

# ICOMOS

2011

## Evaluations of Nominations of Cultural and Mixed Properties to the World Heritage List

ICOMOS Report for the World Heritage Committee, 35th ordinary session  
UNESCO, June 2011

WHC-11/35.COM/INF.8B1



United Nations  
Educational, Scientific and  
Cultural Organization



World Heritage Convention

**UNESCO**

World Heritage Convention  
World Heritage Committee

**2011**

# **Evaluations of Nominations of Cultural and Mixed Properties**

ICOMOS report for the World Heritage Committee, 35th ordinary session  
UNESCO, June 2011



**Secrétariat ICOMOS International**

49-51 rue de la Fédération

75015 Paris

France

Tel : 33 (0)1 45 67 67 70

Fax : 33 (0)1 45 66 06 22

# World Heritage List Nominations 2011

<b>I</b>	<b>Introduction</b>	
	ICOMOS analysis of nominations	1
	ICOMOS procedure	5
	ICOMOS check tool recommendations	9
	Summary of ICOMOS recommendations	11
<b>II</b>	<b>Tables</b>	
	Alphabetical Index of the evaluations (by State Party)	15
	Nominations by category	17
	Geographical spread of nominations	19
	Numerical Index of the evaluations	21
	Technical evaluation mission experts	23

## World Heritage List Nominations received by 1<sup>st</sup> February 2010

<b>III</b>	<b>Mixed properties</b>	
	<b>A Africa</b>	
	<b>New nominations</b>	
	Senegal [N/C 1359]	
	Saloum Delta	25
	<b>B Arab States</b>	
	<b>New nominations</b>	
	Jordan [N/C 1377]	
	Wadi Rum Protected Area	38
	<b>C Latin America and the Caribbean</b>	
	<b>New nominations</b>	
	Jamaica [N/C 1356]	
	Blue and John Crow Mountains National Park	52
<b>IV</b>	<b>Cultural properties</b>	
	<b>A Africa</b>	
	<b>New nominations</b>	
	Nigeria [C 1332]	
	Oke-Idanre Cultural Landscape	63
	<b>B Arab States</b>	
	<b>New nominations</b>	
	Bahrain [C 1364]	
	Pearling, testimony of an island economy	72

	Saudi Arabia [C 1361] The Historical City of Jeddah	85
	Sudan [C 1336] The Archaeological Sites of the Island of Meroe	96
	Syrian Arab Republic [C 1348] The Ancient Villages of Northern Syria	111
	United Arab Emirates [C 1343] The Cultural Sites of Al Ain (Hafit, Hili, Bidaa Bint Saud and Oases Areas)	127
<b>C</b>	<b>Asia – Pacific</b>	
	<b>New nominations</b>	
	China [C 1334] West Lake Cultural Landscape of Hangzhou	140
	India [C 1375] Santiniketan	155
	Iran [C 1372] The Persian Garden	170
	Micronesia / Palau [C 1340] Yapese Stone Money Sites in Palau and Yap	185
	Mongolia [C 1382] Petroglyphic Complexes of the Mongolian Altai	201
	Viet Nam [C 1358] Citadel of the Ho Dynasty	211
	<b>Properties deferred or referred back by previous sessions of the World Heritage Committee</b>	
	Japan [C 1277rev] Hiraizumi – Temples, Gardens and Archaeological Sites Representing the Buddhist Pure Land	224
<b>D</b>	<b>Europe – North America</b>	
	<b>New nominations</b>	
	Germany [C 1368] Fagus Factory	238
	Israel [C 1370] Land of Caves and Hiding in the Judean Lowlands, Maresha, Bet-Guvrin and Adulam	250
	Italy [C 1318] The Longobards in Italy. Places of the power (568-774 A.D.)	264
	Spain [C 1371] Cultural Landscape of the Serra de Tramuntana	277
	Switzerland, Austria, France, Germany, Italy, Slovenia [C 1363] Prehistoric Pile Dwellings around the Alps	292
	Turkey [C 1354] Old City and Ramparts of Alanya with Seljuk Shipyard	307

Turkey [C 1366] Selimiye Mosque and its Social Complex	317
Ukraine [C 1330] The Residence of Bukovinian and Dalmatian Metropolitans	330
<b>E Latin America and the Caribbean</b>	
<b>New nominations</b>	
Barbados [C 1376] Historic Bridgetown and its Garrison	340
Colombia [C 1121] Coffee Cultural Landscape	355
Mexico [C 1357] Fundidora Monterrey Blast Furnaces	367
<b>Properties deferred or referred back by previous sessions of the World Heritage Committee</b>	
Nicaragua [C 1236rev] León Cathedral	378

## World Heritage List Nominations received by 1<sup>st</sup> February 2011

See Addendum (WHC-11/35.COM/INF.8B1.Add) which will include as well minor modifications to boundaries and creations of buffer zone

### V Cultural properties

#### A Africa

##### Properties referred back by previous sessions of the World Heritage Committee

Ethiopia [C 1333rev]  
The Konso Cultural Landscape

Kenya [C 1295rev]  
Fort Jesus, Mombasa

#### B Europe

##### Properties referred back by previous sessions of the World Heritage Committee

France [C 1153rev]  
The Causses and the Cévennes

France, Argentina, Belgium, Germany, Japan, Switzerland [C 1321rev]  
The architectural work of Le Corbusier, an outstanding contribution to the Modern Movement

Israel [C 1105rev]  
The Triple-arch Gate at Dan

# I Introduction

## ICOMOS Analysis of nominations

In 2011, ICOMOS was called on to evaluate 48 nominations.

They consisted of:

29 new nominations  
6 referred back nominations  
1 deferred nomination  
12 minor modifications/creations of buffer zone

The *geographical spread* is as follows:

Europe and North America

Total: 17 nominations, 12 countries  
9 new nominations  
5 minor modifications/creations of buffer zone  
3 referred back  
(17 cultural properties)

Latin America and the Caribbean

Total: 9 nominations, 8 countries  
4 new nominations  
2 referred back  
3 minor modifications/creations of buffer zone  
(8 cultural properties, 1 mixed property)

Arab States

Total: 7 nominations, 6 countries  
6 new nominations  
1 minor modification/creation of buffer zone  
(6 cultural properties, 1 mixed property)

Africa

Total: 5 nominations, 5 countries  
2 new nominations  
2 referred back  
1 minor modification/creation of buffer zone  
(4 cultural properties, 1 mixed property)

Asia-Pacific

Total: 10 nominations, 10 countries  
6 new nominations  
1 referred back  
1 deferred  
2 minor modifications/creations of buffer zone  
(9 cultural properties, 1 mixed property)

## General remarks

### 1. Quality and complexity of nomination dossiers

Generally speaking, ICOMOS notes that nominations are increasingly complex, sometimes to the detriment of the dossiers' clarity and coherence.

Certain nominations would benefit if more time were taken in preparing the nomination, for example to complete the legal protection process, finalise a management plan or undertake additional research.

ICOMOS hopes that the publication of the *Resource Manual for the Preparation of Nominations*, of which an electronic version is now available on its website, and on the World Heritage Centre website, will help the State Parties to improve the quality of nomination dossiers.

In most cases, the weakest parts of the nomination dossiers are the comparative analysis, integrity and/or monitoring.

When evaluating the comparative analysis included in nomination dossiers, ICOMOS examines the methodology used by the State Party and the relevance of the examples given by using the following parameters. Comparisons should be drawn with properties expressing the same values as the nominated property and within a defined geo-cultural area. Therefore the values need to be clearly defined and the geo-cultural framework should be determined according to these values. Comparisons should be drawn with similar properties already inscribed on the World Heritage List and with other examples at national and international level within the defined geo-cultural area.

On the basis of the above, ICOMOS indicates whether or not the comparative analysis is complete and whether or not the analysis justifies consideration of the property for the World Heritage List.

If the nomination is considered incomplete or insufficient according to the parameters indicated above, ICOMOS requests additional information from the State Party, checks relevant ICOMOS thematic studies, and the wealth of information available about properties already evaluated and/or inscribed on the World Heritage List, and on the Tentative Lists, and

consults the ICOMOS network of experts to improve its understanding of the nomination.

ICOMOS wishes to point out that its role is to evaluate the properties and not the nominations (i.e. the dossiers). Similarly, it evaluates the protection, conservation and management of the property at the time of the nomination and not at some unspecified time in the future after the adoption of the laws and management plans. It is the duty of ICOMOS to indicate to the Committee whether or not adequate protection and management are in place prior to inscription.

## 2. ICOMOS evaluations

The objective of ICOMOS is the conservation and long-term protection and presentation of the cultural heritage, whether or not it is of outstanding universal value. In formulating its recommendations, ICOMOS therefore aims to be as helpful as possible to State Parties, whatever the final recommendation proposed.

ICOMOS is well aware that it cannot please everyone. Despite being under considerable pressure, not only from State Parties, it must remain objective, rigorous and scientific, and its first duty remains the conservation of properties.

## 3. Strengthening of dialogue with State Parties

The measures introduced in 2008 with a view to improving and strengthening dialogue with the State Parties have been maintained.

The requests for additional information were sent out prior to the carrying out of the evaluation process.

The ICOMOS World Heritage Panel meeting was held at the beginning of December 2010 instead of during January 2011, so that the letters requesting additional information could be sent out in December, leaving the State Parties more time to reply.

The replies provided by the State Parties have in many cases confirmed or assisted the adoption of the final recommendations made by ICOMOS.

## 4. "Referred back" nominations – "Deferred" nominations

At the request of the World Heritage Committee, ICOMOS and IUCN presented at the 34<sup>th</sup> session in Brasilia an information document concerning the processes, points of reference and time constraints arising from decisions to refer back or defer the examination of a nomination.

ICOMOS wishes to once again express its concerns about the difficulties raised when a "deferred" recommendation is changed into a "referred back" recommendation, which does not allow the advisory bodies to carry out an appropriate evaluation of nominations which are in many cases entirely new.

In its recommendations, ICOMOS clearly distinguishes between nominations which are recommended to be *referred back* and those which are *deferred*. For referred back nominations, outstanding universal value has been demonstrated to the satisfaction of ICOMOS; supplementary information must be supplied to satisfy other requirements of *Operational Guidelines*, but no further technical evaluation mission will be required. For deferred nominations, the very nature of the information requested (a more thorough study, major reconsideration of boundaries, a request for a substantial revision, or serious gaps as regards management and conservation issues) means that a new mission and consideration by the full ICOMOS World Heritage Panel are necessary to evaluate the nomination again, and to ensure that it has the consideration needed to advance the nomination further.

## 5. "Minor" modifications to boundaries

The number of such requests has greatly increased (from 2 requests in 2005 to 12 requests in 2011). They originate either from monitoring, the retrospective inventory or periodic reporting.

The examination of these requests involves a considerable workload for ICOMOS in terms of examining the initial nomination, progress reports on conservation and earlier decisions of the World Heritage Committee, research, consultations and analysis. This year several requests for minor modifications were made by State Parties in respect of a report on the state of conservation or a retrospective inventory. To ensure that they are examined in the most favourable conditions, ICOMOS encourages State Parties to submit a separate request complying with the procedures set out in the *Operational Guidelines for the Implementation of the World Heritage Convention* and within the prescribed deadlines, i.e. 1<sup>st</sup> February at the latest.

ICOMOS also notes that all modifications to the boundaries of a property and its buffer zone are proposed as "minor" modifications, even when they constitute in fact substantial modifications to the property, or even in some cases an extension of the property. According to the *Operational Guidelines*, proposals for major modifications, whether extensions

or reductions, constitute a new nomination (paragraph 165). ICOMOS recommends to the Committee that this provision should be consistently and rigorously applied.

## 6. Serial nominations and extensions

The *Operational Guidelines* stipulate that for serial properties, the component parts must be related and the series as a whole must have outstanding universal value (paragraph 137).

ICOMOS is aware that this is an active matter for consideration by the World Heritage Committee.

This year, ICOMOS has examined 14 serial nominations, including 269 monuments, ensembles and sites. These nominations require a more substantial investment in terms of human and financial resources at all levels of evaluation of the properties. Because the number of serial nominations is growing, this needs to be taken into account in the budgets and contracts. Furthermore, ICOMOS notes that there are also calendar pressures arising from the task of evaluating these large and complex serial nominations and repeats its suggestion, supported by the Jade Tabet<sup>1</sup> review, that the World Heritage Committee give consideration to an extended timeframe for these kinds of nominations.

A specific evaluation format was set up in 2009 for the serial nominations and extensions. ICOMOS explicitly informs the Committee of the questions it asks in relation to the nature of serial nominations:

- a) What is the justification for the serial approach?
- b) How were the chosen sites selected? How do they each relate to the overall Outstanding Universal Value of the property?
- c) Does the comparative analysis justify the selection of properties?
- d) Are the separate components of the property functionally linked?
- e) Is there an overall management framework for all components?

The answers to these questions have been integrated in the evaluation format under relevant sections.

## 7. Development projects

To address the growing need to identify development projects within World Heritage properties during the evaluation cycle, ICOMOS has included in its letters

to the State Parties a specific question intended to bring to ICOMOS' attention any development projects that are planned within the nominated property or in its vicinity, to ensure that comprehensive information is received concerning these potential projects. This has been introduced to respond to growing concern felt by the World Heritage Committee about such development plans and projects. ICOMOS has once again suggested that during the nomination evaluation procedure the Committee should apply provisions similar to those stipulated in paragraph 172, inviting the States Parties to inform the Committee of "their intention to undertake or to authorize in an area protected under the *Convention* major restorations or new constructions which may affect the outstanding universal value of the property [...]".

ICOMOS points out that it has drawn up a document entitled "Guidance on impact assessments for cultural World Heritage sites", which was made available to the World Heritage Committee at its 34<sup>th</sup> session, and can be consulted on its website.

## 8. Issue of calendar and timing

ICOMOS is working under increasing time pressure due to the growing number of complex nominations (serial properties and cultural landscapes). Furthermore, in the past, supplementary information received from States Parties was examined after the meeting of the Bureau of the World Heritage Committee, which was held in June/July, following the initial assessment process for nominations. Today this examination is carried out during the evaluation period itself, well ahead of the World Heritage Committee meeting.

---

<sup>1</sup>Tabet J., *Review of ICOMOS' working methods and procedures for the evaluation of cultural and mixed properties nominated for inscription on the UNESCO World Heritage List*, Paris, ICOMOS, 2010.

## ICOMOS procedure

The ICOMOS procedure is described in Annex 6 of the *Operational Guidelines for the Implementation of the World Heritage Convention*. It is regulated by the *Policy for the implementation of the ICOMOS World Heritage mandate* (revised in November 2007 and October 2010). This document is available on the ICOMOS web site: [www.international.icomos.org](http://www.international.icomos.org).

This policy makes public the existing procedure, and sets out the fair, transparent and credible approach ICOMOS adopts in fulfilling its world heritage remit, and the way it avoids conflicts of interest.

The evaluation of nominations is coordinated by the *World Heritage Unit* of the International Secretariat of ICOMOS, in collaboration with the ICOMOS World Heritage Working Group and the ICOMOS World Heritage Panel.

*The ICOMOS World Heritage Working Group* consists of officers of ICOMOS, the World Heritage Unit and ICOMOS advisers. It meets three or four times a year, and is responsible for the guidance and orientation of work relating to the World Heritage.

*The ICOMOS World Heritage Panel*, which brings together some thirty persons, is made up of members of the ICOMOS Executive Committee and of experts who are invited each year depending on the nature of the properties nominated (rock art, 20<sup>th</sup> century heritage, industrial heritage, etc.). TICCIH and DoCoMoMo are also invited to participate in discussions in which their expertise is relevant. The Panel represents the various professional, geographic and cultural sensibilities present at the international level. It prepares the ICOMOS recommendations for each nomination on a collegial basis.

For each nominated property, ICOMOS assesses:

- Whether it bears testimony of an outstanding universal value:
  - whether it meets the criteria of the *Operational Guidelines*;
  - whether it meets the conditions of authenticity and integrity;
- Whether legal protection is adequate;
- Whether the management processes are satisfactory.

All properties are given equal attention, and ICOMOS also makes every effort to be as objective, scientific and rigorous as possible.

In order to reinforce consistency of the evaluations and recommendations, and to check which additional information requests should be sent to State Parties, ICOMOS uses a check box tool. This tool is included in this volume, together with a table summing up ICOMOS' recommendations for the nominations.

In October 2010, a specific session with the advisers was organised to ensure consistency of approach on all aspects throughout all evaluations.

An external review of the principles, methods and procedures used by ICOMOS in evaluating nominations was carried out in 2009. The final report and the ICOMOS response were made available to the World Heritage Committee at its 34<sup>th</sup> session.

### 1. Preparatory work

The preparatory work is done in several stages:

*a. Initial study of dossiers:* This first stage of the work consists of the creation of an inventory of the nomination dossier documents, a study of them to identify the various issues relating to the property and the choice of the various experts who will be called on to study the dossier (ICOMOS advisers, experts for mission, experts for consultations). A compilation of all relevant comparative material (Tentative Lists, properties already on the World Heritage List, nomination dossiers, "filling the gaps" ICOMOS study, etc.) is prepared in order to assist the work of the advisers on the specific item of comparative analysis.

*b. Consultations:* Experts are consulted to express their opinion about the comparative analysis and the *outstanding universal value* of the nominated properties with reference to the ten criteria set out in the *Operational Guidelines for the Implementation of the World Heritage Convention* (January 2008), 77.

For this purpose, ICOMOS calls on the following:

- ICOMOS International Scientific Committees;
- Individual ICOMOS members with special expertise, identified after consultation with International and National Committees;



- Non-ICOMOS members with specific expertise, identified after consultation within the ICOMOS networks.

For the nominations to be considered by the World Heritage Committee at its 35<sup>th</sup> session, around a hundred experts were consulted.

*c. Technical evaluation missions:* As a rule, ICOMOS calls on a person from the region in which the nominated property is located. The objective of the missions is to study the authenticity, integrity, factors affecting the property, protection, conservation and management (*Operational Guidelines*, 78).

Experts are sent a copy of the nomination (or all relevant parts of it, when the dossier is particularly extensive), a note with key questions based on a preliminary examination of the dossiers, documentation on the Convention and detailed guidelines for evaluation missions.

All experts have a duty of confidentiality. Their opinion about the nomination does not necessarily reflect that of the organisation; it is the ICOMOS World Heritage Panel which, after acquainting itself with all the information, analyses it and determines the organisation's position.

Missions are sent to all the nominated properties except in the case of nominations referred back for which the *Operational Guidelines* do not stipulate that a mission is necessary. (Note: The principle is that properties are referred back because additional information is necessary, and not because thorough or substantial modifications are needed; the deadlines set in the *Operational Guidelines* mean moreover that it is not possible to organise missions, desk reviews or consideration by the full ICOMOS World Heritage Panel for properties referred back).

29 experts representing 25 countries took part in field missions as part of the evaluation of the 29 nominated properties, which in turn represented 31 countries.

Technical evaluation missions were carried out jointly with IUCN for three mixed property nominations and one cultural landscape nomination.

This year IUCN attended the ICOMOS World Heritage Panel meeting as an observer and ICOMOS took part in a conference call held during the IUCN panel meeting. ICOMOS and IUCN have also exchanged information about draft recommendations concerning mixed property nominations.

ICOMOS received comments from the IUCN concerning six cultural landscape nominations. These comments have been included in the evaluations and taken into account by ICOMOS in its recommendations.

## 2. Evaluations and recommendations

*a. ICOMOS World Heritage Panel:* Draft evaluations (in either English or French) were prepared on the basis of the information contained in the nomination dossiers, mission reports, consultations and research. They were examined by the ICOMOS World Heritage Panel at a meeting in Paris from 2 to 5 December 2010. The Panel defined the recommendations and identified the additional information requests to be sent to the State Parties.

*b. Additional information request:* Additional information requests for some of the nominated properties were sent to the State Parties by 31 January 2011, in accordance with the normal procedure. All documents received by 28 February 2011 were examined by the World Heritage Working Group at its meeting on 10 and 11 March 2011.

*c. Finalisation of the evaluation volume and its presentation to the World Heritage Committee:* Following these meetings, revised evaluations have been prepared in both working languages, printed and dispatched to the UN SCO World Heritage Centre for distribution to members of the World Heritage Committee at its 35<sup>th</sup> session in June 2011.

Nominated properties and ICOMOS recommendations will be presented to the World Heritage Committee by ICOMOS advisers in PowerPoint form.

As an advisory body, ICOMOS makes a recommendation based on an objective, rigorous and scientific analysis. However, decisions are the responsibility of the World Heritage Committee. The process relies on the Committee members and their knowledge of the nominations and the evaluations published by the advisory organisations.

## 3. Dialogue with State Parties

ICOMOS makes every effort to maintain dialogue with the State Parties throughout the nomination evaluation process, i.e. following receipt of the nominations, during and after the technical evaluation mission, and following the meeting of the ICOMOS World Heritage Panel. The information requested relates to precise details or clarifications, but does not

invite a complete reformulation of the nomination dossier.

#### 4. Referred back nominations and requests for minor modifications

On 1<sup>st</sup> February preceding the World Heritage Committee meeting, ICOMOS also receives supplementary information on nominations referred back during previous sessions of the Committee. As indicated above, ICOMOS does not organise technical evaluation missions for the evaluation of this supplementary information. It was examined by the World Heritage Working Group, which this year met on 10 and 11 March 2011.

ICOMOS also examines requests for "minor" modifications to boundaries or creation of buffer zones, and for changes of criteria or name for some properties already inscribed on the World Heritage List. 12 requests were submitted by the State Parties concerned before 1<sup>st</sup> February this year. At the request of the World Heritage Centre, all requests have been examined and included in the following document: WHC-11/35.COM/INF.8B1.Add.

#### 5. Conclusion

All the evaluated cultural properties are remarkable and deserving of protection and conservation. In reaching its recommendations to the World Heritage Committee, ICOMOS relies on the *Operational Guidelines* and the direction of the World Heritage Committee.

The opinion of ICOMOS is both independent and institutional. The opinion of one of its members is not binding on the organisation, and the evaluation texts are each the work of between 40-50 persons for each nomination, with several stages of in-depth peer review. ICOMOS represents cultural heritage experts throughout the five regions and is working to protect the entire cultural heritage of the world.

ICOMOS takes a professional view of the dossiers reviewed, and when appropriate makes recommendations for all the properties for which nominations have been submitted to it, independently of the outstanding regional or universal scope of their values.

*Paris, April 2011*

# ICOMOS

## Check tool recommendations

Comparative analysis	Integrity	Authenticity	Criteria	Selection justified series	Boundaries	Protection property	Protection buffer zone	Conservation	Management	Risks addressed	Mission required	Conclusion
√	√	√	√	√	√	√	√	≈	≈	≈	No	Inscription
√	√	√	√	√	≈	X	X	≈	≈	≈	No	Referral
√	√	√	√	√	X	X	X	X	X	X	es	Deferral
O	√	√	O	√							es	Deferral
O	O	O	O	O							es	Deferral
X	X	X	X	X							-	No inscription



O - Good



Adequate - Can be improved



Not demonstrated at this stage



Not O - Not adequate

The grid does not give all possible combinations, but only the lowest benchmarks below which a nomination moves to another category.

This tool is to be used jointly with the table summarizing the ICOMOS recommendations.

## Cultural and Mixed Properties Summary of ICOMOS Recommendations

State Party	Name of the property	Comparative analysis	Integrity	Authenticity	Criteria	Selection justified series	Boundaries	Protection property	Protection buffer zone	Conservation	Management	Risks addressed	Mission fulfilled
-------------	----------------------	----------------------	-----------	--------------	----------	----------------------------	------------	---------------------	------------------------	--------------	------------	-----------------	-------------------

### Inscription

China	West Lake Cultural Landscape of Hangzhou	√	√	√	√	∕	√	√	√	√	√	≈	∕
Germany	Fagus factory	√	√	√	√	∕	√	√	√	√	√	√	∕
Iran	The Persian Garden	√	√	√	√	√	√	√	≈	√	≈	√	∕
Italy	The Longobards in Italy. Places of the power (568-774 A.D.)	√	√	√	√	√	√	√	√	√	≈	√	∕
Japan	Hiraizumi Temples, Gardens and Archaeological Sites representing the Buddhist Pure Land	√	√	√	√	√	√	≈	≈	√	√	≈	∕
Senegal	Saloum Delta	√	√	√	√	∕	√	√	√	≈	≈	≈	∕

Paragraphs of the Operational Guidelines for the Implementation of the World Heritage Convention

132. 3	87-95	79-86	77-78	137	99-102	98	103-107	132. 4	108-118 135	132.4
--------	-------	-------	-------	-----	--------	----	---------	--------	----------------	-------

- √ O - Good
- ≈ Adequate - Can be improved
- Not demonstrated at this stage
- × Not O - Not adequate

State Party	Name of the property	Comparative analysis	Integrity	Authenticity	Criteria	Selection justified series	Boundaries	Protection property	Protection buffer zone	Conservation	Management	Threats addressed	Mission fulfilled
-------------	----------------------	----------------------	-----------	--------------	----------	----------------------------	------------	---------------------	------------------------	--------------	------------	-------------------	-------------------

Inscription

Switzerland, Austria, France, Germany, Italy, Slovenia	Prehistoric Pile Dwellings around the Alps	✓	✓	✓	✓	✓	✓	≈	≈	✓	✓	≈	
Syrian Arab Republic	The Ancient Villages of Northern Syria	✓	✓	✓	✓	✓	✓	≈	≈	≈	≈	≈	
Turkey	Selimiye Mosque and its Social Complex	✓	✓	✓	✓		✓	✓	≈	✓	≈	✓	

Referred back 1

Nicaragua	Leon Cathedral	✓	✓	✓	✓		≈	✓	X	≈	≈	≈	No
-----------	----------------	---	---	---	---	--	---	---	---	---	---	---	----

Deferred 13

Bahrain	Pearling, testimony of an island economy	○	✓	✓	○	✓							es
Barbados	Historic Bridgetown and its Garrison	○	○	○	○								es
Colombia	Coffee Cultural Landscape	○	○	○	○	○							es
Israel	Land of Caves and Hiding in the Judean Lowlands, Maresha, Bet-Guvrin and Adulam	○	○	○	○	○							es
Jamaica	Blue and John Crow Mountains National Park	○	○	○	○								es

State Party	Name of the property	Comparative analysis	Integrity	Authenticity	Criteria	Selection justified series	Boundaries	Protection property	Protection buffer zone	Conservation	Management	Threats addressed	Mission fulfilled
Deferred													
Jordan	Wadi Rum Protected Area	○	○	○	○	△							es
Micronesia / Palau	Apase Stone Money Sites in Palau and Yap	○	○	○	○	○							es
Mongolia	Petroglyphic Complexes of the Mongolian Altai	√	√	√	√	√	√	≈	≈	X	X	X	es
Spain	Cultural Landscape of the Serra de Tramuntana	○	○	○	○	△							es
Sudan	The Archaeological Sites of the Island of Meroe	○	≈	≈	○	○							es
Ukraine	The Residence of Bukovinian and Dalmatian Metropolitans	○	√	○	○	△							es
United Arab Emirates	The Cultural Sites of Al Ain (Hafit, Hili, Bidaa Bint Saud and Oases Areas)	○	○	○	○	○							es
Viet Nam	Citadel of the Ho Dynasty	○	○	√	○	○							es

### Non Inscription 5

Mexico	Fundidora Monterrey Blast Furnaces	X	X	X	X	△							△
India	Santiniketan	X	○	√	X	√							△
Nigeria	Oke-Irande Cultural Landscape	X	○	X	X	△							△
Saudi Arabia	The Historical City of Jeddah	X	X	○	X	△							△
Turkey	Old City and Ramparts of Alanya with Seljuk Shipyard	X	X	X	X	△							△

## Cultural and Mixed Properties

### Alphabetical Index of the evaluations by State Party

State Party	ID number	Name of the property	Page
Aahrain	C 1364	Pearling, testimony of an island economy	72
Arbados	C 1376	Historic Bridgetown and its Garrison	340
China	C 1334	West Lake Cultural Landscape of Hangzhou	140
Colombia	C 1121	Coffee Cultural Landscape	355
Ethiopia	C 1333rev	The Anso Cultural Landscape	Add
France	C 1153rev	The Causses and the Cévennes	Add
France Argentina Belgium Germany Japan Switzerland	C 1321rev	The architectural work of Le Corbusier, an outstanding contribution to the Modern Movement	Add
Germany	C 1368	Fagus Factory	238
India	C 1375	Santiniketan	155
Iran	C 1372	The Persian Garden	170
Israel	C 1105rev	The Triple-arch Gate at Dan	Add
Israel	C 1370	Land of Caves and Hiding in the Judean Lowlands, Maresha, Bet-Guvrin and Adulam	250
Italy	C 1318	The Longobards in Italy. Places of the power (568-774 A.D.)	264
Jamaica	N/C 1356	Blue and John Crow Mountains National Park	52
Japan	C 1277rev	Hiraizumi Temples, Gardens and Archaeological Sites representing the Buddhist Pure Land	224
Jordan	N/C 1377	Wadi Rum Protected Area	38
Kenya	C 1295rev	Fort Jesus, Mombasa	Add
Mexico	C 1357	Fundidora Monterrey Blast Furnaces	367
Micronesia Palau	C 1340	Mekeo Stone Money Sites in Palau and Yap	185
Mongolia	C 1382	Petroglyphic Complexes of the Mongolian Altai	201
Nicaragua	C 1236rev	León Cathedral	378
Nigeria	C 1332	Oke-Irande Cultural Landscape	63
Saudi Arabia	C 1361	The Historical City of Jeddah	85
Senegal	N/C 1359	Saloum Delta	25
Spain	C 1371	Cultural Landscape of the Serra de Tramuntana	277
Sudan	C 1336	The Archaeological Sites of the Island of Meroe	96
Switzerland Austria France Germany Italy Slovenia	C 1363	Prehistoric Pile Dwellings around the Alps	292
Syrian Arab Republic	C 1348	The Ancient Villages of Northern Syria	111
Turkey	C 1354	Old City and Ramparts of Alanya with Seljuk Shipyard	307
Turkey	C 1366	Selimiye Mosque and its Social Complex	317
Ukraine	C 1330	The Residence of Bukovinian and Dalmatian Metropolitans	330
United Arab Emirates	C 1343	The Cultural Sites of Al Ain (Hafit, Hili, Bidaa Bint Saud and Oases Areas)	127
Viet Nam	C 1358	Citadel of the Ho Dynasty	211

## Cultural and Mixed Properties Nominations by category

New nominations (26)		
Bahrain	C 1364	Pearling, testimony of an island economy
Barbados	C 1376	Historic Bridgetown and its Garrison
China	C 1334	West Lake Cultural Landscape of Hangzhou
Colombia	C 1121	Coffee Cultural Landscape
Germany	C 1368	Fagus Factory
India	C 1375	Santiniketan
Iran	C 1372	The Persian Garden
Israel	C 1370	Land of Caves and Hiding in the Judean Lowlands, Maresha, Bet-Guvrin and Adulam
Italy	C 1318	The Longobards in Italy. Places of the power (568-774 A.D.)
Jamaica	N/C 1356	Blue and John Crow Mountains National Park
Jordan	N/C 1377	Wadi um Protected Area
Mexico	C 1357	Fundidora Monterrey Blast Furnaces
Micronesia/ Palau	C 1340	apese Stone Money Sites in Palau and ap
Mongolia	C 1382	Petroglyphic Complexes of the Mongolian Altai
Nigeria	C 1332	Oke-Idanre Cultural Landscape
Saudi Arabia	C 1361	The Historical City of Jeddah
Senegal	N/C 1359	Saloum Delta
Spain	C 1371	Cultural Landscape of the Serra de Tramuntana
Sudan	C 1336	The Archaeological Sites of the Island of Meroe
Switzerland, Austria, France, Germany, Italy, Slovenia	C 1363	Prehistoric Pile Dwellings around the Alps
Syrian Arab epublic	C 1348	The Ancient Villages of Northern Syria
Turkey	C 1354	Old City and amparts of Alanya with Seljuk Shipyard
Turkey	C 1366	Selimiye Mosque and its Social Complex
Ukraine	C 1330	The esidence of Bukovinian and Dalmatian Metropolitans
United Arab mirates	C 1343	The Cultural Sites of Al Ain (Hafit, Hili, Bidaa Bint Saud and Oases Areas)
Viet Nam	C 1358	Citadel of the Ho Dynasty
Referred back nominations (6)		
thiopia	C 1333rev	The onso Cultural Landscape
France	C 1153rev	The Causses and the C vennes
France, Argentina, Belgium, Germany, Japan, Switzerland	C 1321rev	The architectural work of Le Corbusier, an outstanding contribution to the Modern Movement
Israel	C 1105rev	The Triple-arch Gate at Dan
enya	C 1295rev	Fort Jesus, Mombasa
Nicaragua	C 1236rev	Le n Cathedral
Deferred nomination (1)		
Japan	C 1277rev	Hiraizumi Temples, Gardens and Archaeological Sites epresenting the Buddhist Pure Land



## Cultural and Mixed Properties

### Geographical spread of nominations

<b>Africa</b>		
4 States Parties, 4 nominations		
Ethiopia	C 1333rev	The Osonso Cultural Landscape
Kenya	C 1295rev	Fort Jesus, Mombasa
Nigeria	C 1332	Oke-Irande Cultural Landscape
Senegal	N/C 1359	Saloum Delta
<b>Arab States</b>		
6 States Parties, 6 nominations		
Bahrain	C 1364	Pearling, testimony of an island economy
Jordan	N/C 1377	Wadi Rum Protected Area
Saudi Arabia	C 1361	The Historical City of Jeddah
Sudan	C 1336	The Archaeological Sites of the Island of Meroe
Syrian Arab Republic	C 1348	The Ancient Villages of Northern Syria
United Arab Emirates	C 1343	The Cultural Sites of Al Ain (Hafit, Hili, Bidaa Bint Saud and Oases Areas)
<b>Asia – Pacific</b>		
8 States Parties, 8 nominations		
China	C 1334	West Lake Cultural Landscape of Hangzhou
India	C 1375	Santiniketan
Iran	C 1372	The Persian Garden
Japan	C 1277rev	Hiraizumi Temples, Gardens and Archaeological Sites representing the Buddhist Pure Land
Japan, France, Argentina, Belgium, Germany, Switzerland	C 1321rev	The architectural work of Le Corbusier, an outstanding contribution to the Modern Movement
Micronesia/ Palau	C 1340	Mekeo Stone Money Sites in Palau and Yap
Mongolia	C 1382	Petroglyphic Complexes of the Mongolian Altai
Viet Nam	C 1358	Citadel of the Ho Dynasty
<b>Europe – North America</b>		
11 States Parties, 11 nominations		
France	C 1153rev	The Causses and the Cévennes
France, Argentina, Belgium, Germany, Japan, Switzerland	C 1321rev	The architectural work of Le Corbusier, an outstanding contribution to the Modern Movement
Germany	C 1368	Fagus Factory
Israel	C 1105rev	The Triple-arch Gate at Dan
Israel	C 1370	Land of Caves and Hiding in the Judean Lowlands, Maresha, Bet-Guvrin and Adulam
Italy	C 1318	The Longobards in Italy. Places of the power (568-774 A.D.)
Spain	C 1371	Cultural Landscape of the Serra de Tramuntana
Switzerland, Austria, France, Germany, Italy, Slovenia	C 1363	Prehistoric Pile Dwellings around the Alps
Turkey	C 1354	Old City and Ramparts of Alanya with Seljuk Shipyard
Turkey	C 1366	Selimiye Mosque and its Social Complex
Ukraine	C 1330	The Residence of Bukovinian and Dalmatian Metropolitans

## Latin America and the Caribbean

6 States Parties, 6 nominations

Argentina, France, Belgium, Germany, Japan, Switzerland	C 1321rev	The architectural work of Le Corbusier, an outstanding contribution to the Modern Movement
Barbados	C 1376	Historic Bridgetown and its Garrison
Colombia	C 1121	Coffee Cultural Landscape
Jamaica	N/C 1356	Blue and John Crow Mountains National Park
Mexico	C 1357	Fundidora Monterrey Blast Furnaces
Nicaragua	C 1236rev	Le n Cathedral

## Cultural and Mixed Properties

### Numerical Index of the evaluations

ID N	State Party	Proposed world heritage property	Page
11 5	rev Israel	The Triple-arch Gate at Dan	Add
1121	Colombia	Coffee Cultural Landscape	355
1153	rev France	The Causses and the Cévennes	Add
1236	rev Nicaragua	León Cathedral	378
1277	rev Japan	Hiraizumi Temples, Gardens and Archaeological Sites representing the Buddhist Pure Land	224
12 5	rev Kenya	Fort Jesus, Mombasa	Add
1318	Italy	The Longobards in Italy. Places of the power (568-774 A.D.)	264
1321	rev France, Argentina, Belgium, Germany, Japan, Switzerland	The architectural work of Le Corbusier, an outstanding contribution to the Modern Movement	Add
133	Ukraine	The residence of Bukovinian and Dalmatian Metropolitans	330
1332	Nigeria	Oke-Idanre Cultural Landscape	63
1333	rev Ethiopia	The Gondro Cultural Landscape	Add
1334	China	West Lake Cultural Landscape of Hangzhou	140
1336	Sudan	The Archaeological Sites of the Island of Meroe	96
134	Micronesia/ Palau	Yapese Stone Money Sites in Palau and Yap	185
1343	United Arab Emirates	The Cultural Sites of Al Ain (Hafit, Hili, Bidaa Bint Saud and Oases Areas)	127
1348	Syrian Arab Republic	The Ancient Villages of Northern Syria	111
1354	Turkey	Old City and Ramparts of Alanya with Seljuk Shipyard	307
1356	Jamaica	Blue and John Crow Mountains National Park	52
1357	Mexico	Fundidora Monterrey Blast Furnaces	367
1358	Viet Nam	Citadel of the Ho Dynasty	211
135	Senegal	Saloum Delta	25
1361	Saudi Arabia	The Historical City of Jeddah	85
1363	Switzerland, Austria, France, Germany, Italy, Slovenia	Prehistoric Pile Dwellings around the Alps	292
1364	Bahrain	Pearling, testimony of an island economy	72
1366	Turkey	Selimiye Mosque and its Social Complex	317
1368	Germany	Fagus Factory	238
137	Israel	Land of Caves and Hiding in the Judean Lowlands, Maresha, Bet-Guvrin and Adulam	250
1371	Spain	Cultural Landscape of the Serra de Tramuntana	277
1372	Iran	The Persian Garden	170
1375	India	Santiniketan	155
1376	Barbados	Historic Bridgetown and its Garrison	340
1377	Jordan	Wadi Rum Protected Area	38
1382	Mongolia	Petroglyphic Complexes of the Mongolian Altai	201

## Cultural and Mixed Properties

### Technical evaluation mission experts

State Party	ID number	Name of the property	Field mission	Date
New Nominations				
Bahrain	C 1364	Pearling, testimony of an island economy	John Gribble South Africa	October 2010
Barbados	C 1376	Historic Bridgetown and its Garrison	Milagros Flores SA	September 2010
China	C 1334	West Lake Cultural Landscape of Hangzhou	Sohyun Park Korea	September 2010
Colombia	C 1121	Coffee Cultural Landscape	Patricia Green Jamaica	August/ September 2010
Germany	C 1368	Fagus Factory	Marieke Kuipers The Netherlands	September 2010
India	C 1375	Santiniketan	Sai Eise Nepal	October 2010
Iran	C 1372	The Persian Garden	Luigi Angheri Italy	August 2010
Israel	C 1370	Land of Caves and Hiding in the Judean Lowlands, Maresha, Bet-Guvrin and Adulam	Pietro Laureano Italy	October 2010
Italy	C 1318	The Longobards in Italy. Places of the power (568-774 A.D.)	Adriano Loschetti Switzerland	September 2010
Jamaica	N/C 1356	Blue and John Crow Mountains National Park	Angel Cabeza Chile	September 2010
Jordan	N/C 1377	Wadi Rum Protected Area	Maheedhan Saudi Arabia	September 2010
Mexico	C 1357	Fundidora Monterrey Blast Furnaces	Code . Morin SA	September 2010
Micronesia/ Palau	C 1340	Mekele Stone Money Sites in Palau and Yap	Christophe Sand New Caledonia	September 2010
Mongolia	C 1382	Petroglyphic Complexes of the Mongolian Altai	Alfrie Bruglio France	October 2010
Nigeria	C 1332	Oke-Ilanre Cultural Landscape	John Sutton United Kingdom	October 2010
Saudi Arabia	C 1361	The Historical City of Jeddah	Saleh Lamei Egypt	September 2010
Senegal	N/C 1359	Saloum Delta	Rafolo Andrianaivoarivony Madagascar	September/ October 2010
Spain	C 1371	Cultural Landscape of the Serra de Tramuntana	Cristina Castel Portugal	October 2010
Sudan	C 1336	The Archaeological Sites of the Island of Meroe	Mennoelling Malawi	September 2010

State Party	ID number	Name of the property	Field mission	Date
Switzerland, Austria, France, Germany, Italy, Slovenia	C 1363	Prehistoric Pile Dwellings around the Alps	Margaret Gowen Ireland	September/October 2010
Syrian Arab Republic	C 1348	The Ancient Villages of Northern Syria	Georgia Marinou Greece	October 2010
Turkey	C 1354	Old City and Ramparts of Alanya with Seljuk Shipyard	Samir Abdulac France	September 2010
Turkey	C 1366	Selimiye Mosque and its Social Complex	Ratish Nanda India	October 2010
Ukraine	C 1330	The Residence of Bukovinian and Dalmatian Metropolitans	Mosef Stulc Czech Republic	September 2010
United Arab Emirates	C 1343	The Cultural Sites of Al Ain (Hafit, Hili, Bidaa Bint Saud and Oases Areas)	Mohamed El a Morocco	October 2010
Viet Nam	C 1358	Citadel of the Ho Dynasty	Akira Ono Japan	September 2010
Referred back nominations				
Ethiopia	C 1333rev	The Gondro Cultural Landscape	John Sutton United Kingdom	October / November 2009
France	C 1153rev	The Causses and the Cévennes	Henry Cleere United Kingdom	September 2005
France, Argentina, Belgium, Germany, Japan, Switzerland	C 1321rev	The architectural work of Le Corbusier, an outstanding contribution to the Modern Movement	Argentina Rubén García Miranda Uruguay	September 2008
			France Belgium Germany Switzerland Marieke Luijckers the Netherlands	September 2008
			France Natalya Dushkina Russia	September 2008
Israel	C 1105rev	The Triple-arch Gate at Dan	John Murdoch United Kingdom	September 2007
Kenya	C 1295rev	Fort Jesus, Mombasa	Rako Rakotomamonjy Madagascar	August 2009
Nicaragua	C 1236rev	León Cathedral	Daniel Young Panama	September 2010
Deferred nomination				
Japan	C 1277rev	Hiraizumi Temples, Gardens and Archaeological Sites representing the Buddhist Pure Land	Yang Lijun China	September 2010

### III Mixed properties

#### A Africa

##### New Nominations

---

# Saloum Delta

## Senegal

### No 135

---

Official name as proposed by the State Party  
Saloum Delta

Location  
Thiès and Fatick regions  
Foundiougne, Fatick and Mbour departments  
Senegal

**Brief description**  
The Saloum Delta is testimony to original human occupation within a vast wet and brackish region. Its development was based on shellfish gathering and fishing, within a natural environment of extensive biological diversity comprising mangroves, water courses, sand banks and mudflats. The shell mounds built up through the ages by human activity form man-made promontories and islets. The presence of tumuli on some of the shell mounds is testimony to the ancient and permanent nature of this human culture in symbiosis with a specific natural environment.

**Category of property**  
In terms of categories of cultural property set out in Article I of the 1972 World Heritage Convention, the nominated property is a *site*.

In terms of the *Operational Guidelines for the Implementation of the World Heritage Convention* (January 2008), paragraph 47, it is also a *cultural landscape*.

[Note: The property is nominated as a mixed cultural and natural site. IUCN will assess the natural significances, while ICOMOS assesses the cultural significances.]

## 1 Basic data

Included in the tentative List  
18 November 2005

International Assistance from the World Heritage Fund for preparing the Nomination  
None

Date received by the World Heritage Centre  
22 January 2010

**Background**  
This is a new nomination.

**Consultations**  
ICOMOS consulted the International Scientific Committee on Cultural Landscapes, as well as several independent experts.

## Literature consulted selection

Agbogba, C., et al., *La mangrove usages multiples de l'estuaire du Saloum Sénégal*, Dakar, P C-MAB, 1985.

Baltzer, F., Diop, S., and Barousseau, J. P., *L'estuaire et la mangrove du Sine-Saloum, rapport sur les Sciences de la Mer*, n 32, Paris, UNESCO, 1985.

Descamps, C., *Le Sénégal de l'âge de la Pierre à l'âge des Métaux*, Paris, AUD CAM, 1976.

Thilmans, G., *Sauvegarde de certains amas coquilliers du Saloum, Saint Louis, Bulletin de l'âge*, 3, 1997, p. 22-29.

**Technical Evaluation Mission**  
A joint ICOMOS/IUCN technical evaluation mission visited the property from 29 September to 6 October 2010.

**Additional information requested and received from the State Party**  
ICOMOS requested additional information from the State Party on 23 September 2010 and 14 December 2010 concerning:

- The historical and/or contemporary reuses of the shell mounds, and the application of measures to prevent their exploitation;
- The inventory and the archaeological studies concerning the tumulus mounds;
- The presence of any material vestiges of fishing activity;
- The regional comparative analysis, especially West African tumuli;
- The property's integrity and authenticity in relation to current human activities;
- The management of relations between natural heritage and cultural heritage at a local level;
- The shell mounds' listing as Historical Monuments;
- The situation of private property or property returned to the inhabitants within the property;
- The respective boundaries of the National Park, Biosphere Park, Marine Area and Palmarin reserve in relation to the boundaries of the property and its buffer zone;
- The responsibilities and official implementation of the new Management Plan;
- The possibility of extending the buffer zone north of the Saloum river.

The State Party's responses, received on 16 November 2010 and 28 February 2011, are taken into account in this evaluation.

Date of ICOMOS approval of this report  
10 March 2011

## 2 The property

### Description

At its greatest, the surface area of the Saloum Delta region is close to 5,000 km<sup>2</sup>, of which the actual delta represents approximately half. The property comprises the western, southern and central parts of the delta, the most humid and most typical, with a surface area of approximately 800 km<sup>2</sup>; it also includes the coastal marine area from the mouth of the Saloum river in the northwest, to the Gambian border in the south.

The property is structured by three main river arms: the Saloum itself in the north (110 km), the Diombos in the centre (30 km) and the Bandiala in the south (18 km). Together with a great many *bolons* or brackish channels, they form a dense network encompassing over 200 main islands and islets. The property is defined by three main ecosystems: the mangrove forest, which is the most extensive, the Atlantic marine environment in the west and southwest, and a dry forest in the southeast. Along with these dominant environments, the property includes floodable sandbanks, mudflats and several sandy cultivatable expanses. The original ground is always at a very low altitude, a few metres at most. These are, especially as regards the mangroves, very rich ecosystems able to provide food for human consumption.

The delta's ecosystems have supplied vital resources for human communities for over 2,000 years, mainly from fishing and shellfish gathering. In addition to these resources, wood is collected from the mangrove forest and forest, along with some crop growing, domestic stock-breeding and beekeeping. The close and fragile link between humans and the mangrove forest resulted in expertise and social behaviour respectful of the environment at a very early stage. The wealth of plant life yields fruit, bark and medicinal roots. The buffer zone, drier and slightly higher, is more suitable for agricultural use.

Shellfish were particularly sought after by the local population, notably cockles and mangrove oysters, for food and preparation methods which enabled their storage and transport. As a result, numerous shell mounds have been created: 218 have been observed within the property; they are grouped in 96 identified and mapped mound sites (Thilmans inventory, 1997). They form man-made islets in a lake environment, physical supports for human settlements and for animals and plants. The largest and most representative have names. The mounds sometimes have imposing dimensions; the largest are up to 400-500 m at their greatest length (Dioron Boumak) and even 800 m (Ndiamon-Badat); they are a few metres high and even up to 8 to 12 m for the most imposing. Trees, especially baobabs, indicate the presence of shell mounds and they are clearly identifiable on satellite images. They form a relic archaeological landscape characteristic of the Saloum Delta.

The shell mounds are above all present in the more maritime section of the Saloum islands and in all the

Betenti islands, in the south of the property. Their distribution may initially appear random, but they are generally grouped into clearly identified local sub-assemblies: three main sub-assemblies for the Saloum islands and six for the Betenti islands. These sub-assemblies have up to fifteen mounds, sometimes relatively close to each other. The largest mounds, around twenty, are more than 100 metres long; the average sized mounds are between 50 and 100 metres; and the smallest are under 50 metres.

Of these shell mounds, 28 have funerary sites in the form of tumuli (Thilmans inventory 1997), of which over 900 have been identified to date. They are shell cairns containing the remains of one or many individuals. The number of tumuli on any given mound is generally in the tens; sometimes there are less (2 or 3 tumuli). The number exceeds one hundred on the three main mounds: Dioron-Boumak (125), Ndiamon-Badat (149), and Tioupane near Falia (222). The mounds with a great many tumuli have a characteristic undulating profile and they are home to specific vegetation, notably large baobabs, that aids their identification.

In some cases, for an important individual, a funerary structure using a baobab circle forms a sanctuary (tomb of the *griot* Wolof Bak awl on Dioron Boumak). The frequent geographic proximity of mounds with tumuli follows fairly precise topographic rules indicating the presence of a funerary area to the inhabitants. Sites and/or bans were associated with these necropolises and funerary areas; occasionally, they are still practised by the local population.

Archaeological excavations of the tumulus mounds have revealed notable artefacts in the form of often remarkable pottery, and funerary objects. These are important for a better understanding of the cultures associated with the various periods of the delta's occupation. These archaeological artefacts are mainly conserved in scientific institutions and museums in Dakar.

The following 17 tumulus mounds sites can be considered the most important and the most representative in terms of the number of tumuli, their individual quality, or their symbolic meaning still present today:

- 1 Tioupane-Boumak and Tioupane-Boundaw, 222 tumuli
- 2 Ndafafe, 20 tumuli
- 3 Ndiamon-Badat, 149 tumuli
- 4 Site 35, near Dionewar, 11 tumuli
- 5 Fandanga, 17 tumuli
- 6 Ndiouta-Boumak, 26 tumuli
- 7 Sandale, 17 tumuli
- 8 Mbar-Fagnick, 4 tumuli
- 9 Site 9, on the Bakhadou bolon, 6 tumuli
- 10 Site 14, on the right bank of the Diombos, 77 tumuli
- 11 Dioron-Boumak, 125 tumuli
- 12 Dioron-Boundaw, 12 tumuli
- 13 Site 45, right bank of the Bandiala, 14 tumuli
- 14 Site 90, Bossinka north bolon, 63 tumuli



- 15 Bandiokouta, 30 tumuli
- 16 Site 67, Oudierin bolon, 72 tumuli
- 17 Site 46, left bank of the Bandiala, 33 tumuli

Like mollusc gathering, the aim of fishing is to feed the local population and, after preparation, to provide an export commodity to the region's towns and villages. Fishing has not left any notable material vestiges.

#### History and development

Human exploitation of shellfish in brackish or freshwater wet zones dates back to prehistoric times. From as early as the early Palaeolithic, archaeological traces of these customs have been found in the Mediterranean, on the Libyan coast, and on the coast of South Africa; a little later in Europe in Jutland, Scandinavia, and Brittany; in Asia in Japan, etc.

In northwest Africa, the exploitation of marine molluscs combined with fishing can be seen during the Neolithic, along the coast of Western Sahara and Mauritania. The oldest sites date back to 4000-4700 BC; they are more numerous between 4000 and 2000 BC. Shellfish gathering areas, cockles in particular, are then found further south between 2000 and 600 BC, notably in the mouth of the Senegal river. They reached the Saloum Delta and Casamance river a little later, benefiting from vast expanses of brackish water and considerable biodiversity associated with the mangroves. A culture of shellfish exploitation combined with fishing spread here permanently.

In the Saloum Delta, carbon 14 dating of the shell mounds dates the oldest at up to 400 BC. The creation of the mounds is the result of deliberate action by the population so as not to block the delta's channels and to create promontories in floodable land. They are man-made structural points within the delta's shifting territory.

The creation of tumuli on certain large shell mounds occurred later. It started in the 8<sup>th</sup> century AD and developed through to the 16<sup>th</sup> century. Various populations occupied the islands in the Saloum Delta one after another: Fulani, Tukolor and Serer in particular. The latter arrived in the 11<sup>th</sup> century from modern northern Senegal fleeing the Almoravid conquest. They erected large tumuli and they are still the dominant ethnic group in Saloum. In the 12<sup>th</sup> and 13<sup>th</sup> centuries, the islands were occupied by the Guelowars, who unified the local population under their leadership.

Population movements undoubtedly regularly affected the delta's history, an area attractive for its shellfish and fish resources. These migrations are in particular reflected in the linguistic practices in certain villages and by their oral traditions concerning their origins.

Large-scale shellfish gathering and the resultant creation of shell mounds continued in a regular and intense manner for around 2,000 years, until around 1600 AD. Combined with fishing, it forms a stable and sustainable development model. Less intensive exploitation of the

natural resources has continued to the present day where it still provides an appreciable source of additional resources. The material testimony of this delta culture principally resides in the shell mounds and their landscapes, in the tumuli and their funerary uses, and in the study of pottery and its regional dissemination. In addition to the population movements having affected the delta, these aspects confirm the development of a sustainable human culture, with stable and appropriately managed resources, in a specific physical and biological environment, for more than 2,000 years through to the present day.

In the Saloum Delta, the intensive exploitation of shellfish and fishing satisfies local needs as well as providing long-standing and long distance economic trade. The preparation of the shellfish and fish is an elaborate process resulting in a long-lasting dried or smoked product. Specific local pottery called Dioron-Boumak-ware was long used for storage, archaeological finds provide important information about the dissemination of Saloum products. This preservation process enabled long-distance trade between the Saloum Delta islands and the neighbouring coastal communities, as well as those in the hinterland. The dried or smoked molluscs and fish must have been traded for iron, copper and cereals.

As early as the 15<sup>th</sup> century, the Saloum shell mounds were mentioned by the first Portuguese explorers, such as Dinis Diaz. In the early 16<sup>th</sup> century, Valentim Fernandes described in his *Description of the African West Coast*, how the molluscs were processed by the inhabitants and sold commercially in locally made earthenware pots. The formation of centralised hegemonic kingdoms from the 13<sup>th</sup> to the 14<sup>th</sup> centuries, then the colonial maritime pressure from the 16<sup>th</sup> century onwards, disrupted the traditional lifestyles and trade between peoples. This would explain the decline in shellfish gathering and fishing, gradually leading the delta people back towards self-sufficiency and poorer living conditions. In the 18<sup>th</sup> century, the colonial audits refer to a Saloum king heavily involved in the slave trade and profiting from Franco-British rivalry.

The end of the 19<sup>th</sup> and the 20<sup>th</sup> centuries were marked by the regional need for building materials for construction and public works (lime kilns, aggregate for concrete, fill, etc.). In a certain number of cases, the shell mounds became quarries exploited using canoes. Certain mounds have disappeared (Baboura); at least twenty have been intensively exploited. These practices have decreased considerably since the introduction of conservation measures for natural spaces in the 1970s and 1980s; they are now banned, but illegal extraction seems still to take place. Today, the shells from shellfish gathering contribute relatively little to the mounds, being used directly for construction; the finest examples are of greater value and are used to decorate facades or gardens.

The shell mounds were long considered natural accumulations. It was only in the 1930s that their man-made origin was fully proven, and their funerary role

brought to light. The first archaeological excavations in the Saloum Delta were carried out in Dioron-Boundaw and Dioron-Boumak in 1939. Stratigraphic cross-sections revealed their structure and shell composition, making it possible to deduce the rate of formation and periods of accumulation, and to help understand how the shellfish were exploited. The mounds have since been the subject of several major study campaigns, notably at the beginning of the 1950s and in 1971-1973. The research programmes were started up again in the 2000s.

The material and landscape testimonies are complemented by anthropological testimonies that support the traditional legends and descriptions by travellers, such as those by Valentim Fernandes.

Shellfish gathering and processing for trade is today performed by women, while the men devote their time to fishing, without it being possible to know when this division of labour occurred. The shellfish are gathered in the mudflats and edges of the mangroves during the dry season, from December to June. The techniques used are derived directly from traditional practices (wooden dugout canoes, plant fibre baskets, knives, etc.). Gathering is performed rationally, the objective being to sustainably conserve the natural resource. The molluscs are boiled, the flesh extracted from the shell, then dried or smoked. Cockles and mangrove oysters are highly prized foods in West Africa, and their regional sale provides the population with an appreciable income. These activities provide a considerable counterweight to the rural exodus. The farming and collection of shellfish also contributes to mangrove conservation. The development of fishing techniques are still based on traditional methods and transport is also environmentally-friendly (bicycles today).

The current population is concentrated around six medium-sized towns (Niodior, Dionewar, Bassoul, Djirnda, Palmarin and Betenti) and a fishing centre (Missira). Nonetheless, the development of human settlements has been limited by the scarcity of fresh water resources and the low proportion of farmland in the delta; these activities are largely found in the buffer zone.

### 3 Outstanding universal value integrity and authenticity

#### Comparative analysis

The State Party first proposes a comparison of shell mounds, a phenomenon that is well-known to archaeologists, the testimonies of which are found in numerous regions around the world. In various phases of the Palaeolithic and then the Neolithic, numerous cultures used salt or freshwater marine molluscs as a food source. Intensive exploitation systems appeared in the Mesolithic, for example in Scandinavia and Japan, that produced significant shell mounds.

In the northwest African context, the Saloum Delta is part of a general history of shellfish exploitation dating back to

the Neolithic, often combined with fishing (see History). The oldest mounds are found north of Saloum, on the West Saharan Atlantic coast and in Mauritania. These are mounds of a relatively different structure, in the form of long ribbons, sometimes one kilometre or more; but they are not very thick, just a few tens of centimetres in general, one metre at the most. Slightly later mounds, on the old mouth of the Senegal river, reveal an intermediate structure: they are considerably larger and they can be as much as between one and two metres thick. They are, however, smaller in size than the Saloum mounds and they are fossilized in nature. Of easy access and close to Saint-Louis, they were quarried for fill and lime kilns. They are poorly preserved and no longer form a coherent, clearly identifiable ensemble.

South of Saloum, on the banks of the Gambia river estuary, shell mounds are also found, but their structure is different: composed mainly of oyster shell, they are smaller; they have also been extensively mined for lime kilns. Other West African sites are also mentioned: Bijagos Islands in Guinea Bissau and the Niger Delta in Nigeria.

In Brazil, numerous shell mounds (or *sambaquis*), almost one thousand, are spread along the coast in estuaries. However, they are fossil sites and the largest, while similar in form to the Saloum shell mounds, are nonetheless smaller. Large shell mounds also existed in North America, in Florida and California, but they were dismantled in the 19<sup>th</sup> and 20<sup>th</sup> centuries, to make way for building land and used as fill for urban development and road networks. Those that still remain in Japan (Tokyo Bay) are in an urban or peri-urban area where they are integrated into public squares. Most of these sites have completely lost their mangrove forests.

While shell mounds are common-place, the presence of organised tumuli on them is far rarer. The mounds close to Gambia have so far not revealed any sepulchres, although this does remain a possibility. Tumuli in shell mounds have been identified in California and Japan, but they have either disappeared or are now outside their cultural context.

The additional documentation provided by the State Party (November 2010) details the importance of the protohistoric phenomenon of tumuli, called *Mbanar* in West Africa. They are found relatively frequently in the Megalithic zones in the centre and northwest of Senegal; several thousand have been identified and many are found inside the Megalithic Stone Circles of Senegambia (2006, criteria (i) and (iii)). These practices continued throughout historic periods and the Serer people built tumuli until recent times. The general type of protohistoric tumulus is a funerary chamber dug in the earth and covered with a conical roof, which is then buried beneath an earthen mound. Artefacts and sacrificial objects are often found along with the remains of the deceased.

The shell mound tumuli are part of this West African cultural tradition, notably with respect to similar funerary

artefacts testifying to significant contact between the delta and the mainland, even up to considerable distances.

In this relatively general context of the regional funerary practice of tumuli, the shell mound tumuli differ in terms of their presence up until relatively recent historical periods, the originality of the materials and higher position linked to the topography of these man-made topographic spaces. The result is a funerary protocol specific to the Saloum Delta, where inhumations were concentrated in precise and delimited spaces. They accumulated over long periods of time, whereas the mainland inhumations in a given place are simultaneous and without any subsequent funerary re-use. The Saloum tumuli shell mounds, at least the largest of them, are concentrations of a small number of tombs and fulfil the role of necropoli and permanent sacred spaces. Their construction typology is, moreover, different to those in Senegambia.

ICOMOS considers that the arguments in the comparative analysis for the property have been approached appropriately and notably strengthened by the additional documentation (November 2010) and concludes that there are no properties of similar values already inscribed on the List. The shell mounds of the Saloum Delta are among the largest and most representative of human cultures which have practiced a sustainable lifestyle of shellfish gathering in a wet brackish zone. This exploitation of the natural environment, combined with fishing, is still practised using traditional methods. The historic and ethnological meanings of the property are also illustrated and made tangible by the many funerary tumuli on certain shell mounds. Acting as necropolises and sacred spaces, they are testimony to unique funerary practices in the region. Their undulating forms and specific vegetation form a remarkable cultural landscape.

---

ICOMOS considers that the comparative analysis justifies consideration of this property for the World Heritage List.

---

Justification of Outstanding Universal Value  
The nominated property is considered by the State Party to be of Outstanding Universal Value as a cultural property for the following reasons:

- The shell mounds of the Saloum Delta are testimony to food-gathering practices as much for local food supply as for trade. They date back almost 3,000 years.
- Over the centuries, the shell mounds have led to the creation of numerous man-made islets contributing to the stabilisation of the delta's channels and its territory. The largest mounds have considerable dimensions.
- The use of certain mounds as funerary sites with numerous tumuli provides precious information about the lifestyle of coastal peoples and its consistency throughout time. These are sacred spaces with exceptional characteristics.

- The funerary artefacts are testimony to extensive contact between the delta people and coastal and hinterland societies.
- These various cultural practices are still in use and they have moulded a typical and unique landscape in the delta which is testimony to a sustainable balance between humans and nature.
- It is a rich and varied ecosystem preserved by the limited and careful use by man (see natural property).

ICOMOS considers that this justification is adequate. The Saloum Delta landscapes are testimony to an original traditional human settlement in a vast wet tropical zone with brackish water. A civilisation based notably on shellfish gathering and fishing has been able to develop sustainably. These landscapes of the delta are characterised by numerous shell mounds of man-made origin, at times imposing, which provide structure to and organise the delta's space. They are the fixed points in the landscape, in symbiosis with a complex and diverse natural environment. Some mounds are funerary sites with tumuli which, in the light of archaeological studies of regional pottery, have provided a better understanding of the traditional societies of the West African coast and their contacts. It is a living tradition that dates from protohistoric times, but it is fragile from both the socio-economic and environmental aspects.

#### Integrity and authenticity

##### Integrity

The State Party considers that the nominated property has been maintained at a high level of integrity as a result of the following points:

- The state of conservation of the natural environment and its biodiversity is remarkable. It has been maintained to the present day in symbiosis with the development of a stable human culture.
- The traditional exploitation practices of the fishery and mollusc resources have generated careful and sustainable relations between humans and their natural environment. They are still used today.
- The very many shell mounds as well as the archaeological and ethnographic studies testify to this traditional lifestyle.
- The many shell mounds are well preserved within the property, the central part of which is formed by the delta's ocean-facing side. They have suffered greater alteration closer to the mainland, in the buffer zone and in the internal part of the delta.
- The meeting between traditional life styles and the already ancient policy of preserving the natural environment guarantees this integrity.

ICOMOS considers that the conditions of cultural integrity of the Saloum Delta are in theory adequate, but the integrity is fragile. The shell mounds and cultural landscapes and the biodiversity of the natural environment may be under threat from poorly controlled socio-

economic behaviour. While a large number of shell mounds and tumulus mounds appear to be intact, or only slightly affected by human mining, others have disappeared or been damaged in the contemporary era (see History). Monitoring and better knowledge of the conditions of integrity of the entire property must be reinforced for the shell mounds.

#### Authenticity

The State Party presents an authenticity analysis along with the integrity analysis, supplemented by the documentation supplied in November 2010. The arguments in favour of a high degree of authenticity are therefore very similar: the state of conservation of the natural environment in symbiosis with man, the constancy of the utilisation of the natural resources, traditional lifestyles, especially mollusc gathering, and the good preservation of the shell mounds and tumuli on the ocean-facing islands. Moreover, there is no doubt as to the authenticity of the shell mounds.

ICOMOS first of all considers that the conditions of authenticity apply to the characteristic shell mound landscapes. It is expressed by the perception of them as an ensemble within the natural environment, by the character of their typical plant cover (presence of baobabs, plant density, etc.) and by the characteristic morphology of the tumulus mounds.

Secondly, this is a living property given the continuity of use through the on-going traditional harvesting of shellfish by the women of the community, by the respect for gathering zones and the right periods to harvest them, in order to ensure sustainable breeding, and finally by the traditional methods used for their preservation. The elements of modernisation concern aspects of protection and health, such as the use of gloves, rubber boots, plastic buckets and shears. This analysis of the anthropological authenticity of food practices also covers fishing and the production of dugout canoes. More noticeable elements of modernisation have, however, occurred in this area: use of motors (roughly for 50 of the dugouts), nets made of plastic fibre, etc.

In conclusion, ICOMOS considers that the conditions of authenticity of the mounds, tumulus mounds and their landscapes are generally adequate. They are augmented by an anthropological authenticity of the shellfish gathering and, to a lesser extent, fishing practices.

---

ICOMOS considers that the conditions of integrity and authenticity have been met.

---

Criteria under which inscription is proposed

The property is nominated on the basis of cultural criteria (iii), (iv) and (v) (and natural criteria (vii) and (x)).

*Criterion iii bear a unique or at least exceptional testimony to a cultural tradition or to a civilisation which is living or which has disappeared*

This criterion is justified by the State Party on the grounds that the Saloum Delta has important shell mounds that testify to a subsistence and trading economy dating back almost 3,000 years. While this lifestyle based on shellfish gathering and fishing is widespread in many regions of the world, from prehistoric times in some instances, the Saloum shell mounds are remarkable in terms of their great number, dimensions, state of preservation and persistence of this lifestyle up to the present day. The testimony is unique as a result of the presence of mounds containing a great many still-intact tumuli. They are exceptional in terms of the construction of shell tumuli, the accumulation of burials over time, the lasting role as necropolises and funerary areas, and by their characteristic landscapes.

ICOMOS considers that in terms of the important shell mounds, associated landscapes and the presence of a rare and well preserved ensemble of funerary tumulus mounds, the Saloum Delta provides an exceptional testimony of a coastal lifestyle, in a subtropical Sahelian environment with brackish water rich in shellfish and fish. Such a civilisation dates back more than 2,000 years and has continuously developed through to today, notably in its relationship with the resources of the natural environment. The traditional techniques for the preservation of the molluscs and fish have enabled self-sufficiency and regional trade. This is a living civilisation to which numerous anthropological elements bear witness.

---

ICOMOS considers that this criterion has been justified.

---

*Criterion iv be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates a significant stage in human history*

This criterion is justified by the State Party on the grounds that the Saloum shell mounds, in particular those with tumuli, present an exceptional and authentic cultural landscape. The property overall forms an almost perfect example of a sustainable human settlement in a mangrove environment from the protohistoric era through to the present day. The islands and islets, with their dense plant cover, form a complete and extremely rich, physical and biological system in which the action of humans and nature harmoniously complement each other.

ICOMOS considers that the ensemble of the shell mounds, built up over a 2,000-year cultural process, has formed a physical structure of stable islets and reclaimed land within the Saloum Delta. This has resulted in stabilised land and brackish water channels favourable to the development of the natural mangrove environment and the permanency of its biodiversity in harmony with its human exploitation. These are exceptional evolving cultural landscapes that illustrate a long period of the history of human settlements along the coast of West Africa.

---

ICOMOS considers that this criterion has been justified.

---

*Criterion v be an outstanding example of a traditional human settlement, land use, or sea use which is representative of a culture or cultures, or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change*

This criterion is justified by the State Party on the grounds that the shell mounds and the tumulus mounds are testimony to an interaction between humans and their environment over a very long period. In this way, humans have modelled their environment and modified its landscapes. The shell islets and their abundant vegetation dominate the lagoon and naturally floodable lands. Some mounds have acted as necropolises with funerary tumuli with multiple sepulchres, their undulating forms associated with large baobabs are testimony to the apogee of the populations who erected them. While this culture may have disappeared in terms of its funerary and symbolic expressions, the exemplary nature of a virtuous exploitation of the delta's resources remains.

ICOMOS considers that the property constitutes an eminent example of traditional human settlement in a river delta. It represents a lifestyle based on shellfish gathering and fishing within the context of a rational interaction with the natural environment of mangroves, mudflats, brackish water channels and floodable land. It is a fragile balance that is in particular threatened by the aggressive practices of the modern and contemporary world. It is a perfect example of sustainable development in a natural environment of great biodiversity, itself also under threat.

---

ICOMOS considers that this criterion has been justified.

---

ICOMOS considers that the nominated property meets criteria (iii), (iv) and (v) and conditions of authenticity and integrity and that Outstanding Universal Value has been demonstrated.

---

#### Description of the attributes

- The many shell mounds in the Saloum Delta are well preserved and they sometimes have imposing dimensions. They form an exceptional ensemble testifying to very ancient cultural practices widely spread across the globe.
- Over the centuries, the shell mounds have formed numerous man-made islets helping to stabilise the delta's land and channels.
- With their characteristic vegetation, the shell mounds form a typical cultural landscape within the delta's natural environment of mangroves, brackish water channels and sandy soil.
- The use of certain mounds as funerary sites comprising numerous tumuli is a remarkable testimony to past lifestyles of the coastal peoples of West Africa.

- The mounds and their landscapes are testimony to a human culture fully and sustainably adapted to a rich but fragile natural environment. This refers to shellfish-gathering, fishing and the preservation of molluscs and fish. These practices dating back to the protohistoric era are still alive.
- It is a rich and varied ecosystem preserved thanks to the limited and considered impact of human action on the natural environment.

## 4 actors affecting the property

### Development pressures

The most direct threat on the property's cultural integrity is the use of the shell mounds as quarries for construction and public works. These uses were considerable at the end of the 19<sup>th</sup> century through to recent times, notably in that part of the delta closest to the mainland. The State Party has announced that these practices are declining as a result of the application of regulations banning such practices.

Pressure is also being exerted by the development of farming land which is tending to encroach on the integrity of the mangroves and the forest.

Pressure from urban growth would seem to be moderate; it is limited to the existing agglomerations and villages whereas the delta is for the most part not suitable for permanent settlement.

The growing pressure from fishing is affecting the delta's fishery resources and, as a result, threatens the social stability of the community of fishermen who account for approximately 50% of the population.

### Tourism pressures

The growth of tourism is leading to construction and the phenomenon of buildings being decorated with shells. This is contributing to the potential extraction of material from the shell mounds.

ecotourism is leading to the creation of camps in the coastal regions, which could have an impact on the landscape and the environment.

### Environmental pressures

There is the threat of the pollution of the entire ecosystem, which is all the more sensitive given that it is a fragile environment, as a result of, on the one hand, waste coming from the sea, sometimes from far away, which washes up on the coast and, on the other hand, poorly managed urban and village waste which directly affects the delta water, and sometimes the landscape. The result is a deterioration of the environment near the villages, with resultant health consequences for the population.

A certain number of mounds are eroded by the coastal currents and storm water. This could eventually cause

difficulties for the conservation of some of the property's shell mounds.

ICOMOS considers that the management of waste and wastewater must be rapidly improved to limit polluting the environment and to protect the health of the inhabitants and their traditional lifestyles.

#### Natural disasters

Tropical storms and exceptional rainfall compound the phenomena of the erosion of the banks, especially the banks of the shell mounds.

#### Impact of climate change

The general trend towards rising sea-water levels increases the risk of the physical deterioration of the shell mounds. Ultimately, certain reclaimed land may be permanently inundated. Also, the lower rainfall in recent years has changed the freshwater inflow resulting in increased salinity in the *bolons*, which may alter the balance of the natural environment and the shellfish and fish resources.

---

ICOMOS considers that the most direct threats to the cultural property are the natural erosion of some of the shell mounds, illegal mining of the shell mounds and pressure from the growth of villages and tourism. Poorly controlled management of waste and wastewater is a threat for the inhabitants and their traditional lifestyles, as well as for the cultural landscapes.

---

## 5 Protection conservation and management

### Boundaries of the nominated property and buffer zone

The surface area of the nominated property is 145,811 hectares. It has a population of 55,000 (2009 projection), mainly in the rural towns of Bassoul, Dionewar, Djirnda, Eur and Toubacouta.

The buffer zone has a surface area of 78 842 hectares. It has a population of 81,000 (2009 projection). Also, the part of the delta north of the Saloum river's main channel has very similar characteristics to those of the proposed buffer and is very close to the actual property.

ICOMOS raised the issue with the State Party of an eventual extension of the buffer zone north of the property. In its February 2011 reply, the State Party indicated that such an extension would be of little use as it would have no direct influence on the property or its value; it would also be complex to implement and would contribute to dissipating its already very extensive protection efforts. Furthermore, the most vulnerable coastal area of the zone north of the Saloum river is already protected by the Community reserve of Palmarin.

---

ICOMOS considers that the boundaries of the nominated property and of its buffer zone are adequate.

---

### Ownership

The bulk of the property belongs to the National state, owned by the State, notably the areas forming the park and listed forest. The aquatic marine and river sections belong to the State Marine state. Law 64/46 of 17 June 1964 of the National state defines the land use and establishes the property rights given to private owners. All the vacant land or land not registered with the National registry of Mortgages is owned by the National state. The State can transfer it to third parties for its development under national or regional development plans and programmes. Law 96/07 of 22 March 1996 transfers property responsibilities to the regions and municipalities.

ICOMOS requested from the State Party clarification concerning private ownership and property returned to individuals or private legal entities within the property. In its February 2011 reply, the State Party indicated that under the Protection Law of 25 January 1971, no listed cultural property can be ceded by the State to individuals.

### Protection

The various geographic and ecological parts of the property are protected by four entities with national, international or local status, which overlap geographically and complement each other:

- Saloum Delta National Park (March 1976) covers a surface area of 76,000 hectares;
- A Biosphere reserve has been recognised by UN SCO (February 1981); in particular, it is tasked with assessing the human impact on the natural environment;
- Marine Protected Area of Bamboung (1984);
- Community reserve of Palmarin (2001).

These regional entities contribute to the conservation of the overall property, notably its natural and landscape components. The State Party also indicates its support for various international agreements on the protection of nature and the protection of cultural properties; it is working on their implementation.

Following the request by ICOMOS, the State Party has provided an adequate map detailing the geographic boundaries of the National Park, the Biosphere reserve, the Marine Area and the Community reserve of Palmarin. The map makes it clear that the entire property and its buffer zone are located within the Biosphere reserve and that the latter's boundaries correspond to the boundaries of the buffer zone.

### Legal protection

In addition to the aforementioned more general statutes concerning the property's regional protection, the shell mounds should be protected by being listed as *historic monuments* under Law No 71-12 of January 1971, but

without specific stipulation. This Law also protects the archaeological tumulus sites and sets out the conditions for excavation and research.

The 28 tumuli mounds and their inventory are also taken into account in the specific Decree No 08836 of 12 November 2007.

Following the request made by ICOMOS, the State Party provided confirmation in its February 2011 reply that all the shell mounds are included in the National Heritage List in accordance with the Law of January 1971.

#### Traditional protection

Bans and rites still associated with certain funerary areas contribute to protecting the tumulus mounds.

Through their traditional lifestyle, the local population is involved in the protection and conservation of the delta's topographical structures and the natural habitat.

The local communities and village associations are active partners in the property's protection and conservation. Numerous local agreements govern their operation and their relations with the entities in charge of the property's protection and management.

#### Effectiveness of protection measures

ICOMOS considers that an obvious effort to protect the property exists, notably through the various regional structures and the heavy involvement of the local communities in the various programmes for the rational use of the natural resources and protection of the biodiversity as a guarantee of sustainable development.

The National Park's responsibility for protection and conservation is reflected at the ground level by permanent monitoring stations and the presence of park guards and eco-guards from the villages.

In its February 2011 reply to the request by ICOMOS, the State Party confirmed that the mining of all the shell mounds in the property and its buffer zone is prohibited under the Law of January 1971 concerning Listed National Monuments. The National Park eco-guards are responsible for monitoring and enforcing this measure. Nonetheless, ICOMOS considers that the same land protection regime must be ensured for those areas of the property located outside the National Park and which form the bulk of the property's land components with the majority of the shell mounds.

ICOMOS considers that the protective measures are adequate. Nonetheless, ICOMOS recommends that the same land protection regime be ensured for all the property's shell mounds, both within and outside the National Park.

#### Conservation

##### Inventories, recording, research

The property has been the subject of many research studies and scientific inventories, both cultural and natural. The results are published as scientific reports and articles.

For the cultural aspect, the inventory of the shell mounds was first published in 1982 by the National Parks of Senegal. It was updated by the scientific publication of G. Thilmans (1997). It was further augmented with photographic documentation carried out in 2007-2008.

The documents and archives are held in Dakar by the National Parks Department and the Cultural Heritage Department.

The archaeological artefacts (pottery, ornaments, iron weapons, etc.) are mainly conserved in the collections of the Fundamental Institute of Black Africa, of the University of Cheikh Anta Diop (IFAN-Ch. A. Diop) in Dakar, and secondarily in various museums in Senegal (Gorée and Saint-Louis).

##### Present state of conservation

More protected from the pressures of modern urban development than most other similar sites, the Saloum Delta region has been relatively well preserved. Closely associated with the property's conditions of integrity and authenticity, the state of conservation concerns the shell mounds, the tumulus mounds and the associated characteristic landscapes. It is considered fairly good but fragile. It is threatened by the natural and man-made deterioration of the shell mounds, by a potential deterioration in the natural environment and by pollution from human sources. More broadly, a reasonable balance between the human activities and natural resources guarantees the property's sustainable conservation.

##### Active Conservation measures

The conservation of the shell mounds, tumulus mounds and landscapes is assured by the organisation of their monitoring by guards and the application of regulatory measures protecting them from human exploitation. More broadly, the conservation measures for the cultural heritage are developed as part of the management of the natural heritage and sustainable development programmes designed to conserve the economic and social value of the fishing and shellfish gathering practices. In the future, the cultural dimension must be given greater priority as regards the property's management, notably through the preparation of the Management Plan (2010-2014). The latter must enable a stricter application of the protection regulations for the shell mounds. It makes provision for the presence on the property's site of personnel specialising in cultural heritage, which has not been the case up until now.

ICOMOS considers it is essential to significantly strengthen the practical measures for the protection and conservation of the property's cultural values. In the first instance, this refers to the use of eco-guards for the entire property, not just that part incorporated in the National Park, and improved training; and, more widely, to have onsite a sufficient number of staff trained in the protection and conservation of the property's cultural values.

#### Maintenance

There is no specific maintenance policy for the property given its mixed and open-air nature. Further, in the villages, the property's maintenance and the quality of its landscapes come back to the issue of waste and wastewater.

ICOMOS considers that a policy of "best practices" could be promoted in inhabited and tourism areas as part of a general framework of improved management of household waste and wastewater within the property.

#### Effectiveness of conservation measures

ICOMOS considers that the conservation measures for the material cultural heritage have until a very recent period been handled in an ancillary manner compared with the conservation measures for the natural environment. Following the recognition of the property's outstanding universal value, they must become a priority in the Management Plan and they require the presence of a sufficient number of competent staff. Furthermore, sustainable economic development programmes respectful of traditional fishing and shellfish gathering values are very important measures for the conservation of a living heritage.

ICOMOS considers that there is a risk of erosion of certain shell mounds by sea and river currents, and that it is necessary to consider conservation measures.

---

ICOMOS considers there is a conservation dynamic for the cultural heritage linked to the conservation of the natural environments and the sustainable development programmes. This must, however, be confirmed and detailed, and a sufficient number of competent staff provided. Conservation measures for the shell mounds threatened by erosion need to be considered.

---

#### Management

Management structures and processes, including traditional management processes

Given the extent of the delta and the diversity of the aspects of its management, the multiple stakeholders operate, insofar as their relevant sector of expertise is concerned, through various programmes or development plans and within the framework of the regional organisations in place (park, reserves and villages). The following are the groups of stakeholders:

- Several ministries (Environment, Fishing, Tourism and Culture) are represented by six ministerial departments, three of which are exclusively part of the Ministry of the Environment (Water and Forests, National Parks and the Environment);
- The university and various national research institutions are involved in the property's scientific management;
- Regional and municipal bodies and community associations are involved in the property's management.
- Various organisations and international agencies, including the United Nations (*Millennium Development Goal Fund*), non-governmental organisations (NGOs) or specialist foundations are also involved in specific programmes.

The main regional stakeholder in the property's management is the Saloum Delta National Park, which reports to the National Parks Department (DPN) of the Ministry of the Environment. It works in a coordinated manner with the rural communities, which are administrative entities, and village associations, through programmes and specific actions, such as the organisation of eco-guards or the management of the Marine Protected Area of Bamboung and the Community Reserve of Palmarin. The Park is responsible for a certain number of conservation or development programmes in association with other institutional partners (Department of the Environment, districts and sub-prefecture, the National Programme for the Management of Marine and Coastal Resources (*GI MAC*)), national scientific institutions (Society for the Protection of the Environment and Fauna, Dakar Oceanium, etc.), international institutions (UNDP, UN SCO regional office, etc.), and NGOs concerned with environmental protection (IUCN, Waame) and sustainable development (USAID).

The Cultural Heritage Department has for the moment limited itself to providing a remote advisory role for the Park and assistance with the training of personnel. The Fundamental Institute of Black Africa, University of Cheikh Anta Diop (IFAN-Ch. A. Diop), Dakar, coordinates archaeological issues in the delta.

In its February 2011 reply to the request by ICOMOS for clarification regarding the structure of the property's management, the State Party indicated that it is currently the Property's Steering Committee, assisted by the United Nations' *M G Fund* Technical Committee, that fulfils this role. The property's future Permanent Management Committee will be established as part of the current (2011) establishment of the Community House in Toubacouta.

Soukouta Community Radio plays an important role in providing information and raising awareness among the local population.



Policy framework: management plans and arrangements, including visitor management and presentation

The property Management Plan has been drawn up for 2010 to 2014. It covers the various actions and programmes in progress, while displaying a forward-looking approach to seeking new goals.

The main plans and programmes in progress are:

- The integrated regional development plan, which includes five rural community development plans;
- The participative development and management project for the Protected Marine Area of Bamboung (Oceanium);
- The Wula Nafaa project for the considered exploitation of natural resources (USAID);
- Tourism development projects: circuits, eco-guard and guide training, Bamboung eco-tourism camp, etc.;
- The Toubakouta cultural interpretation centre project;
- The various natural environment conservation programmes.

For the near future, the Management Plan defines the general objectives for the conservation of the cultural heritage and sustainable development. This refers, in particular, to the "Culture and Development" project (*M G Fund*) aimed at integrating the current actions and providing them with new perspectives on a larger scale than the nominated property. The Management Plan also aims to strengthen the legal protection and improve the property's overall management. The inhabitants' living conditions are the subject of a programme aimed at developing local production and appreciation of the natural and cultural heritage.

The new Management Plan includes a tourism development programme. Tour circuits have been identified and information boards are starting to be erected. For the moment, visits are mainly accompanied by private guides. The plan comprises sections concerning: circuits and information panels, promotion of the property, a village interpretation centre project, campaigns targeting the inhabitants to raise their awareness of the property's cultural and natural values, production of educational and communication material, provision of accommodation, etc. The interpretation centre will exhibit examples of the archaeological artefacts selected from IFAN's collections.

The actions set out in the Management Plan are the result of the application of a SWOT analysis. They form a coordinated ensemble with an application schedule. Their implementation is guaranteed by the United Nations' *M G Fund* budget for 2009 to 2011, and its probable extension within the Management Plan (2010-2014).

ICOMOS considers that the proposed Management Plan adequately defines the general objectives and that it aims to harmonise actions between multiple stakeholders. The

local actions must strengthen protection of the mounds and raise awareness among the inhabitants of their cultural value; they must also strengthen good practice in terms of waste and wastewater treatment. Tourism development programmes, notably facilities and accommodation, must pay particular attention to landscape conservation. More broadly, ICOMOS recommends extreme vigilance in the effective application of the Management Plan and clear coordination between the various bodies responsible for the natural and cultural heritage, up until now little or not at all involved in the field. Additionally, the official promulgation of the Management Plan must be confirmed and the financial resources for its application consolidated.

In its February 2011 reply to ICOMOS, the State Party indicated that a ministerial decree that will bring the Management Plan into effect is under examination and that the Management Committee will be established by a decree at the regional level.

isk preparedness

There is no specific section dealing with risk preparedness, given that risks are closely associated with the property's preservation and conservation, from both the natural and cultural angles.

Involvement of the local communities

This is at the heart of the management process, through the rural communities and actions coordinated with the National Park and eco-guards, sustainable development programmes, etc.

resources, including staffing levels, expertise and training

The National Park benefits from permanent presence in the field of surveillance and supervisory personnel belonging to the National Parks Department (DPN); a total of 15 in the central control station and 6 monitoring stations.

The eco-guards are volunteers from the villages; there are currently about 40. In addition to their park surveillance tasks, supporting the DNP guards, their role is scientific (animal counts, observation missions), educational (local population awareness, guidance) and economical (participation in development programmes). The eco-guards are given cultural heritage training by the Heritage Department; their headquarters are in Missira.

The Natural reserve of Bamboung has 16 volunteer eco-guards.

In addition to the eco-guards, personnel need to be recruited as part of the creation of the Toubakouta Interpretation Village, especially for surveillance and promotion of the cultural heritage.

Up until now, the property's management has relied on a variety of sources of public and private, local and

international finance. Funds are generally tied to specific programmes, which sometimes complicates coordination. The contribution in the coming years from the "Culture and Development" project with funding of 6.5 million US dollars (United Nations *M G Fund*), should provide greater stability, scale and synergy for the programmes.

Effectiveness of current management

ICOMOS considers that the current management is effective and adequately coordinated by the National Park, even if there are a large number of varied programmes and stakeholders. The ensemble forms a satisfactory management system for the property, with the main stakeholders and managers clearly identified, notably in the case of the National Park and rural communities. Nonetheless, the multiplicity of programmes and stakeholders tends to make some situations somewhat confused. Certain dynamics, such as the active protection of the cultural assets, are very recent and need to be confirmed. Furthermore, the official promulgation of the Management Plan and appointment of the people in charge of its application must be confirmed.

---

ICOMOS considers that the management system for the property is adequate; it is, however, necessary to confirm the official promulgation of the Management Plan, ensure its financial consolidation, appoint the people in charge and ensure its correct implementation. Particular attention needs to be paid to the complete integration of the protection and conservation of the property's cultural components into the National Park management.

---

## 6 Monitoring

Indicators have been established for monitoring the conservation of the natural environment, biodiversity and shell mounds. For the latter, the aim is to monitor the number of mounds still intact, the degree of degradation of the others, the number of mounds illegally exploited and regular checks to identify the presence of illicit excavations. Monitoring is coordinated by the Cultural Heritage Department of the Ministry of Culture (Dakar). There is a standard document for the individual monitoring of mounds.

Further to the request by ICOMOS regarding the possibility for improved monitoring of the landscapes, notably by photographic means, the State Party recalls the existence of a standard monitoring file for cultural properties and the possibility for more detailed monitoring of certain notable landscapes. The territory is moreover too vast to consider a systematic photographic approach.

---

ICOMOS considers that the elements allowing for the individual monitoring of the mounds exists, but that frequency and the responsibility for their implementation need to be specified. The monitoring needs to be extended to include the most significant cultural

landscapes, for example by publishing an annual monitoring report on the property's state of conservation.

---

## 7 Conclusions

ICOMOS recognises the Outstanding Universal Value of the cultural dimension of the mixed property Saloum Delta, Senegal, as a particularly representative and well preserved testimony of coastal civilisations that exploited fishery resources and gathered shellfish.

Recommendations with respect to inscription  
ICOMOS recommends that the Saloum Delta, Senegal, be inscribed as a cultural landscape on the World Heritage List on the basis of **cultural criteria (iii), (iv) and (v)**.

Recommended Statement of  
Outstanding Universal Value

Brief synthesis

The region of the Saloum Delta is a remarkable testimony to the synergy between a natural environment with extensive biodiversity and a style of human development that is still present albeit fragile. Sustainable shellfish gathering and fishing practices in brackish water, and the processing of the harvest for its preservation and export was developed here. The shell mounds and the tumulus mounds form specific and exceptional cultural landscapes.

The numerous shell mounds in the Saloum Delta are generally well preserved and they sometimes have imposing dimensions. They are direct testimony of sustainable and very ancient socio-economic practices. Over the centuries, they have led to the formation of numerous man-made islets contributing to the stabilisation of the delta's land and channels. With their characteristic vegetation within the delta's natural environment, the shell mounds form typical cultural landscapes. Some mounds include tumuli; they form, with their baobab vegetation and their undulating forms, funerary sites with specific landscape features.

**Criterion (iii):** With its numerous shell mounds, associated landscapes and the presence of a rare and well-preserved ensemble of funerary tumulus mounds, the Saloum Delta provides exceptional testimony to a coastal lifestyle, in a Sahelian subtropical environment, with brackish water rich in shellfish and fish.

**Criterion (iv):** All the shell mounds built up over a 2,000 year-long cultural process have formed a physical structure of stable islets and reclaimed land within the Saloum Delta. The resultant cultural landscapes are exceptional and illustrate a long period of the history of human settlement along the West African coast.

**Criterion (v):** The Saloum Delta is an eminent example of traditional human settlement. It represents a lifestyle and sustainable development based on the gathering of shellfish and fishing, in a considered interaction with a natural environment of extensive but fragile biodiversity.

#### Integrity

The conditions of cultural integrity of the Saloum Delta are in theory very adequate, even if some shell mounds have been damaged, but the integrity remains fragile. The shell mounds and the cultural landscapes and the biodiversity of the natural environment may be threatened by poorly controlled socio-economic behaviour.

#### Authenticity

The conditions of authenticity of the mounds, tumulus mounds and their landscapes are generally adequate. They are complemented by the anthropological authenticity of the shellfish gathering practices and to a lesser degree of the fishing practices.

#### Management and protection requirements

The protection of the shell mounds and the tumuli mounds is ensured by adequate regulatory measures. However, the active protection of the cultural sites in the field is recent and must be extended to the property as a whole, and not just concern the National Park. Additionally, the general policy for the property's conservation is closely tied to the conservation of the natural environment and the sustainable development programmes for the delta as a whole.

The property's management relies on numerous individuals in the field. Together they form an adequate management system for the property, with the key stakeholders and those in charge clearly identified, notably the National Park, the rural communities and the United Nations *M G Fund*. However, this management system is evolving and the multiplicity of programmes and stakeholders tends to make some situations somewhat confused. The overall management committee still has to be set up (2011), its resources confirmed, and the homogeneous handling of management and conservation for the entire property needs to be improved.

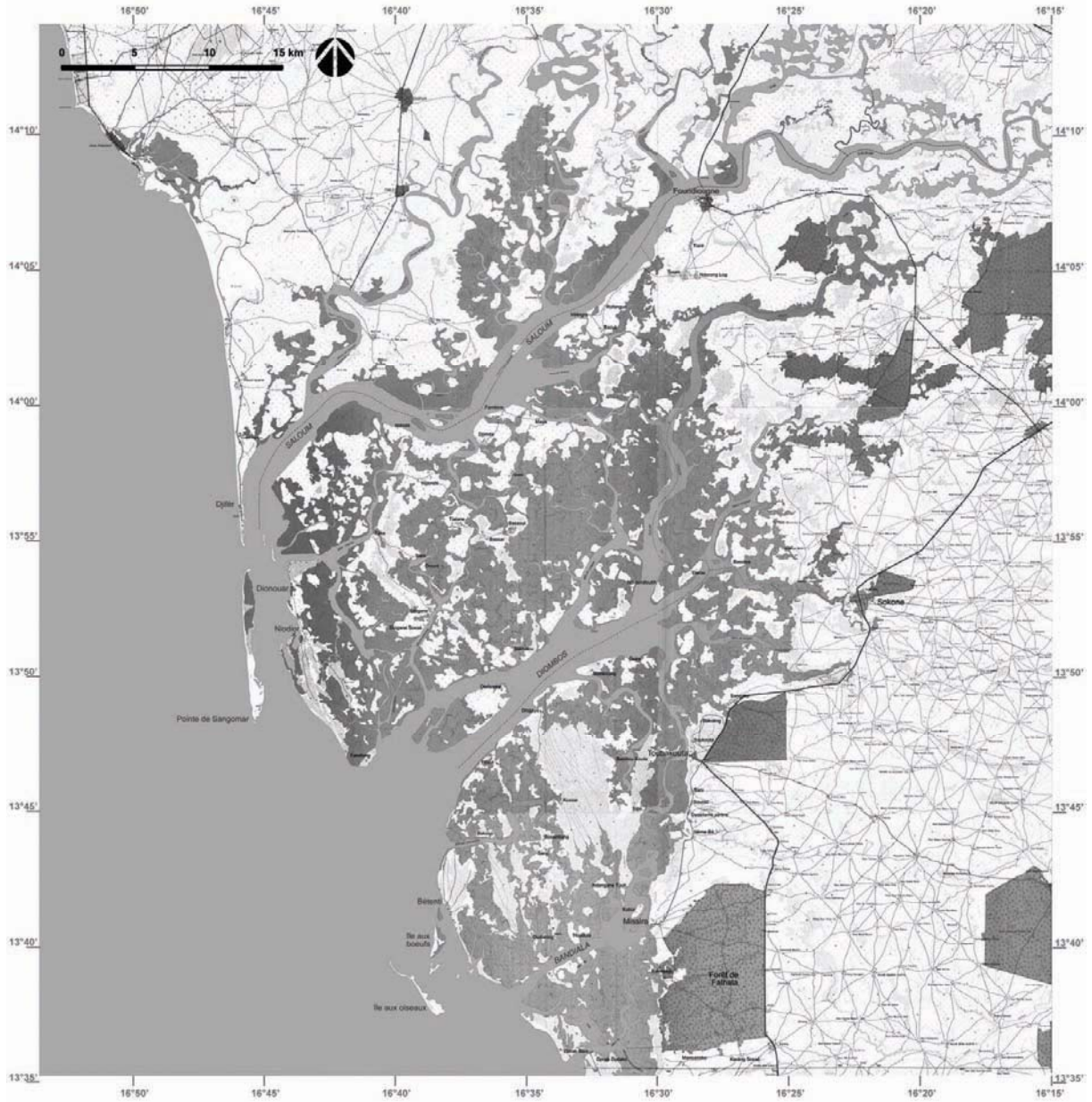
ICOMOS recommends that the State Party give consideration to the following:

- Prioritise attention on the simultaneous protection and conservation of the property's cultural elements and associated natural elements within the context of the Management Plan and economic and social development programmes. Ensure this joint protection-conservation is of the same level across the entire property, especially by means of eco-guards throughout the whole property;
- Confirm the official promulgation of the Management Plan (2010-2014) and the establishment of the Management Committee tasked with its

implementation and coordination; stipulate the Management Committee's human and material resources as well as its ties with, on the one hand, the Community House in Toubacouta and, on the other hand, the Saloum Delta National Park;

- Consider specific conservation measures for the shell mounds threatened by erosion and/or by currents;
- Improve waste and wastewater management in order to limit pollution of the environment and to protect the inhabitants' health and traditional lifestyle, and those cultural landscapes near inhabited areas;
- Pay particular attention to the landscape management aspects of tourism development;
- Pay particular attention to the complete integration of the protection-conservation of the property's cultural elements in the property's management and development programmes;
- Specify the frequency of, and the responsibility for, the implementation of monitoring. It should be extended with respect to the most significant cultural landscapes. The publication of an annual report on the state of the property's cultural and landscape conservation is also desirable.

ICOMOS also recommends that the State Party compile a report on the implementation of its protection and management system for the property, for examination by the 36<sup>th</sup> session of the World Heritage Committee in 2012.



Plan showing the boundaries of the nominated property





Aerial view of mangrove forests



Undulating surface created by tumuli erected at the summit of the Tioupane-Boumak mounds



Diron Boumak mound



Oyster culture on wooden stakes

Arab States

New Nominations



---

adi Rum  
ordan  
No 1377

---

Official name as proposed by the State Party  
Wadi Rum Protected Area

Location

Aqaba Special Economic Zone  
Hashemite Kingdom of Jordan

Brief description

Wadi Rum is a spectacularly scenic desert landscape of flat, sandy valley beds bounded by towering red sandstone cliffs and rock formations created by millennia of geological and climatic processes. Widespread petroglyphs, inscriptions and archaeological remains testify to 12,000 years of human occupation and interaction with the natural environment, illustrating the evolution of pastoral, agricultural and urban human activity in the Arabian Peninsula and the environmental history of the region. North-Arabian inscriptions appear to associate Wadi Rum with the Qur'an.

Category of property

In terms of categories of cultural property set out in Article I of the 1972 World Heritage convention, this is a site.

In terms of the Operational Guidelines for the Implementation of the World Heritage Convention (January 2008), paragraph 47, the property is also nominated as a cultural landscape.

[Note: The property is nominated as a mixed cultural and natural site. IUCN will assess the natural significances while ICOMOS assesses the cultural significances]

1 Basic data

Included in the Tentative List  
8 November 2006

International Assistance from the World Heritage Fund for preparing the Nomination  
None

Date received by the World Heritage Centre  
1 February 2010

Background

This is a new nomination.

Consultations

ICOMOS has consulted its International Scientific Committees on Rock Art and on Archaeological Heritage Management and several independent experts.

Literature consulted selection

Betts, A.V.G. (ed), Helms, S.W., et al, Excavations at Jawa 1972-1986, Edinburgh University Press, Edinburgh, c1991.

Farès-Drappeau, S., 'A preliminary report on the fourth season of the Wadi Iram epigraphical, geographical and archaeological survey' in ADAJ 45, 205-218, 2001.

Farès-Drappeau, S., 'A preliminary report on the sixth season of the Wadi Iram epigraphical, geographical and archaeological survey' in ADAJ 48, 357-371, 2004.

Jobling, W.J., 'Preliminary report on the Archaeological Survey between Ma'an and Aqaba' in ADAJ 25, 1981.

Jobling, W.J., 'Aqaba-Ma'an Survey' in ADAJ 26, 1982.

Jobling, W.J., 'Preliminary report of the Sixth Season of the Aqaba-Ma'an Epigraphic and Archaeological Survey' in ADAJ 29, 1985.

Jobling, W.J., and Tanner, J.G., 'New evidence for early Christianity in the North-West Hejaz in Papers presented at the Eleventh International Conference on Patristic Studies held in Oxford 1991, *Studia Patristica* 25, 313-316, Peeters, Leuven, 1993.

Macdonald, M.C.A., and Searight, A., 'The Inscriptions and Rock-Drawings of the Jawa Area' in ADAJ, 26, 1982.

Huben, I., and Ghassan, N., 'Review of the Archaeology of the Wadi Rum Protected Area, Second Tourism Development Project of the Royal Society for the Conservation of Nature, 1999.

Tholbecq, L., 'The Nabataeo-Roman site of Wadi Hamm (Iram): A new appraisal' in ADAJ 42, 241-254, 1998.

Hayadine, F., and Farès-Drappeau, S., 'Two North-Arabian Inscriptions from the Temple of Lat at Wadi Iram' in ADAJ 42, 255-258, 1998.

Technical Evaluation Mission

A joint ICOMOS/IUCN technical evaluation mission visited the property from 20 to 26 September 2010.

Additional information requested and received from the State Party

Additional information was requested from the State Party on 22 September 2010 as to whether there is an inventory and map of the major sites of petroglyphs and inscriptions, and of the archaeological sites; what conservation and maintenance is being undertaken, and why there is a strip of buffer zone penetrating the property which includes the access road and Rum Village and whether this includes petroglyphs, inscriptions and/or archaeological remains.

A response to this was received on 8 November 2010 and this information is included under the relevant sections below.



Date of ICOMOS approval of this report  
10 March 2011

## 2 The property

### Description

The nominated property covers a total of 73,300ha and is buffered by a surrounding area of 60,000ha. Wadi ʿUm Protected Area lies around 290km south of Amman east of the Jordan Rift Valley and south of the steep escarpment of the central Jordanian plateau. It forms a major part of the Hisma desert of southern Jordan and northern Arabia, which is mainly a Palaeozoic sandstone plateau with elevations up to 1,850m. The area extends from ʿAaʿ Disi in the north-east to Jebel Al Faraʿa in the south-east and to Wadi Sweibit in the south-west. It has a true desert climate – hot and dry.

### Rock Art and Inscriptions

Human settlement going back to at least 10,000 BC is said in the nomination dossier to be documented within the site by over 25,000 petroglyphs (images engraved or painted on rocks) and around 20,000 examples of rock epigraphy (engraved inscriptions) on boulders and the rock faces of cliffs and hills. The rock art depicts anthropomorphic and zoomorphic figures and abstract forms and is found in a relatively limited and coherent area that comprises the wadis Hafir, Sabit, Umm Sahm, Saladeh and ʿUm. Dated through studies of patina, techniques of execution, subjects and association with dated human settlements, the practice of rock engraving in Wadi ʿUm extends, it is claimed, without interruption throughout the Neolithic to the modern era.

ICOMOS notes that only the rock art mentioned in accompanying inscriptions can be accurately dated. Other techniques give relative results. The vast majority of inscriptions date from about the second century BC to about the fourth century CE, with a relatively small number of medieval Arabic graffiti and some modern Arabic ones. More accurate dating of the age of human settlement in the area is given by the excavated Neolithic archaeological sites.

Depiction of fauna throughout the period documents the evolution of climate and of human domestication of animals (cattle, camels, ostriches) and includes wild animals now extinct such as the leopard and Arabian Oryx. Images of feet and hands at Jebel ʿHazʿali, Jebel Um Ishrin and Areq Asegeh may represent worshippers and indicate religious significance. The nomination dossier describes a thematic typology proposed by Borzatti von Lwenstern (Quadri di Petra. 8000 anni d'arte nel deserto, Casa editrice Nuova S1, Bologna, 2005) which identified hunting scenes; collective fights and duels; domesticated animals with humans; dance scenes or ritual practices; erotic scenes and parturition; feet and hands; abstract motifs and tribal marks. While the themes are constant, changes in style of execution over time are evident as well as depicted weapon and animal types.

In conjunction with the rock art in Wadi ʿUm is an extensive corpus of pre-Arabic scripts either side by side with pictorial petroglyphs or overlaying them. According to the nomination dossier, Borzatti von Lwenstern suggested the evolution of pictograms into pictographs, then into ideogrammatic expression and alphabetical script, based on a corpus of over 1,600 painted, standardised geometrical motifs surveyed in the broader Wadi ʿUm area. He dated the early pictographs to 5,000-4,000BC. The earliest dated textual inscriptions known as Thamudic from the Thamud tribe based near Meda'in Saleh in Saudi Arabia are 3,530-2,120 years old. They indicate very early literacy among the pastoral nomads of the region. The script spread out from northern Arabia and continued in use until at least the 11<sup>th</sup> century AD. At an earlier period Lihyanite, Safaitic and Aramaic alphabetical writing systems developed from it; Nabataean developed from Aramaic, and Arabic from Nabataean. With the rise of Islam, Arabic spread all over the region. Within the nominated site texts are found in all these north Arabian scripts. They include dedicatory inscriptions to pre-Islamic deities such as the goddess Allat (Lat) usually in Thamudic but also in Nabataean near the temple site at ʿUm; signatures recording personal names and genealogies associated with hunting or fighting scenes; personal names and genealogies in Thamudic and Arabic associated with water catchment and storage installations; funerary inscriptions; recent names and genealogies in Arabic along hunting routes in the mountains and recent texts in Arabic expressing love and amorous adventures.

The identification of Wadi ʿUm with Iram and the tribe of Ad, mentioned in the Qur'an, has been proposed by scholars who have translated Thamudic and Nabataean inscriptions referring to both the place Iram and the tribes of Ad and Thamud by name. The Qur'an (89: 6-13) refers to the Ad people; the unique high peaks of Iram, and the Thamud who carved the rocks there, and has been interpreted as an account of how Allah dealt harshly with the people of Ad who were corrupted by wealth and the delights of the flesh.

### Archaeological sites

According to the Management Plan, 154 archaeological sites have been identified in the nominated area spanning all eras from the Neolithic and including many Nabataean antiquities. Many sites have Thamudic or Nabataean inscriptions with occasional examples of Greek. The seven most important sites were identified by ʿUben and Nasser in 1999 and are listed with brief descriptions in the Management Plan 2003-2007 extended to 2010, which was submitted as part of the nomination dossier. However they are not cited as attributes of Outstanding Universal Value in the nomination dossier. The inventory compiled by ʿUben and Nasser in 1999 of 151 sites is on the Wadi ʿUm web site with descriptions and publication references.

In response to ICOMOS's request for an up-to-date inventory and map of significant archaeological and rock art and inscription sites, the State Party has provided an enlarged list of 13 most significant sites, two of which are

in the buffer zone and an additional site is outside the buffer zone. The 14 sites are:

1 The Nabataean temple at *Umm* built between 9BC and 40AD

Excavations in 1932, 1959 and the 1960s established that the Nabataean temple was first built in the reign of Aretas IV (9BC-40AD) on the site of an earlier Thamudic temple and went out of use by the 4<sup>th</sup> century AD. A Thamudic inscription mentioning the tribe of Ad was found here on a stone reused in the second building phase. The villa with private rooms attached, was built and decorated in a fairly luxurious style (painted plaster walls) sometime in the reign of Aretas IV. A similar date is proposed for the baths, which were clearly built by the Nabataeans but following the Roman model. With its stone hypocaust in the calderium, this may well be the earliest hypocaust baths in Jordan. As well as being a cultic centre, the temple is thought to have also functioned as a civic and administrative centre. The site is visited by many tourists, given its convenient location near the village.

2 The spring Ain Shallaleh (Al-Shalala) and Nabataean shrine

This is one of the main springs that feeds the *Umm* temple and village area and is marked by a small Nabataean shrine. There are inscriptions that consist partly of dedications to several deities, 'Allat, al-Uza, al-Kutba, Balshamin and Dushara and one names the place Iram and is dated to the reign of *Abel* II. Others are invocations to be remembered by 'Allat made by individuals, some of whom were craftsmen who are thought to have worked on the construction of the temple.

3 A series of 22 pre-Islamic shrines

These line a corridor on the eastern slopes of *Jebel Umm*, 2km before and 2km after *Umm Village* (until *Abu Aina* spring), and the south-western slope of *Jebel Umm Ishrin* from the village to the tip of the mountain. The shrines comprise square or rectangular stone enclosures with a betyle or stone representing the dwelling of the divinity, standing in the centre.

4 The *Abu Aina* spring and its Thamudic inscriptions on a boulder.

5 The Neolithic village of *Abu Nakheileh*

This small Neolithic village is situated at the foot of the mountain just below the spring known as *Ain Abu Nakheileh*. It was probably a seasonal base camp, which was not occupied over a long period. The site has been heavily damaged by passing vehicles going in and out of the bay to collect water from the modern cistern and taking tourists to see the inscriptions on the boulder nearby.

6 The *haz'ali* siq

In 1932 Savignac noted the inscriptions and rock drawings in the cleft in *haz'ali* and published some of them in 1934. There are Thamudic and *Ufitic* inscriptions along with representations of people, feet and animals. They form a visually impressive collection and are one of the

major tourist attractions in the *Wadi Umm* area. The inscriptions and rock art are currently in good condition, largely because they are mostly out of reach of both people and natural weathering factors.

7 The *Ain al-attar* spring and boulder with Thamudic inscriptions

The inscriptions on the boulder mention the tribes of Ad and Shaqalat, and a name similar to the one mentioned on the foundation stone of the temple of *Allat* at *Umm*. There are also traces of a Neolithic settlement, and a large Islamic graveyard.

8 *Umm I-eseir*

Situated on the west side of *Wadi al Beidha*, against a huge stone abutting *Jebel Umm Hariq* there is a small Nabataean building about 12 x 5 metres. The function of this building is not clear. Nabataean and Thamudic inscriptions are to be found nearby, including to "Allat the goddess which is at Iram". Some Neolithic-Chalcolithic flints and pottery sherds of all dates were found nearby along with some stone circles.

9 *Jebel Mughra*

Around this small mountain range eleven dams with numerous Thamudic inscriptions have been documented. Several of the dams are still in use by Bedouin herders today.

10 *Udayb er-ih*

A large Neolithic agricultural settlement with traces of olive farming and very ancient hydraulic installations still used by Bedouin herders today. Pottery finds attest occupation until the Abbasid period. Numerous examples of rock art include depictions of camels, and there are several Thamudic inscriptions.

11 *Wadi Umm*

Rock art site with geometric signs, feet and hands, animal and hunting scenes superimposed on two large boulders.

12 *Uais Salim* (in buffer zone)

Large Neolithic agricultural settlement with hydraulic installations and a large number of petroglyphs and Thamudic inscriptions.

13 *Jebel Burdah* (in buffer zone)

A major Nabataean dam with inscriptions.

14 *Jebel Harazeh* (outside the buffer zone)

Located 15km north of the Protected Area; major Nabataean hydraulic installations (several dams) and caravan outpost between the two Nabataean settlements of *Umm* and *al-Humayma*. The site has traces of pre-historic occupation including large carved human figures and other petroglyphs.

The above sites listed in the additional information provided by the State Party do not include two of the sites in the list of seven significant sites identified by *Uben* and *Nasser*:

### Hedeib Al-Fala

This is an area of inselbergs at the east end of Hor al Ajram where a variety of antiquities have been recorded by different scholars. There are Thamudic inscriptions, including a rare example in black paint (that is not incised) (Jobling 1982) and one Nabataean inscription, as well as rock art. At the foot of a hill is a large area (250 x 400m) of circular house foundations which are associated with flints and predominantly Chalcolithic sherds.

### Bir um Al-Atiq

This Nabataean dam lies across the northern entrance to Wadi um. It was initially identified by Harding who incorrectly located it as being a short distance east of the mouth of Wadi umman. There is a 50m long dam wall with a rectangular enclosure at the east end. Nearby there are some cairns and graves, which may be earlier than the dam, a pottery scatter of mainly Nabataean sherds and a Thamudic inscription. The site has been disturbed by vandalism and modern constructions.

ICOMOS notes that the Palaeolithic site of al-aaaka, which is said in the nomination dossier's History and Development section to be the most important of this era, is also not included in the list of significant sites.

### History and development

Tectonic activity, particularly Tertiary uplift has been a major process in the formation of the high desert and mountain peaks of the area. The evolution of the Wadi um landscape began with the collision between the Arabian and Anatolian tectonic plates, prior to the opening of the Dead Sea rift which resulted in the migration of the Tethys Sea to the Mediterranean. The Jordanian tableland was uplifted, opening a complex grid of geological faults around 20 Ma that have facilitated ongoing extensive and distinctive erosion. Concentrated erosion along fault lines has formed the iconic large-scale checker-board landscape of straight wadis and rectangular mountain blocks and created the network of corridors and canyons that typify the Wadi um landscape. Ongoing uplift and erosion triggers the collapse of cliff sections and consequent debris on the valley floors, as well as leaving isolated remnants (inselbergs) of once larger massifs.

Archaeological surveys and excavations indicate that permanent human occupation began in the Upper Palaeolithic period 19,000 years ago and extended through the Roman and Islamic periods to the present. The numerous archaeological sites from the Palaeolithic era, of which the most important is al-aaaka in Wadi Umm Sahm at a time when the climate was wetter, suggest that the region was densely populated in settlements located near water sources, vegetation and wild game. Sites have been found around the former shores of large inland lakes at aa' Disi and aa' Um Salab that existed in early prehistory on the northern borders of the nominated area. Other are associated with flints found in rock shelters and caves. The largest Neolithic (8,300-4,500 BC) sites in the nominated area are at Abu Nakheil and wais Salim and consist of the remains of circular or rectangular stone houses that were probably inhabited by groups of semi-

sedentary people exploiting the local wildlife and plants. During the Chalcolithic (c 4,500-3,200 BC) when copper was being mined in nearby Wadi Araba, evidence of flints and pottery usually associated with stone settlement foundations such as at Udayb er-ih with rock art depictions of cattle indicate thriving human occupation. In the more arid climate of the Bronze Age, channels, dams and reservoirs near mountain slopes and at the entrance to narrow valleys, and traces of farming activities such as olive growing indicate communities supporting themselves with a combination of animal husbandry and agriculture.

The lack of evidence for Iron Age (c 1,200-539 BC) settlements has been interpreted to suggest a return to a nomadic pastoral lifestyle, an interpretation possibly supported by Biblical accounts of the region. Pottery of this period found at 'weira (outside the protected area to the north-west) and Wadi aman has been termed Midianite by scholars who have proposed that the Wadi um area is the Ram of the Bible - part of Midian, an area extending from the Jordanian highlands above Wadi Araba into the north-west of Saudi Arabia along the shores of the Gulf of Aqaba. The Midianites were said to be polytheist, have swift camels and to be a confederation of tribes. Some lived in the cities and fortresses of Moab; others led a nomadic life in a more distant region, such as Aram.

It is suggested that some 1.8 million years ago, the Wadi um area was a bridge for early migration on the route from Africa to Asia. Much later it became part of the route linking the coastal regions of the Arabian Peninsula with Egypt and the Levant across the Hisma desert for the transport of frankincense and myrrh from Arabia, and copper from Wadi Araba. It was used by the Nabataeans and subsequently formalised by the Romans as the Via Nova Traiana.

By the 4<sup>th</sup> century BC North-Arabian tribes were breeding camels and goats in the area and practicing some irrigated agriculture to feed their livestock. Numerous Thamudic inscriptions near water catchment basins, dams and cisterns mark ownership. Rock art of the period depicts animals and hunting scenes. Several stone circles with a larger stone standing in the centre, located in the foothills of Jebel Umm Ishrin and Jebel um, have been identified as pre-Islamic shrines. From their base in Petra the Nabataeans controlled the trade route linking the Arabian Peninsula to the Mediterranean. Wadi um became a Nabataean outpost on the route between Al-Higr (Meda'in Saleh) in Saudi Arabia and Petra. The Nabataean presence is attested by the remains of a temple to the pre-Islamic goddess Allat (Lat) near the village of um and in numerous rock carvings of deities and inscriptions such as the ones at the Al-Shalala spring nearby and others near water channels and dams in the surrounding mountains. An inscription that records the founding of the original temple by a member of the Ad tribe was found on a reused stone in a later phase of the temple. The Nabataean settlement was a focus for commercial and religious activities and the population between the 1<sup>st</sup> century BC and the 1<sup>st</sup> century AD has

been estimated at 20,000, well above the current number of inhabitants.

Wadi Rum was largely bypassed during the Roman and Byzantine periods (2<sup>nd</sup>-7<sup>th</sup> centuries AD) as trade was diverted through Syria or followed maritime routes along the Red Sea. Numerous petroglyphs attest to continued pastoral population through into the Islamic period and Arabic inscriptions near water sources attest to caravans occasionally crossing the area.

During World War I, the troops of the Great Arab Revolt passed through Wadi Rum and camped in the area. The campaign is attested by Bedouin graffiti and rock drawings of tanks and men with rifles. Following the establishment of the British mandate in Jordan in 1921, borders were created with Saudi Arabia and a Desert Police fort was established at Rum in 1934. The movements of nomads became limited; a school was established for boys and opportunities were created in the armed forces for the tribes. In the late 1960s there was increasing settlement around the fort and in villages established around newly dug artesian wells in Disi. Growing tourism provides employment, while pastoralism continues in the Rum area and agriculture in Disi.

Conservation began in 1979 with the IUCN/WWF recommendation of a network of protected areas including the Wadi Rum area as a representative of the Eastern Desert (Hisma) land type, together with the indigenous flora and fauna and the scenic mountains of Rum. Many scholars have recorded, interpreted and published the rock art and inscriptions and archaeological sites in the area.

As part of the additional information requested by ICOMOS the State Party has advised that over the past 15 years, the Department of Antiquities has licensed three missions to conduct excavations and surveys in the Wadi Rum Protected Area: the excavation and study of the Neolithic settlement at Abu Nakheileh from the mid 1980s to mid-1990s (North California State University); the excavation and study of the bath complex near the temple of Allat in the late 1990s (University of Victoria, Canada); and a complete survey of inscriptions and associated sites and excavation of the Neolithic settlement of Udayb er-Rih, ongoing since 1996 (University of Lyon and Jordanian Department of Antiquities). In addition restoration work has been carried out at the temple of Allat and baths complex; fencing has been authorised for the sites of Udayb er-Rih and Abu Nakheileh; excavated material and artefacts have been conserved, and a data base of site locations is maintained.

### 3 Outstanding universal value integrity and authenticity

#### Comparative analysis

The State Party has compared the nominated property with a number of national and international sites including

five World Heritage sites using a set of 13 values for assessment purposes. Of these six are key:

- iconic assemblage of landforms in an integrated desert landscape;
- occurrence within a true desert ecosystem setting;
- aesthetic significance;
- number and age and continuity of rock art and inscriptions;
- illustration by rock art of interaction of human communities with natural environment;
- affiliation with global religious beliefs.

On the basis of these attributes the two national sites discussed, which are natural, not mixed sites, do not measure up. However ICOMOS notes that the Jawa 'black desert' in the basalt area of north Jordan which also contains numerous petroglyphs and inscriptions in addition to the archaeological sites of Jawa and Umm al-Jamal were not considered.

The State Party considered the two World Heritage properties of Al-Hijr Archaeological Site (Madain Salih), Saudi Arabia (2008, criteria (ii) and (iii)), and Petra, Jordan (1985, criteria (i), (iii) and (iv)), which are closely related geologically, geographically, historically and culturally, particularly as the two key centres of the Nabataean trade route that passed through Wadi Rum 100BC-100AD. However the State Party argues that they differ greatly from Wadi Rum in spite of their similarity in terms of geological aesthetics, in that their significance is essentially related to the aesthetic and architectural achievements of one civilisation.

Similarly, ICOMOS notes that the World Heritage listed Incelik Desert Cities in the Negev, Israel (2005, criteria (iii) and (v)), could be compared with the Nabataean use of the site. The four Nabataean towns of Haluza, Mamshit, Avdat and Shivta, associated fortresses and agricultural landscapes in the Negev Desert reflect the trade in frankincense and myrrh from South Arabia to the Mediterranean, in a hostile desert environment from the 3<sup>rd</sup> century BC until the 2<sup>nd</sup> century AD. Again, the significance relates to the Nabataean period, whereas the nominated property contains rock art, inscriptions and archaeological sites which attest to the cultural traditions of the peoples from the Neolithic period continuing through the Nabataean into the Islamic and beyond.

Comparison is made in the nomination dossier with Tassili n'Ajjer in the Algerian Sahara (1982, criteria (i), (iii), (vii) and (viii)) and indicates similar natural and cultural values but it is argued that the Wadi Rum area exhibits distinctly iconic landforms and a continuity of rock art, inscriptions and traces of human presence that distinguish it from the Algerian site in terms of global values. In addition it is argued that Wadi Rum, proposed as the cradle of Islam, has relevance for Islam not evident at Tassili n'Ajjer. Comparison with the Petroglyphs within the Archaeological Landscape of Tamgaly, Kazakhstan (2004, criterion (iii)) indicates similar cultural values in terms of the petroglyphs, altars and cult areas. However there they

are not associated with inscriptions and lack the distinctive geological landscape of the Wadi Rum area. Comparison with the Uluru- Kata Tjuta and Purnululu National Parks in Australia although indicating similar natural and cultural values is recognised in the nomination dossier as not relevant due to the vast differences between the development of human history and civilisation in Australia and that of the Near/Middle East. Comparison with the Pyrenees-Mount Perdu, France and Spain (1997, criteria (iii), (iv), (v), (vii) and (viii)) is also recognised as not relevant in view of the markedly different landforms, geographic and climatic contexts.

The property was also compared with sites at that time not on the World Heritage List: Monument Valley in the Arizona desert, Canyonlands National Park in Utah and China Danxia (2010, criteria (vii) and (viii)). It was concluded that the two US examples while similar arid sandstone landscapes with traces of human occupation, and also rock art in the case of Canyonlands, were not comparable in terms of the integrated landscape of the Wadi Rum area, and lack the range and complexity of features. The Danxia Landform is a remarkable sandstone formation but considered less iconic in terms of features than Wadi Rum and has a humid climate, representing a very different bio-geographic setting.

ICOMOS considers that the property needs to be compared to others in its geo-cultural area in terms of whether the assembly of rock art and inscriptions together with associated archaeological sites can be seen as exceptional. In cultural terms the iconic landforms are an aspect of the property but not one that necessarily defines its value. Rather what needs to be demonstrated is that the assembly of remains in the property is not paralleled by others that reflect similar timeframes and cultural connections. Currently the wider context of the property is not clearly established in order for these comparisons to be made.

---

ICOMOS does not consider that the comparative analysis justifies consideration of this property for the World Heritage List at this stage.

---

**Justification of Outstanding Universal Value**  
The nominated property is considered by the State Party to be of Outstanding Universal Value as a cultural property for the following reasons:

- Widespread petroglyphs and inscriptions eloquently attest to 12,000 years of human history and the very early development of alphabetical writing, while ongoing land-use reflects a traditional but dynamic Bedouin culture.
- North-Arabian inscriptions identify Wadi Rum as a site specifically mentioned in the Qur'an (89: 7-8), the Holy Book for over one billion Muslims.

ICOMOS considers that this justification might be appropriate if the comparative analysis can demonstrate more clearly that there are no other properties that

demonstrate similar attributes and that attributes are exceptional.

However the property has been nominated as a cultural landscape. There is therefore a need to demonstrate how the whole landscape might manifest exceptional interactions between people and their surroundings, rather than to demonstrate the significance of the cultural sites related to the rock art and inscriptions.

The landscape needs to be understood in terms of how it reflects the way the place was inhabited over time. The rock art and inscriptions need to be related to the archaeological and other evidence to allow them to contribute evidence for the evolution of settlement.

The evidence so far presented is limited to certain specific sites and cannot be said to substantiate the property as a cultural landscape that demonstrates an exceptional reflection of cultural traditions over time.

#### Integrity and authenticity

##### Integrity

The State Party notes that the nominated area comprises the Wadi Rum Protected Area established following the 1979 IUCN/WWF report plus an additional area added in 2002, resulting in an increase from 54,000ha in 1997 to 72,000ha in 2002. The buffer zone comprises an additional 56,300ha of the same target land form. It contains sites of rock art and inscriptions scattered on hills and mountains including at Jebel Harazeh. From the information available, ICOMOS considers that it is currently not clear that the nominated area satisfactorily encompasses a coherent group of rock, inscriptions and archaeological sites.

Um Village, although part of the Protected Area, is not proposed as part of the nominated property but is included in the buffer zone. It is at the south end of the strip of buffer zone that follows the road into the Protected Area from the northern boundary. ICOMOS considers that the exclusion of the strip of land currently shown as buffer zone encompassing Um Village, the Visitors' Centre and access road together with any archaeological sites, petroglyphs and inscriptions within that strip impacts adversely on integrity and should be part of the nominated property.

In response to ICOMOS' request for further information on the buffer zone strip, the State Party stated that the strip does not include the archaeological sites around Um Village and was excluded because of existing infrastructure, but that the government of Jordan would be ready to include the strip within the nominated property if considered necessary by UN SCO and the Advisory bodies. This follows a workshop organised in October 2010 to address the issue of buffer zone boundaries and the exclusion of the strip.

## Authenticity

ICOMOS considers that the rock art remain in their original setting, largely unaltered except for the effects of weathering which has led to fading and rain and wind erosion, leaving some hard to distinguish. In addition in some cases, there is the addition of modern graffiti.

However the fact that so many have been documented means that their ability to convey the cultural traditions of the people who made them has been captured and they can be studied.

Few archaeological sites within the nominated area have been scientifically excavated; others have been disturbed and are physically unprotected. The conditions of authenticity cannot be said to be met for this key archaeological evidence.

---

In conclusion, ICOMOS considers that the conditions of integrity have been only partly met due to the exclusion of Wadi um Village. The conditions of authenticity have been met only in part due to the neglect of the archaeological sites.

---

### Criteria under which inscription is proposed

The property is nominated on the basis of cultural criteria (iii), (v) and (vi), and natural criteria (vii) and (viii).

Criterion (iii): bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is *living or which has disappeared*

This criterion is justified by the State Party on the grounds that the Wadi um Protected Area bears a unique testimony to the practice of rock art and inscriptions that has been ongoing for millennia. The combination of 25,000 petroglyphs with 20,000 inscriptions and their continuity over a period of at least 12,000 years sets Wadi um apart from other rock art and/or inscription sites. The petroglyphs, representing humans and animals, are engraved on boulders, stones, and cliff faces. They trace the evolution of human thought; the long term patterns of pastoral, agricultural, and urban human activity in the Arabian Peninsula; and the environmental history of a distinct region that has evolved climatically from mildly humid to semi-arid. The engravings indicate an elaborate sense of aesthetics and a pictorial culture. Numerous inscriptions in four different North-Arabian scripts testify to the very early emergence of alphabets from iconic representations, and widespread literacy among pastoral societies in the Arabian Peninsula. The open-air library that is Wadi um is a critical site for the study and understanding of the evolution of aesthetics, writing and literacy.

ICOMOS considers that the documented rock art and inscriptions by themselves do not testify to the long period of human continuity at the site. However together with the archaeological sites they could be seen to bear exceptional testimony to the cultural traditions of past

inhabitants of the Wadi um area of the Arabian Peninsula over a very long period.

ICOMOS considers that this criterion needs further justification through further demonstration as to how the rock art and the archaeological sites together convey outstanding testimony to the cultural traditions of past inhabitants of the Wadi um area of the Arabian Peninsula over a very long period.

---

ICOMOS does not consider that this criterion has been justified at this stage.

---

*Criterion v be an outstanding example of a traditional human settlement, land use, or sea use which is representative of a culture or cultures, or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change*

This criterion is justified by the State Party on the grounds that the variety of landforms at Wadi um has played an essential role in fostering human settlement and, as a result, the development of sophisticated intellectual activity that is documented by abundant petroglyphs and rock inscriptions. This graphic testimony to diverse cultural traditions and civilizations over millennia is one of the world's richest sources of documentation. Nowhere else in the world can one find such a wealth of information that enables the study and understanding of the continuum of settled and mobile lifestyles in a desert landscape. Here is a record of resource use in this desert and mountain environment illustrating the adaptability and ingenuity of human communities who have made the most of scarce resources to sustain continuous presence after the climate became dryer in the Bronze Age (3<sup>rd</sup> millennium BC). This is why the significance of the Wadi um Protected Area goes far beyond its north-Arabian context as it represents a uniquely documented instance of human interaction with dry environments of relevance to other arid areas worldwide.

ICOMOS considers that the evidence of the rock art and inscriptions and even the water catchment systems developed in the Bronze Age and used and developed by successive communities in the area for mobile animal husbandry and agriculture are no more or less remarkable than that in other areas of Jordan, throughout the semi-arid eastern desert and into Saudi Arabia. The Wadi um area is part of a much wider area demonstrating this kind of interaction with the environment at certain periods of history. In Jordan this has been similarly documented in published rock art and inscriptions around Jawa. The Wadi um area does not represent *a uniquely documented instance of human interaction with dry environments*.

---

ICOMOS considers that this criterion has not been justified.

---

*Criterion vi be directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance*

This criterion is justified by the State Party on the grounds that North-Arabian inscriptions have allowed scholars to identify Wadi ʿUm with Iram, where the tribe of Ad lived. The site and the tribe are mentioned in the Qurʾan (89: 7-8), the Holy Book for over one billion Muslims. According to evidence derived from numerous inscriptions in various alphabets, ancient Iram and the tribe of Ad can only have been located in Wadi ʿUm. The Qurʾanic story of Iram, *the place of the columns*, exemplifies divine punishment over a corrupt people. Allah left Iram buried under the sands of the desert, making Iram and Ad legends to be spoken of and an exemplary lesson of warning.

ICOMOS considers that evidence is lacking of numerous inscriptions suggesting the connection with Iram, and the identification is by means of an arguable theory rather than scientific proof. The case as argued for the inscriptional association with Islam needs more substantiation in order to provide a reasonable tangible association with a literary work and belief of outstanding universal significance.

---

ICOMOS considers that this criterion has not been justified at this stage.

---

ICOMOS does not consider that the criteria and Outstanding Universal Value have been demonstrated at this stage.

---

#### 4 Factors affecting the property

##### Development pressures

The strategic plan of the Aqaba Special Economic Zone Authority (ASEZA) which administers the Wadi ʿUm Protected Area emphasises its primary role in local economic development while safeguarding the natural and cultural heritage. The property is consequently subject to tourism development pressure, the expansion of ʿUm Village due to continuous population growth and the encroachment of agricultural and possibly mining activities.

The village boundaries restrict its area to 40.4ha but there is a weak level of architectural awareness and weak compliance with the ʿUm Village Plan. All other settlements are located outside the Protected Area. There is one paved road of around 10km entering the Area from the north. No other roads or infrastructure are permitted or planned. A few relict agricultural fields are located within the nominated area and a couple of olive groves near Wadi Sabit. No new agricultural activities will be permitted within the Protected Area with the exception of the household gardens in ʿUm Village as part of a special arrangement. However there are issues of tradition and culture relating to land tenure and tribal conflict over land

rights which affect the adequate enforcement of regulations.

Mining resources exist within the area but mining is prohibited within the Protected Area.

The Oryx reintroduction project being sponsored by Abu Dhabi will require construction of pre-release facilities within the area.

ICOMOS considers that the possible future expansion and development of ʿUm Village and any facilities involving new structures require anticipation and control in terms of strongly enforceable guidelines. The impact of the Oryx on the archaeological sites needs to be considered and any necessary measures taken to protect the sites from possible damage.

##### Tourism pressures

According to the nomination dossier, in 2008 the total number of visitors to the Wadi ʿUm Protected Area was 256,297. All visitors are required to enter the site via the Visitors' Centre constructed in 2003, which includes an interpretation centre, conference room, offices including the office of the Oryx reintroduction program, outlets for local associations and their products, rest rooms and car park. There is also a staff accommodation building and research station.

There is a secondary visitor reception point in ʿUm Village at a guesthouse, and the village is intended to become a visitor attraction in its own right. A panoramic centre is being developed around the old fort; there are a number of locally run bed and breakfast accommodations, a local handicrafts centre, a camp site and numerous small shops and bazaars.

Neither the Visitors' Centre nor the village are included within the nominated property boundary at present.

Signage is provided at entrances and access points including basic information and regulations.

The primary adverse impact of tourism within the nominated property is degradation of the desert landscape by vehicles. Visitors usually take a vehicle tour to the well-known sites and on peak days this can amount to 80 individual tours. Measures taken to mitigate this include creation of a single track network between key visitor sites and the use of a grader to maintain a rut-free surface on the track network and therefore encourage its use in lieu of off-track driving; the introduction of a vehicle spacing scheme and better training for drivers, none of which have proved very effective. The control of vehicle routes in the Protected Area is a top priority for management.

The most common activities are vehicle and camel tours, hiking, rock climbing, horseback treks and camping. Tourists are accommodated at 28 licensed camp sites but regulations are not well-enforced.

Other uses of the area have included special public or government events such as car rallies, marathons, army training and VIP parties, all of which have the potential to damage the ecology and image of the Protected Area. These are now prohibited within the Protected Area itself.

ICOMOS strongly endorses the damage mitigation measures taken by the authorities. ICOMOS notes that in spite of camel racing being banned from the Protected Area (although occurring around the Protected Area), the 2009 organisational structure includes a camel racing manager and staff. ICOMOS considers that the ban of camel racing within the nominated property should be respected.

#### Environmental pressures

The Wadi Rum Protected Area forms a large part of the Hisma Basin, a shallow geological depression extending across south-eastern Jordan to the Saudi Arabian frontier. This basin is the water catchment and drainage basin for Wadi Rum and contains the large fossil water aquifer that supplies Dizeh with irrigation water and will soon be supplying drinking water to Amman.

However there is no clear mechanism for water distribution within the Protected Area and no comprehensive solid and liquid waste management system.

ICOMOS considers that attention is required to water distribution and liquid and waste management.

#### Natural disasters

Earthquakes of 6-7 magnitude on the Richter scale have occurred in the Gulf of Aqaba and the Dead Sea basin in the last decade, related to the Dead Sea Transform (rift). However Wadi Rum itself is not classified by seismologists as a risk zone.

The arid climate and width of the wadis precludes flooding even with torrential rain. No floods have been documented in the area in the recent past. At certain rainy periods, Wadi Al-utun floods in its lower reaches near Aqaba city some 30km to the west.

#### Impact of climate change

The area has been subject to a relatively long period of extreme drought during the last decade but specific data has not been collected. This will be addressed in the new Protected Area Management Plan, which will also consider managing the area as a Carbon-free Protected Area. It is anticipated that the costs of the latter might be offset by the international funding available for climate change mitigation.

---

ICOMOS considers that the main threats to the property are lack of waste management, lack of vehicle route control, lack of control of urban development around Wadi Rum Village and tourism development.

---

## 5 Protection conservation and management

### Boundaries of the nominated property and buffer zone

Natural physical structures form the eastern, western and southern boundaries of the Wadi Rum Protected Area using main wadis and mountain ranges. The main access road to Disi from the junction with the Aqaba-Maan road forms the northern boundary. The boundaries were designated and delineated through a participatory process with stakeholders, which resulted in special legislation for the Area. They are marked by non-intrusive cone structures. The State Party states that the Area includes more than 70% of the iconic sandstone landforms intermingled with their representative desert ecosystems, habitats and species along with ancient preserved rock art, inscriptions and archaeology to collectively form an outstanding case of integrated values of natural and cultural heritage.

The road leading south from the main Aqaba road into the nominated property together with the Visitors' Centre and Wadi Rum Village are contained within a strip of buffer zone that penetrates into the centre of the surrounding nominated property.

The size of the buffer zone was identified by mapping areas which lie within a five km radius of the Protected Area boundaries. The nominated property and buffer zone lie within a wider geographical area exceeding 300,000ha subject to the same land use plan, which includes seven land use classifications: agricultural area; tourism development area; non-irrigated agricultural area; future tourism development zone; no development zone; rangeland zone; sport tourism zone; special management zone; non-accessible zone.

ICOMOS considers that the buffer zone should be rearranged so that the strip covering the road leading into the property to the Visitors' Centre and Wadi Rum Village should be part of the property. As noted above, the State Party has advised ICOMOS that the government of Jordan would be ready to include the strip within the nominated property.

ICOMOS also finds that the boundaries of the buffer zone need to be more clearly marked on the ground.

---

In conclusion, ICOMOS considers that the boundaries of the nominated property and of its buffer zone need to be rearranged so as to include the strip currently shown as buffer zone, within the property boundary, and the boundaries of the buffer zone need to be clearly marked.

---

### Ownership

The Wadi Rum Protected Area is in government ownership except the land of Wadi Rum Village which is privately owned but controlled under the Aqaba Governorate, administered by the Aqaba Special Economic Zone Authority (ASEZA). The new



Management Plan will address issues related to recognition and understanding of the customary system of land tenure. Customary land tenure relates to grazing rights, water catchment and storage installations, cultivated areas and built properties.

The customary system of grazing rights was enshrined in the Angeland Law of 1971. Issues related to differences between the AS A regulations and previous Angeland Law in and around the Protected Area will be resolved in the new Management Plan.

Traditional land tenure, as distinct from customary land tenure, is based on mutually reciprocated recognition of claims deriving from historical use. Challenges usually occur where no precedence of use exists.

## Protection

### Legal Protection

The Wadi um Protected Area is protected legally by Cabinet decisions nos.27/11/3226 (1997) and 224/11/1/986 (2002). In 2008 the Government of Jordan approved the revised National Areas Network report prepared by the Royal Society for the Conservation of Nature (SCN) under the Ministry of Environment and confirmed the legal status and boundaries of the Wadi um Protected Area.

The Wadi um area is governed by two national laws:

The Environment Protection Law no. 52 (2006);  
The Law of the Department of Antiquities no. 21 (1988).

The additional information provided by the State Party states that the Antiquities Law is further reinforced by the regulations of the Protected Area and the by-laws of the Aqaba Special Economic Zone. However ICOMOS notes that it is not explained how the regulations apply to the cultural heritage of the area or whether there are specific listings of rock art, inscriptions and archaeological sites in terms of legal protection.

### Traditional Protection

There is no inherent traditional protection of the property. However ICOMOS notes that the local Bedouin are now taking an interest in their cultural heritage and are active in preventing damage to the rock art and inscriptions by locals or tourists.

### Effectiveness of protection measures

ICOMOS notes that protection measures need strengthening to prevent removal of archaeological artefacts without permission and lack of awareness by government agencies of the property boundaries in relation to mining activities should be addressed.

ICOMOS notes that archaeological sites are not guarded or fenced.

---

In conclusion, ICOMOS considers that the legal protection in place is satisfactory.

---

## Conservation

### Inventories, recording, research

Research activities by national and international institutions relate particularly to the fields of archaeology and anthropology and include the archaeological and epigraphical missions inside the Protected Area of several foreign universities and research institutions by agreement with the Department of Antiquities.

ICOMOS notes that while surveys and inventories have been undertaken by a number of these research institutions and published in journals, there does not appear to be a complete inventory or map of rock art and inscription sites or of archaeological sites at the property. Two lists (located sites: 86, and poorly located sites: 65) and a map by Isabelle Uben and Ghassan Nasser of 1999 are included on the Wadi um web site, which collate published information on 151 sites. In response to the request from ICOMOS for information on the inventory and maps, the State Party has provided a list and brief description of 13 archaeological sites within the nominated property and its buffer zone, and one site which is outside the buffer zone as described above.

ICOMOS recommends that priority is given to creating an inventory and maps that can be used for development of a conservation program and site monitoring purposes.

### Present state of conservation

A national protected areas review report developed and published by SCN in 2009 using IUCN guidelines indicated improved levels of management effectiveness in relation to various natural components of the Wadi um Protected Area. However it highlighted several areas for improvement especially related to visitor management and capacity building, and these will be covered in the new Management Plan 2011-2015.

ICOMOS notes that the archaeological sites in Wadi um, which represent the Neolithic period through to the early Islamic are not well-maintained or preserved. In particular the Nabataean water reservoirs are badly deteriorated. The Nabataean Temple site is open to unrestricted access. However the important stone with the inscription mentioning the tribe of Ad has been removed to the Museum. As noted earlier, rock art sites and inscriptions are subject to fading and deterioration and in some cases to modern graffiti.

### Active Conservation measures

No active conservation measures are mentioned in the nomination dossier. In response to ICOMOS' request for information on this, the State Party detailed works undertaken in the past 15 years (covered above under History and Development) and listed works undertaken in

recent years including restoration works at the um temple of Allat and baths complex; authorisation of fencing for the sites of Udayb er- ih and Abu Nakheileh; licensing of and collaboration with foreign teams; conservation of excavated material and artefacts; publication of preliminary mission reports in the *Annual of the Department of Antiquities of Jordan*, and keeping a data base of site locations.

ICOMOS recommends that urgent attention be directed to guarding rock art and inscription sites and conservation of the archaeological sites within the property. Frequent patrols by rangers/guards could be developed in this respect.

#### Maintenance

No current maintenance program is mentioned in the nomination dossier.

ICOMOS considers that attention is needed to a regular maintenance program for the archaeological sites.

#### Effectiveness of conservation measures

ICOMOS considers that a program of conservation and maintenance of archaeological sites should immediately be initiated, including the cleaning out and repair of water reservoirs and dams.

---

In conclusion, ICOMOS considers that an up-to-date inventory and map of documented rock art and inscription sites and archaeological sites should be a priority, particularly for conservation and monitoring purposes. A program for conservation and maintenance of the archaeological sites, rock art and inscription sites should be a high priority.

---

#### Management

Management structures and processes, including traditional management processes

The Protected Area is managed by the Wadi um Area Management Unit within AS A, which is responsible for the implementation of the Management Plan prepared by the Royal Society for the Conservation of Nature (SCN) for 2003-7 and extended to 2010. The SCN is the primary national agency responsible for the establishment and management of protected areas under the Ministry of Environment.

In response to the request from ICOMOS for information about the involvement of the Department of Antiquities the State Party provided more details of the scope and enforcement of the Jordanian law of Antiquities no. 21 (1988) that applies to all movable and immovable antiquities throughout the Kingdom, together with a list of the roles and responsibilities of the Department of Antiquities, which is responsible for administration of the Law.

ICOMOS notes that in the Wadi um Protected Area, AS A was granted the execution of the Antiquities Law, which it does (according to the nomination dossier) through close institutional cooperation with the Department of Antiquities head in Aqaba, and through direct coordination with the Department headquarters in Amman. Direct involvement of the Department appears to be limited to collaboration with missions working in the area through the presence of an Antiquities Inspector, conserving excavated material and artefacts, contributing material to the Visitors' Centre and collaborating with organisations such as the Friends of Archaeology to conduct lectures about and site visits to spread awareness of the area's importance. The Department also licenses and collaborates with foreign teams in the excavation of sites, investigation of rock art and the reading and interpretation of inscriptions.

ICOMOS considers that more attention is needed to the conservation and management of the cultural attributes of the property.

Management of the property and buffer zone is guided by the Protected Area zoning plan which was developed through a participatory process in 2003 as part of the Management Plan and was revised in 2009 following strategic reviews, stakeholder inputs and monitoring results.

There is also a Site Management Committee which was established in 2002 and represents a fully participative mechanism for management. It includes two permanent local community representatives.

The management team coordinates with other AS A inspection and monitoring teams, particularly in regard to enforcement of activities in the buffer zone.

Policy framework: management plans and arrangements, including visitor management and presentation

A Management Plan was developed for the site covering the period 2003-2007 and subsequently extended to 2010. A new Management Plan is being developed to cover the period 2011-2015 which will include visitor management and presentation.

The current Visitor Management Plan was produced in 2003 by the Royal Society for the Conservation for Nature. This covered the establishment of the Visitors' Centre and parking, proposals for control of the track network, ranger training, guidelines for camp sites, and establishment of a first-aid centre and rescue post in um Village, and creation of a Museum of Bedouin life in the former army fort. The Visitors' Centre is the starting point for tours to places of interest in um, within the tribal territories of both the Disi and um communities. Tours are heavily focused on places connected to Lawrence's activities in the area.

The National Tourism Development Strategy (2004-2010) of the Ministry of Tourism and Department of Antiquities identified Wadi um as one of Jordan's prime tourism development areas, emphasising the need for good planning and consideration of the site's limited capacity and sensitive cultural and natural heritage. The property receives the highest level of funding of all protected areas in Jordan. In addition to the annual government allocation to AS A, the Protected Area benefits from the USAID (United States Agency for International Development) funded SI AHA project; the Abu Dhabi funded Oryx reintroduction project, and the G F (Global Environment Facility) small grants program.

ICOMOS considers that interpretative signage is required at significant rock art and inscription sites and archaeological sites including the water reservoirs and small dams; also guide books covering the cultural heritage, an educational program in the Visitors' Centre and maps showing the significant sites.

ICOMOS considers that the new Management Plan should include a much greater emphasis on the management of the cultural attributes of the property. The Visitor Management Plan should address adequate interpretation of the rock art and inscriptions and archaeological sites that express the Outstanding Universal Value of the property.

The new Management Plan and Visitor Management Plan should be provided to the World Heritage Centre and advisory bodies for review.

#### Risk preparedness

No risk preparedness strategy is mentioned in the nomination dossier.

ICOMOS considers that a risk preparedness plan should be prepared, covering security for visitors and a disaster action plan.

#### Involvement of the local communities

There are six Bedouin groups living inside or around the Protected Area who move around seasonally and for whom the Protected Area is a major source of income via tourism, livestock grazing or agricultural activity. The Management Plan contains actions for developing mechanisms for further community participation in the management of the Protected Area, including membership of the Site Management Committee, regular consultation, and the creation of local working groups for tourism development issues.

ICOMOS noted great pride among local communities in the cultural heritage of the Protected Area and enthusiasm for the nomination of the Protected Area and recommends that local people are involved in the safeguarding and management of the property.

resources, including staffing levels, expertise and training

The Wadi um Area Management Unit comprises 82 people, including an enforcement team of 10 rangers, a tourism manager, two interpretation and marketing officers, three education and outreach officers, four visitor centre guides and 10 socio-economic officers. It is backed by a larger team of specialised technicians and support staff within AS A. Training and capacity building programs are provided through annual government funding allocations to AS A as well as through supporters, partners and donors. An annual agreement with SCN is directed at conservation management and environmental monitoring; the USAID funded SI AHA project which runs to 2013 is directed at tourism development, visitor management, product development, marketing and business planning; the Environmental Agency of Abu Dhabi is providing capacity building in wildlife reintroduction programs and conservation management in relation to the Oryx reintroduction project; and other programs are directed at capacity building for local community development initiatives such as small tourism related businesses, small scale sustainable agriculture development, local rehabilitation initiatives and handicraft development projects.

ICOMOS notes that funding for the cultural components of the property is not mentioned.

ICOMOS considers that apart from a lack of archaeologists and conservators there are adequate trained resources for managing and further developing the property, and that further advanced training is being provided.

#### Effectiveness of current management

ICOMOS considers that the management system is well developed and well organised but noted a lack of involvement by Department of Antiquities staff in the conservation and management of cultural sites. ICOMOS considers that a much greater focus is required on the cultural components of the property and that the State Party should be encouraged to involve the Department of Antiquities to a greater degree than they are at present.

---

In conclusion, ICOMOS considers that special attention is needed for the provision of a solid and liquid waste management system for um Village and camping sites; visitor management and security including a disaster action plan, and provision of guide books and educational programs. The management system requires a greater focus on the cultural components of the property and the State Party should be encouraged to involve the Department of Antiquities more directly than they are at present. Furthermore, the new Management Plan should be provided to the World Heritage Centre and advisory bodies for review.

---

## 6 Monitoring

The monitoring program was designed for the Protected Area originally as part of the existing Management Plan and related to the desert ecosystem, habitats and species. The new Management Plan will include an amended monitoring program geared towards the revised set of Protected Area values and attributes with particular emphasis on the protection and conservation of the landforms and their associated habitats and species as well as the cultural values represented mainly by the rock art and inscriptions.

---

ICOMOS considers that monitoring should be extended to include the archaeological sites and that adequate monitoring of the cultural heritage will not be possible without an up-to-date inventory and map of the documented rock art and inscription sites and archaeological sites.

---

## 7 Conclusions

The extensive Wadi ʿUm landscape appears to contain a wealth of evidence from rock art, inscriptions and archaeology that could provide an understanding as to how this spectacular desert landscape evolved as a cultural landscape over several millennia. However in the nomination dossier so far presented the evidence is limited to specific sites and even for these the details are lacking.

A collection of rock art and epigraphical sites cannot justify the inscription of this vast landscape as a cultural landscape.

If a case is to be made for how Wadi ʿUm is an exceptional cultural landscape the evidence needs to be presented in spatial terms and linked to the uses of the landscape and the settlements it fostered.

ICOMOS considers that more time is needed to produce a database of known sites and to link these to landscape surveys in order to present the way societies have harnessed the natural resources of the area over time. There is a need to show how the rock art, the inscriptions and the various archaeological remains can be understood for the way they present this history, if a case for Outstanding Universal Value is to be substantiated.

The boundaries of the nominated property and of its buffer zone need to be rearranged so as to include the access road, Visitors' Centre and ʿUm Village.

Particular attention is needed for their safe-guarding, conservation and interpretation of the cultural sites. The New Management Plan should include a much greater emphasis on the management of the cultural attributes of the property, and the resources needed to achieve this. A Visitor Management Plan is needed to address

adequate interpretation of the rock art, inscriptions and archaeological sites linked to arrangements for managed access.

Recommendations with respect to inscription  
ICOMOS recommends that the examination of the nomination of Wadi ʿUm Protected Area, Hashemite Kingdom of Jordan, to the World Heritage List be **deferred** in order to allow the State Party to:

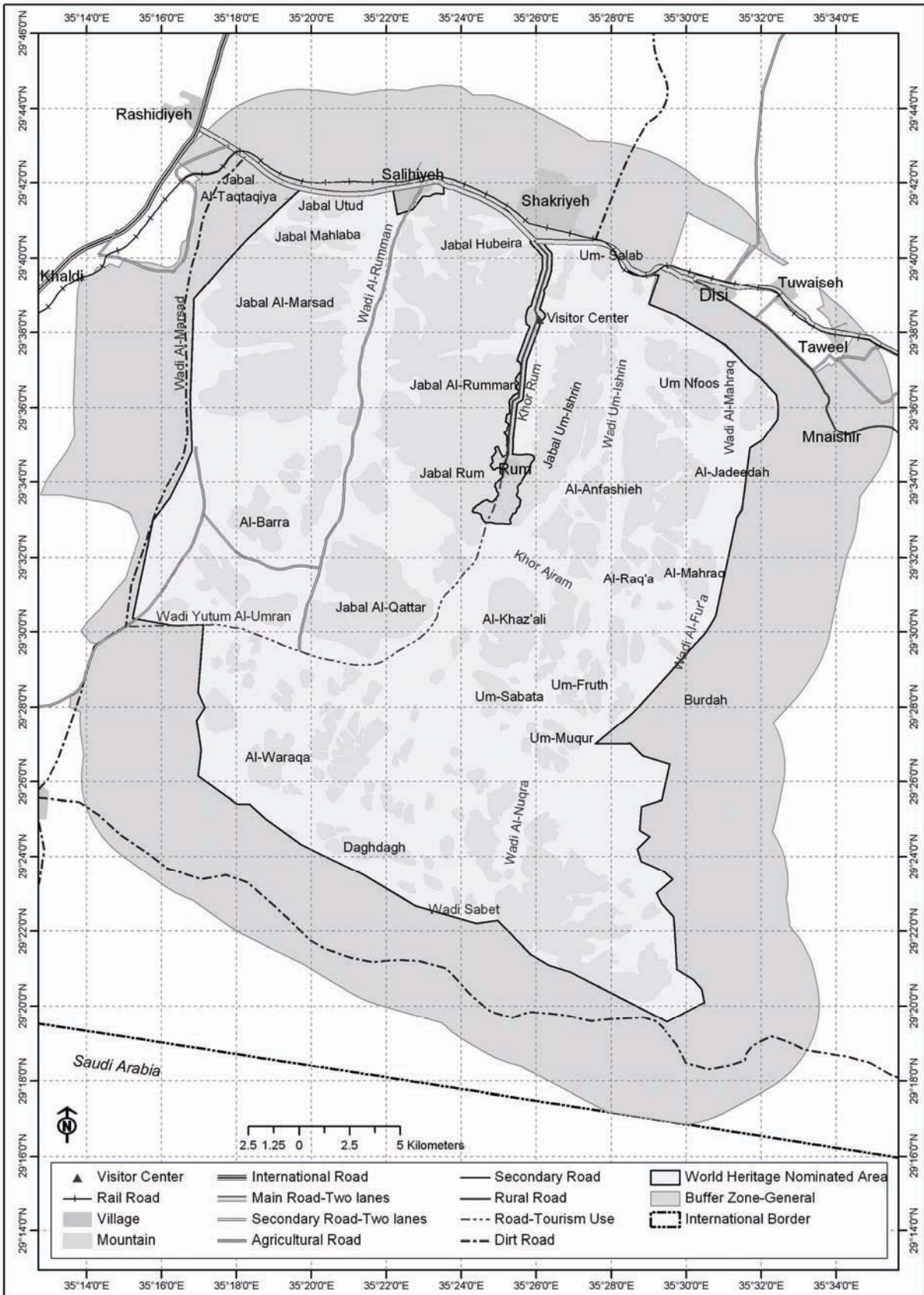
- On the basis of a detailed database of the rock art, inscriptions and archaeological sites, and landscape surveys, demonstrate how the Wadi ʿUm landscape can be considered as an exceptional reflection of the way people have interacted with the landscape over time;
- Undertake a more detailed comparative analysis to show how this landscape compares to other desert landscapes in the same geo-cultural region in terms of the evidence it reflects for its development over time;
- Re-arrange the boundaries so as to include the access road, Visitors' Centre and ʿUm Village currently shown as buffer zone, within the property boundary;
- Put in place an inventory of documented rock art, inscription sites and archaeological sites as a priority, for conservation and monitoring purposes;
- Develop a program for the safe-guarding, conservation and interpretation of archaeological sites, rock art and inscriptions;
- Include a stronger focus on the management of the cultural attributes of the property in the New Management Plan and involve more directly the Department of Antiquities in the management of the property;
- Provide details of funding for the cultural components of the site.

ICOMOS considers that any revised nomination would need to be considered by an expert mission to the site.

ICOMOS further recommends that the State Party consider the following:

- Develop complementary measures for protection of the cultural sites, such as frequent patrols by rangers/guards;
- Establish a solid and liquid waste management system for ʿUm Village and camping sites;
- Develop a strategy for visitor management including vehicle route control;

- Observe great caution concerning exterior reconstruction of the archaeological sites, which could impact on their authenticity. The remains appear to be sufficient to enable understanding, and reconstruction works should cease.

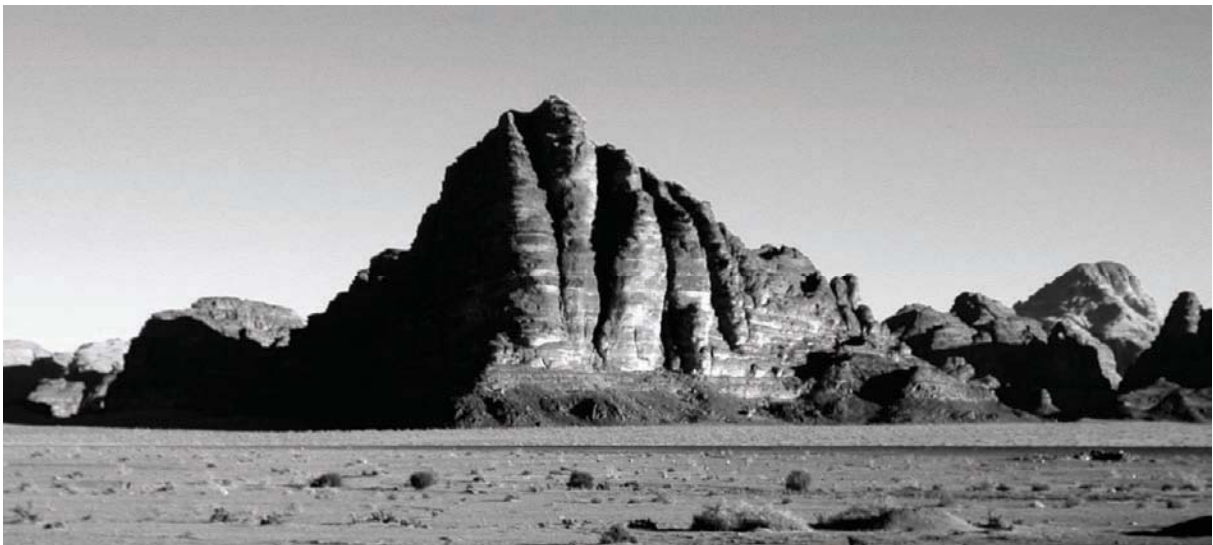


Map showing the boundaries of the nominated property





Panoramic view of Wadi Rum Protected Area from the top of Jebel Rum



Seven Pillars of Wisdom



Nabataean temple remains



Petroglyphs and epigraphy



## C Latin America and the Caribbean

### New Nominations

---

# Blue and John Crow Mountains National Park Jamaica No 1356

---

Official name as proposed by the State Party  
Blue and John Crow Mountains National Park

## Location

County of Surrey

Parishes of St. Andrew, St. Thomas, Portland and St. Mary  
Jamaica

## Brief description

The Blue and John Crow Mountains National Park is a rugged and densely wooded mountainous region in south-east Jamaica that offered refuge to Maroons (escaped indigenous slaves). The forests of the Park and their rich natural resources provided everything the Maroons needed to survive, fight for their freedom and nurture the growth of their culture. Maroon communities still hold strong spiritual associations with these mountains, expressed through intangible manifestations.

## Category of property

In terms of categories of cultural property set out in Article I of the 1972 World Heritage Convention, this is a site.

[Note: The property is nominated as a mixed cultural and natural site. IUCN will assess the natural significances, while ICOMOS assesses the cultural significances.]

## 1 Basic data

Included in the tentative List  
28 August 2006

International Assistance from the World Heritage Fund for preparing the Nomination  
None

Date received by the World Heritage Centre  
25 February 2009

## Background

This is a new nomination.

## Consultations

ICOMOS has consulted its International Scientific Committee on Intangible Cultural Heritage and several independent experts.

## Literature consulted selection

Frug, Jessica, Constructs of Freedom and Identity: The Ethnogenesis of the Jamaican Maroons and the Realities of 1799.

Ugrave, Greg, Maroons and the Jamaican Frontier Zones of the Eighteenth Century, Master thesis, University of North Carolina Wilmington in partial fulfilment of the requirements for the Degree of Master of Arts, 2005.

## Technical Evaluation Mission

A joint ICOMOS/IUCN technical evaluation mission visited the property from 4 to 12 September 2010.

Additional information requested and received from the State Party

Additional information was requested from the State Party on 23 September 2010 including:

- the depth of cultural heritage documentation;
- the distribution of cultural resources in determining the boundaries of the nominated property and related buffer zone;
- the level of protection and management of cultural heritage.

A response was received on 8 November 2010 providing the requested information which has been incorporated into the relevant sections below.

Date of ICOMOS approval of this report  
10 March 2011

## 2 The property

### Description

The nominated property is located on the eastern side of Jamaica and comprises three different mountain ranges separated by valleys. The Blue Mountains range, or Central ridge, runs from northwest to southeast and contains several peaks exceeding 2,000m, the average altitude of the ridge being more than 1,800m. The minor ranges are the John Crow and the Port Royal Mountains that are separated from the Blue Mountains by the Rio Grande, Fallahs and Buff Bay valleys respectively. The nominated property covers 48,649.93ha and is buffered by a strip of land of 26,711.05ha.

The precipitous morphology and lush vegetation of the mountains make the region almost impenetrable. Indeed, even today, it is only accessible via a few roads and is crossed from north to south by a single route (Papine Buff Bay via Hardwar Gap).

The remoteness of the region together with its rich natural resources offered ideal conditions for the Maroons to find refuge and develop their own culture.

Maroonage is a phenomenon closely linked to the European colonisation of the western world. It arose in Jamaica almost immediately after the Spanish took over

the island. Initially, the word was used to indicate resistance to the enslavement of indigenous people in Nueva Sevilla, but it came to define, more generally, any effort made by groups of people to avoid colonial oppression by fleeing to either inaccessible locations or urban areas where they continued their lives in freedom.

Research has identified three types of Maroonage. Petit Maroonage had a temporary nature and was practised by people who had no intention of escaping slavery definitively, but fled temporarily or periodically for personal or familiar reasons. Grand Maroonage was the most extreme form of resistance and meant fleeing to wild areas to live in freedom, where independent communities eventually developed. Finally, Urban Maroonage implied fleeing to an urban environment where one could pass as a free person. The latter was the least practiced form of Maroonage, as the chance of being discovered was greater.

The first accounts of human occupation in the nominated property date back to around the 10<sup>th</sup> century AD, during the Taino colonisation of the island, long before the appearance of Maroons.

At the end of the 15<sup>th</sup> century, following the arrival of the Spaniards, the first Maroon nations were born out of the indigenous Taino population in the Nueva Sevilla region, as a reaction against the enslavement by Spanish colonial power.

From 1513 onwards, Jamaica witnessed the deportation of inhabitants of African origin. They resisted forced labour in the Spanish estates and succeeded partly thanks to alliances with Taino Maroons. This comradeship led to the integration of the two cultures into the Windward or Blue Mountains Maroons.

The nominated property also bears witness to the impact of three centuries of British colonisation, from 1655 to 1962, when Jamaica attained full independence.

However, it is the tangible and intangible legacy that the Maroons left in and around the Blue and John Crow Mountains National Park which constitutes its defining component of cultural significance, in particular in the eastern part, where the Maroons found a favourable environment to settle.

The tangible Maroon cultural heritage is represented by settlements and towns, trails and other important historical places, the significance of which is largely dependent upon intangible elements like legends, religious or spiritual associations.

#### Towns

A few settlements within the nominated property – called ‘towns’ – were established but the exact location of only one has been determined – Nanny Town. The locations of others, such as Guy’s, Dianne’s and Molly’s Towns, remain unknown. The site of Nanny Town was excavated in the 1970s and traces of three different levels of

occupation were found: the first by the Taino, who probably used the area as a sacred site, then by the Maroons (from around 1655 to 1734) and finally by the British for less than a year (1734-1735). Further settlements which were founded after the Maroons gained autonomy are called Moore and Charles Towns.

#### Trails

The most well-known trail within the nominated property is the Cuna Cuna Pass Trail. It runs across the north-eastern Blue Mountains and was the spine of several other trails leading to settlements, hiding-places or important spots for the Maroons. Today, knowledge about the network of historical trails is limited. Tourist footpaths, possibly partly coinciding with the historic network of Maroon trails, have been opened in recent times to allow visitors access to scenic spots.

#### Important places

Several sites within the nominated property (often with special natural features such as waterfalls, valleys and viewpoints) had a particular importance to the Maroons. They were usually associated with specific events and oral history or for their usefulness in the Maroons’ everyday lives as well as their role in Maroon resistance strategy. Look Out on the Cuna Cuna Pass Trail, the Seaman’s Valley, Nanny Falls, Tiao Falls, Three Finger Springs, and Pumpkin Hill are all central to Maroon stories about episodes of resistance.

The western part of the nominated property differs significantly from its wild eastern side, as does the cultural heritage of the area which seems to have been influenced more by the colonising Spanish and British than the Maroons. This heritage consists of coffee plantation estates, either still functioning (Whitfield Hall) or protected as national monuments and transformed into museums or cultural sites (Bellevue Coffee Estate, Craighton House, Farmstead House, Charlottenburgh House or Cinchona Botanical Gardens). Military camps were also established on former plantations. Newcastle military camp, for example, at 1,200masl, was ideal for moving British troops to a sounder environment, to reduce the high mortality rate caused by tropical diseases which spread in the lowlands.

#### Intangible heritage

The intangible Maroon heritage is deeply connected to the nominated property and exhibits cultural and social elements adopted and transplanted from African society. The mountains in themselves are held sacred by the Maroons, firstly because they are a burial ground and, according to West-African belief, the spirits of ancestors live close to these sites. Therefore, these places and the mountains, by extension, carry great spiritual importance to the Maroons.

Literature identifies historical consciousness, oral traditions, religious rites, traditional medicine, language, music and dance, as well as legal and constitutional systems and food preparation, among the components of the intangible Maroon legacy. Some of the above are still

practised today. For instance, tradition is still present in the village government systems under the form of kamiti,' or local councils.

Windward Maroon religious rites and associated manifestations of culture, although still practiced, are not very well-known outside the Maroon community, since many aspects cannot be accessed by non-Maroons or even by other Maroon nations. Music is associated with important religious ceremonies and especially with the romanti Play, which is a ritual meant to cure sick people. This rite is unique to Jamaican Maroons and is still practiced within the Maroon community. Particular instruments are used: one is the Abeng, a kind of horn made from a cow's horn, which was also used to send messages, and the other is the romanti drum, which is made by hollowing a tree trunk and covering it in goatskin.

Language also represents one important element of the intangible heritage of Maroons. Two languages have been retained by Windward Maroons: one is a sort of Creole, which combines words and grammatical forms from different languages, with a grammatical structure similar to Jamaican Creole. The second, romanti, has been largely influenced by the Twi language from Ghana. The first is still only practiced during certain community ceremonies. Likewise, romanti is only used as a liturgical language. The chance of them surviving is not known as members of the community must not reveal their language to outsiders.

Cooking methods, hunting, construction of implements, and crafts are other intangible components of the Maroons' cultural heritage that evolved under particular conditions and through the maximum exploitation of the rich natural resources offered by the forest environment of the Blue Mountains.

#### History and development

The first documented human group that occupied Jamaica were the Taino, who settled on the island in the first millennia AD.

The Spaniards arrived in Jamaica in 1494 where they founded Nueva Sevilla. The first surge of resistance to the Europeans started almost immediately after the Spanish occupation started, with the fleeing of Taino groups into the forests. From 1513, due to the growing need of labourers and the simultaneous decline in the local population, the Spaniards brought Africans to Jamaica to work on the plantations. Initially, they were Moors that the Spaniards had deported to the West Indies after the Spanish Crown eradicated Islamic control over large parts of Spain, but soon other African nations were forcibly transported to Jamaica.

According to Maroon oral tradition, deported Africans soon rebelled against the Spaniards and fled into the forest, joining the Taino. However, it was only afterwards, but apparently before the arrival of the British in 1655, that the Maroons moved away from the Nueva Sevilla area to the north-eastern region of the island, where the nominated

property is located. Here the Maroons settled, founded villages and farms and developed their own particular culture. The Maroons lived on fishing, poultry-raising, hunting and fruit and vegetable growing. Despite their clandestine life, the Maroons did trade with the Spaniards and established a network of contacts with enslaved Africans in the plantations from whom they could obtain essential goods such as salt, tools and weapons.

Open and long-lasting conflicts exploded under British rule, particularly when white settlements started sprouting up in the areas under Maroon control. The Maroons chose to fight the British through guerrilla activities rather than open attacks, and the tactic developed by the Maroons caused considerable difficulties to the British, who imported mercenaries to fight this battle. There were cases of Maroons betraying escaped non-Maroon slaves, thus showing the ambiguous relation that Maroons entertained with other enslaved workers and, at the same time, their profound sense of exclusive identity.

The Maroon English war came to an end in 1740, when the British agreed to give land, civil autonomy, peaceful coexistence and the possibility to freely move in the forests of the Blue Mountains to the Maroons. From that moment on, the Maroons moved out of the forest and settled in their own villages, maintaining their autonomy.

The protection of the Blue Mountains is closely interwoven with the history of natural heritage protection in Jamaica: the first recommendations are contained in Hooper's report and date back to 1885; a few years later, in 1889, the Mountains and Rivers Reserve Act was passed. It was only in 1927, after a land acquisition campaign, that the Blue and John Crow mountains were declared forest reserves and in 1993 they were established as a National Park.

### 3 Outstanding universal value integrity and authenticity

#### Comparative analysis

The State Party has developed the comparative analysis first by examining the specificity of Maroon societies and cultures on the grounds of the reasons for their insurgence and of their cultural background. The search for freedom has been identified as the main reason for slave groups to flee and become Maroons.

The duration of the Maroonage, and the consequent possibility that Maroon groups developed into structured societies, is reputed to be the first relevant element for developing the comparison. Maroonage was in fact a widespread reaction to colonialist oppression but it was only in a few places that Maroonage could last and become a socio-cultural phenomenon with a certain degree of complexity.

Comparison, therefore, has been developed mainly on the basis of how long Maroon nations were independent entities. A selection of relevant examples has been

made on the basis of the distinguishing features of Maroonage identified by Price (1979).

The analysis has considered not only Le Morne Cultural Landscape, Mauritius (2008, (iii), (vi)), which is the only World Heritage Site related to Maroon legacy, but also several Maroon experiences in Jamaica, Cuba, Santo Domingo, Martinique, Guadeloupe, Suriname, Venezuela, Columbia, Mexico, USA, Brazil, making a total of 28 cases.

In more than 50 of cases, the autonomy of Maroons lasted no more than 100 years, and often less. In five cases it has lasted more than 300 years and in four cases until the present day.

The Windward Maroons are reputed to be the first Jamaican Maroon group as well as the first Maroon nation in the West. It was initiated by the indigenous population the Taino but was soon alimanted by deported Africans. These two groups gave life to an integrally original society and a culture that is still alive and largely autonomous.

The Maroon experience associated with Le Morne Mountain, in comparison, lasted only 86 years and their autonomy ceased to exist more than 170 years ago. Other long-lasting Maroon experiences examined in the comparative analysis are those in Suriname, again in Jamaica (the Leeward Maroons still living to this day) and in Cuba and Brazil, where Maroons joined 19<sup>th</sup> century movements for independence and were subsequently absorbed into society.

In summary, according to the nomination dossier, only the Maroon nations of Suriname and Jamaica have maintained independence within their states. Jamaican Windward Maroons, however, are held to be the first Maroon nation in the western hemisphere that has developed its own culture and maintained its independence.

ICOMOS notes that the comparative analysis has been carried out by examining the experiences and main tracts of different Maroon societies, but has not been extended to investigate how, and to what extent, the properties with which these Maroon communities are associated express the associated values. Le Morne Mountain is quoted mainly in reference to the Maroon experience and not with regards to the site itself.

ICOMOS notes that the World Heritage Convention is property-based, therefore the comparative analysis should be carried out by examining properties, both in a national and international context, which have similarities to the nominated one. It should demonstrate that there is no similar property already inscribed on the World Heritage List and that there are no other similar properties either nationally or internationally that might be nominated in the future.

In this case, the State Party has limited the comparison to the cultural phenomena associated with the nominated property and other similar properties but has not examined how, and to what extent, the nominated property bears witness to the associated values in respect to other properties related to other relevant Maroon groups.

ICOMOS also notes that although Le Morne Mountain is the only property on the World Heritage List because of its explicit association with Maroonage in Mauritius, there are other World Heritage Sites, inscribed for their natural values, that are historically associated with Maroons: Morne Trois Pitons National Park, Dominica (1997, (viii), (x)); o PItano Biosphere eserve, Honduras (1982, (vii), (viii), (ix), (x)), verglades National Park, United States of America (1979, (viii), (ix), (x)), and to a much lesser extent, Alejandro de Humboldt National Park, Cuba (2001, (ix), (x)) and Pitons, cirques and remparts of eunion Island, France (2010, (vii), (x)).

ICOMOS further notes that the analysis of the relevance of Maroon groups has failed to consider the Mexican Maroons, who crowned their first ing in 1537 and negotiated a peace treaty with the Mexican colonial government in 1609. In this way, they attained official recognition of the free Negro settlement San Lorenzo de los Negros. There is no mention of the establishment of Haiti either, as the first republic in the New World ruled by people of African ancestry and by local Maroons. It has its outstanding symbol in the World Heritage site of National History Park - the Citadel Sans Souci, amiers, Haiti (1982, (iv), (vi)). Additionally, several other Maroon experiences, i.e. the Maroons of the Brazilian State of Amap , the Maroon-derived Seminoles/Black Seminoles of Florida, the Maroon-derived Miskito of coastal Honduras and Nicaragua could have been included in the comparison.

ICOMOS, in summary, observes that the comparative analysis has not examined the properties with which Maroon experiences are associated, but has only compared Maroon experiences, failing to take into account some of the most relevant ones for comparison.

ICOMOS therefore considers that the nominated property has the potential to justify consideration for inscription on the World Heritage List on the ground of a deepened and reworked comparative analysis that examines how and to what extent other properties reflect their association with their related maroon communities.

---

ICOMOS does not consider that the comparative analysis justifies consideration of this property for the World Heritage List at this stage.

---

ustification of Outstanding niversal alue  
The nominated property is considered by the State Party to be of Outstanding Universal Value as a cultural property for the following reasons:

- Five hundred years ago, the Blue and John Crow Mountains became the place of resistance for Amerindians and subsequently for Africans, who, by joining the escaped indigenous groups, could survive in an unknown land. There they resisted the European colonial system which systematically used enslavement and oppression to maintain the control over these lands.
- Nanny Town represents the spiritual, political and symbolic centre of the Maroons, as well as the headquarters for the guerrilla actions that forced the British powers to sign a peace treaty recognising land, rights and autonomy for the Maroons.
- In Blue and John Crow National Park, the Maroons lived as a largely autonomous nation after fleeing from the European plantations and estates in the hills. They could nurture their culture and remain faithful to their aspiration of a free life.
- In the nominated property, Amerindian and African Maroons ingeniously exploited the resources and adapted their cultural background to the new conditions, so that a completely original multiethnic culture flourished. There are outstanding expressions such as the Romanti Play or "The Maroon Heritage of Moore Town", which was inscribed on the Representative List of the Intangible Cultural Heritage of Humanity in 2008.

ICOMOS considers that the cultural justifications for inscription of the nominated property are based on its association with Jamaica's Windward Maroons, both historically, and to the present day. It would therefore be expected that the nomination dossier demonstrated both the Outstanding Universal Significance of this group of Maroons, as well as the strength of their continuing significant association with the BJCMNP.

ICOMOS considers that this has not been done satisfactorily, in that many claims of significance are not exclusive to Windward Maroons. For instance, the integration between the indigenous populations and the Africans brought by European colonizers is common to most of the other countries in the Caribbean and the Americas.

ICOMOS further considers that the survival through the use of local resources alone is not unique or globally significant but the particular expression and continuity of this phenomenon at the BJCMNP could be, when specific livelihood strategies will be explicitly described and connected with site resources and cultural manifestations.

ICOMOS therefore observes that, although the nominated property unquestionably has important cultural values, the justification for inscription on the World Heritage List presented in the nomination dossier does not sustain the claim to universal cultural significance under criterion (vi). The focus of the arguments used by the State Party to sustain this criterion have been the historic and archaeological features, while the primary reason for the justification of

the selected criterion should have been the continuity and strength of the relationship between the Maroon groups and the place itself.

#### Integrity and authenticity

##### Integrity

According to the State Party, the nominated property contains all the tangible elements that are necessary to convey its significance and the intangible heritage that is associated with the property may be considered rather well-preserved: the mountains are still held sacred by the Maroon community, forms of traditional local government still survive in existing institutions (i.e. the *amiti*), and religious rites, music and dance forms continue to be performed.

The property has an adequate size to express its values and has not been encroached upon, nor is it threatened by future development. Most of the tangible remains left by the Maroons were of ephemeral nature so today, having fallen into disuse, most of them are in ruins or reduced to archaeological traces.

The additional information, received on 8 November 2010, integrated the documentation with specific descriptions, including the name and the current level of use/survival, for each site with cultural significance mapped in the cartography annexed to the nomination dossier. Specific information is provided on the network of trails connecting relevant sites within the property with others outside. The State Party also explained that the location of many places is not known, as well as tangible and intangible aspects related to Maroon culture, due to the custom of secrecy that prevents certain information from being disclosed to non-Maroons.

ICOMOS considers that the nominated property has a considerable size, although the boundaries have been determined only by taking into account the natural aspect of the nominated property. Nevertheless, several attributes which express the cultural significance of the property are comprised in the nominated property or in the buffer zone.

ICOMOS recommends that the cultural properties associated with Maroon heritage and the trails identified to be of Maroon origin, or used by the British to fight the Maroons (documented in the additional information received by ICOMOS on 8 November 2010), be included within the nominated property or in the buffer zone, provided that the buffer zone is covered with adequate legal protection and planning instruments, as prescribed by paragraph 100 of the Operational Guidelines for the Implementation of the World Heritage Convention.

ICOMOS nevertheless notes that the nomination dossier admits that the documentation of Maroon heritage is still scarce, so further research may reveal the existence and location of further relevant features which convey the property's significance.

ICOMOS therefore suggests that areas likely to yield future information, on the basis of historical records, archaeological evidence or oral tradition, be included within the boundaries of the nominated property or of the buffer zone.

ICOMOS likewise recommends that places associated with the living aspects of Maroon story and culture and providing a tangible testimony to the enduring Maroon culture, be included in the nominated property or, at least, in the buffer zone.

ICOMOS further observes that the property has been protected only by means of legal instruments concerning natural heritage, overlooking the cultural dimension of the Blue and John Crow Mountains.

ICOMOS additionally notes that the buffer zone is only protected by means of the 2001 Forest Policy but no explicit legal provisions have been issued until present.

In conclusion, ICOMOS considers that particular places, and other cultural resources linked to Maroons, or areas that may yield additional information on Maroon culture, have not been included within the nominated property or buffer zone. Additionally, the integrity of the cultural dimension of the nominated property is threatened by an insufficient level of documentation and protection measures (see relevant sections).

#### Authenticity

According to the State Party, several tangible and intangible attributes may be considered when assessing the conditions of authenticity. In relation to tangible heritage, permanence of location, continuity of use and function, archaeological evidence and documentary and oral toponymy have been used as main references to assess the authenticity of the trails, towns and important places. The surviving practice of religious rites and ceremonies, accompanied by traditional music, songs and dances attests to the continuity and liveliness of Maroon culture.

The State Party underlines that the mountains themselves carry powerful associations that nurture the Maroon culture and identity and are continually regenerated by this mutual relationship.

ICOMOS considers that most of the tangible elements that would bear witness to the early occupation of the nominated property by Windward Maroons are not known. The trails are the best documented elements of this cultural heritage but have since long lost their original function or, if they are still used, this has not been documented.

ICOMOS considers that the indicators of a strong and continuing connection of present-day Maroon groups to the nominated property in different areas of cultural expression (i.e. persistence of cultural practices, land use patterns, livelihood strategies or aspects of

traditional environmental knowledge) are particularly weak and not sufficiently described and sustained.

ICOMOS observes that further investigation with research instruments proper to archaeology, ethno-anthropology and history, as well as a continuing dialogue with the Maroon community, would significantly expand the knowledge of Maroon heritage. It would also improve the assessment of the conditions of authenticity of the property in relation to the values associated to it.

As for authenticity, ICOMOS considers that currently, the indicators of the association of present-day Maroons with the nominated property are not adequately made explicit.

---

In conclusion, ICOMOS considers that the conditions of integrity and authenticity have not been met.

---

#### Criteria under which inscription is proposed

The property is nominated on the basis of cultural criteria (vi) and natural criteria (ix) and (x).

Criterion (vi): be directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance;

This criterion is justified by the State Party on the grounds that the Blue and John Crow Mountains are associated with the pursuit of freedom and survival of the indigenous people of Jamaica (the Taino) and subsequently of deported Africans. The resistance to enslavement and their search for freedom were the grounds for developing the first Maroon nation at the end of the 15<sup>th</sup> century, and for the creation of its new syncretistic culture which integrated elements from Taino and African cultures. The nominated property is also associated with living traditions, beliefs and ideas that resulted from the fusion of indigenous and external components.

Windward Maroon society is the only one that preserves the biological and cultural legacy of the Taino and thus represents an important bridge between indigenous and the external peoples of Jamaica.

The criterion is further justified on the grounds that the UN and UN SCO have recognised, in principle, the resistance against enslavement and human oppression respond to a deeply-rooted human aspiration of Outstanding Universal Value.

ICOMOS considers that many significant claims related to criterion (vi) are not exclusive to Windward Maroons: the integration between the indigenous populations and enslaved Africans is common to most of the other countries in the Caribbean and the Americas. Additionally, the fact that Jamaican Maroons retain the gene pool of the Taino people supports national, and not universal, significance.

ICOMOS considers that the nomination dossier has not satisfactorily demonstrated the strong association of modern-day Jamaican Maroons with the nominated property.

---

ICOMOS considers that this criterion has not been demonstrated at this stage.

---

In conclusion, ICOMOS does not consider that the criterion and Outstanding Universal Value have been demonstrated at this stage.

---

#### 4 actors affecting the property

##### Development pressures

The State Party holds that the nominated property is not under risk from any serious development threats, since nobody is allowed to inhabit the nominated property and the population of the buffer zone amounts to only 33,614 people. The only land use change permitted is the conversion of degraded areas into natural forests. Agricultural activities are limited to demonstration plots. Illegal conversion of forest to farmland, illegal harvesting and logging and illegal settlements threaten some areas, to a limited extent.

ICOMOS considers that no mention is made in the nomination dossier of the possible threats that development or encroachment may cause to cultural heritage.

ICOMOS also notes that the protective measures for the BJCMNP that prevent people from living within the nominated property may be at odds with the needs of the Maroon community to sustain and nurture their association with the mountains and may undermine such association in the long term.

##### Tourism pressures

According to the State Party, the difficult morphology of the area prevents easy access to the area and reduces the number of visitors who impact on the area. In addition to this, a Sustainable Tourism Master Plan was prepared in 2002 through which a visitor strategy is being implemented. The plan concentrates tourism development in the Community buffer zone and local communities have been involved in the preparation of specific tourism plans (e.g. Hollywell Tourism Development and Management Plan, 2005).

ICOMOS observes that visitor pressure is currently low. However, since only few places are apt to accommodate visitors, it is important that any tourism development project assesses the consequences of an increased number of tourists concentrated in a small area.

ICOMOS recommends that any tourism strategy for the property should involve the Maroon community, from the

beginning of its inception, to avoid any threats to their cultural heritage.

##### Environmental pressures

The State Party holds that the main threat to the nominated property is by invasive species.

ICOMOS notes that nothing is mentioned about the possible environmental pressures that may threaten the cultural dimension of the nominated property.

##### Natural disasters

The most likely disasters in the region are caused by storms and hurricanes which lead to landslides, soil erosion, and damage to vegetation. Another threat is fire, although this is limited to peripheral areas and buffer zone. In some instances, fires are started by deliberate burning related to farming activities, or sometimes by arson. The Management Plan foresees the implementation of a Fire Management Plan which will involve the Forestry Department, the local fire brigade and the activation of education and training programmes for the local population.

The nominated property has a Disaster Preparedness and Emergency Management plan prepared in 2006 (see Risk Preparedness section).

ICOMOS notes that the Disaster Plan does not concern the cultural heritage of the property and recommends that any such plan should be designed in a way which takes into account possible impacts of disasters, as well as recovery measures, on cultural heritage.

##### Impact of climate change

ICOMOS believes that climate change in the region is likely to cause an increase in the frequency and violence of hurricanes and storms.

---

ICOMOS considers that the main threats to the property are hurricanes and storms, as well as fire. The lack of appropriate legislation to protect tangible Maroon heritage may also represent a threat in the long run. ICOMOS recommends that any tourism strategy involves the Maroon community, from its inception, to avoid any threats to their cultural heritage.

---

#### 5 Protection conservation and management

##### Boundaries of the nominated property and buffer zone

The boundaries of the nominated property coincide with those of the Blue and John Crow Mountains National Park. The detailed description of the consistency of the nominated property was recorded in 1993 and is based on the original patents granting land in the 17<sup>th</sup> and 18<sup>th</sup> centuries.



The buffer zone was established by carrying out a rapid ecological Assessment ( A) and identifies a one-km community buffer zone' around the boundaries of the National Park. Within this area, the Management Plan focuses on local communities and foresees programmes for sustainable livelihood and environmental education.

ICOMOS notes that the nominated property is only protected for its natural value and not for its cultural significance. Therefore, it is unclear whether the boundaries of the nominated property can be considered adequate with regard to the expression of cultural significance of Blue and John Crow Mountain National Park. Although many places with cultural significance seem to be included within the nominated property, archaeological findings are still fragmentary and much more could be revealed through systematic research on the ground.

---

In conclusion, ICOMOS considers that the boundaries of the nominated property and of its buffer zone need revision and recommends that the cultural properties, as well as the trails identified in the additional documentation received from the State Party on 8 November 2010, be included in the nominated property or in the buffer zone. Likewise, areas that may yield further information on Maroon culture should be comprised in the nominated property or in the buffer zone.

---

#### Ownership

The land of the nominated property is, for the most part, owned by the Commissioner of Lands (Government of Jamaica) and only very small parcels are privately owned by the parish of St. Andrew and Portland.

#### Protection

##### Legal Protection

The State Party reports in the nomination dossier that the nominated property was declared a National Park in 1993 under the Natural Resources Conservation Authority Act. The area was also declared a Forest Reserve in 1939 under the Forest Act (1937, revised 1996).

Other relevant legal provisions mentioned in the nomination dossier are: the Natural Resources Regulations (1993), Forest Regulations (2001), Forest Policy (2001), Country Fires Act (1942), Endangered Species Act (2000), National Solid Waste Management Act (2001), Water Resources Act (1995), and the Wildlife and Protected Areas Act, instruction for the implementation of which is currently under elaboration.

The additional information received by ICOMOS on 8 November 2010 explained that several legal provisions exist in the Jamaican legislation that ensure the protection of the cultural heritage of the nominated property.

The most important law is the Jamaica National Heritage Trust Act (1985), which covers the identifying,

researching, recording, protecting, and interpreting of material cultural heritage resources of Jamaica. The Jamaica National Heritage Trust (JNHT) has the authority to maintain or assist in the protection of national heritage.

Further provisions mentioned by the State Party are the Institute of Jamaica Act (1892, 1978), the National Resource Conservation Authority Act (1991) and the National Cultural Policy (2003).

Plans to declare the most significant Maroon cultural resources within the BJCMNP and the surrounding region elements of the national heritage are under way. It is planned that official protection, and the related statement of significance, for each selected site will be provided under the JNHT Act within two years.

At the level of planning, the Protected Areas Master Plan, elaborated in 1992 and currently under review, provides a monitoring framework. The nominated property is expected to act as a pilot area for the implementation of this system. The Sustainable Tourism Master Plan provides a framework for the sustainable development of tourism and recreational activities, and for assessing the success of the tourism industry based on economic and social opportunities offered to the Jamaican people.

ICOMOS considers that legal protection of the nominated property only takes into account its natural aspects and therefore does not appear adequate to protect the tangible and intangible attributes that bear witness to the cultural significance of the nominated property.

Additionally, the buffer zone is not covered, at present, by any legal provisions except the Management Plan regulations of the National Park and by a Forest Policy dating back to 2001. Despite this, the instructions under preparation for the Wildlife and Protected Areas Act will include, among other things, the establishment of formal buffer zones around protected areas.

##### Traditional Protection

Although there is no mention of traditional protection measures in the nomination dossier, ICOMOS notes that intangible heritage and related practices are protected by Maroon communities through continuing practice and performance.

Additional information, received by ICOMOS on 8 November 2010, explained that the Maroon community, because of their rights of self-governance, have a system of by-laws, or codified rules, which integrate with the national legislation. Maroons also show a great respect for their heritage and it is therefore rare to have to enforce the existing legal provisions on the Maroon community.

##### Effectiveness of protection measures

The nominated property is managed by the Jamaica Conservation and Development Trust (JCDDT) a non governmental organisation established in 1988 through an agreement with the Natural Resources Conservation

Authority (N CA), signed in 1998 and renewed in 2002. The N CA is the body responsible for protected areas according to the law in force and the agreement above defines objectives for the protection and management of the natural heritage of the park.

The nominated property is managed under category II of the IUCN categories, that is, for conservation and recreation. Over the last two years, efforts have been made to include local communities in the conservation of the natural and cultural heritage of the nominated property. There is also a view to provide locals with a means for generating income.

The additional information, provided by the State Party to ICOMOS on 8 November 2010, explained that the JNHT has the legal authority and responsibility to encourage conservation and preservation of cultural resources within the nominated property. In case of infringement of the provisions of the JNHT Act (i.e. encroachment, destruction, damage), the JNHT will take necessary action.

ICOMOS considers that the structure established to implement the protection of the nominated property was designed with mainly natural resources in mind, whilst the cultural heritage of the nominated property has been overlooked until now, except for the community-based protection/conservation programmes. These programmes, however, focus on reducing encroachment on the boundaries of the National Park, maintaining the trails and developing training programmes in tourism.

---

In conclusion, ICOMOS considers that the legal protection in place is currently not adequate for cultural heritage in that it mainly focuses on natural resources. ICOMOS recommends that envisioned protective measures for the cultural heritage of the nominated property, both legal and planning-based, be developed and enforced without delay.

---

## Conservation

Inventories, recording, research

The nomination dossier reports that, in 1973, archaeological excavations were carried out in the site of Nanny Town. The site was cleared, several test pits were dug and various objects found. No mention is made of any other archaeological or inventory campaign of cultural resources. The nomination dossier admits the need for archaeological research in the area and for further investigations.

The additional information, provided by the State Party on 8 November 2010, explained that several research and excavation campaigns were carried out in Nanny Town between 1967 and 1995.

ICOMOS considers that there is a need for systematic inventory and research on the tangible cultural heritage,

and where possible, and through adequate tools, also on the intangible heritage. Systematic recording and mapping in a GIS environment would be of great help for the future management of tangible cultural resources.

## Present state of conservation

Due to the ephemeral nature of the materials used by Maroons to build shelters and houses, the frequent relocation of settlements, and their abandonment more than two centuries ago, very little tangible evidence remains today. The trails are maintained in some cases, while places of importance are generally spots of natural beauty which do not require ongoing intervention.

The intangible heritage is still alive: music, songs and dance performances are still practiced, stories are still told and languages used (although to a limited extent and only for particular functions).

ICOMOS considers that the nature of the tangible heritage would not require intensive conservation measures, rather careful documentation and management.

## Active Conservation measures

Active conservation measures focus on natural heritage and only a few programmes exist for cultural heritage.

The maintenance and restoration of the trails network is carried out by the Bowden Pen Farmers Association, a community-based organisation. However, it aims mainly at reinforcing the eco-tourism strategy within the park.

UN SCO has funded a programme for the preservation of Moore Town Maroons' intangible heritage and the African Caribbean Institute of Jamaica is working with the community.

ICOMOS considers that conservation measures mainly concern natural resources or, at the most, trails, whilst there is also a need to include cultural resources in conservation programmes.

## Maintenance

ICOMOS considers that maintenance programmes for the cultural heritage focus almost exclusively on natural resources. The only cultural resources that have been included in maintenance programmes have been the trails, with particular regard to the Cuna Cuna Pass Trail.

## Effectiveness of conservation measures

ICOMOS considers that conservation measures set up by the State Party are limited to natural heritage while cultural values are only peripherally affected by the current conservation strategy.

---

In conclusion, ICOMOS considers that only the conservation issues of natural heritage are addressed, while the cultural resources are largely overlooked. ICOMOS recommends that a comprehensive strategy for the documentation, conservation and maintenance of

the cultural heritage be developed and that action plans, covered by adequate funding, be set up as soon as possible.

ICOMOS further recommends that the Maroon community be involved as early as possible in the documentation, conservation and management of Maroon cultural heritage to ensure its vital conservation.

## Management

Management structures and processes, including traditional management processes

The nominated property is managed by a pool of bodies: the Jamaican Conservation and Development Trust (JCDDT), Forest Department, and National Environment and Planning Agency (NEPA). The respective tasks and responsibilities are laid out in an agreement and the coordination of management activities is ensured through meetings held at least every three months. This agreement is currently under review. The draft of the 2011-2016 Management Plan envisions the establishment of a Scientific and Technical Advisory Committee that will provide guidance for the management of the BJCMNP and promote research and monitoring.

ICOMOS considers that the management framework fails to include agencies or bodies with specific responsibilities for the protection and management of cultural heritage. This is detrimental to the future safeguard of the cultural value of the nominated property.

Policy framework: management plans and arrangements, including visitor management and presentation

Since the creation of the national park, the nominated property has been managed according to different management plans, purposely developed for the park. Currently, the BJCMNP Management Plan is in place, covering the period 2005-2010. The plan aims to maintain and enhance the forests and other natural resources within the park. A new Management Plan for the period 2011-2016 is under elaboration by the JCDDT.

The additional information, received by ICOMOS from the State Party on 8 November, includes one chapter of the Draft Management Plan 2011-2016. This comprises objectives for the conservation and promotion of cultural heritage and related programmes, resources and outlines a specific timeframe for their implementation.

ICOMOS notes that the Draft Management Plan 2011-2016 contains a description of the cultural heritage associated to the nominated property and establishes guidelines and objectives for its conservation with a timeframe and allocates resources to carry out such objectives.

ICOMOS nevertheless considers that these elements are not part of a global approach to cultural heritage and

recommends that a comprehensive strategy for cultural heritage be developed and implemented within the management plan under elaboration.

## Disaster Preparedness

The nomination dossier mentions that a Disaster Preparedness and Emergency Management plan is in place. The plan has been prepared by the Park's Chief of Corps. An audit of the Park's emergency status is to be carried out as a basis for the scheduled revision of such Plan.

ICOMOS observes that this Plan should integrate concerns about the cultural values of the nominated property into its overall strategy.

## Involvement of the local communities

Involvement of local communities appears to be limited to the cooperation with the Bowden Pen Farmer Association, with which the Jamaica Conservation and Development Trust has signed a Memorandum of Understanding for this purpose.

ICOMOS considers that involvement of Maroon communities should be extended to the overall protection and management strategy.

Resources, including staffing levels, expertise and training

The funding for the management of nominated property comes from several sources but mainly derives from grants and fundraising activities by the JCDDT.

The executive director of the JCDDT has a post-graduate degree in resource management. The Staff with professional level is expected to hold at least an undergraduate degree in Biological Sciences, Conservation, Natural Resource Management or Geography. Technical staff is expected to hold secondary level education and specialised training and experience.

ICOMOS appreciates the diversification of sources of funding proposed for the management of the property. ICOMOS however notes that additional resources both financial and human are needed for the management of cultural resources.

## Effectiveness of current management

ICOMOS considers that management is mainly focussed on natural heritage while the cultural dimension of the nominated property is insufficiently addressed, although some objectives for its conservation and promotion have been identified and funds allocated.

In conclusion, ICOMOS considers that the management system fails to adequately address the issues related to cultural heritage.

ICOMOS recommends that a comprehensive strategy for cultural heritage be developed, implemented and adequately funded within the Management Plan 2011-

2016 under elaboration, which should be finalised without delay.

ICOMOS also recommends that training programmes in cultural heritage be developed for rangers, so that they can be involved in its daily protection.

---

## 6 Monitoring

ICOMOS considers that monitoring focuses on natural resources and does not contemplate cultural heritage.

ICOMOS observes that building a sensible monitoring system for the tangible cultural heritage of the nominated property requires baseline data, which do not seem to be currently available. As for intangible heritage, ICOMOS considers that any monitoring and monitoring indicators should be set up in conjunction with the Maroon communities that hold the necessary knowledge of its manifestations.

---

ICOMOS recommends that a monitoring strategy and appropriate indicators be identified to ensure that the cultural value of the nominated property be safeguarded over time.

---

## 7 Conclusions

The current nomination has been prepared focussing on the natural values of the property and the same can be affirmed of the protection and management system established. The arguments to sustain the justification for inscription under criterion (vi) have not been sufficiently made explicit and articulated. The insufficient consideration of the cultural dimension of the nominated property in the protection and management does not guarantee that in the future the associative values of the property and related attributes will be adequately protected.

Recommendations with respect to inscription

ICOMOS recommends that the examination of the nomination of Blue and John Crow Mountains National Park, Jamaica, to the World Heritage List be deferred in order to allow the State party to:

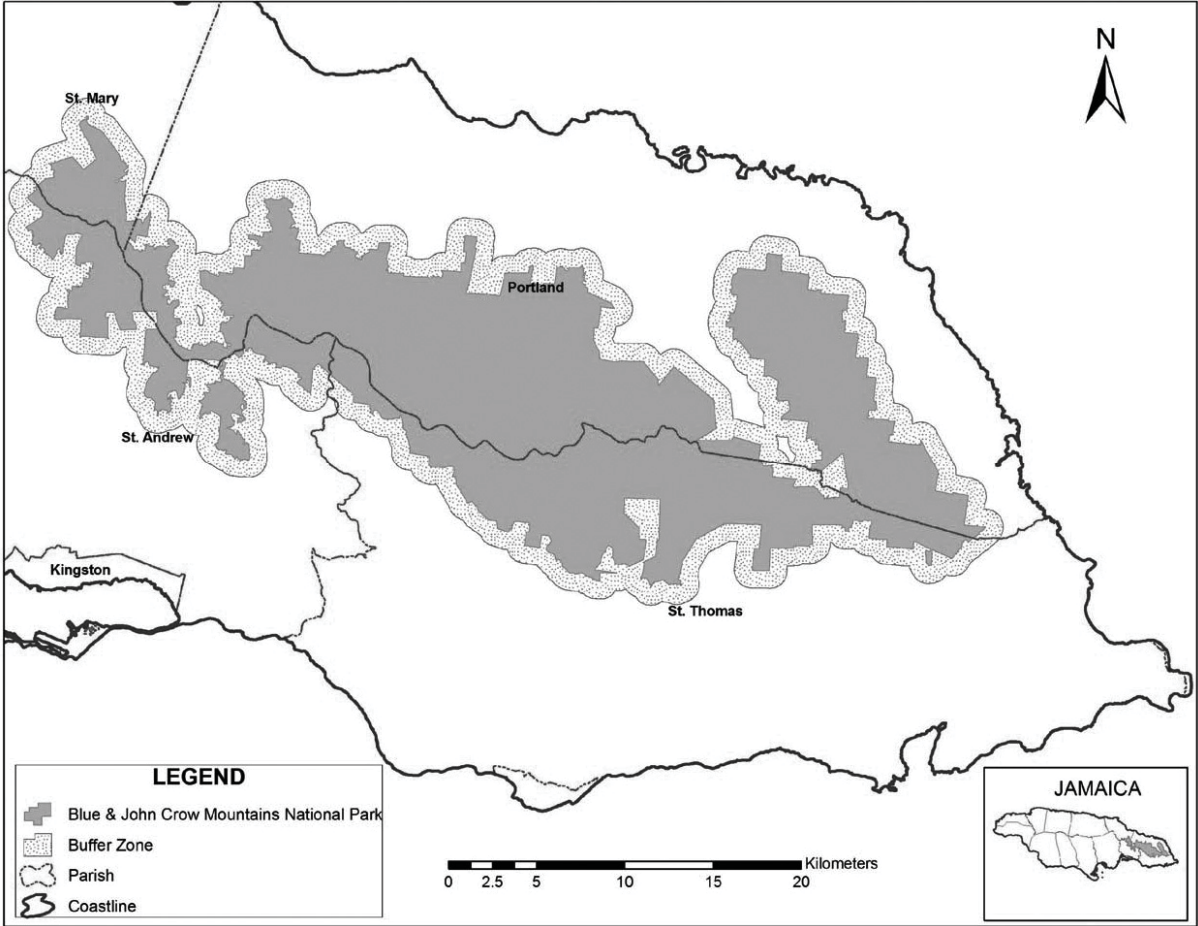
- Deepen the comparative analysis in order to demonstrate the Outstanding Universal Value of the property by examining how, and to what extent, the nominated property bears witness to the associated values in respect to other properties related to other relevant Maroon groups;
- Revise the nomination dossier so that the values of the properties can better present the proposed Justification for inscription and the selected criterion;

- Modify the boundaries of the nominated property or of the buffer zone to include the cultural resources documented in the additional information, received by ICOMOS on 8 November 2010, as well as those areas with the potential to yield additional information on Maroon culture in future archaeological campaigns;
- Develop and enforce as soon as possible protective measures, both legal and planning based, for the cultural heritage of the nominated property;
- Develop and adequately fund a comprehensive strategy for cultural heritage within the 2011-2016 Management Plan under elaboration, including inventorying, documentation, conservation, maintenance, disaster management, promotion and tourism;
- Finalize and implement the 2011-2016 Management Plan without delay.

ICOMOS considers that any revised nomination would need to be considered by an expert mission to the site.

ICOMOS further recommends that the State party give consideration to the following:

- Involve representatives of the Maroon community in the management framework;
- Develop training programmes in cultural heritage for the Park rangers, so that they can be involved in the daily protection of cultural resources.

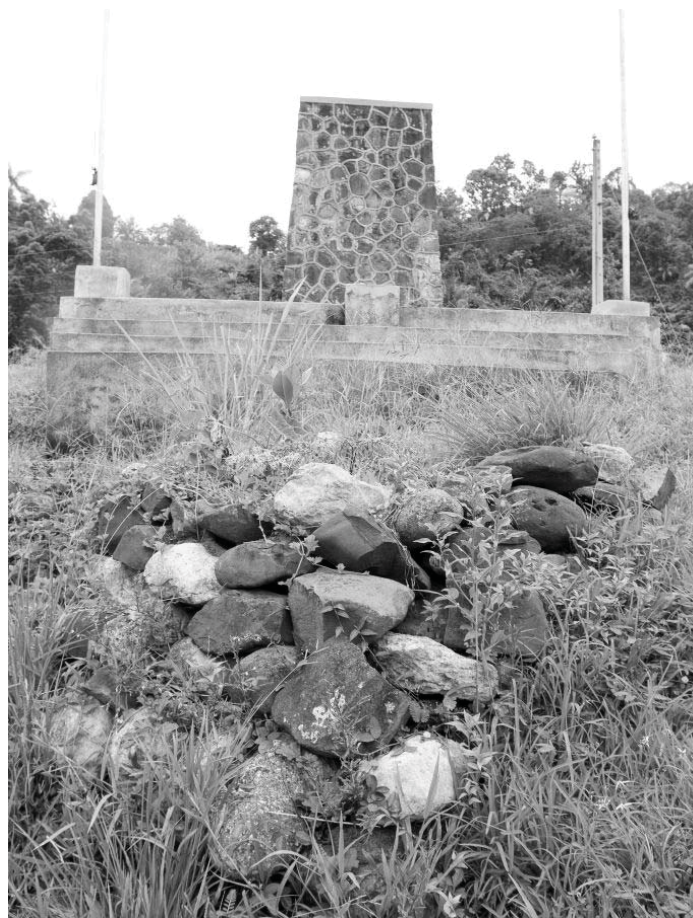


Map showing the boundaries of the nominated property





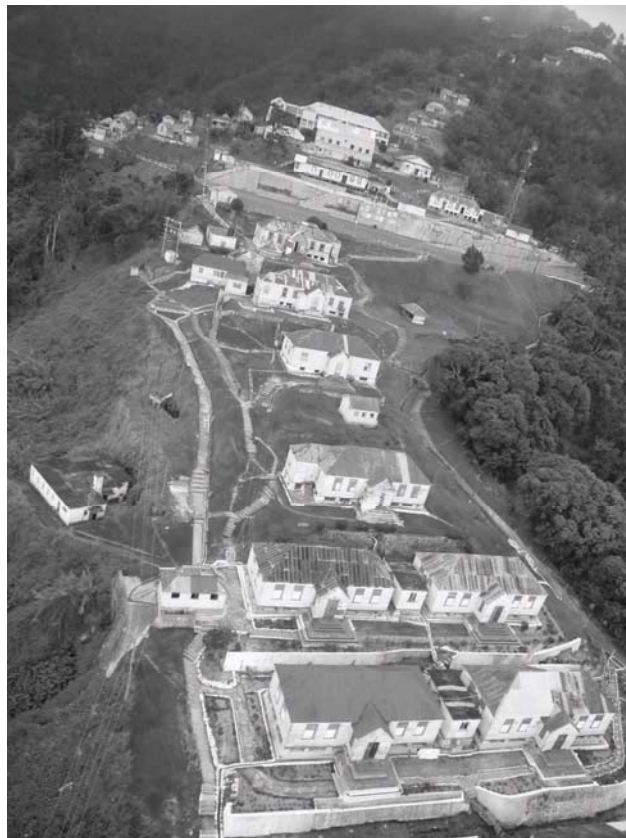
Park trail through areas of historic and ecological interest



Nanny's grave at Moore Town



Nanny Falls



Newcastle British military camp

# I Cultural properties

## A Africa

### New Nominations



---

Oke-Idanre  
Nigeria  
No 1332

---

Official name as proposed by the State Party  
Oke-Idanre Cultural Landscape

Location  
Ondo State, Idanre Local government area  
Nigeria

**Brief description**  
Oke-Idanre, on top of one of the granite inselbergs that are characteristic of the Nigerian landscape, was the highest hill top settlement amongst the oruba people of the South West of Nigeria. In the early years of the 20<sup>th</sup> century, the inhabitants moved from this naturally fortified site to the plain where they replicated the hill top settlement in terms of planning and buildings, while retaining ceremonies and institutions related to places in Old Idanre.

The original site has traditional buildings such as the Owa's Palace, and remains of a house containing the burial of the last king, a 19<sup>th</sup> century District Officer's residence, primary school, and colonial courthouse, as well as shrines that continue to attract large number of pilgrims for special festivals.

**Category of property**  
In terms of categories of cultural property set out in Article I of the 1972 World Heritage Convention, this is a *site*.

In terms of the *Operational Guidelines for the Implementation of the World Heritage Convention* (January 2008) paragraph 47, it is also a *cultural landscape*.

## 1 Basic data

Included in the tentative List  
8 October 2007

International Assistance from the World Heritage Fund for preparing the Nomination  
None

Date received by the World Heritage Centre  
29 January 2010

**Background**  
This is a new nomination.

**Consultations**  
ICOMOS has consulted its International Scientific Committee on Cultural Landscapes and several independent experts.

Comments on the assessment of this cultural landscape were received from IUCN on 1st February 2011.

The information was carefully considered by ICOMOS in reaching the final decision and recommendation in March 2011, and IUCN has also reviewed the presentation of its comments as included in this report by ICOMOS.

## Literature consulted selection

Denyer, Susan, *African Traditional Architecture*, 1978.

Dmochowski, . . . *An introduction to Nigerian traditional architecture*, Vol 2, 1990.

Ojo, A., *oruba palaces a study of afins of orubaland*, 1966.

**Technical Evaluation Mission**  
An ICOMOS technical evaluation mission visited the property from 4 to 13 October 2010.

**Additional information requested and received from the State Party**  
Additional information was requested from the State Party on 28 September 2010 regarding comparative analysis and proposed tourism infrastructure projects. A response was received on 5 November 2010 and the information is included under the relevant sections below.

Date of ICOMOS approval of this report  
10 March 2011

## 2 The property

**Description**  
Old Idanre is on the small summit of a granite inselberg that rises abruptly several hundred metres above the valley floor in the heart of orubaland. The town was naturally protected by the almost vertical faces of the mountain with the only access up a rope ladder.

In the 1920's a road was pushed through the valley below Old Idanre and by the 1930s Old Idanre's inhabitants had largely migrated down to a new town in the valley to the north and east of the mountain.

Although the Old Town is no longer inhabited, many of the institutions and celebrations of the Idanre people remained tied to remaining buildings or places in Old Idanre, which is now revered as the spiritual home of the community. Each year there is an Ogun festival, which is partly celebrated on top of the hills during October and an Ije festival, spread over seven days.

The nominated property (637.7ha) consists of the mountain with the remains of its hill top settlement. Access is today by 670 concrete steps, installed in 2007 on the line of one of the original paths that was modified in the 1950s. The property is surrounded by a buffer zone (2,052ha) that encompasses a small part of the new city on its northern edge and a large inaccessible tract of mountain to the west of Old Idanre.

The sites on the mountain are:

- Owa's Palace;
- remains of the Old Town:
  - *Iro o*, *Isalu* and *Idale* quarters of the Old Town with remains of houses;
  - *A in* quarter the abode of spiritual power of Idanre people;
  - Administrative quarter with remains of District Officer's residence, primary school, old court, church belfry.
- *Agbogun* footprint;
- Festivals.

These are considered separately:

- Owa's Palace  
This is formed of a cluster of single storey buildings arranged around courtyards of varying sizes in a form that is typical of oruba palaces, although the precise form is unclear as no plan has been provided. The entire palace covers an area of 500 square metres. The walls are of rammed earth, while the roofs are covered with corrugated tin sheeting. The entrance, framed by two Akoko trees whose leaves are used during chieftaincy installations, leads into the largest courtyard where the Owa or ruler could meet his subjects. All around the central open space the walls are open and were originally supported by 13 posts carved into the shape of figures. These were photographed in 1964 and appeared to possess considerable artistic and historical significance. Since then, however, all but two have been removed and some are believed to be in (illegal) private possession outside Nigeria, while a certain number are said to have been rescued or recovered, being kept securely in the new palace, with a proper record being by National Commission for Museums and Monuments (NCMM). Information on these was, however, not made available to the mission. The current posts were carved by an artist from Osogbo. On one side of the courtyard is a shrine where cow skulls are hung, each of which represents a year of an Owa's reign, elsewhere a further shrine represents departed Owas.

Leading off this central courtyard are smaller courts, surrounded by buildings. The first, Owamimu, was the limit of where outsiders were admitted; the second, Owaya, was where the Owa met his Chiefs every nine days. In the centre of this court is an Ajale shrine that includes a tree, planted by the Oba, whose foliage acts as a barometer for the health of the community. Further away from the main court are courts that functioned as bedrooms of the Owa and rooms for his wives.

- remains of the Old Town  
The neighbouring town traditionally had four quarters:

#### *Iro o* quarter

This quarter was between the Oba's Palace and the market. Either side of the road are the remains of Chief's houses – some six in all. Few details are provided of these buildings although one or two are said to be habitable with the remainder in a state of almost collapse.

#### *Isalu* quarter

This quarter also contained residential buildings, including one belonging to a chief who was the last man to die in the Old Town in 1957. Again few details are provided of the remains of these buildings.

#### *Idale* quarter

The remains of buildings in this quarter are mostly barely visible having collapsed through lack of maintenance.

#### *A in* quarter

This is the quarter where the mother of an Owa was buried. It is seen as the place that holds the spiritual powers of the Idanre people. Four buildings remain, one of which is an intact hall where Orosun worshippers meet. In front is a statuette of Orosun and nearby a further shrine at the foot of a small Igheghe tree.

#### Administrative quarter

The Old Idanre Local Authority Primary School established by the (Anglican) Church Missionary Society in 1894 was recently rebuilt from one wall in 2005 (and will act as an education centre); its abandoned football field is now overgrown with vegetation. Nearby is the Old Courthouse, built in 1904, and which had partially collapsed by 2005 but which is to be restored. Both are small rectangular buildings of earthen walls and with roofs covered with tin sheets. Nearby are the remains of the British District Officer's bungalow and office. A small pillar from the Old Church Belfry survives, now covered by a shelter and symbolises the advent of Christianity and the polarising effect this had on the structure of the town.

Nearby are visitors chalets, first erected in the 1950s and rebuilt twenty years later in concrete-block style, now neglected and awaiting renovation.

- *Agbogun* footprint  
A natural imprint in a rock in the shape of a footprint is considered to have been made by the first Owa, *Agbogun*. In the past, it was seen to be an effective detector of witches and of people who had committed wicked acts'.

- Festivals  
The Old Town is the focus of several annual festivals. In May the Orosun festival honours Orosun the wife of Olofin who is seen as the progenitor of the Idanre people. Orosun is linked to Ile-Ife, the cradle of oruba culture, as she is believed to have offered her only son

for sacrifice to save that town. In December, the Ije or Iden festival is for worshipping ancestral spirits and provides the opportunity for the Oba to wear the original beaded crown of Od duw (see below) brought to Idanre from Ile-Ife by Olofin and still in the possession of the Owa. In February there is the Us (bat) festival focused on the Owa cave where the bats are believed to be divine messengers.

#### Buffer zone

IUCN notes that the natural setting of the property and its isolation has assisted the protection of cultural traditions and spiritual practices by the Idanre people of the oruba ethnic group who claim this site as their ancestral and spiritual home. IUCN notes that natural values are intrinsically linked to the beliefs associated with the property, including the natural and spiritual powers in the forms of magical trees, water bodies and rock structures as symbolic representations of gods. Ceremonies include regular pilgrimages to the landscape in veneration of the spirits believed to be residing there.

The nomination reports that due to the remoteness of the site some of the industrial wood trees that are endangered and almost extinct in the rain forests of Nigeria can still be found in this area and about 50 of the trees have medicinal value and are widely used by the Idanre community. There is a long tradition of healing with herbal products that is still being extensively used by the Idanre communities. Many plant species are stated to be of medicinal use, but relatively limited details or status information is provided on these.

#### History and development

The history of Oke-Idanre is only known from oral traditions. The history of the settlement has not been explored through historical documents or archaeology in order to provide correlation for the oral record or to augment it.

According to oral traditions, the founder of the town is believed to be Olofin, the brother of Od duw, revered as one of the founders of the oruba people, who had migrated from Egypt and founded Ile-Ife.

Ile-Ife is where the founding deities Od duw and Ob t l began the creation of the world, under the instruction of the paramount deity Ol d mar. Ob t l created the first humans out of clay, while Od duw became the first divine king of the oruba. The current king of Ife claims direct descent from the god Od duw and is said to be counted first among oruba kings. The first settlement at Ife can be traced as far back as 350 BC.

Oral traditions relate that either Od duw's six sons and one grandson or his seven grandsons founded the oruba states of Owu, Sabe, Popo, Benin, Ila Orangun, etu and Oyo.

Oke-Idanre's founding is linked to Od duw's brother, Olofin, who is believed to have led his people from Ile-Ife to the top of the Idanre mountain bringing with him Od duw's regalia. He died shortly afterwards in a cave where he had instructed the townspeople to offer human sacrifices, of strangers to the town, every two years in order to avoid defeat from their enemies. This tradition persisted until 1894 when human sacrifices were replaced by the biennial slaughter of a cow.

In the early 20<sup>th</sup> century, a considerable number of the townspeople converted to Christianity and in 1928, largely because of tensions that developed between Christians and those still practising traditional religious beliefs, the Christians moved to the plain to establish a new settlement at the foot of the mountain. Five years later in 1933 the remaining population also moved down to the new town which had been laid out in a similar way to the old one with three of the traditional quarters mirrored in the valley settlements. However, the second wave of people kept their spiritual links with the Old Town on the mountain a link which still persists today.

ICOMOS considers that the relationship between Oke-Idanre and other oruba towns that made up the oruba confederation is not set out in the nomination dossier. Many oruba towns trace their origins back to Od duw and it is not clear that Oke-Idanre's oral history is exceptional.

In the past few years work has begun to re-build or restore what remains of the town. However this project has been treated more as maintenance than conservation based on available evidence, even though sizable interventions have been made. Few records have been created to document this process as conservation history.

### 3 Outstanding universal value integrity and authenticity

#### Comparative analysis

In the nomination dossier, Oke-Idanre is first compared to inscribed properties.

Within Nigeria, Oke-Idanre is seen to be comparable to the inscribed site of Osun-Osogbo Sacred Grove (2005, criteria (ii), (iii) and (vi)), which was inscribed on the List as a sacred forest that had, through the interventions of artists, become an important spiritual centre not only for orubas in Nigeria but throughout the oruba Diaspora. Oke-Idanre is said to be an important milestone in the development of oruba civilisation and to demonstrate a 'higher' representation of oruba philosophy and history than Osogbo.

Oke-Idanre is also seen as comparable with the Sukur Cultural Landscape (1999, criteria (iii), (v) and (vi)), on the borders of Nigeria and Cameroon, a remarkable terraced landscape. Oke-Idanre has sacred features that the Sukur landscape does not possess, such as the

sacred footprint. Oke-Idanre is also seen as similar to the Sacred Mijikenda aya Forests, enya (2008, criteria (iii), (v) and (vi)), but with more spectacular scenery.

Further comparisons are made with Matobo Hills, Zimbabwe (2003, criteria (iii), (v) and (vi)), and Tsodilo, Botswana (2001, criteria (i), (iii) and (vi)), which are seen as having a high level of similarities in geological terms, and the former is seen to have similar shrines that attract pilgrims.

Further afield, comparisons are considered with the Jelling Mounds, unic Stones and Church, Denmark (1994, criterion (iii)), which is seen to present a similar fusion between traditional and Christian religion and with Sulaiman-Too Sacred Mountain, yrgyzstan (2009, criteria (iii) and (vi)), which is seen to have similar sacred sites.

ICOMOS notes that the analysis tries to show similarities rather than differences between Oke-Idanre and these other properties and therefore has failed to demonstrate that the significance of Oke-Idanre is not already represented on the World Heritage List.

Within Nigeria, the planning of Oke-Idanre is said to be typical for oruba towns in terms of spatial layout. In terms of its hill top location, Oke-Idanre is said to be one of a number of hill-top settlements in the oruba area. Others were Olumo ock in Ogun State, Ancient oso in Old Oyo ingdom and Aenla-Bunu in ogi State. Of these, oso and Aenla-Bunu have been completely abandoned while Olumo ock in Ogun State is still active for spiritual exercise. At oso, in the Old Oyo National Park, there are remains of enclosing walls, and ruins of houses. Oke-Idanre is however said to be at a higher altitude.

No comparisons are offered with the physical remains of other sites in the region which are seen as sacred and linked to the foundation of oruba society such as Ile-Ife, founded before the 11<sup>th</sup> century, and from where the orubas are said to have originated and which became a sacred site and major artistic centre, or the remains of the seven states that descendents of the founder of Ile-Ife founded: Owu, Sabe, Popo, Benin, Ila Orangun, etu and Oyo. Old Oyo is on the Tentative List as are earthworks associated with Benin City.

However, in terms of pilgrimage sites, Oke-Idanre is compared to the cultural landscape of Tongo-Tenzuk, Ghana: both are seen to contain sacred shrines and in both traditional practices survive. At Tongo-Tenzuk, the most prominent earth shrine attracts pilgrims from Guruni, usasi, Builsa, Dagomba, Mossi and beyond Ghana.

The key buildings remaining at Oke-Idanre are the palace buildings which are constructed in typical oruba style. oruba palaces are characterised by sprawling courtyards surrounded by long rectangular buildings in

expansive grounds. The larger courtyards, used for public gatherings, were often surrounded by long verandas supported by carved wooden posts, symbolic of the local mythology. The spiritual power of the king was often emphasised by the presence of altars and shrines.

The Oke-Idanre palace shares these features with other remaining oruba palaces and, although its sitting is seen as unusual in terms of oruba town planning in that it is surrounded in on three sides by rock outcrops, it is not exceptional in architectural terms (as confirmed in the supplementary information received from the State Party).

ICOMOS considers what the comparative analysis has not achieved is to show that Oke-Idanre is exceptional as a hill town that retain its spiritual significance. The planning of Oke-Idanre is not unusual apart from its altitude. Very little remains of the town apart from the palace buildings and these are not the most well preserved or most exceptional examples to survive. In terms of spiritual associations and links with pilgrimages there are several other sites that retain strong spiritual traditions and have regional importance and the shrines at Oke-Idanre cannot be said to be exceptional.

ICOMOS considers that although Oke-Idanre is clearly important in local or possibly even regional terms, it does not consider that a case has been made to justify Oke-Idanre being seen an outstanding representation of the spiritual, political and town planning arrangements of oruba towns.

---

ICOMOS does not consider that the comparative analysis so far presented justifies consideration of this property for the World Heritage List.

---

ustification of Outstanding niversal alue  
The nominated property is considered by the State Party to be of Outstanding Universal Value as a cultural landscape for the following reasons:

- When the Oke-Idanre community moved downhill, they replicated the hill top settlement in the valley but maintained an umbilical relationship with the abandoned settlement uphill. The traditional management system that sustains this relationship includes safeguarding endangered species of plants and animals.
- The Oke-Idanre Cultural Landscape represents an outstanding example of an enduring, indigenous, cultural practice which evolved and remained active for over 800 hundred years, despite encounters with external influences and civilizations.
- The system of town planning and land use, defence and security mechanisms, beliefs and practices give the landscape a distinct setting worth preserving.
- The relict layout clearly shows the demarcation of spaces for political, religious, social and economic purposes.

- The skilful and imaginative deployment of natural resources (rocks, trees, water bodies) for defence and protection is a testimony of the triumph of human spirit to adapt to a difficult environment.

ICOMOS considers that what this justification has not demonstrated is how the physical remains within the old hill-top settlement manifest an association that is of outstanding and universal significance, rather than one that is of national importance. Clearly the arrangement for the defence of the Old Town on top of the steep inselberg is interesting and dramatic in the way that the natural features were used to create an almost impregnable settlement, and clearly the continued use of the Old Town as the sacred centre for the community that is now located in the valley, and the persistence of traditions over time is also of great value to the oruba community beyond the immediate area of Oke-Idanre. However what has not been shown is how these associations have come to have an international value or indeed to be to oruba people as, or more, important than for instance Ile-Ife, the spiritual home of the orubas and from where the founder of Oke-Idanre migrated.

The key remains of the Old Town are the palace buildings and their architecture and layout reflects the typical pattern for oruba palaces. It is not shown that these are exceptional remains. Nor has it been established how the town planning arrangements for Oke-Idanre are both typical of those for other oruba towns and exceptional in terms of what has survived.

#### Integrity and authenticity

##### Integrity

The boundaries clearly encompass the attributes associated with the potential Outstanding Universal Value that is the remains of the layout of the town and its setting on the mountain, as set out in the nomination dossier

However ICOMOS considers that some of these attributes such as the remains of buildings are clearly vulnerable and under a high degree of threat, through their abandonment, and un-documented re-building.

##### Authenticity

In terms of the way the attributes of the property convey Outstanding Universal Value, ICOMOS considers that apart from the dramatic location of the Old Town, and the palace buildings, what survives is slight and does not readily convey an understanding of how the town was laid out and functioned. Furthermore, in terms of individual structures, the re-building and restoration work cannot be seen as either a reflection of the time when the town was abandoned or as a reflection of the on-going repair needed to sustain a living and evolving town. The record is thus somewhat confused and the authenticity to a degree compromised.

---

ICOMOS considers that the condition of integrity has been only partly met but that the condition of authenticity has not been met.

---

Criteria under which inscription is proposed

The property is nominated on the basis of cultural criteria (iii), (v) and (vi).

*Criterion iii bear a unique or at least exceptional testimony to a cultural tradition or to a civilisation which is living or which has disappeared*

This criterion is justified by the State Party on the grounds that Oke-Idanre bears an exceptional testimony to oruba mythology, cultural traditions and practices originating from Ile-Ife and dispersed to other regions in Nigeria and neighbouring West African countries.

ICOMOS considers that the oral traditions that relate Oke-Idanre to Ile-Ife are shared to a great extent by many other oruba kingdoms who tie their lineage to that of Oduduwa and the received chronology of Ile-Ife. In the case of Oke-Idanre the traditions have not been tested with archaeological investigation or by a critical appraisal of the oral-historical traditions. Nor have they been compared to other oruba towns in order to demonstrate their exceptionality. The structures remaining on the property, still revered for their spiritual associations, clearly reflect local traditions but cannot be said to present an exceptional testimony to the ideas of oruba mythology.

---

ICOMOS considers that this criterion has not been justified.

---

*Criterion v be an outstanding example of a traditional human settlement, land use, or sea use which is representative of a culture or cultures, or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change*

This criterion is justified by the State Party on the grounds that Oke-Idanre is an outstanding example of a traditional settlement where the palace buildings testify to oruba traditional designs and where the planning system was adapted to the physical environment. These are preserved by the continuing cultural practices carried out.

ICOMOS considers that the palace building is a reflection of typical oruba palace building but what has not been demonstrated is how it is outstanding. Although Oke-Idanre appears to be the only naturally fortified oruba town, what remains of the town is a shadow of its former layout and only the memory of much of it now remains.

---

ICOMOS considers that this criterion has not been justified.

---

*Criterion vi be directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance*

This criterion is justified by the State Party on the grounds that Oke-Idanre is linked to traditional and spiritual festivals.

ICOMOS considers that Oke-Idanre is directly and tangibly linked to traditional and spiritual festivals of the oruba community which involve pilgrimage to the landscape where spirits are seen to reside. The site has also been immortalised in the work of Nobel Laureate author Wole Soyinka.

However, ICOMOS considers that for this criterion to be relevant, it would first need to be established that the cultural traditions are of outstanding universal significance and then how the site manifests those traditions in an exceptional way. First ICOMOS does not consider that a case has been made to show that Oke-Idanre is exceptional as a spiritual place for oruba people as many places are seen to have this very strong link between people and the spirit world and quite a number are the focus of pilgrimage to a lesser or greater degree. Secondly, ICOMOS does not consider that a strong case has been made to show that the manifestations of this spirituality in Oke-Idanre are themselves exceptional over and above what exists in other sacred places.

---

ICOMOS considers that this criterion has not been justified.

---

In conclusion, ICOMOS does not consider that the criteria and Outstanding Universal Value have been justified.

---

#### 4 actors affecting the property

##### Development pressures

A golf-course to meet international standards is being constructed six km north-north-west from Idanre, at Atosin, but will not be visible from Old Idanre. However, the Ondo State plan does include the building of a hotel on the road opposite the golf-course and this could be visible depending on its form and height.

There are no immediate development pressures nearer the property, other than Press reports of a possible 'seven star' hotel, that would be built if the property was inscribed. However ICOMOS considers that any substantial development in Idanre new town could have an impact on the property and there should be policies developed for local plans to protect the buffer zone and wider setting.

##### Tourism pressures

Tourist numbers are currently very low. An anticipated increase in numbers is being planned for.

##### Environmental pressures

ICOMOS considers that the main threat is from an increase in hunters and farmers as their bush-burning activities pose a direct threat to buildings and the natural environment.

##### Natural disasters

There are no identified natural threats other than fire. Two workshops for staff and local people on fire prevention were held in 2007. An awareness raising programme is to be initiated.

##### Impact of climate change

Any increase in rainfall could further aggravate blocked drains that could endanger the stability of buildings. Regular cleaning of drains is being planned.

---

ICOMOS considers that the main threats to the property are uncontrolled farming and hunting activities.

---

## 5 Protection conservation and management

##### Boundaries of the nominated property and buffer zone

The boundary of the property includes most of the eastern part of the inselberg on which Old Idanre is sited and includes all the remains of the town.

The buffer zone encompasses a large tract of uninhabited and inaccessible land to the west of Old Idanre, over the remainder of the inselberg, and a narrower band on the north, east and south sides. This latter is determined largely by the configuration of the hills and the new town in the valley, the northern part of which is in the nominated boundary and a larger portion in the buffer zone.

In order to have a more logical differentiation between the property and its buffer zone, ICOMOS considers that it would be desirable to reduce the boundary of the property at its south-eastern edge to the track leading from East (Lower) Idanre to Igorin village and Ijema (beyond the boundary) and to extend the buffer zone to cover a larger area of the town.

---

ICOMOS considers that the boundaries of the nominated property and the buffer zone are adequate but to have a more logical differentiation between the two, it would be desirable to reduce part of the urban area in the boundary and increase the buffer zone.

---

## Ownership

The land is owned primarily by the Oba of Idanre who holds it in trust for the entire local community. The palace is owned by the State Government.

## Protection

### Legal Protection

Oke-Idanre had been declared a State monument under legislation passed by the Ondo State House of Assembly in 2009. The boundaries of this protected monument have not been indicated and it is not clear if it covers the whole of the nominated area or a smaller area.

The Palace is being considered by NCMM for protection as a national monument under the Nigerian National Cultural Policy, 1988.

One of the assumptions of the Management Plan is that the whole property will be gazetted that is given national protection. This has not yet been achieved, but is clearly highly desirable.

IUCN notes that it is not clear whether the buffer zone is a recognised protection zone for nature.

ICOMOS notes that it is currently not clear whether any protection is afforded by the Buffer zone apart from hunting being banned within it. Such protection needs to be encapsulated in local plans.

### Traditional Protection

Traditional protection is of great importance for the property. The local community respect the Owa as custodian and respect taboos associated with the Orosun shrine in particular. However ICOMOS notes that the traditional protection has not been strong enough to conserve the remains of buildings not under the care of the NCMM, nor to curtail hunting or the bush-burning activities of farmers.

### Effectiveness of protection measures

Any necessary or urgent action, enforcement or legal sanctions will depend on how effectively the management and NCMM work with both the local community and the higher authorities to command sympathy and respect. As the management structures have yet to be put in place, it is difficult to predict how successful they will be. The Management Plan acknowledges the need for protection to be enforced. Meanwhile urgent action is needed to protect the remains of buildings, and archaeological evidence, and to control hunting and bush-burning.

---

ICOMOS considers that the legal and customary protection in place will be adequate once the national designations have been approved and if the constraints relating to the buffer zone become part of local plans, but protection enforcement has not been yet put in place formally and this needs to happen as soon as possible.

---

## Conservation

### Inventories, recording, research

ICOMOS notes that very little attempt has been made to trace documentation for the property in terms of written records and photographs in archives that might provide evidence of the form of the colonial administrative buildings at the time of their abandonment in the 1930s; or to trace what might exist for the palace and other buildings apart from the published photographs of the carved wooden veranda posts in the main courtyard taken by Dmochowski in 1964 before they were stolen. The built remains have been photographed recently but the buildings have not been recorded by measured drawings or by archaeological survey. This is particularly unfortunate for the palace building where an understanding of its complex layout and how this might have changed over time should be an essential prerequisite of any conservation intervention. ICOMOS considers that a complete architectural-cum-archaeological plan of the palace needs to be undertaken as a matter of urgency.

A spatial survey of the town quarters, is also needed, mapping the positions of each structure and tracing walls, in order to gain an understanding of the town as a social entity, before it began to be abandoned in 1928.

An inventory of the structures cannot therefore be said to exist. However the need for systematic documentation is a recommendation of the management plan.

### Present state of conservation

The ascent path, consisting of some six-hundred concrete steps, is mostly in a good state, with care taken to channel storm-water away to avoid erosion.

The palace buildings are relatively stable as a result of repairs and interventions, although vulnerable through the lack of repairs to the roof.

Some of the few standing houses are in reasonable repair and habitable, in part if not in whole, but most are in various states of neglect, decay or collapse and shrouded in vegetation. The school, which had only one wall remaining in 2005, has been rebuilt with earthen walls covered in cement plaster.

### Active Conservation measures

Most of the built remains of the Old Town are unconserved and in a very fragile state. Those that have had interventions have been subject to reconstruction rather than stabilisation. In these cases, they have been reconstructed to what is called their 'original' form by master-builders experienced in the layered mud construction, and who worked intuitively on earth walls, veranda surfaces and plaster finishes.

ICOMOS notes that the work does not appear to be based on any documentary evidence, in the absence of precise records and photographs being available (although these might exist see inventories above), nor on any archaeological or anthropological research. Nor have measured drawings been prepared for the buildings.

No work has been done on the roof of the palace and the rusting corrugated sheets and their timber supports need urgent attention to protect the mud walls beneath.

The re-building work that has been carried out has been justified on the grounds that the Old Town does in some way reflect a continuous oruba town and royal seat over some twenty generations, that has been renewed over time even though it now no longer functions as a living town. The reconstructions are therefore to some extent approximations of what once existed. No record has been made of the recent work in terms of recording the buildings as found, or documenting the interventions. ICOMOS considers that the work undertaken does thus compromise to a degree the authenticity of the remaining structures.

The measures proposed for the future (such as the reconstruction of the Bell Tower when only a small portion remains) is planned to be a continuation of the work already undertaken and this gives cause for concern in that it will not be underpinned by adequate documentation and evidence. ICOMOS considers that it is clearly necessary for the conservation to be put on a firmer basis underpinned by survey and research into available documentation, and by archaeological exploration.

Only the palace is the responsibility of the NCMM and without a source of funding it seems unlikely that the authority and encouragement of the Owa and council of chiefs is sufficient to encourage the private owners to undertake restoration work.

IUCN notes that the nomination dossier includes a partial list of key species however it is not clear the extent to which the species named are present in the property or in buffer zone or the wider region. There are several species where names are unclear and thus some questions over identification exist. The species noted are mostly of local and national biodiversity conservation significance. The relatively small area of the property is unlikely to be adequate for conservation of species without considering their protection in the wider surrounding area.

The nomination states that there are plans to reintroduce native flora and fauna, but details are not specified regarding these plans and these plans should be carefully considered regarding the choice of species.

## Maintenance

The maintenance of the palace building is carried out by the NCMM. For the other structures there is no regular maintenance.

### Effectiveness of conservation measures

ICOMOS considers that the conservation measures in place are not currently satisfactory as they are not underpinned by adequate documentation, research and archaeological investigation, nor do they follow an agreed conservation approach to ensure that sufficient is being done to avoid loss or damage to the historic fabric and to ensure that appropriate materials and techniques are used. The Management Plan needs to be augmented to set out a more detailed basis for an acceptable conservation approach.

---

ICOMOS recommends that the conservation measures be underpinned by adequate documentation, research and archaeological investigation, that an agreed conservation approach be developed to maintain the authenticity of the property and that a complete architectural-cum-archaeological plan of the palace be undertaken. Such work needs to be included in the Management Plan and its delivery overseen by the Management Committee.

---

## Management

Management structures and processes, including traditional management processes

There is a site manager at the Akure office of the NCMM who works in collaboration with the Ondo State and local authorities to manage the site. The site manager is assisted by other staff of the NCMM who have benefited from training workshops and seminars, at various levels. Site Guides employed by Ondo State monitor the property on a daily basis and also conduct visitors around.

Policy framework: management plans and arrangements, including visitor management and presentation

A 5 year Management Plan 2009-2013 was submitted with the nomination dossier. The text suggests it came into effect in 2008. The plan sets out a SWOT analysis, guiding principles, objectives and an Action Plan. One of the Actions is to set up a management committee. This has not yet been put in place as the plan states that if the property is inscribed, the site manager will have the responsibility of convening such a management committee and ensuring its effective functioning. The recommended membership includes four Ondo State Commissioners, representatives of the State Tourist Board, the Idanre community, the organised private sector and Idanre youths.



Immediately outside the entrance to the approach steps, a large information centre is already largely built, with work currently interrupted as a result of a successful court challenge resulting from the change in State Governor. The building appears to anticipate an increase in visitor numbers.

Currently there is no interpretation on the site, whether from signs or provided by guides, but these are envisaged in the Management Plan. The satisfactory completion of the visitors centre at the entrance to the hill climb does need to be accompanied by a leaflet and/or pamphlet with a clear sketch-map, and also simple signposts on the hill itself.

A specific visitor management plan to address a possible increase in visitors and to mitigate their impact on the site and the environment is planned but awaiting the completion of the tourism plan being developed by the Ondo State.

Currently visitor numbers are said to be low.

Fire preparedness

This has not so far been addressed apart from fire prevention (see above). Once more buildings are restored there will be a need to consider wider risks such as extreme weather.

Involvement of the local communities

This is clearly crucial as many of the buildings are in local ownership. It is understood that, if the property is inscribed, a management committee will be put in place that will include representatives of the local community.

Resources, including staffing levels, expertise and training

These are currently both skilled and unskilled staff employed by Ondo State to manage the site. Resources are available through the NCMM for staff costs and for restoration work.

The site manager has been trained by the NCMM as part of the Africa 2009 training programme.

Effectiveness of current management

ICOMOS considers that the effectiveness of the existing arrangements needs to be strengthened through the implementation of the Management Plan. This will introduce more formal arrangements for involvement of all stakeholders and a more structured effective and documented approach to management.

---

ICOMOS considers that there is a need to implement the management structures set out in the Management Plan to ensure a more structured and effective approach to management.

---

## 6 Monitoring

The site manager and staff carry out regular inspections of the property. Key monitoring indicators have been developed for flora and fauna, funds, visitor numbers, and the number of buildings repaired annually. However there are no indicators that relate to the state of conservation of the highly vulnerable structures and these need to be developed.

---

ICOMOS considers that given the fragile and vulnerable nature of the built fabric of the property, there is a need for more targeted monitoring of the conservation buildings and the remains of buildings on a regular basis.

---

## 7 Conclusions

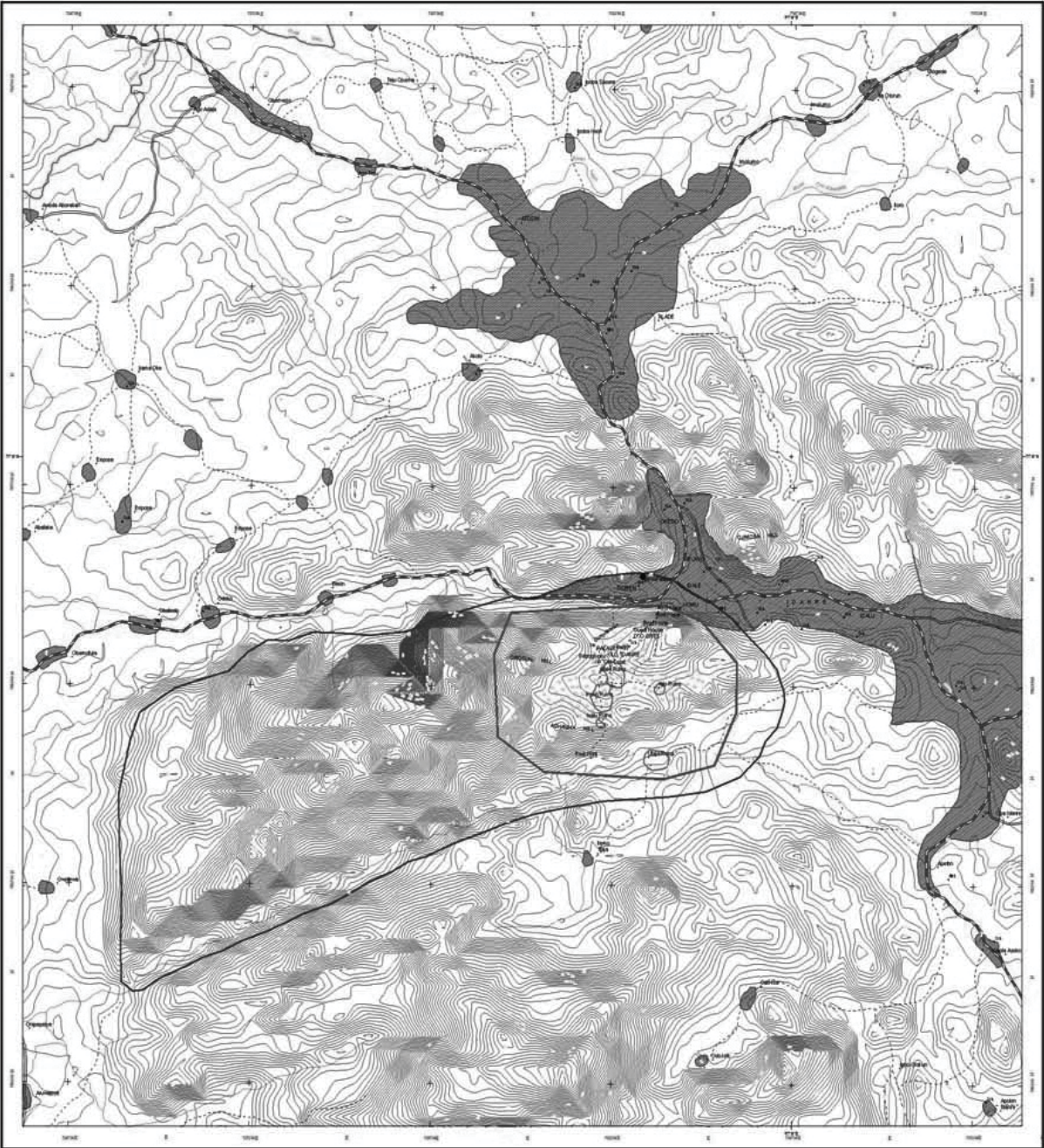
The sitting of the remains of Oke-Ilandre town on top of its inselberg is dramatic and its still limited access well illustrates its natural defences. The relationship between the Old Town and its successor in the valley at the foot of the mountain is clearly maintained with the hill top remains being the spiritual focus for the new town. The shrines attract pilgrims from further afield for certain annual festivals. All of this makes Oke-Ilandre of clear importance for its immediate locality and for some people from a wider area.

What, however, has not been demonstrated is how Oke-Ilandre as a Yoruba settlement has come to be of exceptional significance both within and beyond national borders, for its town planning, for its spiritual significance or for a combination of both.

Oke-Ilandre cannot be seen as a still living and evolving town in physical terms: it holds some remains of its former structures and of its planning and layout. However apart from the palace building which in itself is not exceptional as a representative of the Yoruba traditions of palace building the rest of the built remains are slight and have in some instances been substantially reconstructed without detailed documentary evidence. Nor, for similar reasons, can Oke-Ilandre be seen as a reflection of how the town was when it was abandoned as so little remains.

As a shrine, Oke-Ilandre is clearly of local importance but it has not been shown to be exceptional in terms of associations with long-standing traditions of pilgrimage or as a place that is seen as a focus of Yoruba culture that is revered both nationally and internationally.

Recommendations with respect to inscription  
ICOMOS recommends that Oke-Ilandre Cultural Landscape, Nigeria, should be **inscribed** on the World Heritage List.



Map showing the boundaries of the nominated property





Odode surrounded by hills



A view of Aghagha Hill from the Guest House



Ode'ja (old market square) during rainy season



View of the Owa's palace

Arab States

New Nominations



---

# Pearling in Bahrain No 1364

---

Official name as proposed by the State Party  
Pearling, testimony of an island economy

## Location

Kingdom of Bahrain, territorial waters  
Kingdom of Bahrain, Muharraq Island, Muharraq  
Governorate

## Brief description

The traditional sea-use of harvesting pearls from oyster beds in the Arabian Gulf shaped the island of Bahrain's economy for millennia. As the best-known source of pearls since ancient times, the Gulf industry reached the apex of its prosperity at the end of the 19<sup>th</sup> and beginning of the 20<sup>th</sup> centuries. The wealth of what had become a global trade is reflected in the development of the merchant quarters of Muharraq city. A few distinctive commercial and residential buildings remain as a testimony to this proud but dangerous and demanding economic activity which suffered a sudden and catastrophic demise in the 1930s as a result of the development in Japan of cultured pearls from freshwater mussels.

The property includes seventeen buildings embedded in the urban fabric of Muharraq city, three off shore oyster beds, and a part of the seashore at the southern tip of Muharraq Island, from where the boats set off for the oyster beds.

## Category of property

In terms of categories of cultural property set out in Article I of the 1972 World Heritage Convention, this is a serial nomination of 15 components consisting of four sites, nine monuments and two groups of buildings.

## 1 Basic data

Included in the Tentative List  
14 May 2008

International Assistance from the World Heritage  
Fund for preparing the Nomination  
None

Date received by the World Heritage Centre  
27 January 2010

Background  
This is a new nomination.

## Consultations

ICOMOS has consulted its International Scientific Committees on Intangible Cultural Heritage, Underwater Cultural Heritage and Architectural Heritage and several independent experts.

Comments on the assessment of this property were received from IUCN on 1<sup>st</sup> February 2011.

This information was carefully considered by ICOMOS in reaching its final decision and recommendation in March 2011; IUCN reviewed the presentation of its comments, as included in this report by ICOMOS.

## Literature consulted selection

Dayaratne, Dr. Anjith, The Traditional and the Hybrid Architecture of Bahrain, Department of Architecture, University of Bahrain.

Al Masri, Souheil Alarwood, John, Al Muharraq: Architectural Heritage of a Bahraini City, 2005.

Fuccaro, N., The Making of Gulf Ports Before Oil, in Liwa, Journal of the National Center for Documentation Research, June 2010.

## Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the property from 6 to 11 October 2010.

Additional information requested and received from the State Party

By letter on 1<sup>st</sup> October 2010, ICOMOS requested supplementary information from the State Party in relation to the detailed conservation and restoration of buildings.

A response was provided in a letter of 7 November 2010 which set out outline plans for future work of restoration and adaptation of most of the structures. This information is included under the relevant sections below.

Date of ICOMOS approval of this report  
10 March 2011

## 2 The property

### Description

This is a serial nomination of fifteen sites of which three are located in the northern territorial waters of Bahrain and the remaining twelve on the island of Muharraq, the second largest island of Bahrain, located just to the north-east of the main island.

Until the discovery of artificial pearls in the 1930s, Bahrain was the centre of the natural pearl industry which, in the late 19<sup>th</sup> and early 20<sup>th</sup> centuries, became global, with the resultant international trade bringing substantial economic benefits. This prosperity, and the structure of the industry, is reflected in buildings remaining in the merchant quarter of Muharraq Island. The source of the prosperity is recognized by three

extensive under sea oyster beds, while the link between land and sea, and the route of the boats and divers, is commemorated by a stretch of seashore which includes a fort that helped safeguard the trade.

The property consists of:

- Three Oyster beds:
  - Hayr Bū-I-Thāmāh
  - Hayr Bū'Amāmāh
  - Hayr Shtayyah
- Bū Māhir Seashore al at Bū Māhir fortress
- Muharraq city:
  - Al-Ghūṣ House
  - Badr Ghulum house
  - Al-Jalahma House
  - Al-Alawi House
  - Fakhro House
  - Murad House
  - Murad Majlis
  - Siyadi Shops
  - Amārāt Ali ashed ousif Abdurrahman Fakhro (group of three storehouses)
  - Nūkhidhah House
  - Siyadi complex two family residences and mosque.

These are considered in turn:

- Three Oyster beds:
  - Hayr Bū-I-Thāmāh
  - Hayr Bū'Amāmāh
  - Hayr Shtayyah

The oyster beds chosen for inclusion in the nomination represent the most productive of the oyster beds to the north and north east of Bahrain, and the areas described in the historical literature and by informants as having produced the best quality pearls and the highest density of oysters.

The two deeper oyster beds (Hayr Bū-I-Thāmāh and Hayr Bū'Amāmāh) are separate, discrete oyster beds. The larger, shallower oyster bed, Hayr Shtayyah, is an amalgam of six, adjacent, historically exploited oyster beds that form a crescent around the edge of a huge seabed dome, the centre of which is free of oysters and thus forms part of the buffer zone. Apart from the oyster beds themselves, there are no tangible remains of the oyster harvesting traditions.

- Bū Māhir Seashore al at Bū Māhir fortress  
*The ū Māhir* Seashore is the only stretch of authentic sand shoreline remaining in Muharraq (the remainder has been reclaimed). The shore was the point from which the pearl diving boats set off for the oyster beds and is where the festivals associated with their departure and return were held. The nominated shore is some 110 meters long and between 2.5 and 25 meters deep, depending on the tide.

The fortress of *al at ū Māhir* protected the shore and the harbour basin beyond from pirates or opponents. Of

its original four towers, only one tower and an attached wing remains. The upper parts are reconstructions dating to 1977-79.

- Muharraq city:  
 The urban properties form a linear route through the southern part of Muharraq city, each of which adds to the overall picture, and tells part of the story of pearling.

They consist of ten houses, belonging to wealthy merchants, three shops, three storehouses, and a mosque, next to one of the family houses. They have been chosen to represent different social and economic aspects of the pearling culture, and particularly the houses of the merchants, who organised the boats and team of pearl divers, and who supplied materials such as timber for ships.

The traditional urban architecture of Bahrain shares many of the characteristics of the wider Gulf region and with the Middle East. However, there are distinct characteristics in the Bahraini architecture particularly in the form, construction and decorative details, reflecting influences from the many countries involved in the pearl trade. The houses that remain reflect the major rebuilding that took place as a result of the upsurge of the global industry in the late 19<sup>th</sup> and early 20<sup>th</sup> centuries.

The urban houses are arranged around one or more courtyards the centre for movement in and out of the surrounding enclosed spaces. The number of courtyards is varied depending on the family wealth and social status.

The main construction material is coral rubble set in mud mortar and plastered. The flat mud roofs are supported on closely spaced mangrove poles above which are laid split bamboo, woven mats and a layer of stone and mud. Many of the houses are elaborately decorated with perforated gypsum panels, carved doors, fretwork windows, and sometimes decorated ceilings, and a few also have a distinctive recessed decoration on the external facades.

- Al-Ghūṣ House

This single storey building dates to the early 20<sup>th</sup> century and at that time occupied the southernmost tip of al-Ḥālah Island. The building stood on the route from the Muharraq Sūq to al'at Bū Māhir, which until the mid 20<sup>th</sup> century was located on a separate island just to the south. It is a modest structure for the low-income crew members of the pearling dhows. *Al Ghūṣ* House was originally of three closed rooms and an open *lī ān* (colonnade) arranged around a central courtyard.

- Badr Ghulum house

This house was built in c.1912 by Badr Ghulum, who, as a barber and folk healer, was one of only a handful of people to offer medical services in Muharraq in the last years of the pearling economy, and it is upon this basis that the building has been nominated. The property is a two-storey building constructed around a central

courtyard garden. In addition to living quarters, the building contains treatment rooms used by Badr Ghulum and his family. It is attached to the adjacent Turabi house (built by a business colleague of Badr Ghulum) by a common wall. The house still belongs to the family but is leased by the Ministry of Culture and will be used as an interpretive centre around the history of traditional medicine in Muharraq.

- o Al-Jalahma House

Al-Jalahma House is a large and complex residence of an influential family of *ṭa ā īsh* (pearl merchants) and traders. The building occupies both sides of a street and is linked by Muharraq's last remaining *ṣabāṭ*, a sort of roof-like bridge which links the two portions of the building. One half of the building is in a generally good state of repair and retains most of its original features. The other half is in a poor condition, although it too retains most of its original features and layout. The house has extensive quarters for women.

- o Al-Alawi House

Al-Alawi House was built by Mahmoud Muhammad al-Alawi, a trader who gained his income from supplying the pearling dhows at sea with fresh water, tobacco, food, and other basic necessities, through so-called sweet water boats. The building was originally located at the south eastern edge of the historic main island of Muharraq, within a busy water area known as *al ūsah*, which at one point connected Muharraq to *al Ḥalah* Island. The construction of al-Alawi House started in 1932 on newly reclaimed land. The houses includes one of Muharraq's last example of a *malqif al ha ā* or wind tower, one of the traditional local methods developed for cooling buildings. The building also demonstrates high quality workmanship with mostly local materials, and includes some items which were imported by the owner during his trade expeditions.

- o Fakhro House

This house was built by ousif Abdurrahman Fakhro, a merchant who dealt in timber and construction materials, and had a fleet of up to 50 boats and his own dock. The complex was originally on the seafront. As Fakhro's family grew, so the property was expanded by reclaiming land from the sea until the property had four courtyards, only one of which remains today in its entirety, dating to the pearl boom years at the beginning of the 20<sup>th</sup> century. The other three survive as archaeological remains. Half is still lived in by the family and has been modernised. The remaining half is in urgent need of restoration having been last lived in 1954. It contains elaborate pierced gypsum panels and highly decorated fretwork windows above which are arched fanlights with the remains of multi-coloured glass.

- o Murad House Murad Majlis or guesthouse

The house and its adjoining guest house face each other on two sides of a small public square separated by a mosque. They are seen as the best preserved examples of a merchant's house and guest house. Constructed in the late 19<sup>th</sup> century, the main house is arranged around

a central courtyard with the rooms around it displaying a rigid repetitive pattern of piers and tall semi-circular niches, above which are square niches with trefoil arches. At one corner there is an upper room that provides shady areas for summer and views towards the sea.

The main room of the guest house retains incised decorative panels above recessed rectangular niches. The southern street facade has rows of tall arched niches.

- o Siyadi Shops

These are a series of shops and storehouses in three groups in the commercial centre. Of these, two are within the property and the third is in the buffer zone. The shops were built between around 1860 and 1905. They were owned by pearl merchants who also supplied other produce such as dates, rice, and coffee during periods when there were no pearl traders. They have double wooden doors onto the street but lack the upper floor with overhanging enclosed balconies that used to be typical.

- o Amārāt Ali ashed ousif Abdurrahman Fakhro (group of three storehouses)

One of the storehouses survives only as a ruin, having been demolished in the 1990s. It demonstrates the very recent neglect of buildings associated with pearling, and also, through excavation, at least four phases of land reclamation. The second is preserved as a building with all the internal features of its lofty central space intact, but has not been used since the 1980s and needs urgent intervention to stabilise it. The third storehouse is the only one in the market still in use by merchants who own neighbouring shops. Traditionally all three would have been used originally to store timber logs (for dhows) and dhow equipment to service the boats, and some had stores used as banks before the first central bank was established in the 1920s. Latterly they were all used for the storage of construction materials and food.

- o Nūkhidhah House

This house, constructed around the 1920s, includes guest accommodation for divers arriving in Bahrain and where the crews would be formed for the next season and it is this part of the house alone that has been nominated. Its stout exterior walls, decorated with rectangular niches, have only one small window.

- o Siyadi complex two family residences and mosque

This complex, created by one of the grand pearl merchants, with his own fleet of dhows, consists of three inter-related structures: the family house, a second family house with guest accommodation, and a mosque.

The modest single-storey mosque with a conical minaret was originally built in 1865 and reconstructed in 1910. It opens onto a small square.



The simple facade of the mosque is in strong contrast to the highly ornamental facade of the neighbouring house - the only building of this height - that was constructed in two phases, in 1850 and 1921 by Bahraini merchants with the interior woodwork being imported from Shiraz in Persia.

The centrepiece of the property is the towering structure of the first floor guesthouse with its sophisticated facade of tall slender timber framed windows, with intricately fretted external screens below arched incised plaster panels and above them four rows of rectangular incised plaster panels, emphasising the strong verticality of the design. Within, the rooms still retain their interior woodwork and gypsum plaster decoration. This building is owned by the Ministry of Culture and will become a Museum of Pearls.

The third structure is a private house still lived in by the grandson of the builder. Built in 1931, its impressive tall facade has a plain lower storey above which are regular slender niches decorated with trefoil plaster panels. It is an integral part of the silhouette of the overall complex of buildings viewed from the south. There is no public access to this building.

#### History and development

The nomination provides detailed information on the history of the pearling economy, including its social and economic structures, and cultural associations.

What are being nominated are the buildings and sites that reflect these traditions. The history of the individual buildings is given under Description above. This section provides the context for these structures and sites.

There is evidence that pearls have been harvested from underwater oyster beds in the Arabian Gulf since Neolithic times for both local use and perhaps for trade with Mesopotamia. After a lull during the Bronze Age, a large and well organised industry emerged during Oman times, centred in Bahrain, to cater for the colossal demand for these luxury goods in the empire. Bahrain is mentioned by Pliny in the 1<sup>st</sup> century AD as being famous for the finest pearls although he mentions that the pearl industry in Sri Lanka was the most productive and their pearls seem to have been better known to the Omanis.

In the medieval period there was a resurgence of the pearl trade for the Umayyad and early Abbasid elites, with its focus still remaining in Bahrain. Pearls were also traded to the Black Sea and beyond by Genoese merchants. It should be noted, however, that until the late Middle Ages the term Bahrain referred to the wider region of Bahrain and not to the two islands that now constitute Bahrain. Ibn Battuta's use of the term in the 14<sup>th</sup> century to refer only to the islands is one of the earliest uses of the term for this limited area.

Under the Safavids, who took control of Bahrain from around 1602, the wealth from the pearls was used to

finance a great expansion of Shi'a religious institutions in Persia and the Safavid dependencies.

Between the late 15<sup>th</sup> and early 17<sup>th</sup> centuries, there appears to have been a serious contraction of the industry, as reflected by a drop in the number of boats recorded by writers from around a thousand in 1490 AD to a few hundreds. This was related to the discovery of alternative sources of pearls in the New World, particularly the coast of Venezuela, although this competition proved to be relatively short lived.

During the 17<sup>th</sup> century the pearl industry in Bahrain came under the control of a local religious elite which led to the development of a system whereby the prayer leader/merchants advanced funds to the villagers to finance their dives and in return they were obliged to offer their catch to the merchants.

From the late 17<sup>th</sup> century a series of migrations occurred with Arab tribes coming to exploit oyster beds in the light of the renewed expansion of the industry in response to demand from India.

The wealth derived from pearls became a key factor in the struggles for the control of Bahrain in the 18<sup>th</sup> century when it fell victim to a series of attacks from the Omanis, Huwalah, Persians, and Utub which led to much destruction and decline of urban centres. And during the same time of conflict and instability, several other cities found the opportunity to develop as pearling centres, such as atar, and uwait, with large ships purchased from India in response to the increasingly global demand for pearls.

In the early 19<sup>th</sup> century, Bahrain was invaded by both the Omanis and the Al Sauds. In 1820, a treaty between Al halifa rule and Britain, then the dominant military power in the Persian Gulf, granted the Al halifa the title of rulers of Bahrain.

This stability allowed Muharraq to emerge as the major pearl trading city with a population of some 6,000, the largest in the Gulf. Peace also brought new types of trade which meant that Bahrain was no longer solely dependent upon pearling, and by the mid-19<sup>th</sup> century it became the pre-eminent trading centre in the Persian Gulf.

The pearling boom reached its apogee in the last quarter of the 19<sup>th</sup> century and the early years of the 20<sup>th</sup> century. Bahrain continued to maintain its position as the region's major pearling centre, although it faced competition from newer centres in the region. The industry suffered a sudden and catastrophic demise in the 1930s, as a result of the development in Japan of cultured pearls from freshwater mussels. As pearling collapsed, more or less co-incident with the discovery of oil on the main island, large numbers of people moved away from the city with the result that buildings were abandoned and fell into disrepair. Comparatively little conservation work has been carried out between the collapse of the pearl

industry and today. Some that was carried out in the 1960s and 1970s may need to be reversed in order to return to traditional materials and methods.

### 3 Outstanding universal value integrity and authenticity

#### Comparative analysis

The detailed comparative analysis in the nomination dossier, based on detailed new research, compares the elements, attributes and themes that relate to the potential Outstanding Universal Value of the nominated property with other sites in three separate ways. First comparisons are given for other pearling centres on a global scale; secondly the property is compared with other centres in the Gulf region, and thirdly the individual nominated sites are justified in comparison with others in the local area. The nominated property is also compared to existing inscribed properties.

For the global comparisons, the Bahrain pearling industry is compared to other local economies that were sustained by pearls in the Indian sub-continent, Australia-Pacific and Latin America. The evidence is taken from archaeological data, government records, trade statistics and other historical sources such as travellers' accounts. This demonstrates that Bahrain appears to have the oldest known pearl industry; that Bahrain's pearls were renowned over many centuries as the finest in the world; and that the Arabian Gulf as a whole was the only regular and substantial supplier to the world's markets from oman times, apart from a brief period during the 16<sup>th</sup> and late 18<sup>th</sup>/early 19<sup>th</sup> centuries.

In terms of the regional profile, the comparative analysis shows that Bahrain was the centre of the Gulf's industry until the early/mid 19<sup>th</sup> century after which it continued to maintain the largest fleet and accounted for more than half the export from the region. Detailed statistical data confirm Bahrain's central role in pearling in the Gulf; and that Muharraq was the centre of Bahrain's industry in terms of the number of boats and the number of divers.

Although other pearling centres around the Gulf are mentioned, there is no detailed analysis of the precise remains in each of these and how they reflect their involvement with the pearl industry. Al- ubarah, for instance, is on the Tentative list of atar. This short-lived town was a focal point for the pearling industry during the late 18<sup>th</sup> and early 19<sup>th</sup> centuries and contains details of urban planning that cannot be matched in Muharraq.

The nominated sites are compared to other similar sites within Muharraq. This shows that the oyster beds are those with a good state of conservation and which are linked most often to memories of the pearling season; that the seashore is the last original sand seashore in Muharraq island (the rest have been reclaimed); that Bū Māhir fort played a greater part in protecting the pearl dhows than the other surviving fort; that Muharraq hosts

a full range of pearl related buildings; and that the properties chosen are those that are a good example of their kind, and have a better state of conservation and authenticity than others.

In particular Al-Ghūş house is the only modest single storey house still in a reasonable state of conservation; the Badr Ghulum house is the only property associated with medical services; the spatial use of Al-Jalahma house demonstrates the prominence of women in the pearling era; and Al-Alawi is the last middle class residence with decorative and traditional elements and to retain its wind tower.

The comparative analysis clearly demonstrates that there is no similar property on the World Heritage List, given that Bahrain has been a pearling centre that has been a main focus for the industry for almost two millennia, and still has buildings that reflect different facets of that industry.

The analysis also fully justifies the choice of the serial nomination within Bahrain.

However ICOMOS considers that what is not made entirely clear in the comparative analysis is that there are other places in the Gulf region that had substantial associations with the pearling industry where comparable buildings remain that once belonged to pearl merchants.

Although it is the case that such places cannot be said to have the same long-standing association with the industry, it has to be acknowledged that in Muharraq the nominated buildings are largely a testimony to the final flourish of the industry in the late 19<sup>th</sup> century and early 20<sup>th</sup> centuries and do not reflect its earlier periods or its overall longevity.

ICOMOS considers that the comparative analysis demonstrates that Muharraq can be seen as reflecting an essential component of a pearl industry that flourished around the Gulf region, and particularly its final flourish and demise. However it needs to be augmented to show how the nominated structures compare to other buildings and settlements associated with the pearl industry in the Gulf region, and whether the nominated series is the best possible representation of this sea use and industry over several millennia in this region.

---

ICOMOS considers that the comparative analysis needs to be augmented with more detailed comparisons within the Gulf region in order to justify consideration of this property for the World Heritage List.

---

ustification of Outstanding universal value  
The nominated property is considered by the State Party to be of Outstanding Universal Value as a cultural property for the following reasons:

- Pearling is an outstanding example of a traditional sea use, which shaped the single product economy and cultural identity of an island society;
- This millennia-long practice is the most significant example globally of a natural pearl-collection tradition and is based on the Arabian gulf oyster beds north of Bahrain, which are the best-known source of pearls since ancient times;
- Although the pearling economy collapsed as a result of irreversible economic change in the 1930s, many of its characteristic features and practices survive. The natural resource remains in the surviving oyster beds Hayr Bū-I-Thāmah, Hayr Bū'Amāmah, and Hayr Shtayyah. The architectural testimony in Muharraq (in 17 architectural structures) is the last remaining example which comprises residential and commercial structures that are tangible manifestations of all major social and economic roles and institutions associated with the pearling society and acts as a memory marker for the cultural identity it produced and still maintains. Beyond the nominated sites, place names, family names, social hierarchies, surviving legal systems, songs, stories, poetry, festivals and dances are associated with these physical resources and assist in transmitting the grand narrative of the pearling economy.

The serial approach has been justified in connection with the individual sites all reflecting different aspects of the pearling economy.

ICOMOS considers that the pearl-collecting traditions of Bahrain were amongst the oldest in the world and have consistently delivered pearls to the world's market over some two millennia and the nominated sites do bear witness to these pearl-collection traditions and their related social and economic activities. The issue is how these nominated structures together with the beach and oyster beds can be seen as exceptional manifestations of this tradition which extended around the Gulf region.

ICOMOS considers that the collection of structures, most of which have survived relatively unaltered since the collapse of the pearl industry in the early 20<sup>th</sup> century do bear witness to distinctive building traditions that the industry fostered, and particularly their high standard of craftsmanship in timber and plaster. Currently, in their fragile state these buildings do evoke memories of that industry and its supporting social and economic structures.

The record is however extremely fragile, with the buildings embedded in the more modern city of Muharraq. If these buildings were to be over-restored, the strong associations might become very much less strong.

The buildings may be considered as a collection of good remaining buildings associated with the pearling industry that possess a coherence and relate to still strong

pearling traditions. Such buildings do exist elsewhere around the Gulf and further comparisons are needed to demonstrate how the nominated group might be seen as an exceptional collection of structures within the wider region, in relation to the pearl industry.

#### Integrity and authenticity

##### Integrity

The sites that make up the property were selected to reflect the buildings created as a result of the great prosperity of the pearl industry in the late 19<sup>th</sup> and early 20<sup>th</sup> centuries, and its economic structures. The undersea sites reflect the oyster beds upon which the prosperity was based and the seashore is the link between land and sea. However the boundary around the fort needs to be extended to allow it to encompass associated archaeological remains.

The way each of these relates to the proposed Outstanding Universal Value is clearly set out in the nomination dossier. The oyster beds are not under threat and neither is the sea shore or fort.

The choice of urban sites was limited by the neglect of the pearl industry's heritage since the industry's demise in the 1930s almost until the new millennium. As a result many buildings were demolished and those that remain have suffered from neglect and the adverse effects of new development around them. The urban sites chosen reflect extensive architectural, anthropological and historical surveys and are seen as those that carry the memory of the pearling industry for the local community. They variously reflect the key activities of merchants associated with the pearl industry as well as its building traditions.

The nominated urban sites are thus islands within the city. They are still extremely vulnerable with many of the buildings needing extensive work to give them satisfactory stability, and because the special zoning arrangements to protect their context have only recently been introduced.

ICOMOS considers that the condition of integrity has been met but that to maintain integrity, a clear understanding of the way the urban properties are to be stabilised needs to be set out and agreed in a defined strategy.

##### Authenticity

The authenticity of the property is related to its ability to convey the Outstanding Universal Value in terms of transmitting information about the social and economic process of the pearl industry. In terms of the buildings this relates to their ability to manifest their status, use, architectural form, local materials and techniques and their craftsmanship particularly the exceptionally high quality of some of the craftsmanship deployed in timber and plaster work.

Many of the urban buildings are highly vulnerable in terms of their fabric and decoration as a result of lack of use and maintenance. What is not yet completely clear is how this vulnerability will be addressed in terms of the degree of intervention of the proposed work. Any work will need to ensure minimum intervention in order that as much as possible of the original material is conserved so that the buildings may still provide tangible links to the decades of their former glory while being robust enough for use and a degree of access. For the fort there is a need to reverse some of the restoration of the last few decades and to re-introduce traditional materials.

The underwater oyster beds are still thriving, although there is nothing to convey their sea-harvesting traditions; the sea shore, although a fraction of what used to exist and now much compromised by later development nevertheless adds an important attribute, and is a focal point for important intangible cultural associations that relate to pearling.

ICOMOS considers that the fragility of the urban fabric presents a potential threat to authenticity as conservation, if over done, could erase the memory that the buildings currently evoke. More information is needed on how this potential threat will be addressed.

---

ICOMOS considers that the conditions of integrity and authenticity have been met for the present but both are highly vulnerable in terms of fragility of the urban fabric. In order to ensure that authenticity and integrity persist into the future, there is a need for a restoration and conservation strategy that sets out the degree of intervention to be formally agreed.

---

Criteria under which inscription is proposed

The property is nominated on the basis of cultural criteria (iii) and (v).

*Criterion iii bear a unique or at least exceptional testimony to a cultural tradition or to a civilisation which is living or which has disappeared*

This criterion is justified by the State Party on the grounds that the spatial and architectural testimony of the pearling economy in Muharraq and the northern waters of Bahrain reflect the culmination of more than six millennia of pearling history in the Arabian Gulf. The property is the last remaining, and outstanding, example that represents the complete narrative of the cultural tradition of pearling, which dominated the Arabian Gulf between the 2<sup>nd</sup> and early 20<sup>th</sup> century, and the related human system established in a single-product island economy. While the economic system subsided, the remaining testimony continues to carry the grand narrative it produced, which is still the most significant source of Bahraini cultural identity.

Although ICOMOS considers that the nominated sites do bear witness to an important centre for the cultural

tradition of pearl-collecting, what has not been demonstrated is how they are exceptional structures in the Gulf region. Furthermore in order for the buildings to continue to bear a testimony to this tradition, it is essential that they are conserved with the minimum intervention in order to sustain physical links with the era of pearl-collecting.

---

ICOMOS considers that this criterion has not been justified at this stage.

---

*Criterion v be an outstanding example of a traditional human settlement, land use, or sea use which is representative of a culture or cultures, or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change*

This criterion is justified by the State Party on the grounds that pearling, and the testimony it brought forth in Muharraq, is an outstanding example of traditional sea-use and human interaction with the environment, which shaped the economic system and cultural identity of an island society. The oyster beds and the architectural testimony of this socio-cultural and economic system are representative of a tradition that became vulnerable and was gradually abandoned in the 1930s. The collapse of the international natural pearl market value in face of the global economic crisis and the introduction of large-scale cultivation of pearls have irreversibly impacted on the system's viability and vitality.

ICOMOS considers that the justification put forward could be applied to other places in the Gulf region. Also there are few tangible remains of the sea harvesting traditions. The majority of the nominated property is an architectural testimony that reflects the trading of pearls rather than sea use.

---

ICOMOS considers that this criterion has not been justified at this stage.

---

ICOMOS considers that the serial approach is justified.

---

ICOMOS does not consider that the criteria and Outstanding Universal Value have been demonstrated at this stage.

---

## 4 actors affecting the property

### Development pressures

ICOMOS considers that over-development of the sites themselves, and over-development of the buildings that provide their context, is a real danger. Although the buildings nominated are mostly not surrounded by buildings of similar age, neighbouring buildings are however mostly of a similar scale, and, if this scale were to be interrupted either in terms of height or width, then

the urban grain would have a negative impact on the nominated sites.

In an effort to reduce the impact of vehicles in the old city, there is a proposal for the provision of vehicle parking in the form of multi-storey car parks on empty land in Muharraq city. The need is clear – the impact of cars on the city is a real problem. And while such new buildings will fill in currently open areas that have resulted from previous demolitions, and thus restore the dense nature of the built environment in the areas, ICOMOS considers that extreme care will have to be taken to ensure that whatever is proposed is sympathetic to the scale and form of the surrounding historic environment.

Some concepts have been developed for marking a pearly route through Muharraq, and for other open spaces (in a city where such spaces did not traditionally exist). These are for modern, reversible structures to sit on top of the ground, and therefore to read as different from the surrounding historic fabric. ICOMOS considers that there is a need to ensure that these proposals support the urban grain and to be submitted to the World Heritage Centre, in accordance with paragraph 172 of *Operational Guidelines*, if the property is inscribed. Similarly any proposals that could impact on the remaining sea shore, such as further land reclamation work, would also need to be submitted.

#### Tourism pressures

A tourism management strategy is outlined in the Management Plan based on the principle of Limits of Acceptable Change, under which limits are set not only for visitor numbers, but also for the impact visitors have on the various components of the property. A baseline survey will be carried out, upon completion of the conservation work, to document the condition of the property and to determine standards and indicators, as well as carrying capacities. Subsequently, surveys will be conducted regularly to ensure that the standards are maintained and that the established carrying capacities are appropriate.

IUCN notes that tourism pressures related to the property include potential impacts from marine tourism including unauthorized collection of oysters and coral. IUCN considers that an effective system of regulations, supported by an adequate on-water presence to ensure enforcement, is required, taking particular account of any increased pressures that might result from inscription on the World Heritage List.

#### Environmental pressures

IUCN notes there is oil and gas exploration being undertaken in the region, as mentioned in the nomination dossier, and that exploration and possibly exploitation is foreseen in the buffer zone of the marine component. The protection of the pearl beds should be a clear priority in relation to such activities, and IUCN considers that both exploration and exploitation would be

better located outside of the marine buffer zone that has been established. The marine component of the property should not be subject to exploration or production activities for oil and gas. IUCN recommends that proposals for exploration and exploitation in the region around the property should be assessed for their impact on the marine component and its buffer zone, and should the property be inscribed such activities should include prior consultation via the UN SCO World Heritage Centre, in line with the procedures outlined in the Operational Guidelines.

The risk of an oil spill that affects the offshore and coastal element of the nomination is real, given the major existing oil industry in Bahrain. However, although oil spills have been recorded within Bahraini territorial waters in the past, none are known to have impacted the oyster beds.

In the event of a spill, the National Oil and Hazardous Spill Contingency Plan (S ACO , 2009) will be activated and subsequently the National Incident Command System will direct the allocation of resources, to assist in the surveillance, protection, and cleanup activities.

In a closely packed urban environment such as Muharraq, fire is a very real potential threat to the historic fabric of the nominated sites. The nomination's risk preparedness and management plans describe a series of measures for reducing that risk and also for dealing with such an event.

#### Natural Disasters

Localised flooding, after the infrequent, but heavy, rains Bahrain is subject to, is considered a potential major risk to the historic fabric of properties in Muharraq. The management system addresses factors such as the urban drainage system that increases the likelihood of flooding, and provides for the upgrading of the relevant urban infrastructure in the buffer zone that will prevent or reduce the likelihood of floods in the future.

Although unlikely, earthquakes are identified as a potential risk. The potential damage of an earthquake is exacerbated by the poor condition of some of the historic properties and many other structures in the urban buffer zone. The management system attempts to reduce the risk of the built historic fabric's collapse by proposing adequate techniques for stabilising the fragile structures.

#### Impact of climate change

Any change in sea level could impact on the remaining sea shore and also those buildings nearest to it through rising ground water levels; any change in the water temperature, brought about by higher temperatures could adversely affect the health of the oyster beds; and any dramatic increase in the quantity of rain and the rate at which it falls could have a detrimental impact on the fragile mud and coral buildings. All these threats need to inform a risk preparedness strategy.

---

ICOMOS considers that the main threats to the property are insensitive development in the setting of the nominated sites and fire but considers that the proposed response to fire is adequate while controlling development will need to be achieved through the application of the strengthened planning regulations. A more wide-ranging risk preparedness strategy needs to be developed to consider the potential impacts of climate change.

---

## 5 Protection conservation and management

Boundaries of the nominated property and buffer zone

The boundaries of the urban properties are tightly drawn around the buildings but their context is encompassed within the primary protection zone of the buffer zones with each of the nominated sites having its own primary protection area. The secondary protection zones of the buffer zones merge to form a linear corridor around the urban sites. The boundaries of the nominated sites and the buffer zone are adequate.

However ICOMOS considers that the current proposed boundary of the fort should be extended to cover its archaeological remains.

---

ICOMOS considers that the boundaries of the nominated property should be extended to cover the archaeological remains of the fort; the boundaries of the buffer zone are adequate.

---

### Ownership

The majority of the nominated urban properties in Muharraq are owned by private individuals or families. Three of the properties are owned by the Ministry of Culture; one has been purchased by a private organisation, the Shaykh Ibrahim Bin Mohammed Al Khalifa Centre for Culture and Research; and two are owned by a *qāf* (family based charitable trusts). For those properties in private ownership the Ministry of Culture has negotiated formal agreements with all the property owners setting out management and conservation conditions.

### Protection

#### Legal Protection

The three oyster beds and their marine buffer zone are currently generally protected at a national level in terms of Decree (2) 1995 with respect to the Protection of Wildlife; Legislative Decree No. 21 of 1996 in respect with the Environment (Amiri Decree); and Decree (20) 2002 with respect to the Regulation of Fishing and Exploitation of Marine Resources.

A legislative decree that will specifically designate the sites and buffer zone as a national marine protected area is in the final stages of preparation and is expected to be approved by the end of 2010. Until then, the protected status of the oyster beds has been given interim expression in a Memorandum of Understanding between the government agencies with an interest in the area - the Ministry of Culture, the Public Commission for the Protection of the Environment, Marine Resources and Wildlife, the National Oil and Gas Authority (NOGA) and the Bahrain Petroleum Company (BAPCO).

The Bū Māhir Seashore and the individual sites in Muharraq all have national protection as designated national monuments under *Decree No. 11 of 1995 Concerning the Protection of Antiquities* on 10 January 2010, and their future management resides under the Ministry of Culture.

A revision of the existing municipal by-laws for the historic core of Muharraq represents an important future legal tool for ensuring the protection of the individual sites and their surroundings. Instead of rescinding existing by-laws and bringing in new legislation, the Ministries of Culture and Municipalities and Agricultural Affairs have amended the by-laws and introduced new heritage-centred regulations, urban design criteria, architectural guidelines and an implementation plan.

The buffer zone of the urban properties is divided into primary and secondary protection zones. The primary protection zones comprise the immediate surroundings of the properties and contain cultural assets that are related to the property in visual and other terms. The character and urban design of the primary protection zones are controlled to protect these associations.

### Traditional Protection

This applies at the moment in terms of owners of buildings keeping their buildings largely as they are. However the strong community engagement undertaken as part of the nomination means that the community will have a role as guardians of their heritage and even if they may not actively participate in building conservation, their regular maintenance will be crucial.

Effectiveness of protection measures

Once all the measures outlined above are in place, protection will be adequate.

---

ICOMOS considers that the legal protection and planning measures in place for the property will be adequate once the planned measures are in place.

---

### Conservation

Inventories, recording, research

A comprehensive architectural survey of Muharraq was carried out by the Ministry of Culture in 2008, which identified the 17 historic buildings that comprise the

nomination dossier. This survey has been followed by detailed recording and documentation of the nominated properties. All this material together with environmental and architectural survey data gathered between 1993 and 2009 has been incorporated into a GIS Database housed in the Ministry of Culture. The GIS also contains maps (historical, topographic, cadastral, bathymetric), a range of historical and modern aerial photos, historical and modern photographs of the properties, a wide range of scanned documents relevant to the various properties, and detailed, current plans of all the urban properties. This project database is available online and allows easy access to data, at whatever level required, by anyone associated with the project.

#### Present state of conservation

IUCN states that the three nominated oyster beds appears to include important biodiversity values of national and possibly regional significance, and a survey undertaken in 2009 found the beds to be in excellent condition.

The Bū Māhir Seashore comprises a well-preserved natural beach and adjacent seawaters, including a traditional fish trap.

The standing remains of the al'at Bū Māhir fort were restored and partially rebuilt in the 1970s. Conservation studies, currently being carried out, aim to assess where the original fabric ends and the later reconstruction starts, and to find solutions as to how best to deal with or reverse these later interventions which include hard cement render.

The buried, archaeological portions of the fort were the subject of an archaeological excavation early in 2010 which revealed that the foundations of most of the fort, including internal buildings, still survive. These are being stabilized.

The general state of conservation of sites in Muharraq reflects the downturn in the city's fortunes after the collapse of the pearling industry in the 1930s. The properties are in various states of conservation from good to a state of almost collapse and many are acknowledged in the nomination dossier as being in urgent need of conservation. ICOMOS notes that works on the most urgent (the Nūkhidhah house, for example) are already underway.

More than half the sites remain inhabited and in daily use and have been maintained by owners or tenants. Most preserve the vernacular built fabric and architectural elements of the late pearling era but almost all have, over time, also been modified and adapted to modern living/use requirements. Most of the alterations and additions to these properties have been carried out using modern materials. In most cases these additions are reversible without impacting on the historic fabric.

Those properties which are not in daily use have generally undergone fewer changes to their built fabric, but are now vulnerable through lack of maintenance and repair.

#### Active Conservation measures

To ensure a cohesive approach to the conservation of the urban buildings a detailed analysis of the architectural traditions of Muharraq has been carried out and this has led to the development of an architectural conservation plan which sets out outline approaches to the way the buildings will be restored and in some cases adapted for use. Detailed plans developed by architects showing proposals for conservation and a certain amount of development have been provided in response to ICOMOS's request to the State Party for additional information, but what is not yet clear is the degree of intervention intended for original fabric nor how the very high quality craftsmanship of the timber and plasterwork will be conserved to ensure that as much as possible of the original fabric is kept. ICOMOS considers that it is also not clear how the powerful atmosphere of the buildings will be sustained with the interventions proposed such as the introduction of glass doors to the shops.

#### Maintenance

Maintenance is carried out largely by the owners and ICOMOS notes that currently this is minimal.

#### Effectiveness of conservation measures

Up until now very little conservation work has been carried out and the majority of the buildings will have major conservation work carried out over the next few years. Further details need to be provided as to how these conservation measures will be put into practice with respect to the optimising retention of the original fabric.

---

ICOMOS considers that further details are needed on the overall conservation philosophy, on the degree of intervention proposed and on how the very high quality craftsmanship will be conserved and repaired.

---

#### Management

Management structures and processes, including traditional management processes

The Ministry of Culture and Information, Sector for Culture and National Heritage coordinated the preparation of the management plan. The Ministry has since been split and the newly formed Ministry of Culture is now the responsible lead for management. A dedicated Site Administration Unit has been established within the Ministry to co-ordinate the implementation of the management system. The Unit, which reports to the Undersecretary for Culture, consists of an interdisciplinary team including historical researchers, conservation architects, an urban planner and

rehabilitation specialist, a marine biologist and environmental specialist, a site manager for the urban properties and a GIS specialist, all supported by an administrative team which deals with finances, marketing, etc.

A Steering Committee has been established as the governing body of the management and administrative system for the nominated properties. The Committee brings together at ministerial level, members of the 12 governmental agencies representing the full range of partners and stakeholders in the project, as well as representatives of the private owners of the Muharraq properties and the businesses in the urban buffer zone. The Steering Committee is chaired by the Minister of Culture.

The Steering Committee has established five thematic, technical subcommittees to support the Site Administration Unit in its activities. These subcommittees are the decision-makers with respect to management activities in their respective areas of expertise and their members are drawn from the Steering Committee, the Site Administration Unit and from the wider cultural heritage sector. The subcommittees established to date are for Marine Heritage, the Bū Māhir Seashore, Urban regulations and Project Design, Urban and Architectural Heritage, and Tourism Development and Promotion.

The Steering Committee is responsible for taking overall decisions concerning the management policy and for approving all major activities related to the site. It also provides a platform for conflict management through the discussion of interests, and for generating ideas for the management of the heritage site through contributions from representatives of all stakeholders. The Site Administration Unit reports to the Steering Committee twice yearly on progress and in this sense, the Committee functions as a monitor of the management plan.

To facilitate the future management of the Bū Māhir Seashore and al'at Bū Māhir, located within the National Coastguard Base, a memorandum of understanding has been agreed between the Ministries of Culture and Interior regarding the development of visitor facilities on the site and public access to the property.

Where properties in Muharraq are owned privately by individuals or organisations, formal memoranda of understanding have been negotiated between the owners and the Ministry of Culture. These define the rights and duties of both partners within the management system.

At a local level, there is co-operation between the Muharraq Municipal Council, the Ministry of Culture and the Ministry of Municipalities and Agricultural Affairs which has resulted in a number of protective initiatives linked to and driven by the nomination:

- The municipal zoning scheme is currently being amended with a view to designating a Historic District in Muharraq which will cover the historic core of the city and come with urban regulations that are supportive and enabling with respect to heritage protection;
- In August 2009, the Minister of Municipalities and Agricultural Affairs announced a freeze on the construction of apartment buildings in the historic district of Muharraq, including the nominated area and its buffer zone;
- Agreement by the agencies involved of the Secondary Protection one as an area in which any built environment and other permissions are strictly monitored to comply with the conservation requirements of the nominated properties.

A clear overall management framework thus exists to coordinate the management of the serial components and bring together all the key stakeholders.

Policy framework: management plans and arrangements, including visitor management and presentation

A Management Plan was developed during the preparation of the nomination dossier and the system that will ensure its effective implementation is being developed as the planned legislative and policy changes come into effect. The Management Plan is oriented towards relevant government agencies, both municipal and national. It also addresses and serves the wider public - stakeholders such as property owners and the local communities who have an interest in the properties. The plan emphasises architectural conservation, urban upgrading, historical and social research and the creation of visitor and interpretation facilities. In addition, it provides guidance with respect to the long-term protection and operation. The Plan will become fully operational if the property is inscribed.

Currently there is very little visitor interpretation. There are proposals to create three interpretation centres along the urban linear route at the Bū Māhir Seashore, the Siyadi Complex at the other end, and at the ruined Amārat ousif A. Fakhro. There are also proposals to relate the sites to the intangible heritage of the pearling era, such as songs and boat building.

A scheme to mark the route and providing visitor facilities in the form of street furniture is currently under consideration and proposals are being sought from a number of urban planning consultants for a non-permanent, non-intrusive marking system. Such a scheme could be intrusive and ICOMOS considers that this would constitute a major project that would need to be submitted to the World Heritage Centre for consideration by the Advisory Bodies, if the property were inscribed, under paragraph 172 of the Operational Guidelines.



risk preparedness

This forms part of the Management Plan and is mentioned above in relation to fire and oil spills.

Involvement of the local communities

This has been a fundamental part of the whole nomination project.

Resources, including staffing levels, expertise and training

The nomination dossier including the necessary research has been well resourced. The property has an administration unit with funds for 15 posts of which 4 are currently vacant as it has been difficult to find people with the necessary expertise. The current staff includes a conservation architect and urban planner. There are resources to hire in extra consultants. ICOMOS notes that an objective of the Management Plan is to train Bahraini citizens in heritage conservation and management, so that there can be a higher ratio of Bahraini employees in the Site Administration Unit.

Effectiveness of current management

The current management arrangements are adequate and seem to be effective. The level of inter-departmental and inter-agency co-operation and degree of co-ownership of the nomination from government agencies, non-governmental organisations, the private sector and property owners, is impressive. The Management Plan is supported by national institutions at the highest level and is beginning to be implemented.

---

ICOMOS considers that the management system for the property is adequate.

---

## 6 Monitoring

Monitoring has been given a high priority and detailed monitoring indicators have been developed for all the key attributes of the property in an exemplary way.

---

ICOMOS considers that monitoring is adequate.

---

## 7 Conclusions

The nominated properties, and in particular the urban structures of Muharraq, form a highly fragile reminder of the great days of the pearling industry, of the enormous wealth it generated and of the distinctive buildings that were once commonplace in the city, at the end of the 19<sup>th</sup> and early 20<sup>th</sup> centuries.

Although the nomination dossier sets out clearly the pivotal role played by Bahrain in the pearling industry over many centuries, what has not so clearly been demonstrated is how the nominated structures that

reflect this industry are exceptional within the Gulf region, a region that was, as a whole, the only regular and substantial supplier of pearls to the world's markets from Oman times, apart from a brief period during the 16<sup>th</sup> and late 18<sup>th</sup>/early 19<sup>th</sup> centuries. Further comparisons are necessary, particularly with built remains from other centres in the Gulf region, in order to establish whether the series of sites in Bahrain are exceptional or whether a trans-national, serial nomination might better reflect what remains of the built structures and settlements associated with the pearling industry in the wider Gulf area.

In order to keep this link with an industry that died around eighty years ago it is essential that as much as possible of the traditional fabric of any nominated buildings is conserved and that the atmosphere that the buildings currently have is not removed through over restoration. Currently it is not clear what degree of conservation is being planned for the nominated sites or how the necessary craftspeople will be found to restore the high quality fretted woodwork and decorative plasterwork. ICOMOS considers that more details of these aspects are needed.

The nomination process has been characterised by a comparatively unrushed approach with all the necessary research being undertaken to allow full engagement of the stakeholders and this is to be commended. ICOMOS considers that a similarly careful approach is needed for the restoration of the individual buildings in order to ensure that they can fully express their value through original fabric and craftsmanship as well as through plan and form.

The groups of buildings are linked by a linear path through the modern city and currently their setting is characterised by irregular buildings that although of concrete are sympathetic in scale and form. ICOMOS considers that it will be essential to try and keep this somewhat organic nature of the old city in any new development and to ensure that any visitor routes or interpretation do not detract from the atmosphere of a living city.

Recommendations with respect to inscription

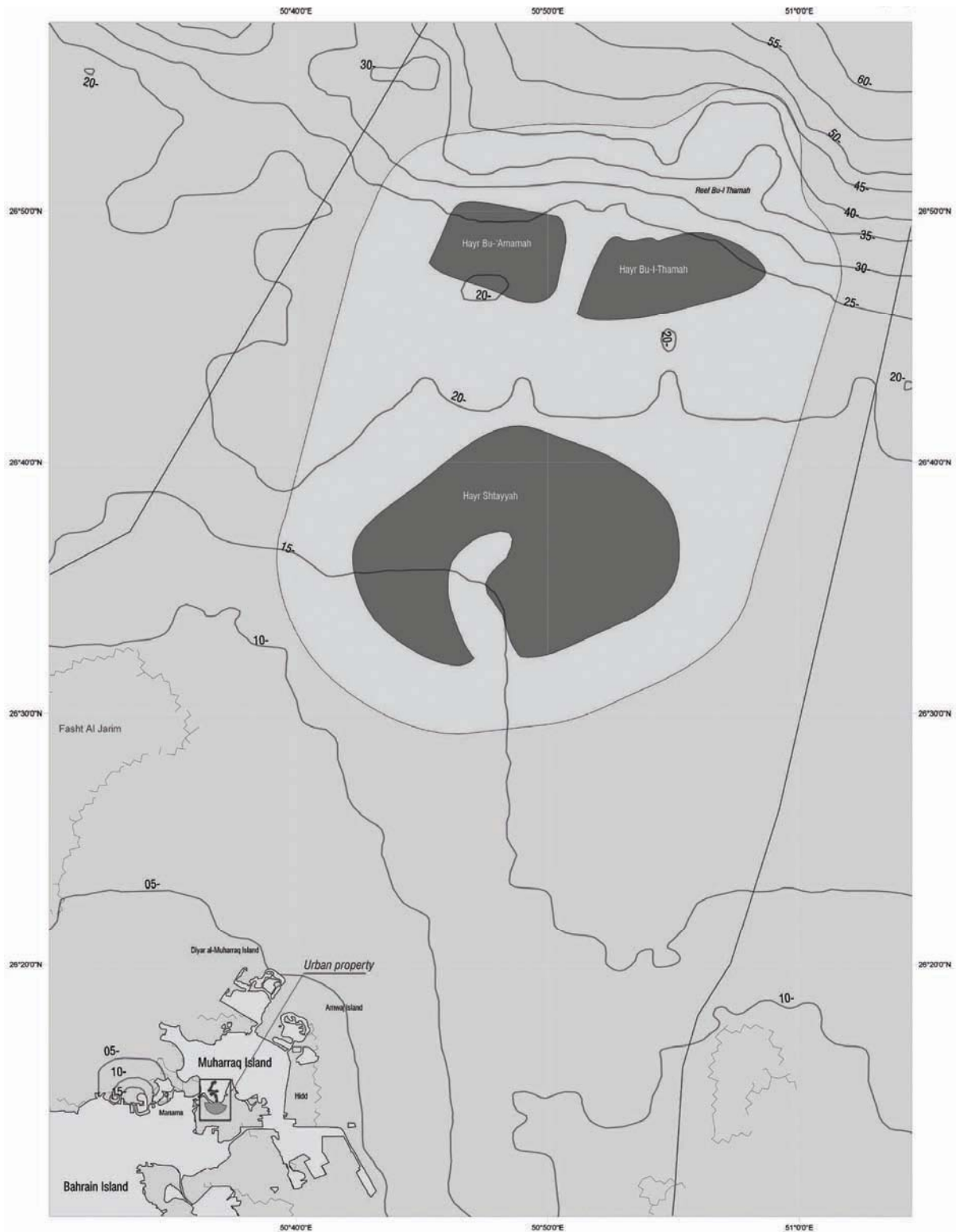
ICOMOS recommends that the examination of the nomination of Pearling, testimony of an island economy, Kingdom of Bahrain, to the World Heritage List be **deferred** in order to allow the State Party to:

- Provide a more detailed comparative analysis with sites that have tangible heritage elements of pearling in the Gulf region;
- If justified by the comparative analysis, consider the possibility of a trans-boundary, serial nomination;
- Provide a more detailed conservation approach for the urban buildings that sets out how the conservation of original fabric will be optimised, how

the necessary skills will be put in place for the restoration of decorative woodwork and plasterwork, and how the overall conservation work will be phased;

- extend the boundary of the Bū Māhir fort site to cover its archaeological remains.

ICOMOS considers that any revised nomination would need to be considered by an expert mission to the site.



Map showing the boundaries of the nominated property



View of Bū Māhir Seashore and Muharraq Harbour



al'at Bū Māhir (Bū Māhir Fort)



Anchored pearly dhows



View of Siyadi complex

---

Historical City of Jeddah  
Saudi Arabia  
No 1361

---

Official name as proposed by the State Party  
The Historical City of Jeddah

Location  
Makkah Al-Mukarramah Region, Jeddah Governorate  
Kingdom of Saudi Arabia

**Brief description**  
For several centuries, the Historical City of Jeddah was one of the most important ports of the Red Sea along the trade route from the Indies to the West. It still exhibits elements of its dense and winding urban pattern that dates from the 16<sup>th</sup> century, when the town was encircled by defensive walls and its urban pattern substantially redesigned, and is now compressed by the urban development of the 20<sup>th</sup> century Jeddah, which has also erased the old port and modified the coastline. Structures particular to Jeddah are refined examples of 19<sup>th</sup> century merchant tall houses featuring wooden balconies highly decorated with grilles and carvings.

**Category of property**  
In terms of categories of cultural property set out in Article I of the 1972 World Heritage Convention, this is a group of buildings.

In terms of the *Operational Guidelines for the Implementation of the World Heritage Convention* (January 2008), Annex 3, this is also an *inhabited historic town*.

## 1 Basic data

Included in the tentative List  
28 November 2006

International Assistance from the World Heritage Fund for preparing the Nomination  
None

Date received by the World Heritage Centre  
26 January 2010

**Background**  
This is a new nomination.

**Consultations**  
ICOMOS has consulted its International Scientific Committees on Historic Towns and Villages and on Urban Architecture and independent experts.

## Literature consulted selection

Abdu, M.S., Salagoor, J., Al-Harigi, F.A-N., *Jeddah Urban Growth and Development Process: the Underlying Factors*, accessed at *Scientific Journal of King Faisal University* (Basic and Applied Sciences), Vol.3 No.1, March 2002.

Baessa, A.A., Hassan, A.S., *An evaluation of Space Planning Design of House Layout to the Traditional Houses in Shibam, Yemen*, in *Asian Culture and History*, Vol. 2 No. 3, July 2010.

Facey, W., *Queen of the India Trade*, in *Saudi Aramco World*, Vol.56 No. 6, November/ December 2005.

Al-Ahmed Salim, A., *Field Report Suakin On Reviving an Ancient Red Sea Port City*, in *T S*, Vol.8 No. 2, p. 63-74, 1997.

**Technical Evaluation Mission**  
An ICOMOS technical evaluation mission visited the property from 26 to 30 September 2010.

**Additional information requested and received from the State Party**  
None

Date of ICOMOS approval of this report  
10 March 2011

## 2 The property

**Description**  
Jeddah is situated on the eastern coastline of the Red Sea, on the Tihama plains. This is a flat strip of coastland rising north-west, forming the Hejaz Mountains, and the Asir Mountains to the south-east.

The favourable geography of Jeddah's location allowed the town to flourish. Its coral reef presents a relatively narrow gap which allows navigation through it and the possibility for Jeddah to receive large vessels. North of Jeddah, the prevailing winds blow in a north-south direction throughout the year and only small vessels could take advantage of the changing coastal winds and currents. Jeddah was therefore the last port on this Red Sea coastline where large transoceanic ships could arrive safely.

The nominated property comprises an area of 62.45ha which corresponds to the historic core of the town. It is also known as al-Balad, except for one sector that was formerly part of Old Jeddah but is today separated due to its different urban fabric.

The historical setting of the nominated property has been radically modified: the sea is no longer visible or accessible from the old town and the same can be said for the al- Arbaeen lagoon to the north.

Old Jeddah exhibits a dense urban pattern. Its narrow streets are lined with three- and four-storey houses which provide shade and create a bearable micro-climate during the summer. Most residential buildings were built in the 19<sup>th</sup> century, and whilst older structures are rare, the urban

street pattern dates back to the 16<sup>th</sup> century. Historic Jeddah also contains mosques, caravanserais and souks.

#### The residential quarters or *hara*-s

There are three main residential areas, or *hara*-s, in Old Jeddah. They have different names but are not physically separated. *Hara*-s are made up of semi-private spaces that were used by the same family. They also consisted of some open spaces or *baraha*-s, which were generally positioned close to a mosque or the mansion of a prominent family. The streets of Historical Jeddah used to be unpaved and covered with sand.

#### The mosques

The major mosques in the city are located near the souks. The nomination dossier counts six of them, two of which date back to before the 15<sup>th</sup> century, while the others were erected between the 18<sup>th</sup> and 19<sup>th</sup> centuries and thoroughly restored in the 20<sup>th</sup> century.

#### The souks

Two major souks are located in the old town: Souk al-Alawi on *abel* Street; and Souk al-Nada, which runs perpendicular to *abel* Street.

#### The traditional houses

The multi-storey residential houses are the most distinctive feature of Historical Jeddah. Their architectural language may be understood as a variant of the *Red Sea* style. They date back to the 19<sup>th</sup> and early 20<sup>th</sup> centuries, when the town experienced a boom following the construction of the Suez Canal and the increasing number of steamships. Residential constructions could only grow within the city walls, which, at that time, were still standing. The unfavourable climate and scarcity of water meant that buildings were designed to fully exploit the available resources thereby improving living conditions.

The configuration of the houses was such that they worked as 'wind catchers', capturing the fresh sea breeze and letting it circulate into the buildings. They took advantage of the different densities of fresh hot air to cool down the temperature inside. The scarcity of water was overcome by draining and channelling rainwater from the roofs into cisterns beneath the ground. Roofs are equipped with high parapets and latticework grilled panels to protect privacy, as they are used for rest and sleeping during the summer nights, while the grilles let the breeze in for the comfort of inhabitants.

The building technique makes use of blocks of local stones – the most widespread being a very workable seashell limestone, the Mangabi stone – assembled with clay obtained from the bottom of the al-Manqabah lagoon. The walls were strengthened and bound with horizontal tiered beams enclosed in the walls and connected to the crossbeams of the floors, characteristically marking the external *fa ade* with horizontal dark bands. Structurally, however, these buildings suffered from foundation problems due to the instability of the soil and the addition of storeys to the buildings.

The houses were lime-washed to protect the surface of the stone against the harsh marine environment. The white appearance of the walls contrasted with the natural tone assumed by the exposed teak, and with the bright colours of the latticework used to screen the windows and the *roshan*-s, which are the main distinguishing features of this architecture.

*oshan*-s were used as extensions of the sitting rooms and lattice screens maintained privacy, provided shade and enhanced ventilation. Large *roshan*-s may entirely cover the *fa ade* or extend up two or more storeys or even horizontally. The panelling of *roshan*-s combines lattice grilles, blind panel and shutters that allow light and breeze let in.

Other special features of the traditional houses are the entrances and *fa ade* plaster decorations. Plaster is necessary in Jeddah to preserve the limestone from weathering and this has prompted artisans to decorate the plastered *fa ade*, especially on the ground floor, with incised motifs or sgraffiti.

There are some prominent 19<sup>th</sup> early 20<sup>th</sup> century mansions that still demonstrate this significant period of prosperity for Jeddah: Bayt Naseef, Bayt Noorwali, Bayt Sharbatli, Bayt Ba'ishan, Bayt al-Shafey are the most significant surviving examples of this building tradition.

The buffer zone forms a belt of 240.55ha made up of urban sectors, each with particular features, and includes the first urban development of Jeddah after 1947.

The first sector, west of the Old City, comprises an area of reclaimed land close to the sea and the modern-day harbour. High-rise buildings have been erected in part of the sector, while the other part is an empty area separating the town from the harbour zone.

The second sector, to the east, is considered part of the Old City and includes a dense neighbourhood with small shops. However, it was separated from the extant part of the old core by a new road and subsequently underwent major modifications.

The third area is rather large and includes parts of the city that were developed in the early 1950s and are now considered by the Municipality as slums in need of recovery.

#### History and development

The first human settlement in the area of Jeddah was documented in the second century BC.

During the Classical Greek and Roman period there is no mention of Jeddah in travellers' accounts.

Little archaeological and scientific research has occurred, so early Jeddah remains largely unknown and dependent on historical written sources.



Persians occupied Jeddah in the 6<sup>th</sup> century and the first city walls and the harbour date to this period. In the 7<sup>th</sup> century, after the Arabs took over the town, Jeddah became a major port, preferred over Shuaybah as the port of Makkah. Although political changes in the following centuries saw the loss of centrality of western Arabia, Jeddah continued to grow thanks to its port and its association with the holy city of Makkah.

Until the 10<sup>th</sup> century, Jeddah had a minor role, but when the Arabian Gulf lost its position as a channel for trading from India, and after Bagdad's defeat by Cairo, the Red Sea acquired a greater importance in commerce and Jeddah prospered.

Between the 12<sup>th</sup> and 14<sup>th</sup> centuries, the political and economic situation of the Arab world became unstable and Jeddah's centrality declined.

After the conquest of Bagdad by the Mongols, the Mamluks acquired importance in the region and from 1425 they had control over Makkah and Jeddah. The town's custom duties fell under their control but local *sharif*-s were accorded a share of the port traffic. The city recovered from the marginality it had suffered in previous centuries and became the only exchange port between India and Egypt along the Red Sea coast. The fall of Constantinople caused the closure of the Bosphorus and the Black Sea to international trade and the Red Sea attained strategic relevance for east-west commerce.

The importance of the Red Sea, however, was soon to be threatened by the opening of the Cape of Good Hope route by Vasco da Gama: this allowed the Portuguese to develop trade with the East, at the same time avoiding zones under Islamic control.

In the early 16<sup>th</sup> century, Jeddah was fortified with new walls to resist potential attacks from the Portuguese who were trying to take over the Arabian Sea and the Indian Ocean and related commerce routes. Historical sources suggest that the new walls were built in two different construction campaigns, from which the city took its current form, and also imply the demolition of large sectors of the town.

The Portuguese tried to extend their control over the Red Sea area by repeatedly attacking Jeddah and the Egyptian fleet, although they never took over the region. This was also thanks to the role of the Ottoman Turks in the Red Sea provinces from 1517.

Trade remained active in the Red Sea region throughout the 16<sup>th</sup> century, despite the new route around Africa. However, in the 17<sup>th</sup> century, when Dutch and English tradesmen reduced Portuguese prominence in the region, the Cape route became the preferred way to Europe and Jeddah was again marginalised. Trade stagnation in the region continued into the 18<sup>th</sup> century.

The development of the Reform Movement in the early 19<sup>th</sup> century, which was to lead to the creation of the

modern Kingdom of Saudi Arabia and its role in the Hejaz region, changed Jeddah's prospects. The city roused interest from Europeans and received diplomats from France, Britain and Holland.

The opening of the Suez Canal in 1869 and the advent of steamships fuelled a new period of prosperity for Jeddah. Large ships would arrive in the harbour with merchandise to be distributed inland, as well as with thousands of pilgrims heading for Makkah. Jeddah's wealth in the 19<sup>th</sup> century contributed to the development and enrichment of the construction of the Old City.

By the 1850s, the Ottomans had regained control over Arabia and this caused widespread discontent, instability and riots, especially in the Hejaz. Jeddah was freed from Ottoman domination in 1916, during a period of great political agitation in the entire Arabian Peninsula. This finally led to the creation of the Kingdom of Saudi Arabia in 1932.

Until the mid 20<sup>th</sup> century, Jeddah had developed within its city walls but after World War II, oil production and marketing brought high revenues to the Saudis and the growth of Jeddah took off. The city walls were demolished in 1947 to make way for urban expansion and in the following decades Jeddah boomed, reaching its present-day 1,000-square-kilometre surface area and population of 3.5 million.

Urban development in the decades following World War II, especially in the 1960-70s, caused the loss of a good part of the historic urban fabric, and also of some prominent mansions, the most renowned of which was Bayt Baghdadi.

Since the end of the 1970s, Jeddah Municipality has funded several studies on the old city in view of its preservation. Robert Matthew, a British architect, carried out the first inventory of historic buildings at that time more than 1 thousand were counted, while today only 350 survive and was the basis for the building regulations enforced in the old city. It also comprised a three-level classification of buildings, based on their architectural significance.

### 3 Outstanding universal value integrity and authenticity

#### Comparative analysis

The State Party has developed the comparative analysis taking into consideration the role that Jeddah played as the most important harbour along the Red Sea coast. It examines the contact the city had with other trade and port towns in the vast region facing the Indian Ocean, the Arabian and the Red Seas along the shores of India, the Arabic Peninsula and Africa.

The analysis therefore examines several cities within this area that share similar urban patterns and architecture. Among World Heritage cities, the State Party has considered the Old Walled City of Shibam (Yemen,



1982, (iii), (iv), (v)) and the Old City of San'aa ( Yemen, 1986, (iv), (v), (vi)) relevant for comparison. They are, however, said to differ from Historic Jeddah as they developed in the mountains, whilst Jeddah is a port city. Other towns inscribed on the World Heritage List which have been examined are the Stone Town of Zanzibar (Tanzania, 2000, (ii), (iii), (vi)) and Lamu Old Town (Kenya, 2001, (ii), (iv), (vi)).

The State Party has also taken into consideration other important Hejazi towns, i.e. Makkah and Madinah, which are the major centres in the region. The comparison shows that, despite certain similarities, Makkah and Madinah also differ from Jeddah due to their inland position, their function as pilgrimage cities, and their inferior integrity, caused by the loss of built fabric. The State Party has also examined other port cities along the Red Sea coast: Yanbu, Al-Wajh, and Unfudah in Saudi Arabia, Massawa (Eritrea), Hodeidah (Yemen) and Suakin on the Tentative List of Sudan.

The State Party notes that Yanbu is similar to Jeddah in its pattern of development, but declined earlier than Jeddah. Additionally, little remains of the historic Yanbu. Al-Wajh has several similarities with Jeddah's urban development but its integrity has been undermined by the British bombardments in 1917.

Outside Saudi Arabia, Suakin, Massawa, and Hodeidah have been considered. Both Suakin and Massawa hardly conserve any traces of their old urban fabric and architecture: Suakin is today reduced to the conditions of an archaeological site, while Massawa was destroyed by an earthquake in 1921. Hodeidah is said to be subject to urban transformation and this has led to the abandonment of the old buildings which has caused the loss of many buildings.

In summary, the State Party finds that, despite the similarities that Jeddah shares with other towns in the region and along the Red Sea coast, Jeddah stands out from the other selected examples because it is the only one that still retains its urban unity, despite certain alterations.

ICOMOS considers that, while the comparative analysis has examined several properties inscribed or not on the World Heritage List, the comparison with the most relevant properties, Zanzibar and Lamu, has not been fully developed in terms of explaining the peculiarities of Jeddah's role within the region and of its urban fabric and architecture. Similarly, the analysis of Shibam and San'aa has only considered the location of these cities and not their pattern of development and the typology of the residential tall buildings, which share many similarities with Jeddah. This is particularly true in the distribution and uses of internal spaces and the exploitation of natural ventilation.

ICOMOS notes that the State Party has not included Historic Cairo (Egypt, 1979, (i), (v), (vi)) in the

comparison, with which Jeddah had long lasting commercial exchanges.

ICOMOS also notes that Al-Mukalla and Aden (Yemen) could also have been included in the comparative analysis. Although these port cities do not face the Red Sea, they are nevertheless part of the network of ports that dotted the trade route from the Indies to Egypt through the Arabian and the Red Seas and exhibit several commonalities with Jeddah. The old city of Al-Mukalla, in particular, still retains its relationship with the sea, its immediate setting and much of its urban and built fabric. The particular setting and the urban pattern of Aden are also still clearly recognisable.

ICOMOS recognises that Jeddah has retained a number of 19<sup>th</sup> century merchant houses and much of its street pattern, despite the losses suffered in the last fifty years, compared to other port cities along the Red Sea coastline, i.e. Suakin, Yanbu, Al-Wajh, Al-Unfudah or Massawa. However, ICOMOS considers that Jeddah's importance is enhanced when situated in its larger historic and geographical context as an entrepôt of the trade routes from the Indies to the West along the Indian Ocean the Arabian and the Red Seas. The surviving examples of the network of cities that dotted these routes exhibit characteristics that contribute to a better understanding of the economic and historic role played by these lands and cities in past centuries.

ICOMOS considers that the comparison developed by the State Party does not convincingly demonstrate that Historic Jeddah possesses, as an historic town, the features and the complex layers that would make it stand out in respect to cities inscribed or not on the World Heritage List. Additionally, the typology and the architectural language of the surviving residential architecture in Historic Jeddah share similarities with other cities, i.e. Hodeidah, Yanbu, Suakin, Al-Mukalla or, to a lesser extent, San'a and Shibam, in the typology and internal distribution, although it does include local variants, and mainly related to buildings materials and decorative elements.

---

ICOMOS does not consider that the comparative analysis justifies consideration of this property for the World Heritage List.

---

Justification of Outstanding Universal Value  
The nominated property is considered by the State Party to be of Outstanding Universal Value as a cultural property for the following reasons:

- Jeddah was the last port along the Red Sea route from India that could be accessed by large ships and this made it the most important hub for goods along the East-West Red Sea trade route between the 16<sup>th</sup> and 19<sup>th</sup> centuries.
- Jeddah's prosperity of past centuries is reflected in its urban fabric, dating back to 16<sup>th</sup> century, and its traditional, merchant mansions, mainly built in the

19<sup>th</sup> century, in the traditional 'Red Sea' architectural style, which is peculiar to this region.

- Jeddah was also the harbour for the Holy city of Makkah and has therefore become the symbolic gate to Makkah. This has contributed to the cosmopolitan character of the nominated property.

ICOMOS considers that Jeddah, as well as several other cities along the Red Sea coastline, played an important part along the East-West trade route over the centuries until the Cape of Good Hope route was opened by the Portuguese and prevailed over the Red Sea route in the 17<sup>th</sup> century. Once the Red Sea route lost its centrality in major East-West trading, there was an era of relative marginalisation for Jeddah, between the 16<sup>th</sup> and the 19<sup>th</sup> centuries. Despite this, Jeddah was the exclusive exchange port between India and Egypt during that time.

ICOMOS observes, in this respect, that no traces remain of the old port of Jeddah, nor has the coastline retained its original shape, after the thorough reclamation for building the new port.

ICOMOS notes that Jeddah's urban structure dates back to the 16<sup>th</sup> century and the majority of its houses were built in the 19<sup>th</sup> century, precisely the period when Jeddah lost its centrality in the international trade exchange. Only the traditional 19<sup>th</sup> century Mangabi stone houses reflect the wealth generated by the opening of the Suez Canal and Jeddah's recovered economic centrality. The houses alone, however, cannot carry the complexity of a city, therefore the proposed Outstanding Universal Value cannot be supported only by the residential function and related physical components.

ICOMOS considers that the impact of pilgrimage to the Holy Cities on Jeddah is relatively recent. It was only after the introduction of steamships and the opening of the Suez Canal in 1869, that large numbers of pilgrims arrived in Jeddah by water to reach Makkah. Before that, the large majority used overland transport with the caravans.

In summary, ICOMOS considers that this justification is not appropriate in that the extant built fabric of the nominated property does not hold the complexity of tangible and intangible features possessed by an old city and cannot convey, alone, the sense of the economic role of the trade along the Red Sea.

#### Integrity and authenticity

##### Integrity

According to the State Party, the nominated property retains an urban unity, coherence and features that allow it to be distinguished from neighbouring modern areas that developed after the city walls were demolished.

The nominated property contains the former walled city almost in its entirety, and its size ensures that the cultural

significance and the proposed Outstanding Universal Value are adequately represented. Only the eastern sector of the old city has been cut off from the extant part and subsequently largely altered by the construction of incompatible structures. This part has therefore been excluded from the nominated property. However, modern additions that undermine the architectural language of the traditional cityscape may also be found in other areas of the old town. Additionally, the ancient line of the coast has been reclaimed and extensively modified by modern development.

ICOMOS observes that the setting and fundamental components of Historic Jeddah that witnessed its pivotal role in the maritime trade in the region - the old port, the coastline (moved westwards to develop the new port), and the walls - have been lost. The historic core has also been fragmented by high traffic roads, although it retains a number of residential buildings.

ICOMOS considers that the Historic City of Jeddah contains several inappropriate structures and building components that have altered the cityscape. Additionally, despite the considerable efforts made and the strategies developed in the recent decades to preserve the urban fabric of the nominated property, several historic buildings have been intentionally demolished or destroyed by fire or due to their dilapidated condition. The state of conservation of the surviving buildings is still poor, whilst development and property market pressures continue to threaten the survival of what has been preserved so far.

##### Authenticity

The State Party states that the Historic City of Jeddah is still able to evoke the world and the image of a commercial and harbour centre along the Red Sea Coast, although many changes have occurred and large parts of the old town have been modified by modern high-rise buildings or concrete infrastructure. Al-Balad remains a busy, multi-ethnic centre, despite these changes. However, the traditional mansions have been subdivided and rented, thus largely modifying the social profile of old Jeddah.

ICOMOS considers that only the 19<sup>th</sup> century merchant mansions in the Historic Town of Jeddah bear clear witness to its last phase of prosperity, following the opening of the Suez Canal. Too little remains from the preceding eras, which can demonstrate, in a tangible way, Jeddah's role in the region, except for the underlying structure of the urban fabric. In this respect, archaeological investigations and an archaeological approach to the study of the urban and built fabric of Historic Jeddah could potentially yield additional important information on the transformations witnessed by Jeddah in the course of its history and could strengthen the sources of information on its claimed values.

---

In conclusion, ICOMOS considers that the conditions of integrity have not been met, while the conditions of authenticity have not been met at this stage.

---

Criteria under which inscription is proposed  
The property is nominated on the basis of cultural criteria (iv), (v) and (vi).

*Criterion iv to be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates a significant stage in human history*

This criterion is justified by the State Party on the grounds that Jeddah is an outstanding example of Red Sea urban planning and architecture, and is of remarkable size and extensively conserved. The nominated property still exhibits a preserved urban fabric with an articulated pattern of souks, streets, squares and lanes that date back to the 16<sup>th</sup> century and beautiful examples of 19<sup>th</sup> century merchant mansions. The fact that Jeddah played a central role as Makkah's port of entry generated much wealth in the area. This, in turn, led to the creation of a highly refined architecture in its functional conception and decoration, which has indelibly shaped Jeddah's cityscape.

ICOMOS considers that the street pattern of Jeddah is common to other towns of the region as well as within the Islamic world, and is not unique or exceptional to the nominated property. ICOMOS also notes that the extensive and intricate network of streets has been broken down by the opening of a thoroughfare and a ring road that have considerably altered the cityscape.

Finally ICOMOS considers that in other cities within the same geo-cultural region, such as San'aa and Shibam, it is possible to find earlier exceptional examples of typologically similar multi-storey houses, performing similar functions, although built using different building materials and techniques.

---

ICOMOS considers that this criterion has not been justified.

---

*Criterion v to be an outstanding example of traditional human settlement, land use, or sea use which is representative of a culture or cultures, or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change*

This criterion is justified by the State Party on the grounds that for centuries, Jeddah has been the major port at the northern limit of the navigable tract of the Red Sea and developed into the central hub for the trades between Africa, Arabia and India. Jeddah also holds symbolic importance as the harbour where thousands of Muslim pilgrims from Africa, India and other regions of the world disembarked to reach Makkah. This made Jeddah a crossroad of cultures that left its imprints on the urban fabric, architecture and inhabitants. After a period of decline between the 17<sup>th</sup> and 19<sup>th</sup> centuries, the opening of the Suez Canal gave Jeddah back its prominence in the 19<sup>th</sup> and early 20<sup>th</sup> centuries, which is

attested to by the rich residences of Saudi merchants that mark Jeddah's urban landscape.

ICOMOS considers that the symbolic importance of Jeddah is not appropriate to justify criterion (v), but that it should be considered in relation to criterion (vi) (below).

ICOMOS also observes that the development of Jeddah along the coast has followed a pattern common to other cities along the Red Sea coastline, which acted as port towns for other, important inland cities. It is the case of Sana'a for Madinah, Hodeidah for San'aa, Juzan for Abha, Massawa for Asmara and Luxor for Luxor. Nevertheless, due to its location along the coast, Jeddah acquired a prominent position over the others and became the exchange port for merchandise directed to Egypt and the Mediterranean.

ICOMOS, however, observes that the built fabric of Historic Jeddah dates back to the 19<sup>th</sup> and early 20<sup>th</sup> centuries, whilst little remains from previous epochs other than the 16<sup>th</sup>-century urban street plan. Almost nothing survives from the earlier centuries when Jeddah held an important position in the Red Sea trade route, which had become an alternative to the route through the Arabian or Persian Gulf, due to the geo-political situation in the region at that time. Additionally, the setting of Historic Jeddah has been profoundly altered. The coastline has been reclaimed and the old port no longer exists. Today it is far from the former maritime merchant town, and the most important witnesses to Jeddah's fortune have disappeared.

---

ICOMOS considers that this criterion has not been justified.

---

*Criterion vi to be directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance*

This criterion is justified by the State Party on the grounds that Jeddah has been the landing port for pilgrims to Makkah for centuries. Hundreds of thousands of pilgrims have passed through Jeddah to reach Makkah or Madinah to participate in the *hajj* (the pilgrimage to the Holy city of Makkah) or the *umrah* (or small pilgrimage that can take place throughout the whole year). Today Jeddah continues to play this role and its international airport has a special terminal to receive more than 1 million pilgrims each year.

ICOMOS considers that, for a long time, the vast majority of pilgrims travelled to the Holy Cities overland and not by sea, with the great caravans from Cairo, Istanbul, Damascus, Baghdad and southern Arabia. Only pilgrims from sub-Saharan Africa, India and Malaysia reached Jeddah by water. Although statistics are not in existence, travellers' accounts report rather small numbers of pilgrims overall, therefore making it unlikely that they could contribute a great deal to Jeddah's fortune in these earlier centuries. Things only

changed after the advent of steamships and the opening of the Suez Canal in 1869. From that period onwards, large number of pilgrims arrived in Jeddah to reach Makkah. The impact of pilgrimage to the Holy Cities on Historic Jeddah is therefore relatively recent and today plays a minor role, as the pilgrims disembark at Jeddah International Airport, which is located miles north of the Historic City of Jeddah.

---

ICOMOS considers that this criterion has not been justified.

---

In conclusion, ICOMOS considers that the criteria and Outstanding Universal Value have not been demonstrated.

---

#### 4 actors affecting the property

##### Development pressures

The State Party reports that the nominated property is subject to aggressive speculative pressure that is difficult to withstand.

The historic setting of Jeddah, as well as its urban street pattern have been profoundly modified. The historic core has suffered from the opening of two large roads that have fragmented its unity. A rehabilitation plan and related regulations for the old city developed in the 1980s have slowed down the destruction, but since then, hundreds of historic buildings have disappeared and many others have been substantially altered.

The municipality has recently enforced new building regulations which aim to protect traditional architecture within the city and new regulations are being elaborated as part of a revitalisation plan for Old Jeddah.

ICOMOS considers that the threat of encroachment and land speculation continue to endanger the nominated property, despite the considerable efforts undertaken by the State Party. The rehabilitation plan developed in the 1980s has only been partly successful but has not been able to resist the demolitions and substitution of old buildings with modern ones out of scale.

Arson, with speculative motive, is still a serious menace to the old fabric of al-Balad, which demonstrates that the 1980 Rehabilitation Plan has not fully succeeded in raising citizens and real estate owners' consciousness of the importance of Jeddah's built heritage.

##### Tourism pressures

According to the State Party, visitor pressure on the nominated property is minimal, as it has no special appeal to tourists, although the inhabitants of Jeddah go to al-Balad regularly for business or leisure. Statistics report an average of 2,000 visitors per year.

The Municipality of Jeddah is elaborating a conservation and development plan, which, coupled with the effects of the national strategy for tourism development, is expected to radically change the situation and give Jeddah a prominent role as tourist destination.

ICOMOS appreciates the renewed efforts of the State Party to ensure the protection and the conservation of the built heritage of Historic Jeddah. ICOMOS recalls that tourism can increase the pressure on cultural heritage when tourism valorisation becomes the main goal pursued by rehabilitation programmes for heritage cities. This is particularly true when legal protective regulations are weak, community awareness is not well established, and where the conditions of the built heritage are fragile.

##### Environmental pressures

The State Party reports that car traffic and air conditioners have modified the micro-climate of the old town, which, in the past, used to be cooler and cleaner than the outermost parts of the city. Industrial pollution has also had an impact on the old buildings, although the Red Sea breeze blows most of the smog away from the city.

##### Natural disasters

The region is prone to earthquake. The arid climate of the region is favourable to floods as the rare precipitations pelt down violently with abundant rainwater in a short time. Recently the municipality has built a system of ditches and channels which has reduced the effects of rainstorms.

Fire is one of the major threats for the old city. The dense urban fabric, the widespread use of timber construction, the arid climate and the precarious electric installations make Jeddah's built heritage highly prone to fire and arson.

##### Impact of climate change

The State Party has not addressed this issue in the nomination dossier; however it is likely that climate change effects in the region may result in violent and unpredictable events, i.e. rain storms or rising sea levels.

---

ICOMOS considers that the main threats to the property are development pressures and fire.

ICOMOS recommends that any rehabilitation plan for Historic Jeddah should give the highest priority to the preservation of its built heritage and of its tangible and intangible components to retain its specificity and ensure that its tourism valorisation is grounded in Historic Jeddah's cultural values.

---

## 5 Protection conservation and management

boundaries of the nominated property and buffer zone

The boundaries of the nominated property are clearly defined in the administrative resolution No. 3100188574 dated 27.07.2010 by means of existing streets.

The buffer zone is encircled by a ring road from the East and the South. The buffer zone is determined by the water front to the West.

The buffer zone is divided into three zones: 1, 2 and 3 according to the regulations concerning built-up areas as well as land use and heights. A small portion of sector 3 has been excluded from the buffer zone due to the extremely poor condition of the buildings, mostly illegally built.

---

In conclusion, ICOMOS considers that the boundaries of the nominated property and its buffer zone are adequate.

---

### Ownership

Most of the houses and buildings within the nominated property are privately owned and still belong to the descendants of the merchant families that built them. There is a high percentage of *waqf* properties, that is an inalienable religious endowment under the Islamic Law, whilst only a handful of buildings is publicly owned.

### Protection

#### Legal Protection

According to the State Party, the protection of the nominated property has been primarily based on the building regulations set up after the 1979 study on which the 1980 conservation plan was grounded. No building can be higher than 22 metres and the use of each plot has been regulated. The function of most of the traditional built fabric is residential and commercial at ground-floor level. Purely commercial and government activities are located in the western sector of the town.

Since 2000, the Saudi Commission for Tourism and Antiquity (SCTA) has issued circular letters and decrees to enforce heritage protection at the national level. These circulars have attempted to create conditions for dialogue between the authorities and the owners in matters concerning the demolition of historic buildings.

However, a new Antiquity Law, currently under review, will ensure that legal protection of urban heritage is enforced.

While the legal framework is almost non-existent, several plans have been developed at different scales. These are:

- Red Sea Tourism Strategy and Action Plan (SCTA, 2006);

- Jeddah Strategic Plan 2010-2030 (Municipality of Jeddah, 2009).

Several mega-projects' are also under way: the Old Airport Plan, the Central District Development project, the Hozama Project, the Historic District Strategy and the Municipality Unplanned Settlements Renewal Plan: all these projects aim at the renewal of the central sector of Jeddah. Taken altogether, they outline a strategy of urban redesign and rehabilitation of Jeddah, and particularly of Old Jeddah..

ICOMOS considers that legal protection is a necessary basis for the conservation of the built heritage of the Old City of Jeddah and that building and planning regulations are insufficient because they are more easily subjected to modifications than any national law. They have not prevented the demolition of many historic buildings (between 1980 and 2007 more than 200 buildings have disappeared and others have been more or less profoundly transformed).

ICOMOS notes that, although the Antiquity Act in force does not contain references to urban heritage, it does include provisions that allow protection of individual items of the built heritage and their proper and controlled interventions. Therefore, it would already be possible to afford better legal protection to the nominated property through the protection of its individual components.

ICOMOS also observes that several of the plans and projects mentioned in the nomination dossier are very recent and are still waiting to be implemented. Their impact on the nominated property is still, therefore, unknown.

#### Effectiveness of protection measures

The Saudi Commission for Tourism and Antiquity (SCTA) is responsible for issuing decrees and circulars concerning cultural heritage as well as for their application. It is also responsible for the development of the Red Sea Tourism Strategy. Protective measures concerning buildings is a task carried out by the municipalities.

ICOMOS considers that, despite the efforts by the State Party, the regulations put in place with the 1979 rehabilitation plan have been only partially effective. This is primarily due to the extraordinary development pressures over the historic core of Jeddah and the lack of a framework for legal protection.

ICOMOS nevertheless observes that the existing legal tools already offer means to ensure the protection of parts of Saudi built heritage if applied and implemented.

---

In conclusion, ICOMOS considers that the legal protection in place for the nominated property is currently insufficient, despite some existing legal provisions; and that the planning system for the most part has not yet been implemented. ICOMOS recommends that the State Party gives the highest

priority to establishing forms of legal protection for the nominated property, finalising and implementing the planning instruments under development, accelerating the approval of the Antiquity Law currently under revision, and ensuring its full implementation.

---

## Conservation

### Inventories, recording, research

The most complete inventory carried out on the built heritage of Jeddah was done by Robert Matthew in 1979 and formed the basis of the rehabilitation plan for al-Balad in 1980. The inventory lists all traditional houses and classifies them according to their historical significance. The Municipality of Jeddah is preparing a GIS survey of the old city that will record all plots and buildings and is based on an updated version of Matthew's inventory. The GIS will be the key instrument for the management of the nominated property.

ICOMOS notes that direct research on the urban fabric of Historic Jeddah is still scarce, though it would greatly assist in the comprehension of Jeddah's development phases and of the structural behaviour of traditional buildings.

### Present state of conservation

Overall, despite the endeavours of the State Party and some successful experiences of conservation of individual buildings, the conservation conditions of the nominated property are rather poor. Neglect and inappropriate subdivisions, adaptations and structural deficiencies have compromised the building components of traditional houses. Many of them have already collapsed; others are in an advanced state of disrepair. Numerous buildings have been torn down for speculative reasons. Today some 350 traditional houses are still standing, in uneven conditions.

### Active Conservation measures

Between the end of the 1970s and the 1990s, Jeddah underwent various conservation and maintenance programmes that involved professionals and craftsmen from Jeddah and neighbouring countries.

The Central District Development Project concerns 570ha and includes the nominated property. It will be implemented through a concession to a private company. The objectives of the plan include achieving a balance between urban development and conservation for historic Jeddah, combining profitable investment outside the nominated property while funding regeneration projects within. It is foreseen that part of the income generated by the project will be transferred to the Old City of Jeddah over a ten-year period.

Further detailed plans and projects include the Old City Development Plan and the Old City renewal projects. These are tools designed to achieve the physical, economic and social regeneration of the Old City. Finally,

use of the restoration Manual developed by the *cole d'Avignon* will contribute to the appropriate conservation of the architectural components of the urban fabric. The Manual collects and describes intervention techniques and methodological criteria, to improve the quality of conservation works, which also requires specific training.

ICOMOS recommends that the proposals concerning Historic Jeddah and included in the Central District Development Project be carried out in accordance with conservation principles, to ensure the retention of the values of the property.

ICOMOS further recommends that training programmes for workers and professionals be developed in order to ensure that sound conservation principles and practice be used in the preservation and regeneration activity planned in the foreseen projects.

### Maintenance

The nomination dossier informs that the nominated property suffers from a generalised lack of maintenance, and upgrading of technical installations, caused by the economic and social decline of the old city.

#### Effectiveness of conservation measures

The programmes set up by the Municipality have proven to be partially effective as far as individual buildings are concerned. They have slowed down the rate of demolition but have failed to overturn the general trend of replacing historic buildings with modern ones. Nevertheless, within the Historic District Strategy recently developed by the Municipality of Jeddah, several plans, projects and schemes have been elaborated for the regeneration of the nominated property, its buffer zone and a wider area.

ICOMOS considers it crucial that these plans and projects harmonise development and regeneration objectives with the retention and strengthening of Old Jeddah's heritage significance.

---

ICOMOS considers that the state of conservation of the nominated property is of concern, since it appears that the measures taken have not yet been successful in halting the pace of degradation.

ICOMOS recommends that future rehabilitation programmes be guided by conservation principles and developed with the involvement of the owners and tenants, in order to ensure a sensitization towards Old Jeddah's built heritage.

ICOMOS further recommends that training programmes for workers and professionals be developed to ensure the diffusion of sound conservation principles and practice.

---

### Management

Management structures and processes, including traditional management processes

The institutional framework for the management of the nominated property foresees the following: a High

Authority, with responsibilities in the supervision of the management implementation and an executive Committee, in charge of the effective implementation of the plan.

Historic Jeddah Municipality is the new administrative structure that will be in charge of the nominated property and its buffer zone. The SCTA will establish a local office which will cooperate with the new municipality. The operational branch of the Municipality will be the Historic Jeddah Developer, a private company which will be operationally responsible for different management sectors and will coordinate its work in cooperation with the SCTA local Office and with the Jeddah Development and Urban Regeneration Company (JDU C). JDU C was established by Royal Decree in 2006 and is responsible for supervising, facilitating, making possible the implementation of sustainable regeneration and development projects in Jeddah, through partnership with government agencies and the private sector. The board of directors of JDU C includes officials from the Municipality, Ministries and the private sectors. To pursue the objectives of public interest JDU C also searches for partners in the private sector.

ICOMOS observes that, apart from establishing JDU C, which has been operating since 2006, the management framework has not yet been adopted. The time-frame for the implementation of the management framework is not provided in the Management Plan or in the nomination dossier.

ICOMOS recommends that the State Party establish the management framework and a clear schedule for the implementation of the actions foreseen in the Management Plan.

Policy framework: management plans and arrangements, including visitor management and presentation

The Management Plan was developed in 2008 and updated in 2010. It combines economic, social, heritage conservation and rehabilitation objectives, beginning with an examination of the cultural significance of Historic Jeddah and of its current situation. Each objective is preceded by a detailed analysis and followed by guidelines for action.

ICOMOS appreciates the overall approach of the Management Plan and recommends that it is approved and implemented as soon as possible.

#### Risk preparedness

The Management Plan identifies arson and accidental fire as the main threats and most probable causes of disaster. At the moment, a comprehensive strategy to address this issue is under elaboration with the assistance of the French authorities.

ICOMOS recommends that this strategy be completed and implemented as soon as possible along with concrete preventive measures.

#### Involvement of the local communities

The Management Plan foresees the involvement of local community in the implementation of regeneration programmes.

ICOMOS notes that the Management Plan is very generic in addressing this issue, considering the complex situation of the social pattern of today's historic Jeddah.

ICOMOS further notes that there is a great need to raise public awareness of tangible and intangible cultural heritage of Historic Jeddah, to ensure the effectiveness of Greater Jeddah Strategic Plan, of which the Management Plan is part.

Resources, including staffing levels, expertise and training

The budget allocated by SCTA to ensure the implementation of the objectives identified by the Management Plan amounts to 30 million riyals (some 8 million USD), for the next triennium. A regular budget will be granted by the Government of Saudi Arabia.

The Jeddah SCTA Office staff includes six people: 1 director, 1 deputy-director, the head of the Hozama Museum, 1 staff member and 2 guards. The budget of this office permits only ordinary activities, and special funds must be requested from the central office for large projects. The current SCTA staff does not include an architect.

The Management Plan identifies the gap in the staff competencies and foresees an enlarged SCTA Antiquities Office.

ICOMOS notes that the nomination dossier does not specify the professional profile of the staff of the newly created municipality, nor of the Historic Jeddah Developer, which will be the key bodies for the implementation of the Management Plan.

Effectiveness of current management

The management framework described has not been enforced yet. Therefore the management of the property currently relies upon the SCTA local office and the municipality technical office.

In conclusion, ICOMOS considers that the management system for the property is not in place yet. The management framework has not been adopted, apart from establishing JDU C, and the Management Plan has not been approved yet. ICOMOS first recommends that the foreseen management framework and Management Plan be adopted and implemented as soon as possible. ICOMOS further recommends that additional trained technical and professional staff be

hired to ensure the full implementation of management objectives.

ICOMOS finally recommends that the State Party considers organising meetings and events to raise the level of public awareness and participation.

---

Recommendations with respect to inscription  
ICOMOS recommends that the Historical City of Jeddah, Kingdom of Saudi Arabia, should be **inscribed** on the World Heritage List.

## 6 Monitoring

The monitoring framework has been designed to control change at two different levels: the wider city where the nominated property is located, and the implementation of the management objectives.

Indicators are grouped with regard to urban and architectural conservation (environmental data, accidental fires, conservation works, periodic photographic campaigns), and planning and development (advancement of mega-projects, analysis of satellite images, tourist and resident statistics, number of commercial licenses, etc.). Periodicity of measurement is mentioned as well as the body responsible for these measurements and data storage.

---

In conclusion, ICOMOS considers that the monitoring system requires short and long-term reporting and review cycles. Indicators assessing the increase of legal protection designations and the reduction of the loss of historic buildings should also be established. ICOMOS recommends that monitoring be implemented as soon as possible.

---

## 7 Conclusions

Jeddah has played an important role as a port town along the Red Sea coast ever since the 13<sup>th</sup> century, but the traces bearing witness to this past have been reduced mostly to the 19<sup>th</sup> century merchant mansions built in the characteristic Red Sea style, and to a partially intact urban street pattern dating back to the 16<sup>th</sup> century. The historic setting of Jeddah has been largely modified in recent decades: the old harbour and the walls have been pulled down and the coastline has been completely altered.

ICOMOS therefore considers that what has survived of the nominated property does not possess sufficient integrity as an outstanding example of a historic town that flourished thanks to the Red Sea maritime trade. Development pressures are causing a continuing loss of historic buildings and, despite the considerable endeavours undertaken by the State Party, do not seem to have come to a halt, nor has the property been granted an adequate level of protection.

ICOMOS encourages the State Party to continue with the efforts recently undertaken to ensure that everything is done to retain the significant elements of the property and to preserve the surviving physical traces that bear witness to its important past.





Map showing the boundaries of the nominated property



The dense fabric of the old city



Street of the old city





Jamjoum house



Caravanserai (khan)

---

# Island of Meroe

## Sudan

### No 1336

---

Official name as proposed by the State Party  
The Archaeological Sites of the Island of Meroe

Location  
River Nile State, Shendi Province  
Republic of Sudan

**Brief description**  
The Island of Meroe, a semi-desert landscape between the Nile and Atbara rivers, was the heartland of the kingdom of Kush, a major power in the ancient world from the 8<sup>th</sup> century BC to the 4<sup>th</sup> century C, before the onset of Christianity in the region. The property consists of the royal city of the Kushite kings from the 3<sup>rd</sup> century BC at Meroe, near the River Nile, and the nearby religious sites of Naqa and Musawwarat es-Sufra. There are remains of places, steep-sided stone or fired brick pyramidal funerary monuments, and elaborate temples, many of which reflect Egyptian, Roman and Sahelian African influences. The three sites testify to the wealth and power of the Kushite state and to its wide-ranging trade contacts with the Mediterranean and Middle Eastern worlds.

**Category of property**  
In terms of categories of cultural property set out in Article 1 of the 1972 World Heritage Convention, this is a serial nomination of three sites.

## 1 Basic data

Included in the tentative List  
31 August 2004

International Assistance from the World Heritage Fund for preparing the Nomination  
2004

Date received by the World Heritage Centre  
25 January 2010

**Background**  
This is a new nomination.

**Consultations**  
ICOMOS has consulted its International Scientific Committee on Archaeological Heritage Management and several independent experts.

## Literature consulted selection

Edwards, D.N. The archaeology of the Meroitic state: new perspectives on its social and political organisation, Tempus Reparatum, Oxford, 1996.

O'Connor, D., Ancient Nubia, Egypt's Rival in Africa, The University Museum of Archaeology and Anthropology, University of Pennsylvania, Philadelphia, 1993.

Wildung, D. (ed.), Sudan: Ancient Kingdoms of the Nile, Institut du monde arabe, Flammarion, Paris-New York, 1997.

**Technical Evaluation Mission**  
An ICOMOS technical evaluation mission visited the property from 23 to 30 September 2010.

**Additional information requested and received from the State Party**  
The State Party was requested on 23 September 2010 to provide maps with annotated features for each site, together with clarification of funding arrangements for the proposed management framework for the overall property.

A response was received on 21 October 2010 including maps. This information has been incorporated into the relevant sections of the evaluation below.

Date of ICOMOS approval of this report  
10 March 2011

## 2 The property

**Description**  
The nominated property comprises a total of 2,357.36ha in three separate sites:

Meroe is in two parts: Meroe 1 (town site) west of the highway covers 612.551ha and Meroe 2 (cemetery site) east of the highway covers 674.904ha. Meroe 1 & 2 are surrounded by a buffer zone of 1,718.031ha.

Musawwarat es-Sufra covers 836.57ha and is surrounded by a buffer zone of 2,653.64ha.

Naqa covers 231.852ha and is surrounded by a buffer zone of 9,509.92ha.

The kingdom of Kush emerged as a powerful African civilisation in the Middle Nile region around the 9<sup>th</sup> century BC at Napata around Gebel Barkal, about 50km downstream from the fourth cataract of the Nile. The Napatan rulers were the inheritors of the Pharaonic kingdom.

They occupied Egypt for nearly a century, at that time ruling over a vast empire extending from the Mediterranean to the heart of Africa. The seat of power rested with the king who journeyed annually throughout his realm. The early rulers were buried at el-Urru, a few kilometres downstream from Gebel Barkal, then at Nuri and at other nearby sites. These were inscribed on the

World Heritage List in 2003 as Gebel Barkal and the Sites of the Napatan region.

The Kushite kingdom moved its capital and royal burials south to Meroe in 4<sup>th</sup> century BC. At Meroe and at nearby sites, the Kushites developed a civilisation that was mostly sub-Saharan in character, while maintaining strong links to the Mediterranean world to the north. They created urban centres on the banks of the Nile, the most important being the capital Meroe and the port of Wad ben Naqa (not part of the nominated property). Adequate annual rainfall and alluvial deposits also encouraged the spread of settlement away from the Nile Valley, the largest being Naqa and Musawwarat es-Sufra which were both religious centres. Numerous small religious centres also dot the Western Butana and Keraba. These comprised a temple and a reservoir (hafir), forming permanent foci for semi-nomadic pastoralists and providing a means through which the government exerted its power and control over the population. None of these smaller sites are nominated.

Meroe was at the convergence of a network of trade routes along the White and Blue Niles connecting the Red Sea port towns in the east to beyond Lake Chad in the West. They manufactured and traded richly decorated cotton textiles, ceramics, iron and objects of bronze, and gold and other luxury items which were much in demand in Roman Egypt.

The main structures to survive substantially above ground are elaborate temples and distinctive pyramidal funerary monuments, built of durable stone, or red fired brick as well as numerous hafirs (reservoirs).

Most Meroitic temples had pylons' (monumental gateways) and enclosure walls, but the number of rooms varied from one to three or more. The temples were built in a variety of styles and, over time, became more influenced by Hellenistic and Roman architecture. They were elaborately decorated with a variety of royal and military themes. The temples are usually associated with hafirs and would have acted as a resting place for travellers and nomads as well as being centres of regional authority.

The cemeteries are characterised by tall pyramids, echoes of those built in Egypt around Aswan in the New Kingdom at least 800 years earlier but rather steeper. Built either of stone or of burnt brick they would originally have been plastered with lime mortar and then painted and so the differences in materials would not have been apparent. The burials were in tombs cut into the sub-surface rock beneath Meroe.

The site of the royal city of Meroe, known today as Begraweya, is near the banks of the river Nile about 220 km north of Khartoum. It lies in the savannah belt on the south side of the Sahara, receiving today an annual rainfall of 100mm. Proximity to the Nile made the region viable throughout the city's history. The site is partly overlaid by the villages of Deraqab and Igiek.

The site consists of the remains of the royal city within an enclosure wall and to the east extensive royal cemeteries, a number of temples, a reservoir (hafir), cemeteries of the less wealthy inhabitants of the city and a kilometre to the east the Sun temple and its associated hafir.

The Atbara to Khartoum railway cuts through the eastern edge of the settlement. The main highway connecting Khartoum with Port Sudan runs north-south through the centre of the plain.

The irregular trapezoidal stone-walled area known as the Royal City has four gates and includes the Royal Baths' and four temples. Some blocks in the wall bear masons' marks in Greek and the date suggested is second half of 3<sup>rd</sup> century BC to mid 2<sup>nd</sup> century C .

The bath structure was a water sanctuary decorated with faience plaques bearing alternate figures of lions and bulls in stone, two painted serpents and an elephant, and three free-standing statues; the central one a harpist and the one on the left a musician playing the pipes. It was supplied by a brick vaulted, cement-lined aqueduct. Filling the basin depended on the water level of the Nile; it was only operative at the high Nile and was associated with inundation, the New Year and by extension, the cult of the ruler.

The area also includes remains of a small rectangular temple possibly dedicated to Amun, with interior plastered walls painted with scenes of enthroned gods with goddesses standing behind, and images of bound prisoners.

Outside the walled enclosure adjacent to its eastern wall is the Temple of Amun, the largest structure on the site constructed of mud and red brick with door jambs, columns, pylons and with the main sanctuary of Nubian sandstone. The formal approach was lined over time with small temples, and close to the pylon, by two stone rams either side. The temple includes an outer courtyard, a hypostyle hall, several ancillary rooms and the sanctuary. The fact that this temple faces towards the desert, which is unusual as Amun temples usually face the river, together with evidence of thick deposits of Nile silt in excavations immediately east of the temple, suggest that when the temple was built, the main river channel ran to the east of the city, which stood on an island. The Nile is a dynamic river and is constantly shifting its course, creating new islands and sometimes washing others away.

The Lion Temple, dedicated to the cult of Apedemak (Lion God) is located on a heap of iron slag immediately east of the town site. It is a double-chambered sandstone temple decorated with reliefs. The entrance is by a flight of steps originally flanked by two lion statues.

The Sun Temple located around one km from the town is set on a podium with a colonnade around the temple's

sanctuary, a Greek architectural feature. It was built around 600 BC and restored in the 1<sup>st</sup> century.

Relief decoration depicts bound captives, war scenes, massacre scenes and an image of a ritual temple. Immediately in front of the temple a large portrait head of Augustus was buried. This may be loot from the Kushite raid on Aswan around the late 1<sup>st</sup> century AD at a time following the Roman occupation of Egypt. Renewed contact with the Graeco-Roman world is evident in the architecture of this period under the co-rulers King Natakamani and Queen Amanitore, including the kiosk in the forecourt of the Amun Temple.

There are three royal cemeteries to the east of the city known as the western, northern and southern cemeteries.

Many of the graves are surmounted by steep stone or brick pyramids, a dramatic feature of the site, particularly along the eastern side. They were robbed out in antiquity, and many have their tops removed as a result of later treasure hunting by the 19<sup>th</sup> century explorer Ferlini in the 1830s.

The Western Cemetery, thought to be the burial ground for the princes and nobles of Meroe, contains more than 500 graves.

The Southern Cemetery contains more than 200 graves of two types; one type containing a non-mummified body on a wooden bed, the other containing a mummified body in a wooden coffin adorned with a bead net as in Egyptian third intermediate period burials. The earliest burials are dated to around 747 BC. When the burial of rulers began at Meroe in the 3<sup>rd</sup> century BC they were initially interred in the Southern Cemetery and the graves crowned with pyramids.

The Northern Cemetery is exclusively for the rulers of Meroe and contains 44 pyramids; all but six mark the tombs of reigning monarchs. The earlier pyramids are constructed of stone facing blocks on a rubble core, the latest were faced in red brick or were built of coursed rubble. They incorporate a funeral chapel on the east side, usually built of dressed sandstone bearing reliefs and inscriptions in Egyptian and Meroitic.

There are sandstone quarries in the hills near the Northern and Southern cemeteries, a possible ritual site on the upper slopes of Gebel Ardeb, and extensive heaps of iron slag immediately east of the town indicating iron making and working, carbon-dated to c514 BC – c210 BC.

#### Musawwarat es-Sufra

The site of Musawwarat es-Sufra, the Kushite Aborepe lies around 40km south of Meroe, 35km east of the Nile at the head of the Wadi el-Banat in the Keraba region. With Naqa, it was serviced by the port of Wad ben Naqa, on the east bank of the Nile, where there are the

remains of an enormous palace, together with two temples and a town.

The ruins of Musawwarat es-Sufra are located in a large basin surrounded by low sandstone hills.

The main features of the site include the 'Great enclosure', the 'Small enclosure', the Lion Temple, the Great reservoir (Hafir), a smaller reservoir, quarries, minor temples and other structures. An additional reservoir lies further away up the wadi.

The large temple complex, known as the "Great enclosure" may have been a pilgrimage centre or a royal palace.

It covers an area of 55,000sq m. Constructed in sandstone, it comprises individual buildings, store rooms, workshops, kitchens, walled enclosures, and ramps. It exhibits eight major phases of rebuilding dating from the Napatan period onwards. There are also remains of a building which may have been a temple or possibly the royal throne room (Temple 100), adorned with reliefs; a pottery workshop and a garden irrigated from the Great reservoir. Most of the walls of the complex bear graffiti both pictorial and in Meroitic script, including many representations of elephants, and masons' marks in both Meroitic and Greek.

The Small enclosure lies a short distance away and covers an area of around 1,883sq m. Built in sandstone and red brick, it comprises a courtyard surrounded by 34 rooms. It has been identified as the seasonal residence of the king of Kush.

The Lion Temple dating from the 3<sup>rd</sup> century BC is located to the east across the wadi from the Great enclosure. Built in sandstone it is a single chambered temple with six columns. Inscriptions are in Egyptian hieroglyphs including reference to Apedemak as "lord of Apa and the lord of Musawwarat". The lower parts of the columns bear reliefs of griffins and lions, and other parts of the temple depict lions and elephants in relation to a representation of the king before Apedemak and his consort. The temple had collapsed outwards in antiquity; when excavated in the 1960s it was found possible to re-erect the blocks accurately from where they had fallen and a new roof was constructed for the temple.

The Great reservoir (Hafir) is 250m in diameter and excavated 6.3m into the ground.

Recent excavations have led to the discovery of a pottery workshop for the manufacture of fine Meroitic ware and the remains of an extensive garden complex in one of the eastern courtyards, possibly irrigated through pipes from water tanks supplied from the Great Hafir, located several hundred metres to the east, via an aqueduct.

## Naqa

The third site, Naqa, the Kushite Tolkte lies around 15km south of Musawwarat es-Sufra and 35km east of the Nile and covers an area about 1km long by 600m wide.

The main features of the site include the Lion Temple, theiosk, the Amun temple, the small temple, the temple of King Amanahakharem, a circular structure, a large reservoir (hafir) on the southern side of the site, quarries to the east of the site and a vast cemetery of large stone tumuli on the northern side of the site which has not yet been excavated.

The greater part of the settlement remains unexcavated. Naqa also contains a 60m deep well dug during the Anglo-Egyptian Condominium in 1904. This is frequented by large numbers of nomads with their camels, sheep and goats.

The Lion Temple (Building 300) lies on the western side of the site; a single-chambered temple built in sandstone blocks, it is preserved to almost its original roof height and dated to the 1<sup>st</sup> century BC. The reliefs indicate that one side of the temple was associated with Apedemak and the other with Amun.

Theiosk (Building 361) is a small rectangular sandstone structure preserved almost to its roof level, standing a few metres to the east of the Lion Temple. Architectural and decorative elements show Pharaonic Egyptian, Hellenistic and local artistic influences and the building is thought to be a shrine to the goddess Hathor.

The Amun Temple (Building 100) stands to the east of theiosk. It is built of sandstone, red brick and mud brick. It is approached from the west by a long ramp lined each side with six ram figures interrupted in the centre by a sandstone kiosk. Two columned halls precede the triple sanctuary. A thirteenth ram at the rear wall of the sanctuary may mark the beginning of an avenue leading to the mountain or to another temple. The preserved Meroitic hieroglyphic scene legends distinguish four Amun gods. The sanctuary chamber is built of stone and floored with stone slabs. On both sides reliefs depict a procession of Nile gods behind the king and queen towards the back of the chamber where two representations of Amun are seated. The temple was apparently destroyed by an earthquake.

The small temple of Queen Shanakdakhete (Temple F) is located close to the base of Gebel Naqa. It was dedicated to the ram-headed Nubian Amun. The earliest known inscription in Meroitic, the indigenous language of the Kushites, runs around the niche in the centre of the back wall of the temple.

### History and development

From the 4<sup>th</sup> century BC onwards, Kushite royal activity was concentrated to some extent in the Island of Meroe, the fertile region bounded by the Nile, the Blue Nile and the River Atbara. Meroe became the site of royal burials from the 3<sup>rd</sup> century BC. Previously the rulers had been

buried at el-Urru, a few kilometres downstream from Gebel Barkal, then at Nuri and at other nearby sites. Scholars have suggested that the reason the centre of royal activity moved south may have been an invasion of Napata by the 6<sup>th</sup> Dynasty Egyptian pharaoh Psammetik II at the beginning of the 6<sup>th</sup> century BC.

The kingdom of Kush collapsed, possibly due to invasion by the Axumites and foreign tribes towards the middle of the 4<sup>th</sup> century BC. The country was converted to Christianity in the 6<sup>th</sup> century and three Christian kingdoms were established in the Middle Nile region. Burials in the Western Cemetery at Meroe date to the 6<sup>th</sup> century, but contemporary occupation within the Royal City has not been noted and the site appears to have been abandoned from that period until it was rediscovered by James Bruce during his travels through the area in 1772. Burckhardt noticed the ruins in 1814 and they were subsequently described by French scholars Frédéric Cailliaud and Linant de Bellefonds in 1821 and the British traveller George Hoskins in 1833. In 1834 the Italian adventurer Giuseppe Ferlini decapitated a number of pyramids in his unsuccessful search for ancient treasures. The Royal Prussian expedition led by Carl Richard Lepsius undertook the first scholarly investigation in 1842-4. John Garstang's excavations 1910-14 confirmed Bruce's identification of the site as Meroe. He uncovered large areas of the settlement and parts of the Western Cemetery. His work was followed by that of George Reisner who excavated three pyramid fields less than ten years later. Musawwarat es-Sufra and Naqa were similarly discovered and visited by early travellers and scholars. Work since the early 20<sup>th</sup> century at the individual sites is detailed below:

### Meroe

The site of the Royal City became overgrown with acacia trees in the decades following the first periods of excavation in the early 20<sup>th</sup> century. The antiquities area was fenced and left until the 1960s when large sections were excavated by the universities of Calgary and Hartoum, and again in 1992-93 by the Humboldt University, Berlin. A shelter building was erected over the excavated remains of the Royal Baths at the beginning of the 20<sup>th</sup> century and renewed some decades later but is causing problems to wall paintings due to inadequate roof drainage and poor ventilation.

Windblown sand is causing ongoing erosion to the pyramids with their funerary chapels, and has increased in recent decades. From 1975 a number of buildings were dismantled and rebuilt under the direction of Dr. Hinkel. Up to 1999, fourteen chapels had been restored and roofed using the original blocks or prefabricated replacements.

### Musawwarat es-Sufra

First mentioned by Linant de Bellefonds in 1822, the site was subsequently visited by Frédéric Cailliaud a few months later. The first scholarly description was by Lepsius and the first archaeological excavations were undertaken by the Butana expedition of Humboldt

University Berlin in the late 1950s and 1960s directed by the late Professor Hintz, and later in the 1990s and early 2000s. Humboldt University is still active in its research and protection program at the site.

However damage has occurred to all structures due to windblown sand erosion, rainwater runoff, the activities of sheep and goats and uncontrolled access by tourists.

The Great Hafir has been partly dug out in an attempt to restore its original function as a reservoir, exposing archaeological deposits in its interior which are now eroding.

Excavated walls of the Great enclosure have been consolidated using a mixture of sand, earth and lime. Others have been supported by structures of burnt brick. In front of the central temple, columns and bases bearing reliefs have been enclosed in walls of burnt brick for protection from erosion by wind-blown sand.

The Lion Temple was dismantled and re-erected under the direction of Dr. Hinkel; missing wall parts were constructed in burnt brick, plastered and coloured; the sandstone masonry was chemically consolidated and the temple was fenced. Defects in the modern roof have led to deterioration of the walls and interior reliefs of the temple.

The 1960s excavation of a small temple (IIA) suffered from rain damage and was roofed with a metal construction to protect against rain and grazing goats. To protect against damage from windblown sand, the walls of the protective structure are covered with reeds which are renewed periodically.

The excavated building complex IIIB was enclosed with burnt brick walls and filled with sand to protect against wind erosion and water runoff.

#### Naqa

Like Musawwarat, the site was visited and described by 19<sup>th</sup> century travellers and scholars who passed through the region. Lepsius mapped the site topographically. In the early 1980s, scholars from the University of Tübingen (Germany) copied the reliefs and inscriptions of the Lion Temple. Since 1996, the investigation and conservation work on the site has been undertaken by the archaeological mission of the Egyptian Museum of Berlin. The Egyptian 'iosk' is well-preserved and there are substantial remains of the Lion Temple, Temple of Amun and Temple F. The rams flanking the processional way to the Lion Temple have been re-erected on their bases. The painted stone altar has been cleaned, consolidated and buried in sand for protection, as have decorated blocks from Temple 200.

### 3 Outstanding universal value integrity and authenticity

#### Comparative analysis

The State Party makes comparison with the Egyptian World Heritage property containing Pharaonic pyramids (Memphis and its Necropolis – the Pyramid Fields from Giza to Dahshur, 1979, criteria (i), (iii) and (vi)) and argues that nowhere else in the world are there royal cemeteries in which all the many tombs are in pyramidal form. The State Party argues also that the Meroitic pyramids are much smaller and more steep-sided, and should be seen as a sub-set of the overall pyramid form.

ICOMOS notes that comparison could also be made with other World Heritage properties containing funerary monuments and temples in the region such as the Nubian Monuments from Abu Simbel to Philae (1979, criteria (i), (iii) and (vi)), which are however examples of a different category of monumental architecture, being so much grander in scale; and the Pharaonic temples in Upper Egypt from the Ptolemaic and Roman periods on the Tentative List for Egypt, which do not however, combine the eclectic influences visible in the temples at the Meroe sites.

The State Party also compares the property with the Gebel Barkal and the Sites of the Napatan region (2003, criteria (i), (ii), (iii), (iv) and (vi)) World Heritage listed sites and argues that the Meroe sites are complementary to that property, representing the later and fully developed Kushite kingdom. This is supported by the evidence of more developed structures reflecting Hellenistic influences as well as Egyptian and African in the architecture, decoration and iconography, and representing an extensive network of social, religious and commercial contacts.

ICOMOS considers that what is not justified in the comparative analysis is the selection of sites. Meroe, Musawwarat es-Sufra and Naqa are the three main centres of the later Kushite kingdom. However as the wealth of the settlements was based on trade, links with the river and its traffic were essential. The port for both Musawwarat es-Sufra and Naqa was Wad ben Naqa directly on the river Nile. This has not been included and there is no description of it or justification for its absence. The port's remains cover an extensive area and include a large palace, and temples, some of which have been recently excavated. One is in the form of a perfect circle and originally would have been beehive shaped. A second temple has provided evidence to show that it could have been associated with the Lion god.

If the nominated property is to reflect fully the wealth and influence of the kingdom and the way it functioned, then consideration should be given to including this port.

An extended comparative analysis is needed to show how the three nominated sites relate to other sites in the area including the port of Wad ben Naqa.



ICOMOS considers that the three sites together demonstrate the development of the Kushite civilisation at the height of its power. Further analysis is needed to understand whether they on their own demonstrate fully its extent and its relationship with the Nile.

---

ICOMOS considers that the comparative analysis justifies consideration of sites reflecting the Kushite kingdom on the World Heritage List, but considers that the comparative analysis should be augmented to relate the three nominated sites to other remaining sites of the Kushite kingdom, particularly Wad ben Naqa, in order to understand whether this needs to be included in the nominated property.

---

Justification of Outstanding Universal Value  
The nominated property is considered by the State Party to be of Outstanding Universal Value as a cultural property for the following reasons:

- The Island of Meroe is the heartland of the kingdom of Kush, a major power in the ancient world from the 8<sup>th</sup> century BC to the 4<sup>th</sup> century AD. Meroe became the principal residence of the ruler and from the 3<sup>rd</sup> century BC onwards it was the site of most subsequent royal burials.
- The nominated sites comprise the best preserved relics of the kingdom of Kush, including pyramid tombs, palace and domestic buildings, temples with relief decoration and iconography, shrines, water reservoirs, quarries and evidence of ironworking.
- The wide range of architectural forms and environments testify to the wealth and power of the Kushite state and its contacts with the Mediterranean and Middle Eastern worlds.

The State Party states that the serial approach is necessary to cover the wide range of architectural forms and environments that together demonstrate the extent and development of the kingdom of Kush. Meroe was the capital city located on the Nile. Naqa and Musawwarat es-Sufra represent the spread of settlement away from the Nile.

ICOMOS considers that the three sites do reflect that best standing remains from the Kushite kingdom but that the three together do not fully testify to the way the kingdom was linked by the river Nile to the Mediterranean and Middle Eastern worlds – the artery through which it gained wealth from trade. Further analysis is needed to show whether Wad ben Naqa could contribute to justifying the full extent of the kingdom.

#### Integrity and authenticity

##### Integrity

ICOMOS notes that the sites selected are the remains of what were the capital city of the Kushite kingdom (Meroe) with its religious buildings, reservoirs and associated extensive royal burial ground of pyramid

tombs, and the kingdom's two largest hinterland centres: the religious centre at Musawwarat es-Sufra and the urban centre at Naqa. Together they provide evidence of the size, and influence of the Kushite civilisation at the height of its power. However without the port city of Wad ben Naqa the trade routes that linked the three cities to the Mediterranean and the Middle East cannot be fully understood.

According to the State Party, the integrity of the three sites: the two parts of the Meroe site, Musawwarat es-Sufra and Naqa, conforms with the requirements of the Operational Guidelines for the Implementation of the World Heritage Convention because they have not been subject to inappropriate interventions of any significance since their abandonment and their places in the natural landscape have not been compromised or degraded.

ICOMOS considers that for Meroe, while nearly all key attributes that reflect outstanding universal value are included within the property boundary, a small unexcavated part of the Royal City beneath the now abandoned settlement of Deraqab should be included also, because it has future research potential to contribute to the understanding of the property.

Many features of the component sites have deteriorated over the course of time, pyramids have collapsed and a number were partly demolished by the treasure-seeking activities of Ferlini in 1834. Wind erosion as the result of desertification over the past 40 years has gradually erased reliefs, particularly in the Sun Temple and also from pyramids.

The main north-south highway linking Khartoum and Port Sudan, which separates the two parts of the Meroe site is a visual and auditory intrusion and impacts negatively on the integrity of the property, as does the line of high voltage power transmission lines. Two pipelines run north-south along the ground through the property some distance east of the highway; one has cut through the old hafir. The railway passes through along the western side of the property, metres from the entrance to the Royal City. Its line was cut through a large slag heap. About two trains pass per day. The tracks have been replaced recently and it is said the line will be doubled in future.

There is some settlement in unobtrusive buildings in the western part of the property, together with guard houses and the University of Khartoum excavation house (Garstang's house). Some government structures, in particular an unfinished guest house located between the Southern and Western Cemeteries, and the unfinished museum to the east of the Northern and Southern Cemeteries have a detrimental impact on visual integrity. The Royal City ticket office is blocking the view along the fundamental west-east axis of the Temple of Amun, which connects the Royal City to the pyramids.

In order to meet the conditions of integrity, there needs to be a definite timetable for the re-routing of the highway, transmission lines and pipelines around the outside of the property to the east; subject to satisfactory impact assessments, the removal of the unfinished guest house, unfinished museum and the ticket office blocking the alignment view at the Amun temple; no new settlement housing should be allowed; and strict controls should be applied to the location, design and materials of excavation houses, guard houses, site museums, visitor centres/facilities, access tracks, waste management, utility services, and signage. Other existing structures need attention to camouflage.

The buffer zone is adequate for the most part but includes only one of the northern hills. The southern flanks of these hills are all in clear view of the property and offer opportunity for visual impact on its integrity as demonstrated by the small lodge built only a few years ago, just inside the buffer zone to the north of the Northern Cemetery.

The buffer zone should be extended to include the south flanks of the northern hills and strict controls should be applied to the location, design and materials of any new structures in the buffer zone. Existing structures need attention to camouflage.

ICOMOS considers that for Musawwarat es-Sufra, the property boundary and buffer zone are adequately drawn. The integrity of the archaeological landscape is impressive. Efforts are being made to prevent damage from wind and human activity. Modern buildings include the newly built rest house close to the Small Enclosure, a small guard hut close to Temple IIA, and a few modest guard houses to the east of the Great Enclosure. The new rest house, which was built with government funds without the knowledge of the Antiquities authority, is now obscured by vegetation, but this lush, green irrigated vegetation stands out in the semi-arid basin.

ICOMOS considers that for Naqa the nominated property encompasses the whole site. There is no habitation in the area other than that of the guards and the excavation house, leaving the archaeological site intact. Wind erosion has not yet had as much impact as seen at Meroe. In addition there are several mounds and numerous tumuli that remain untouched, awaiting possible future excavation. The bright, obtrusive police office at the present entrance to the site, at the edge of the property, impacts on the site's visual integrity and needs attention to camouflage. The well, established under General Gordon, while not an attribute of OUV continues to be used by pastoralists and helps maintain community support for the site.

In considering the integrity of the whole property, this brings into focus whether the three sites can fully reflect the full extent of the Kushite kingdom and its trade and cultural exchange or whether the port of Wad ben Naqa should be included and further analysis is needed to address this.

## Authenticity

The State Party states that the authenticity of the sites is in conformity with the requirements of the Operational Guidelines, arguing that while the partial demolition by Ferlini in the 1830s was undeniably very deleterious to a small number of pyramids in the Meroe cemeteries, the overall appearance of the cemeteries has survived. In relation to the restoration that has been carried out since the mid 20<sup>th</sup> century, the State Party argues that while the materials and techniques employed do not in certain instances conform with current conservation principles and practice, which have made considerable advances since these works were carried out, the precepts of the Venice Charter (1954) and the Nara Document (1995), and the concept of anastylosis have not been violated. Two or three small pyramids have been completely rebuilt, with a didactic purpose, in order to demonstrate how they would have appeared in antiquity.

ICOMOS considers that at Meroe, archaeological research activities primarily by foreign scholars since the late 19<sup>th</sup> century have left extremely large spoil heaps, particularly in the Western Cemetery and the Royal City, which impact on the setting and adversely affect site drainage in some areas. Conservation works to the pyramids and temples have involved more reconstruction (in the Burra Charter sense of introducing new material), than in situ stabilisation or restoration (where new material is not introduced) or true anastylosis. However the whole history of archaeological discovery and the developing approach to it can be told at this site from 18<sup>th</sup> century European adventurers, travellers and treasure hunting, through the mid-19<sup>th</sup> century scholarly endeavour of the Royal Prussian Expedition, early 20<sup>th</sup> century archaeological excavations of John Garstang, mid 20<sup>th</sup> century excavations by the Universities of Calgary and Hartoum through early approaches to conservation up to the present day. While this aspect of the site is not an attribute of OUV as a Kushite site, it is nevertheless one to take into account in considering authenticity, given that the number of features restored' so far is said to be small. The work to the Royal Baths and pyramid temple/porches using brickwork which is difficult to distinguish from the original could be interpreted as part of telling the overall story of the site, and is not an issue so long as it is not repeated.

ICOMOS considers that what is necessary is a review of previous treatment approaches and development of a conservation strategy in line with current best practice.

At Musawwarat es-Sufra, ICOMOS notes that new wall construction around the Lion Temple and the raising of the north wall of the Great Enclosure were apparently undertaken as protective measures. They need to be assessed in relation to their performance in this regard and reviewed in the light of current best practice. Apart from these elements, the Lion Temple has been reconstructed using new material, Temple 100 has been excavated and undergone some anastylosis and the hafir has been subject to archaeologically unsupervised

re-excavation, in order to restore its original function as a perennial water source for pastoralists' live stock. All of these impact to a degree on authenticity.

Again, what is necessary is a review of previous treatment approaches and development of a conservation strategy in line with current best practice.

At Naqa, ICOMOS considers that the authenticity of this site is high, although the Amun Temple has undergone some reconstruction using new materials. The Lion Temple and the 'iosk' have been reassembled by anastylosis in the Venice Charter sense rather than by reconstruction using new materials.

In terms of authenticity of the whole property, and its ability to reflect all the necessary attributes of the proposed Outstanding Universal Value, ICOMOS considers that further analysis is needed to understand whether the port of Wad ben Naqa is needed in order to understand better the relationship with the river and trade routes that led to the substantial cultural exchanges that are reflected in the property.

In conclusion, ICOMOS considers that the conditions of integrity have been met for the individual sites but that more analysis is needed to understand how the port might contribute to the integrity of the whole property. The conditions of authenticity have been met for individual sites but with the proviso that future conservation reflects an agreed strategy based on a review of past conservation practices. There is a small boundary adjustment at Meroe and a timetable needs to be set for the diversion of infrastructure and removal of structures at Meroe. For the whole property, whether the authenticity could be strengthened through the addition of the port needs to be established.

#### Criteria under which inscription is proposed

The property is nominated on the basis of cultural criteria (ii), (iii), (iv) and (v).

Criterion (ii): exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design;

This criterion is justified by the State Party on the grounds that the archaeological sites of the Island of Meroe provide a detailed insight into the exchange of ideas between central Africa and the Mediterranean world along what was the major corridor to and from Africa over a very long period during the ancient world. The interaction of local and foreign influences is demonstrated by the architecture, art, iconography, religion and language.

ICOMOS considers that foreign influences are reflected in the architecture, decoration and iconography and reflect the contact the kingdom had with the Mediterranean world and Arabia as a result of its

extensive trade. In order to fully justify this criterion it would be necessary to understand how there might have been an inter-change of values resulting from the trade and for this it would appear to be desirable to include its port on the Nile. Further analysis is needed to address this issue.

---

ICOMOS considers that this criterion has not been fully justified at this stage.

---

Criterion (iii): bear a unique or at least an exceptional testimony to a cultural tradition or to a civilisation which is living or which has disappeared;

This criterion is justified by the State Party on the grounds that all aspects of the Kushite civilisation were largely expunged by the arrival of Christianity on the Middle Nile in the 6<sup>th</sup> century C . The nominated sites with their wide range of monument types, well preserved buildings, and potential for future excavation and other avenues of research are unique testimony to this, perhaps the greatest civilisation of sub-Saharan Africa.

ICOMOS considers that the testimony is exceptional rather than unique, given the Gebel Barkal and Napatan sites. ICOMOS considers that the nominated sites with their wide range of monument types, well preserved buildings, and potential for future excavation and other avenues of research contribute to an exceptional testimony to the wealth and power of the former Kushite state and its extensive contacts with the African, Mediterranean and Middle Eastern worlds. However consideration should be given assessing how the port might contribute to the nominated property.

---

ICOMOS considers that this criterion could be justified but consideration should be given to assessing whether the inclusion of the port would give a more complete picture of the scope and extent of this trading kingdom.

---

Criterion (iv): be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history;

This criterion is justified by the State Party on the grounds that the pyramids at Meroe are outstanding examples of this highly distinctive Kushite funerary monument, and their intimate association with the well preserved remains of the urban centre is noteworthy. The evidence for iron-working is of considerable importance for studying the role of Meroe in the diffusion of metal-working technology in sub-Saharan Africa.

At Naqa, the 'oman 'iosk', with its juxtaposition of architectural and decorative elements from Pharaonic Egypt, Greece and Rome as well as from Kush itself, and the Lion Temple, which preserves superb reliefs of the Kushite gods and royalty, are of especial importance.

Musawwarat es-Sufra is a unique architectural ensemble with temples, courtyards, and domestic buildings, as well

as major installations connected to water management, quarries and industrial areas.

For this criterion to be fully justified there needs to be consideration of including the port within the boundaries.

---

ICOMOS considers that this criterion has not been fully justified at this stage.

---

Criterion (v): be an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change;

This criterion is justified by the State Party on the grounds that the major centres of human activity far from the Nile at Musawwarat es-Sufra and Naqa raise questions as to their viability in what is today an arid zone devoid of permanent human settlement. They offer the possibility, through a detailed study of the palaeoclimate, flora, and fauna, of understanding the interaction of the Cushites with their desert hinterland.

ICOMOS considers that the sites on their own do not demonstrate how communities were sustained through interaction with the landscape. More extensive areas could perhaps display this evidence.

---

ICOMOS considers that this criterion has not been demonstrated.

---

---

ICOMOS considers that the serial approach is justified but the full extent of the serial needs further assessment.

---

---

ICOMOS considers that the nominated property has the potential to meet criteria (iii) and (iv) but recommends that further assessment is needed to assess the contribution of the port of Wad ben Naqa to the potential Outstanding Universal Value and that an extended area at Meroe is nominated.

---

#### 4 actors affecting the property

##### Development pressures

Urban expansion is a potential threat to the integrity of the site of Meroe. There appears no potential for this to occur at Musawwarat es-Sufra or Naqa.

ICOMOS notes that there are sufficient means to control such development as long as the Antiquities authority (NCAM), the local authorities and local communities hold regular meetings to discuss development plans. Uncontrolled development by other government departments at Musawwarat es-Sufra and Naqa has been successfully halted.

The plateau to the east of the pyramids at Meroe is rich in minerals, especially iron ore, and it is stated in the nomination dossier that it could be subject to mining in the future.

ICOMOS considers that mining so close to the property, with the need for associated infrastructure and increased traffic, could be a major threat to the property.

##### Tourism pressures

The number of tourists and visitors is not high, around 6,000 annually over the past two years. The three sites can be easily visited in a one day return trip from Khartoum. Several tourist companies organise trips to the region normally in the period from mid-October to the end of March. There are two small hotels in the neighbourhood of the Meroe pyramids, and a larger hotel in the town of Shendi, 60kms from the sites. A site museum is being built near the pyramid fields at Meroe and a small museum has been opened in collaboration with the University of Humboldt, Berlin, inside the Great Enclosure at Musawwarat es-Sufra. A project for a museum at Naqa is being considered in collaboration with the Archaeological Mission of the Egyptian Museum, Berlin.

There is no central ticketing office, information centre, adequate and functioning toilets, interpretative panels and brochures, trained guides or established trails.

Some damage to the property is attributed to tourists including graffiti and damage to the stonework, and litter. Many archaeological features not represented by standing walls such as the workshop areas, cemeteries, habitation sites, and the smaller hafirs are constantly endangered by tourist cars and other vehicles driving over the sites.

The River Nile State has no comprehensive tourist plans. The current priority for the River Nile State is infrastructure and rural development. Currently under the Transitional Constitution based on the Comprehensive Peace Agreement between the South and the North, revenue from tourism at the sites should be shared between the National Corporation of Antiquities and Museums (NCAM) and the Department of Tourism in the River Nile State.

ICOMOS notes that the impact of tourism is already visible in the form of graffiti on the sandstone structures, and considers that the State Party's approach based on education and information is insufficiently rigorous. ICOMOS recommends compulsory guiding as a solution, since the property is so large that in order to guard the sites adequately one would currently need more guards than one would need guides if they were mandatory.

##### Environmental pressures

Desertification and wind erosion are the main threats, especially to the pyramids of Meroe. Some parts of the Meroe town site, Musawwarat es-Sufra and Naqa

occasionally suffer from summer rains. A drainage system is needed at several monuments.

ICOMOS considers that desertification and wind erosion are the main threat to the sites. The abrasive effect of the wind has almost completely faded the reliefs of the Sun Temple at Meroe. If this level of destruction were to happen to the whole property, the Outstanding Universal Value would undoubtedly be at risk. The current approach by the State Party is to leave some pyramid chapels at Meroe covered in sand to avoid further exposure. An acacia plantation to the north-east of the Northern Cemetery at Meroe is being considered, but it is doubtful whether such a plantation would be sufficient. The complete Meroe property may need to be fenced in order to allow ecological recovery such as that which can be observed in the Royal City.

#### Natural disasters

A small section of the Meroe town site on the western boundary of the property is vulnerable to flood from the Nile river. It has flooded four times in the past 60 years.

ICOMOS notes that this threat is being addressed by the Antiquities authority (NCAM) in collaboration with international partners.

#### Impact of climate change

Increasing desertification is leading to an increasing rate of erosion by windblown sand. Indications are that the climate has become gradually drier from Neolithic times onwards. However faunal and floral evidence indicates a higher rainfall at the time of the Kushite kingdom by comparison with today's climate in central Sudan. The present desert environment is partly the result of over-exploitation of the natural resources such as over-grazing and wood-cutting. This is demonstrated by the natural re-establishment of an acacia forest within the fenced off Royal City archaeological site at Meroe.

---

ICOMOS considers that the main threats to the property are mining, desertification and wind erosion.

---

## 5 Protection conservation and management

### Boundaries of the nominated property and buffer zone

#### Meroe

The nominated property boundary includes the ancient town, the non-royal and elite cemeteries, the Sun Temple, its associated hafir and the Western elite cemetery. It also includes the Northern and Southern royal cemeteries and the gallery quarry to the east. The modern village of Migiek and the settlement of Deraqab lie outside the boundary.

The buffer zone extends from the hills to the east of the royal cemeteries to the Nile and includes areas to the

north and south of the archaeological remains which are clearly visible from them. At present, the buffer zone is cut through by modern pipelines. The latter are to be redirected in the near future to the east of the buffer zone while the telegraph pole line is no longer in use. The buffer zone also includes the unfinished rest house a little to the east of the Southern Cemetery.

ICOMOS notes that Deraqab to the north should be included in the nominated property as important archaeological remains lie within the village. According to the Management Plan (p. 190) it is included. The feature map provided by the State Party as part of its additional information of October 2010 does not show the boundaries of the property or the buffer zone.

ICOMOS also notes that the buffer zone needs to be extended to include the south flanks of the northern hills. The telegraph poles have been removed since the nomination dossier was written. The pipelines go through the nominated property as well as the buffer zone as shown on the plan of registered archaeological sites between the city area and the stone quarries showing pipeline' (after F.W. Hinkel in Wildung: 408, Fig.64).

#### Musawwarat es-Sufra

The nominated property boundary encloses all the structural remains directly associated with the Kushite activities at Musawwarat es-Sufra as well as the cemeteries adjacent to the site. Several of the quarries are also included. Within the boundary lies the modern compound (Sudan Civilization Institute) with its trees, well, mosque and rest house along with the dig house of the German Archaeological Mission.

The buffer zone extends far from the site enclosing most of the area visible from it, in an attempt to preserve the desert environment.

ICOMOS considers the boundaries of the nominated property and buffer zone are satisfactory but the feature map provided by the State Party as part of its additional information does not show the boundaries of the property or the buffer zone.

#### Naqa

All archaeological features directly associated with the site are included within the nominated property boundary.

The buffer zone seeks to enclose most of the environs of Naqa visible from the site. It is anchored on the three prominent hills, Jebel Hardan, Nasb es-Sami and Jebel Gerai, along with the promontory to the north of Naqa on the right bank of Wadi Awateib. It includes the Kushite remains at Jebel Matruga and at the foot of Jebel Hardan and Nasb es-Sami.

ICOMOS considers the boundaries of the nominated property and buffer zone are satisfactory, but the feature map provided by the State Party as part of its additional

information does not show the boundaries of the property or the buffer zone.

---

ICOMOS considers that the boundaries of the nominated property and of its buffer zones are adequate at Musawwarat es-Sufra and Naqa but are not adequate at Meroe.

---

#### Ownership

The three sites that make up the nominated property are owned by the National Corporation of Antiquities and Museums (NCAM) on behalf of the central government of the Republic of the Sudan. There is no mention of traditional or customary ownership but the Management Plan mentions the need to resolve the situation of some of the inhabitants affected by the delimitation of site boundaries and buffer zones.

#### Protection

##### Legal Protection

At the national level, the three sites that make up the nominated property are protected under article 13 (5) of the Interim Constitution of the Republic of Sudan of 2005.

The property is protected by the provisions of the Antiquities Protection Ordinance of 1999. It is also protected by Presidential Decision/Decree (no. 162 for the year 2003) for the Confiscation of the Region of Naqa, Musawwarat and Begraweya and for the Creation and Register of a National Reserve within this Region and managing it. It is expected that the creation of the proposed Management Committee for the Island of Meroe involving all stakeholders will greatly increase the power of the law, and in particular the physical protection of the property. All components of the property are guarded by civil guards and a police force.

ICOMOS notes that the Reserve declared here encompasses all three sites and their buffer zones. The Reserve is supposed to be overseen by a management council but its effectiveness is doubtful as although it includes both national and state officials, NCAM is not a member of it and it does not convene regularly.

##### Traditional Protection

According to the State Party, traditional and popular interest in the sites and their cultural heritage provides another layer of protection. In many instances this layer is organised under popular committees or cultural clubs operating from the localities surrounding the sites such as at Shendi, Abbushiyya, Begraweya, Ba Naqa and al-Awateib.

ICOMOS notes that there are no traditional forms of protection as such in place.

#### Effectiveness of protection measures

ICOMOS notes that physical protection relies on the power of the formal laws and since the permanent police presence, no more cases of theft have been reported. Fines for graffiti are about USD90 for a first offence, which is high for most Sudanese. There was no evidence of looting, and no evidence of damage due to goats.

The effectiveness of development control within the nominated property and buffer zone fully depends on the local presence of NCAM, and its intervention to enforce the law before any illegal construction begins.

---

In conclusion, ICOMOS considers that the legal protection in place is adequate.

---

#### Conservation

##### Inventories, recording, research

According to the nomination dossier, archaeological research has been undertaken at Meroe since 1910, Musawwarat es-Sufra since the late 1950s and Naqa since the 1980s by various institutions, mostly foreign, and has been published in numerous journals as listed in the nomination dossier's Bibliography.

Research, recording and conservation works are currently being undertaken at the three sites by the following institutions:

Meroe town site: Ontario Royal Museum and the University of Khartoum;  
Meroe Royal Baths: the German Archaeological Institute;  
Musawwarat es-Sufra: Humboldt University, Germany;  
Naqa: The Egyptian Museum of Berlin.

ICOMOS notes that there is no overall inventory of individual building remains/sites. It is not clear that copies of all the data gathered by the excavation teams are deposited in Sudan.

ICOMOS considers that an overall inventory of the elements of the sites that comprise the Outstanding Universal Value of the property should be compiled as a basis for an overall conservation and monitoring program.

Material from the excavations is held in the collections of the Sudan National Museum, as well as in foreign institutions that funded the various excavation programs, and the Department of Archaeology of the University of Khartoum. Some material is stored at the Meroe dig house and in the site museum.

##### Present state of conservation

The State Party states that there has to date been some restoration and reconstruction of the remains (as detailed above) using a variety of methods at all three

sites. The lack of sufficient qualified NCAM staff and no overall site director/co-ordinator is not conducive to a consistent approach. A few pyramids and funerary chapels were reconstructed by NCAM under the direction of the late Dr. F. Hinkel. The Photographic record of rapid Condition Assessment attached as an Annex to the Management Plan documents the present state of conservation. This is described in Section 5 of the Management Plan as a state of ongoing slow deterioration of the archaeological remains due firstly to exposure to the harsh effects of the natural environment, and secondly to erratic and in some instances ineffective regimes of maintenance which address only specific elements of the sites.

ICOMOS concurs with this view.

#### Active Conservation measures

##### Meroe

The Ontario Royal Museum and the University of Hartoum are undertaking comprehensive surface and geophysical surveys, mapping unexplored parts of the site and are studying previously excavated buildings such as the Temple of Amun including undertaking its partial reconstruction. They also propose many conservation measures for the site. ICOMOS considers that all proposals for the site should be planned in accordance with the overall conservation policy and management plan for the property.

##### Musawwarat es-Sufra

Since 1993 detailed photogrammetric documentation has been undertaken of the Great enclosure and a survey of the state of preservation (with involvement of ICC OM); courtyards have been cleared of excavation spoil and a shelter belt has been planted to protect against sand and wind erosion. Sand dunes have been removed from courts and terraces to prevent damage from water runoff; dikes have been built to prevent flooding from the north-westerly hills. A parking area has been established south of the Great enclosure.

Similarly since 1993 a detailed survey of the state of preservation of the Lion Temple and its roof has been undertaken (with involvement of ICC OM). Depressions beside the temple pylon that accumulated water and destabilised the ground beneath have been filled and a concrete floor has been laid to the north and south of the pylon in order to protect its foundations from rainwater. The shelter belt has not been successful due to lack of constant watering. The Humboldt University mission proposes a number of conservation measures for the site. ICOMOS considers that all proposals for the site should be planned in accordance with the overall conservation policy and management plan for the property.

##### Naqa

The archaeological mission of the Egyptian Museum, Berlin proposes excavation, conservation and consolidation of the 'Naqa' (Hathor Chapel),

temple 400 and selected buildings in the city. The aim is to create an Archaeological Park. ICOMOS considers that all proposals for the site should be planned in accordance with the overall conservation policy and management plan for the property.

#### Maintenance

ICOMOS notes that there is no central maintenance of the sites beyond what is done by the individual archaeological missions. A maintenance program should be included in the Management Plan.

##### Effectiveness of conservation measures

As reported in the Management Plan, there is currently no overall conservation approach and the sites suffer from ineffective maintenance. A Conservation Plan is proposed by the State Party as part of the Management Plan.

ICOMOS considers that an overall conservation approach and agreed conservation policy for the property is an urgent priority. Past conservation practices and protection attempts need to be reviewed and assessed for their efficacy and current international conservation philosophies and practices at archaeological sites need to be investigated in terms of their applicability to the Meroe sites. A Conservation Plan for the overall property needs to be developed, so that conservation actions will be properly co-ordinated and follow good conservation practice.

---

In conclusion, ICOMOS considers that a Conservation Plan with an agreed conservation policy covering the three component sites needs to be developed as part of the Management Plan for the property. All proposals for works at any of the sites should be planned in accordance with this overall conservation policy and Management Plan. On-going maintenance also needs to be structured and agreed between all the archaeological missions.

---

#### Management

Management structures and processes, including traditional management processes

Management of the three component sites is the responsibility of NCAM. NCAM has 409 employees headed by a director general and has three main departments. The Fieldwork Section is responsible for archaeological work and co-ordination of foreign missions. Personnel are graduates of national and foreign institutions, together with technical assistants and site guards. The Museums Section organises exhibitions and its personnel include curators who have undertaken intensive training courses in major international institutions. The Restoration Section is responsible for the care of moveable objects in museums/stores and for immovable antiquities. Personnel are graduates in relevant fields and some have participated in ICC OM training courses. Technical

staff has acquired considerable expertise in the dismantling and re-erection of monuments. As well as public relations, library and photographic sections, there is a technical workshop staffed by trained masons, carpenters etc.

At present, responsibility for the three component sites resides with the Antiquities Inspector resident at Shendi, 40km from Meroe and c60km from Musawwarat es-Sufra and Naqa, assisted by four technical staff and over 20 permanent and temporary recruited guards. There is a significant police force on each site. A World Heritage Management Committee is proposed to oversee management of the whole property, and the Chairman of this Committee has already been appointed. An executive World Heritage Site Management Team is proposed under the Management Plan, with an overall Site Director for the whole property, a Conservation Co-ordinator for the whole property, a Site Manager for each of the three component sites, two assistant managers and two technical assistants for each site, a ticket office operator and 10 guards for each site. It is not explained how this additional staff will be funded. Currently funds are provided by the central government and the archaeological missions; however international financial and technical assistance is needed for major projects. This was confirmed in the additional information provided by the State Party in October 2010, which also contained information regarding a proposed collaboration between NCAM and the Istituto Superiore per le Ricerche di Conservazione dei Beni Culturali e dell'Ambiente "Antonio De Stefano" (ISAD). This may address funding and training issues. Euro 1,500,000 has been pledged by the Italian government towards the preservation of Nubian heritage.

ICOMOS considers that the proposed Management Committee, of which the Chairman has already been appointed and which will oversee co-ordinated management of all component sites would satisfy paragraph 114 of the Operational Guidelines. The proposed executive World Heritage Site Management Team should go a long way in redressing current management shortfalls. However the composition of the Team may need fine-tuning in that Meroe may require more staff than the other smaller sites, and a single ticket office operator seems insufficient.

Policy framework: management plans and arrangements, including visitor management and presentation

A draft Management Plan was developed for the property in January 2009 by NCAM. It addresses the characteristics and intricacies of the three component sites and follows the approach appropriate to World Heritage properties. It includes an Inventory of Conservation Problems to be addressed which will assist in quantifying the intervention and resources required for undertaking conservation on the sites in future.

The proposed executive World Heritage Site Management Team will be responsible for implementing the activities of the Management Plan, guided by the World Heritage and other international conventions, and overseen by the World Heritage Management Committee.

ICOMOS notes that the Management Plan is yet to be implemented. It awaits funding and staff.

Risk preparedness

A risk management strategy is included in the Management Plan. The main risks are due to river flooding of the Royal City at Meroe, rainstorm flooding and damage at Naqa and sandstorm damage at Musawwarat es-Sufra. At Meroe flood risk is being managed by the construction of water diversion systems with awareness of the sensitivity of above and below-ground archaeological remains. At Naqa storm water diversion and evacuation are being re-evaluated and improved around the Amun Temple, the Lion Temple and the Roman 'iosk' site. At Musawwarat es-Sufra the reconstruction of enclosure walls and other internal walls is the approach taken to providing protection from sandstorms.

ICOMOS considers that the risk preparedness strategy should also cover visitor/tourist security in the case of emergencies.

Involvement of the local communities

According to the nomination dossier a stakeholder consultation process was used in the development of the Management Plan, including local and national authorities. It is not clear to what extent this involved local communities as such.

ICOMOS notes that only in Meroe is there a local community. Local families have been employed by NCAM to serve as guards; the positions are inherited from father to son, promoting a certain degree of family pride and commitment towards the sites.

According to the Management Plan, an Advisory Committee will be set up, headed by NCAM and consisting of representatives of the main stakeholders with influence over the site. The Committee will oversee the implementation of the Management Plan and the proper spending of funds coming from donors. The Committee will meet quarterly with the executive World Heritage Site Management Team.

ICOMOS notes that currently there is no form of interpretation or presentation at either Meroe or Naqa. At Musawwarat es-Sufra there is a small museum. Without a guide the visitor would find it difficult to understand the sites.



resources, including staffing levels, expertise and training

According to the nomination dossier there is a great need to develop the status of NCAM and the importance of its work in managing the cultural resources of the country. Low salary levels restrict the agency's ability to recruit and retain qualified personnel. The proposed Advisory Committee will need to find sources of financial support for positions needed for the protection, management and promotion of the serial nomination. The development of cultural tourism is seen as a driver for this, however improved visitor facilities will need to be provided.

ICOMOS notes that NCAM is currently forced to depend on the archaeologists of Shendi University for practical assistance. The University has pledged to assist with training and research. However provided funding is found for the new positions, there should be enough archaeology graduates within the Sudan to fill them.

Effectiveness of current management

ICOMOS considers that there is a great need for a coordinated approach to the management of the sites.

---

In conclusion, ICOMOS considers that completion of the establishment of the Management Committee for the overall property is a high priority, together with funding and implementation of the Management Plan. It should be extended to include a maintenance program for the sites, linked to the monitoring system.

---

## 6 Monitoring

Key indicators for measuring the state of conservation are set out in the Management Plan. These cover the implementation of the policies and related action plans. Currently there is no central monitoring system in place.

ICOMOS considers that the monitoring system needs to be linked to an overall inventory of site features which are attributes carrying the Outstanding Universal Value of the sites.

---

In conclusion, ICOMOS considers that the monitoring system needs to be further developed.

---

## 7 Conclusions

The three sites of Meroe, Naqa and Musawwarat es-Sufra together present an extraordinarily vivid testimony to the distinctive Meroitic culture that flourished for over a millennium from the 8<sup>th</sup> century BC to around the 4<sup>th</sup> century AD around the White Nile. The royal tombs with their pyramidal shape express exuberantly its fascination with the Egyptian culture of the Pharaohs and the elaborate temples demonstrate strong links with the Classical world as well as the underlying culture of

sub-Saharan Africa. The royal city of Meroe was the heart of this kingdom. The other two sites were strategically placed religious sites in the semi-desert and with their hafir provided a focus for the semi-nomadic tribes. What underpinned the prosperity of this kingdom was the extensive trade in luxury goods that supplied cities of the Mediterranean and Arabia, and societies as far afield as Lake Chad in West Africa. What has not been nominated is the port of Wad ben Naqa on the White Nile which was strategically important in facilitating this trade. Further analysis is needed to understand its relationship with the other three sites.

The three nominated sites have been the subject of excavations over many decades and varying approaches to conservation and repair. Currently there is no overall inventory of the sites and not all the material associated with the excavations is within the country. There is an urgent need to collect all the relevant material as the basis for the development of an overall database. This could then support the drafting of a Conservation Plan that sets out an agreed approach to future conservation in line with accepted conservation principles and would underpin adequate monitoring.

The three sites are spread out and large, and managing them and the visitors that visit them presents considerable challenges. There is an urgent need to put in place the Advisory Committee as an over-arching management body that can oversee the implementation of the Management Plan. To achieve this will require extra resources over and above what is currently available.

The three sites are fragile and vulnerable and adequate resources to allow a satisfactory degree of control of management, conservation, excavation and visiting is essential if they are to be properly sustained.

Recommendations with respect to inscription  
ICOMOS recommends that the examination of the nomination of the Archaeological Sites of the Island of Meroe, Republic of Sudan, to the World Heritage List be deferred in order to allow the State Party to:

- Augment the comparative analysis to consider how the three sites relate to other remains from the Kushite kingdom and particularly to the port of Wad ben Naqa as a preliminary to considering extending the site to include this port;
- Extend the Meroe property boundary to include the archaeological remains of the northern part of the royal City;
- Extend the buffer zone for Meroe to include the southern flanks of the northern hills;
- Complete the establishment of the Management Committee, obtain dedicated funding and implement the Management Plan to include a maintenance program for the sites, linked to the monitoring

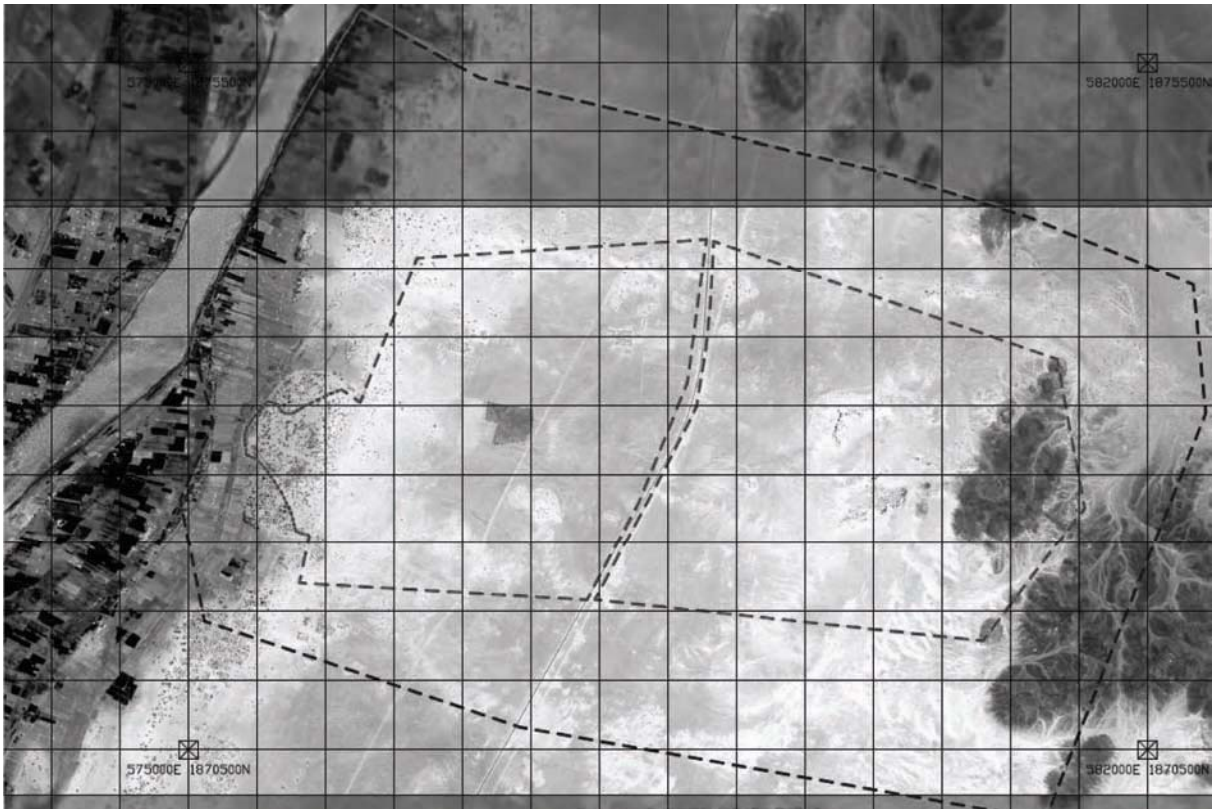
system; and establish mandatory guides for visitors/tourists;

- Develop an overall inventory and database for the sites as a basis for the conservation program and monitoring;
- Develop a co-ordinated Conservation Plan with an agreed conservation policy for the three nominated sites;
- Strengthen protection of the setting of Meroe to ensure that mining in the setting is not allowed where it would impact adversely on the property;
- Provide a timetable for rerouting the highway, power transmission lines and pipelines around the outside of the Meroe site.

ICOMOS considers that any revised nomination would need to be considered by an expert mission to the site.

ICOMOS also recommends that the State Party be encouraged to seek international assistance for the protection and conservation of the property, through the development of the co-ordinated Conservation Plan, in accordance with paragraph 235 (c) and paragraph 241 (Conservation and Management Assistance) of the Operational Guidelines for the Implementation of the World Heritage Convention.

ICOMOS finally suggests that the international community should be invited to consider support for these extraordinary sites and might offer cooperation to help with the development of the co-ordinated data-base and the Conservation Plan.



Aerial photograph showing the boundaries of the nominated property



Meroe, the enclosure wall on the east side of the Royal City



Meroe, North Cemetery facing west





Musawwarat es-Sufra, Aerial view of Temple 100



Naqa, the settlement

---

# Ancient villages of Northern Syria

## Syrian Arab Republic

### No 1348

---

Official name as proposed by the State Party  
The Ancient Villages of Northern Syria

#### Location

Governorates of Aleppo and Idlib  
Provinces of Daret Azza, al-Bara, Maaret an-Nouman,  
al-Loze, al-Hosn and Jisr al-Shoughour  
Syrian Arab Republic

#### Brief description

Located in the vast Limestone Massif in northwest Syria, some forty ancient villages have been selected for the property because of their remarkable state of architectural and landscape preservation. They provide a coherent insight into the rural lifestyles of villagers in late Antiquity and the Byzantine Period. Definitively abandoned in the 8<sup>th</sup> to 10<sup>th</sup> centuries, they still retain a large part of their monuments and original buildings: dwellings, pagan temples, churches and Christian sanctuaries, funerary monuments, bathhouses, public buildings, buildings with economic or artisanal purposes, etc. Grouped within eight archaeological parks, the ensemble forms a series of relict cultural landscapes.

#### Category of property

In terms of categories of cultural property set out in Article I of the 1972 World Heritage Convention, this is a serial nomination of 8 *sites*.

In terms of the *Operational Guidelines for the Implementation of the World Heritage Convention* (January 2008), paragraph 47, it is also a *cultural landscape*, in the *organically evolved landscape* category and the *relict landscape* subcategory.

## 1 Basic data

Included in the tentative List  
28 December 2006

International Assistance from the World Heritage  
Fund for preparing the Nomination  
2007

Date received by the World Heritage Centre  
29 January 2010

#### Background

This is a new nomination.

#### Consultations

ICOMOS consulted its International Scientific Committees on Archaeological Heritage Management, Historic Towns and Villages, Cultural Landscapes, and several independent experts.

#### Literature consulted selection

De Vogüé, M., *Syrie centrale, Architecture civile et religieuse du I<sup>er</sup> au I<sup>er</sup> siècle*, 2 vol., Paris, 1865-1867.

Green, P. T. W., *The archaeology of the Roman economy*, University of California Press, 1986.

Lavergne, M., *L'urbanisation contemporaine de la Syrie du nord, vue du monde musulman et de la Méditerranée*, n° 62, 1992, p.195-208.

Sartre, M., *Villes et villages du Hauran (Syrie) du I<sup>er</sup> au I<sup>er</sup> siècle*, Frezouls (ed.), *Sociétés urbaines, sociétés rurales dans l'Asie Mineure et la Syrie hellénistiques et romaines*, Strasbourg, 1987, p.239-257.

Tate, G., *Les campagnes de la Syrie du nord du I<sup>er</sup> au I<sup>er</sup> siècle. Un exemple de planification démographique et économique*, Paris, 1992.

#### Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the property from 8 to 15 October 2010.

Additional information requested and received from the State Party

ICOMOS sent a letter to the State Party on 22 September 2010 and on 28 January 2011 asking for additional information regarding the following:

- The comparative analysis;
- The selection of sites;
- The current regulatory decisions concerning the property's management;
- The shared management tools and the establishment of the eight archaeological parks;
- The protection of the property's landscape and its surroundings;
- Inventories for each of the nominated zones;
- Major development projects and the possibility of extending the property to include other sites.

The State Party replied with additional information on 24 October 2010 and 16 February 2011. The analysis of this documentation is included in the present report.

Date of ICOMOS approval of this report  
10 March 2011

## 2 The property

#### Description

In the northwest of Syria, close to the Turkish border, lies a long karstic mountainous region called the "Limestone Massif". It is approximately one hundred kilometres long and no more than twenty kilometres

wide. It is located between the Afrin and Orontes valleys to the west, and the Aleppo and Idleb plains to the east. It forms a folded plateau with an altitude of between 400 and 1,000 metres, its relief marked by several *jabals*: Sem'an in the north, and Halaqa, Barisha, al-A'la, Doueili, Wastani and *awiya* in the centre and south. They mark the boundaries between the various sectors of the ancient human settlements.

The region enjoys a Mediterranean climate, in a mid-altitude mountain location conducive to winter rain. The air is very pure. Easily accessible, it was for a long time a region of just passage or grazing, as its agricultural capacity seemed poor compared with the rich neighbouring plains. The geological and hydrological features of an eroded karstic massif determine the landscape's natural features, as well as the Mediterranean vegetation of scattered forests and scrubland often transformed into dry steppe following the passage of grazing flocks.

This naturally somewhat inhospitable region for humans, abandoned for nearly one thousand years since its occupation in ancient times, has long been called the region of "dead cities". However, the term is inappropriate as these are remains of villages reflecting slow rural colonisation. They are often ensembles of peasant houses without any precise order and without suitably identified streets or squares. The public buildings are mainly pagan, later Christian, sanctuaries; sometimes there are bathhouses, as well as economic or social venues. In several cases, the urban fabric is more closely interwoven and monumental elements appear, such as towers, more imposing houses, blocks of adjoining buildings, community buildings, etc.

The first type of village house (2<sup>nd</sup>-3<sup>rd</sup> centuries) is of a unique type that bears no resemblance to the traditional *oman* dwelling. Built quite simply in rubble, it consists of a main rectangular, two-storey building. The large ground-floor room, sometimes split into several rooms, is set aside for work activities, storage and animals. The upper storey is reserved for the family dwelling. The rooms open onto a courtyard enclosed by a wall. These are generally living spaces for relatively small groups of people. Sometimes, there are more complex ensembles, with several buildings around a larger courtyard. These include specialist production rooms, monumental entrances or pillared porticoes.

The 4<sup>th</sup>-5<sup>th</sup> centuries correspond to a population expansion and enrichment of the communities resulting in larger and more refined buildings. These by now include elements inspired by *oman* architecture, built to a high level of quality: walls in regular stone masonry, arches with careful finishes, richly-sculpted architectural elements, grand columns, occasionally mosaics, etc. The dwellings often have underground chambers, either under the main building, or under the courtyard. Their role is similar to that of the ground-floor functional and work rooms. The houses sometimes have pillared galleries and they retain stairs providing access to the

upper level. The production buildings are oil mills, mills, presses, etc. The villages were embellished by square towers several stories high, associated with religious buildings. This is the period of Christianisation and the construction of churches, sometimes very large, convents, baptisteries and numerous funerary monuments (hypogea, mausoleums, monumental sarcophagi, etc.). Finally, the villages from this period often have refined buildings for community purposes, not always precisely established even if they are generally designated as inns. They could also be bazaars, shops, farm produce markets or administrative premises. Relatively sophisticated hydraulic elements have been identified, notably large communal cisterns.

The use of limestone was encouraged by its omnipresence and by its suitability for use as dressed stone. Its use spread to include numerous elements of the buildings, as wood was a more rare commodity. The unity of material and clearly identified types of construction provide the various villages with a pleasing architectural homogeneity.

Farming activity initially involved clearing stones from land designated for crops, followed by the construction of numerous low walls for protection, soil retention and demarcation of plot boundaries in accordance with *oman* rules. These low walls marking out the cultivated areas are still very visible in the landscape today.

The landscape typologies are analysed from geological and geographic features, the natural plant cover on which was grafted human action in the form of the establishment of the villages, and the improvement of the soil. Four landscape models have been identified, corresponding to the regions of the main *jabals*: Sem'an, *awiya*, al-A'la and Barisha, and Wastani. This landscape analysis and the visibility limits are used as the basis for defining the property's eight component sites, based around the selected villages.

The first three parks are located in the northern chain of the Jabal Sem'an in the Governorate of Aleppo, whereas the five others are located in the other chains of the Limestone Massif, in the south and west, in the territory of the Governorate of Idleb.

Park No 1: al'at Sem'an, Jabal Sem'an

The park contains the remains of the great sanctuary dedicated to Saint Simeon the Stylite and his cult, as well as a series of surrounding villages. In particular, the sanctuary includes the large cruciform martyrion church, which was one of the most monumental Christian buildings of its time. In its centre, an octagon surrounds the base of the column at the top of which Saint Simeon spent many years in prayer. It opens onto four lateral basilicas aligned to the cardinal points. The site also includes the remains of a vast baptistery, a monastery adjoining the church and adjacent buildings, and dwellings for those on pilgrimage in the saint's memory.

Among its villages and other remarkable places, Park No 1 includes:

- Deir Sem'an with its inns, a church and a monastery, as well as a vast three-storey residential building.
- The site provides testimony to a site predating Roman occupation and pagan vestiges.
- The Sit al-um ruins, called "Our Lady of the Byzantines", with its vestiges of a church and a Roman tomb.
- Kafadeh is a village with very carefully constructed buildings, using both anti-seismic polygonal stonework and horizontal courses.
- The summit at Sheikh Barakat retains pagan vestiges from the 1<sup>st</sup> and 2<sup>nd</sup> centuries, including a temple.

Park No 2: the second archaeological park in Jabal Sem'an

This park corresponds to a vast agricultural plateau, more or less continuous, especially in the north, but more uneven in the south.

The main sites are:

- Brad is a large town with characteristic landscapes in the northern part of the plateau. It has a monumental tomb, most likely dating back to the early colonisation, and relatively large baths with a large cistern on an uphill slope. It also has vestiges of Byzantine churches and chapels.
- Kafar Nabo, to the south, has a pagan temple and a vast inn in fine orthogonal stonework.
- Borj Haydar, on the summit of a promontory, has a rich religious ensemble with several churches and a convent. An inscription commemorates the land survey of 298.
- Kafalota has some fine houses and two Byzantine churches.
- Kafar Shams dates from the start of the Roman era, but the village above all has two beautiful churches, 4<sup>th</sup> and 5<sup>th</sup> century respectively, the first of which has a colonnaded central nave that is virtually intact.

Park No 3: the third park in Jabal Sem'ane

This park is located in the southern part of the jabal. It has typical Mediterranean vegetation and small olive groves. It is generally used for pasture.

The main villages in Park No 3 are:

- Sinkhar has a dense habitation encompassing the entire period of occupation and provides an illustration of all the regional construction techniques. It also has a church and a chapel, as well as a monumental tomb associated with a dwelling.
- Batouta is a crest village with five or six large widely-spaced dwellings and the remains of a church.

- Sheikh Sliman is a large village in a sparsely populated area, in the heart of a landscape with clearly visible agricultural plots. It has a large slightly cracked tower and several Byzantine churches. Some of the large houses have been reused in the contemporary era.

Park No 4: The first archaeological park in Jabal awiya

Jabal awiya is the southernmost part of the Limestone Massif. It peaks at an altitude of a little over 1,000 metres. It descends in a steep slope westwards, above the Orontes Valley; but its eastern section has a gently sloping and easily accessible plateau. Its farmland is relatively vast and among the mountainous region's most fertile. Only the villages in its northern part have been adequately preserved, as the southern part was occupied until the 12<sup>th</sup> century, at which time an earthquake seriously damaged its built structures.

The villages preserved in Park No 4 are close to each other; they form a homogeneous ensemble dating from the Byzantine Period. The main assets are:

- Serjilla has been known and visited since the 19<sup>th</sup> century. Arranged on either side of a small valley, the village includes large and very well preserved constructions from the early Byzantine Period, such as an inn and baths; it also contains funerary monuments, large sarcophagi, typical dwellings, a large press, Christian sanctuaries, and an immense communal cistern dug into the rock, etc.
- Al-Bara is the large town at the centre of all the villages, the many vestiges of which are spread across an extensive area. It is renowned for its 6<sup>th</sup> century pyramidal tombs, and also has ruins of several churches and three monasteries.
- Wadi Martaoum has several buildings overlooking a wadi and a series of man-made grottoes.
- Mujleya is a large agglomeration with dense habitation. It includes two churches, baths and rich tombs.
- Shinshara has rich houses, the architectural quality of which is very refined.
- Dalloz is a similar agglomeration comprising an ensemble of fine houses.
- The other important villages in Park No 4 are Btirsa, Bshilla, Abi'a and Ba'uda.

Park No 5: the second archaeological park in Jabal awiya

It is located in the eastern part of the jabal. It has two villages, Ouweyha and Jerada, and the land between them retains exceptional traces of the ancient farm plots across several kilometres.

The main elements are:

- The village of Ouweyha has fine widely-spaced Byzantine houses and a denser residential quarter. It has a large Basilica with a tower and the Byzantine Bizzos Church, named after its founder. It was studied



from the 19<sup>th</sup> century onwards and is considered to be the first (6<sup>th</sup> century) example of the use of transverse ribs crossing the main nave in order to reinforce it. It also has several tombs, one of which is in the form of a classical temple.

- The village of Jerada is renowned for its stone tower and 5<sup>th</sup> century church.
- The ancient plan of agricultural plots is characterised by relatively low straight walls marking off the plots in extended rectangles. It corresponds to a later reorganisation.

#### Park No 6: Jabal al-A'La

The jabal forms a narrow plateau corresponding to small but numerous areas of settlement.

The park's main elements are:

- alb Loze Basilica (probably dating from the end of the 5<sup>th</sup> century) is the most important monument in the whole property, after the Saint Simeon Sanctuary. It was described as early as the 19<sup>th</sup> century. Imposing and well-preserved, it is located within an equally well-preserved enclosure. It includes areas with paved roof terraces and monumental entrances. It is at the heart of a village that was re-occupied from the 10<sup>th</sup> century and which has experienced recent development.
- irqbiz village is located on a rocky spur, overlooking the plain to the south. It includes dwellings from the end of the oman era and others from the Byzantine Period, as well as presses. The 4<sup>th</sup> century church is considered one of the region's oldest Christian places of worship. It adopts the typical layout of a building with an enclosed courtyard and entrance portico.
- feir is an isolated village with dwellings from various periods and a richly decorated church. It has many presses one of which is underground.

#### Park No 7: Jabal Barisha

This park has several villages in a characteristic and well-preserved karstic landscape, as the region is virtually uninhabited; it lies close to the Turkish border.

The main villages are:

- Dar ita was an important village in the Byzantine Period. It has three churches with extensive outbuildings, two baptisteries and towers, as well as around forty houses and a community building.
- Deiroune has a monastic chapel of rare decorative quality and it is very well preserved.
- Baqirha is testimony to all the periods of occupation of this region, especially with its 2<sup>nd</sup> century oman temple which dominates the village. It has large houses in fine stonework and vestiges of streets with stairs and ramps, as well as two churches.
- herbet al- hatib has remains of a pagan temple from the 2<sup>nd</sup> and 3<sup>rd</sup> centuries as well as a Byzantine basilica with columns and a baptistery.

#### Park No 8: Jabal Wastani

A majority of the ancient villages in this region were re-occupied. The park corresponds to the northerly part of the jabal, a relatively inaccessible mountainous region. Among the vestiges of dwellings, there are a great many olive and grape presses and numerous cisterns.

The most important sites in Park No 8 are:

- Benasra provides testimony to pagan worship by the ancient Syrian population who cohabited with Christianity: sacred grottoes, a temple and a centre of religious practices. The village has two adjoining churches, built at different periods and with rare architectural details.
- Al-Fassouq has a building at the highest point of the village. Pre-dating oman colonisation, it is in part dug out of the rock. The village has dwellings, a subterranean mausoleum and twin churches like in Benasra.
- afr Aqareb has significant buildings, notably a praetorium of the oman headquarters, a temple and grottoes for pagan worship, a Byzantine basilica and a large communal reservoir on the hill. The surroundings contain vestiges of the oman road that led to Antioch.

The landscapes associated with the village ensembles were formed by the interaction between the farmers of ancient times and their environment. In their synergy with the monumental and archaeological remains, they provide testimonies of complete and well-preserved ensembles. These relict cultural landscapes express the coherency of each of the sites selected as well as the local differentiations. Nonetheless, these landscapes have changed in the course of the occupation of the Limestone Massif, from late Antiquity to the Byzantine Period. This is evident in the architecture, building techniques, the switch from pagan temples on the summits to places of Christian worship in the villages, for the built topography, by the appearance of new types of construction, etc. This is also true of elements of the rural landscape, up until the oman system of plot parcels that definitively established its relief, but which continued to evolve through the choice of crops, such as the development of olives and grape vines in the Byzantine Period. This is therefore a relict landscape, left exactly as it was after being abandoned in the 8<sup>th</sup> and 9<sup>th</sup> centuries.

#### History and development

The Limestone Massif in modern northwest Syria was for a long time an area without notable human settlement, especially in protohistoric eras and for a large part of Antiquity. Its karstic mountainous plateau situation with relatively poor stony soils explains its limited or temporary occupation, and use by semi-nomadic herders. Easily accessed, the massif is located close to plains with fertile and easily-worked soil, both to the east and west, which experienced early urban development, sometimes of considerable extent, such as in Antioch, Apamea, Aleppo and Chalcis.

The situation changed from the 1<sup>st</sup> century AD, during the Roman occupation, because of increased demographic pressure and poor farmers searching for vacant land. Human occupation on the limestone plateau began with the clearance of stones from the soil and the building of the first, as yet modest, villages.

The period of peace that lasted until the middle of the 3<sup>rd</sup> century aided regional population expansion, and the migratory movement from the plains increased leading to colonisation of the mountains. It was characterised by growing mastery over the soil, notably by the building of low walls to protect the fields from erosion as much as to mark out their perimeters, giving tangible form to the agricultural plot plan implemented by the Roman administration. A first style of vernacular construction and initial method of farming was established, based on cereals, pulses and stock rearing, as well as fruit trees in some cases. These were relatively poor peasants working under difficult conditions. The temples and tombs illustrate their spiritual and cultural practices. Such a complete ensemble bearing witness to a rural society in Late-Roman Antiquity is rare.

The middle and the end of the 3<sup>rd</sup> century, and the start of the 4<sup>th</sup>, were marked by epidemics and war against the Persians that led to a decline, or at least a stagnation, in the rural colonisation of the Limestone Massif. New constructions become rare. This was a period of transition.

The situation started to change in the 330's, with a return to population growth. Lasting peace was established under the new Eastern Empire that arose at the end of the 4<sup>th</sup> century. This period of expansion lasted for nearly two centuries during which time the mountain population grew threefold or more. The economic recovery was both quantitative and qualitative, with improved control of water, and development of grape vines, olive and fruit trees. The production of oil, fruit and wine made the villages richer and led to a long-lasting high-point for architecture. While the basic model of Roman building was used, notably for the style of farm house specific to this region, it was enlarged, diversified, built to a far higher standard in regular stone masonry, and refined ornamentation was added. The quality of the limestone made possible such architectural development combined with a real passion for stone in the rural environment.

The mountain society belonged to two cultures expressed through the use of two languages: Syriac (or Aramaic), the native language, and Greek as demonstrated by the great many inscriptions. This society gradually converted to Christianity under the influence of hermits during the 4<sup>th</sup> and 5<sup>th</sup> centuries, even though pagan rites continued. Religious architecture (churches, convents, baptisteries and tombs) took on considerable importance, resulting in particularly refined, and at times vast and original, buildings. During this period, Saint Simeon was an extremely famous Christian ascetic from the region. He spent a large part of his life at the top of a column, in Jabal Sem'an (Simeon

Mountain), where he prayed and converted crowds of pilgrims who had come to meet him. After his death in 459, a vast sanctuary ordered by Emperor Theodosius was built around the base of his column (Park No 1). The villages built increasingly large churches, and in greater number, from the end of the 5<sup>th</sup> century and during the 6<sup>th</sup> century. A powerful monastic movement developed in the wake of the saints and hermits.

This period of expansion and wealth in the mountains finally came to an end in the mid-6<sup>th</sup> century. Construction declined and then ceased altogether. Food shortages and epidemics again became rife, as during the Persian War, affecting the entire Syrian territory. A discrepancy grew between an ever-increasing population and stagnating resources within a territory that it was impossible to enlarge. The rural population grew poorer and increasingly weak, leading to a migratory movement back to the neighbouring plains and their towns from whence their remote ancestors had come. The Arab Islamic Conquest (7<sup>th</sup> century) did not directly affect the region, but it did reinforce the migratory trend that became massive in the 8<sup>th</sup> and 9<sup>th</sup> centuries. The plateau was emptied of its population; the farmland and villages were gradually abandoned. In the 10<sup>th</sup> century, the mountains were deserted.

The difficult conditions for working the land and managing water meant that there was no major attempt to re-establish agriculture in the limestone mountains in the following centuries. There were a few exceptions to this, and above all a recent movement to re-establish agriculture under the influence of regional demographic growth. This affects a large number of villages, some of which are within the property's boundaries.

### 3 Outstanding universal value integrity and authenticity

#### Comparative analysis

The comparative analysis proposed by the State Party encompasses three complementary approaches: at the national level, by examining properties from the same period; in the Mediterranean Basin and in similar historic and cultural contexts; and lastly by a review of properties already inscribed on the World Heritage List, in the Mediterranean Basin and the Middle East for which there is a certain analogy.

In Syria, there are many and often remarkable monuments and archaeological sites dating from the Roman and Byzantine Periods. However, they are frequently associated with monumental or urban ensembles that were re-used and rebuilt in later periods. Unity between the built and natural environment is rarely as significant and the testimonies are of a different nature. Sites similar to the nominated property must be looked for in areas at the edges of the great axes of human occupation in these periods. This is the case with villages in southern Syria that provide notable similarities in terms of occupation of a rural territory and types of

construction. However, this region is geologically different and was re-occupied starting from the 17<sup>th</sup> century, resulting in extensive transformations. Testimonies comparable to the property are therefore more disparate and they are in environments with less integrity and authenticity.

Whilst rural society of Roman and the early Byzantine Period both had a profound effect on the history and landscape of the Mediterranean rim, their built testimonies have often been modified or destroyed by the civilisations which came after them. There are, of course, very important architectural vestiges, both religious and urban, but, as is the case in Syria, complete sites that are the most similar to the property must be sought in isolated or marginal rural areas. The mountainous regions close to southern Turkey and Palestine provide examples of rural houses, ancient villages and landscapes sharing similarities with the property, but their scope, stylistic unity and preservation are far less great. The site of Dougga / Thugga and its landscape in Tunisia (1997, criteria (ii) and (iii)) is the most similar but it is a single isolated city and not a regional ensemble. The case of Incense route Desert Cities in the Negev, Israel (2005, criteria (iii) and (v)), offers a similar level of preservation because of early abandonment, but the testimony is different, referring to trade on the Incense route. Also, in plains' regions, mud brick, a degradable material, was often used for rural constructions, as in the Nile Delta, and few traces have remained despite extensive historical presence in the same periods.

Several sites in the Mediterranean Basin and the Middle East testifying to late Antiquity and early Christianity have already been inscribed on the World Heritage List. There is, however, no recognised Byzantine site in Syria so far, whereas it is a very important aspect of the history of this country and region. The closest property of this type is Saint Catherine Area in Egypt (2002, criteria (i), (iii), (iv) and (vi)), in use to this day, providing a very important testimony to 6<sup>th</sup> century Christian architecture. It may be compared to Saint Simeon Sanctuary, but the latter is an archaeological site. Again in Egypt, the paleo-Christian town of Abu Mena (1979, criterion (iv)) provides an example of urban and architectural development paralleling that in the region of the ancient villages of northern Syria. It also contains an important sanctuary associated with a pilgrimage. In Jordan, Umm er-Rasas (2004, criteria (i), (iv) and (vi)) has a similar history, testifying to the region's architectural and urban history in the same periods as those of the nominated property. The major presence of anchorite monks underscores the analogy. Nonetheless, the vestiges also date from the Umayyad period and they are more fragmented in terms of agriculture.

Elsewhere in the Mediterranean rim, inscribed properties demonstrating significant similarities are, firstly, Greme National Park and the Rock Sites of Cappadocia, Turkey (1985, criteria (i), (iii), (v) and (vii)). This site provides an exceptional testimony to Byzantine

Christian culture that nonetheless includes a much later phase, and the subterranean nature of the site and its associated landscapes are unique and dissimilar to the nominated property. Early Christian Monuments of Ravenna, Italy (1996, criteria (i), (ii), (iii) and (iv)) illustrates in a remarkable and very comprehensive manner the architectural and decorative transition between the Roman world and Byzantine influence in Southern Europe. A certain number of elements are specific to this property, but the development, in the same period, of Saint Simeon Sanctuary, the basilicas and the first monasteries in the property provide an eastern counterpoint to the Ravenna site.

Other monastic properties present similarities: Meteora, Greece (1988, criteria (i), (ii), (iv), (v) and (vii)) also had anchorite monks, but at a much later period and in a spiritual context in a spectacular and isolated mountainous environment. The Armenian monasteries and their churches also provide similarities, especially Monastery of Geghard and the Upper Azat Valley, Armenia (2000, criterion (ii)) and the Armenian Monastic Ensembles of Iran (2008, criteria (ii), (iii) and (iv)). These are exceptional sites but purely devoted to monastic and spiritual activity, in a defensive fortified context which differs from that of the ancient villages of northern Syria.

The theme of agro-pastoral landscapes is also evoked, but it is considered removed from the property's values, as it is only a late and secondary aspect of its history.

ICOMOS considers that the State Party presents a detailed comparative study bringing the property's specific values and its landscapes into relevant perspective. The analogies and differences are well set out. In terms of ancient agricultural plot plans, the remarkable case of Stari Grad Plain, Croatia (2008, criteria (ii), (iii) and (v)) might also be evoked, dating from a more ancient Greek period.

In conclusion, the nominated relict cultural landscapes form a diversified and very complete testimony of rural development in the Roman Empire, and the initial phases of the Byzantine Empire, in the form of its villages, dwellings, economic structures, agricultural plot plan, pagan and then Christian places of worship, funerary monuments, etc. It appears to be unique in terms of its extent, completeness and conservation.

ICOMOS considers that the comparative analysis justifies the choice of the sites constituting the serial property proposed for the World Heritage List.

---

ICOMOS considers that the comparative analysis justifies consideration of this property for the World Heritage List.

---

Justification of Outstanding Universal Value  
The nominated property is considered by the State Party to be of Outstanding Universal Value as a cultural property for the following reasons:

- The eight sites selected provide remarkable, complete testimony of rural colonisation in late Antiquity and the early Byzantine Period, and its interaction with its environment. They have resulted in relict cultural landscapes characteristic of this rural colonisation and its cultural evolutions, both material and spiritual.
- The sites illustrate the development of farming communities in a Mediterranean mountainous zone of medium altitude, from the 1<sup>st</sup> century to the 6<sup>th</sup> century, in terms of its dwellings, villages and a clearly identifiable agricultural plot plan. It is an exceptional testimony in terms of its extent as well as its diversity and quality.
- Amongst the many architectural remains, the churches, monasteries, funerary monuments and places of pilgrimage testify to the birth and development of the Christian world in the countryside of the Middle East.
- The exceptional state of preservation of the built remains and landscapes is attributable to the quality of the stone constructions, both monumental and vernacular, and by the abandonment of the limestone mountain regions of northern Syria for a thousand years.

The eight parks forming the nominated serial property correspond to the selection of the best preserved villages and monumental sites. They form, with their environments, coherent ensembles and characteristic landscapes.

ICOMOS considers that the arguments put forward by the State Party are justified. This is indeed a strong testimony, of remarkable quality, of the lifestyles in the countryside during the Roman Empire and the Byzantine Empire that followed, from the 1<sup>st</sup> to the 6<sup>th</sup> century. It is also an important illustration of the development of Christianity in the East, within village communities. The notion of relict cultural landscape is fully justified.

#### Integrity and authenticity

##### Integrity

The notion of integrity applies on the one hand to the built remains and on the other to the cultural landscapes of the serial property.

Although only representing 5 to 6% of the Massif, the surface area of the eight parks is 130 km<sup>2</sup> and they encompass the entire architectural diversity of the monuments and vernacular constructions from the various periods, as well as extensive overviews of the ancient agricultural plot plan. The same applies to the diversity of the landscapes associated with the historical development of the village communities.

When the Limestone Massif is abandoned, the hitherto living landscapes become relicts. However, the plant cover evolves, and the Massif is returned simultaneously to nature and extensive semi-nomadic stock activities.

The very recent return of village communities is tending to re-open the living dimension of certain rural landscapes of the Massif through, for the time being, traditional activities with limited mechanisation. The nominated property's sites are only slightly affected by this phenomenon.

ICOMOS considers that the architectural integrity of the property's sites is adequately expressed and that it is very complete. The sites are sufficiently extensive; they include a large number of villages, places of worship, and well-chosen monumental and vernacular testimonies. The number and quality of relict landscapes is also adequate. The ensemble selected adequately expresses the values and meanings associated with the property's history. However, the recent trend towards agricultural re-occupation of the Limestone Massif could affect the integrity of the built component of certain villages, and their associated landscapes.

ICOMOS considers that the nominated series is fully justified and that it is adequate to express the property's values. ICOMOS considers that the series is closed.

##### Authenticity

The almost total absence of human occupation over the centuries that followed the abandonment of rural settlements, in the 8<sup>th</sup> and 9<sup>th</sup> centuries, coupled with the quality of the constructions, explains the remarkable state of preservation of a large number of villages, places of worship, and the surrounding rural and natural landscapes. In the eight sites selected, the topography of human settlement, the architectural forms and designs, and the materials used have remained intact. Their level of preservation allows them to express very fluently the occupants' functions, usages, technical practices and lifestyle.

The property's location, well removed from the main areas of development, has enabled it to avoid, on the one hand, re-use of the stone that happened so frequently in urban areas and, on the other hand, the sometimes untimely restoration/reconstruction campaigns at some ancient and medieval properties in the 20<sup>th</sup> century. Furthermore, its most important monuments are well known through the architectural descriptions made by travellers and archaeologists from the middle of the 19<sup>th</sup> century.

The main human intervention, other than rural re-settlement, affecting the property is archaeological excavation that tended to become more frequent in the second half of the 20<sup>th</sup> century. They are in general respectful of the sites and contribute to the understanding of the authenticity of the components.

In its reply to the September 2010 request by ICOMOS, the State Party indicated that more than 700 ancient sites have been recorded in the Limestone Massif region, and some sixty are deemed to be in a good state of preservation, without or virtually without any human

impact since their ancient use. The forty most significant, and having the most satisfactory landscape environment, have served as the basis for defining the property's sites. With their territories encompassing important vestiges of the ancient oman rural plot plan, the villages are grouped into eight clearly identified landscape areas, each forming an archaeological park. The ensemble forms the serial property.

ICOMOS considers that as a result of the absence of human occupation for one thousand years, the absence of re-use of the stones and the absence of restoration/reconstruction campaigns in the 20<sup>th</sup> century, the property and its landscapes have retained a very high degree of authenticity. However, recent rural settlement could affect the conditions of authenticity, in terms of the buildings, structure of the villages and the landscapes. Furthermore, well managed and traditional replanting, respectful of the ancient plot plan, should contribute to revitalising the landscape without affecting its authenticity.

---

ICOMOS considers that the conditions of integrity and authenticity have been met.

---

Criteria under which inscription is proposed

The property is nominated on the basis of cultural criteria (iii), (iv) and (v).

Criterion (iii): bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared;

This criterion is justified by the State Party on the grounds that the serial property provides a unique and exceptional testimony to the lifestyles, rural development and cultural traditions established during the colonisation of the Limestone Massif of northern Syria, during the Imperial oman period and early Byzantine mpire.

This culture is characteristic of a successful and sustainable agricultural system, in a karstic plateau region that is difficult to work. It was in particular based on wheat, vines and olives. It developed a characteristic system of stone habitations appropriate to the region's economic development. It is a testimony at a regional scale and of a rare quality.

ICOMOS considers that the serial property provides a homogeneous and exceptional testimony to the lifestyles and cultural traditions of rural civilisations that developed in the Middle ast within the context of a Mediterranean climate at mid-range altitudes from the 1<sup>st</sup> to the 7<sup>th</sup> century.

---

ICOMOS considers that this criterion has been justified.

---

Criterion (iv): be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history;

This criterion is justified by the State Party on the grounds that the forty villages in the eight archaeological parks form a unique ensemble of built remains. In the context of the Mediterranean Basin, they testify to the evolution of rural domestic architecture during late Antiquity and the Byzantine Period. They testify to a well established type of construction for rural habitats in these periods.

The region gradually shifted from the pagan worship of late Antiquity to Christianity, as demonstrated by an exceptional ensemble of temples, churches, baptisteries, tombs, and places of worship and pilgrimage. Their architectural styles and their locations illustrate the transition between the values of the Classical oman world and the spread of Byzantine Christianity in the 4<sup>th</sup>-6<sup>th</sup> centuries.

The eminent quality of the property's constructions is illustrated by the mastery of stone masonry, used in particular during the Byzantine Period, both for vernacular housing and community buildings and places of worship. The refinement of the sculpted decoration combined with the creative architectural traditions reveal a remarkable mastery of stonework and a style characteristic of a cultural and spiritual peak.

ICOMOS considers that the serial property provides an ensemble of eminent examples both of the architecture of rural houses and civilian and religious community buildings at the end of Classical Antiquity and during the Byzantine Period. Their association within villages and places of worship forms relict landscapes characteristic of the transition between the ancient pagan world and Byzantine Christianity.

---

ICOMOS considers that this criterion has been justified.

---

Criterion (v): be an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change;

This criterion is justified by the State Party on the grounds that the serial property presents remarkably preserved landscapes that illustrate human settlement and the utilisation of the territory of the Limestone Massif of northern Syria, from oman Antiquity to the Byzantine Period. These landscapes illustrate a rational and systematic occupation of the land by clearing the soil of rocks, building low protective walls, establishing the agricultural plot plan in the oman ra, and the selection of appropriate and exportable agricultural crops (wheat, oil and wine). The rural dwelling expresses a functional type adapted to these economic activities and their use by groups of farming families. In an unfavourable karstic environment, the collection of water and its storage in at times very large cisterns shows a high level of skill in hydraulic engineering.

ICOMOS considers that the property provides an eminent and significant example of a sustainable rural settlement, from late Antiquity to the early Byzantine Period. It is based on the careful use of soil, water and limestone resources, as well as the mastery of agricultural production and its transformation into products of value. The economic function of the habitat, the hydraulic techniques, protective walls and oman agricultural plot plan inscribed in the landscape are testimony to this.

---

ICOMOS considers that this criterion has been justified.

---

ICOMOS considers that the serial approach is justified and that the selection of sites is appropriate.

---

ICOMOS considers that the nominated property meets criteria (iii), (iv) and (v) and conditions of authenticity and integrity and that Outstanding Universal Value has been demonstrated.

---

#### Description of the attributes

- In terms of its characteristic relict landscapes, the serial property provides an exceptional testimony of rural colonisation in late Antiquity and the early Byzantine Period. It illustrates the dense network of villages created by the communities and their interaction with the environment.
- The technical expertise associated with this rural settlement is in particular expressed through domestic architecture, its enclosure and functional distribution of the rooms. It forms a type of construction that is well-established, the evolution of which can be traced through history.
- The large cisterns are testimony to mastery over water management; low walls were used for soil improvement and protection and they marked out the ancient agricultural plot plan.
- The temples, basilicas, churches, baptisteries, monasteries, funerary monuments and places of pilgrimage reflect ancient paganism followed by the birth and growth of Christianity in the Middle Eastern countryside.
- The structure of the villages is generally loose, but it is arranged around numerous religious buildings, especially churches, and includes civilian community buildings.
- The remarkable quality of construction, the mastery and general use of stone masonry in the Byzantine Period, and the refinement of the sculpted decoration are testimony to a creative architectural tradition; they express a style that is characteristic of a society at its cultural and spiritual peak.

## 4 actors affecting the property

### Development pressures

Long abandoned, the Limestone Massif has seen an extensive revival of rural and village life since the 1980s. Despite the past protection of the most emblematic places and historic monuments, and a choice of sites that has taken this factor into account, several villages in the nominated property are affected by this trend. ICOMOS notes that disorganised growth of small settlements could rapidly have a negative impact on the property's landscape and conservation. It has been announced that a housing development project by a large property company within the boundary of Park No 3, not far from the major archaeological site of Sinkhar, was stopped at the last moment.

This trend is accompanied by a revival in farming the land. For the time being, it is not very mechanised and is tending to reintroduce species that belong to this ancient rural landscape, such as olive trees. However, there is a growing trend towards the use of large machines to remove the stones from the soil and destroy the ancient low walls to increase the size of fields and open up pathways.

The ancient remains are open to the risk of vandalism and theft, notably the reuse of the dressed ashlar stone or for the illegal trade in sculpted stones. There is also the possibility of unauthorised excavations at the most remote archaeological sites to dig up artefacts for sale on the international antiquities market.

A programme for the installation of power lines could affect Park No 1.

In the Jabal awiya area (Park No 5), there are projects to develop limestone quarries and industrial projects that have not taken into account the property's landscape dimension.

### Tourism pressures

Apart from the Saint Simeon Sanctuary, the sites are infrequently or not at all visited. Tourism does not pose any notable problem and, for the State Party, its increase should be very gradual and controlled in the event that the property is inscribed on the World Heritage List.

### Environmental pressures

The eight archaeological parks that make up the property are characterised by a fine natural environment with an excellent atmospheric quality that have been well preserved up until now. For the State Party, there is no pressure in this area for the foreseeable medium term.

## Natural disasters

The property is located in a seismic zone, as evidenced by the many accounts of earthquakes in historic sources. Their effects are sometimes visible in the property's built remains.

The risk of fire relates to rural vegetation in the dry season.

## Impact of climate change

For the time being, there is no fully demonstrated effect from climate change on the property.

ICOMOS considers that the main threats to the property are human intervention through inappropriate agricultural methods, construction near the sites, the reuse of antique dressed stone and unauthorised excavations. The erection of power lines could affect the area of Saint Simeon Sanctuary (Park No 1) and a plan to open a quarry and establish industrial activities could affect Jabal awiya (Park No 5).

## 5 Protection conservation and management

Boundaries of the nominated property and buffer zone

The State Party above all considers each of the property's sites as a cultural landscape, that is, an ensemble of highly correlated constituent elements expressing an overall value. The definition of each site is dependent on this: it is determined from the identification of the most significant villages, monuments, and vestiges of the agricultural plot plan combined with the best preserved natural environments. Eight separate landscape areas have been identified, taking into account the visual boundaries created by crest lines and the horizon at each of the sites. In each case, they are relatively large areas with precise boundaries, even if these are not always identified with markers.

This global approach views each site as a visual territory taken as a whole and defined as a relict landscape. The ensemble forms a series of relatively large geographic basins that always define the visitor's view. This approach to defining the landscape sites has led the State Party to not consider a buffer zone. Each of the property's eight territories has been named an archaeological park.

Archaeological park number	Surface area (ha)	Population (2009)	Inhabited villages (2009)
1	3,700	1,650	1
2	2,760	3,872	4
3	380	1,200	1
4	3,200	1,500	1
5	530	1,900	2
6	460	1,500	1
7	580	0	0

8	680	150	2
Totals	12,290	11,772	12 (out of 40)

ICOMOS considers that the boundaries of the nominated property are adequate and that the absence of a buffer zone has been justified.

## Ownership

Ownership of the plots of land within the boundaries of the archaeological parks that form the property of the Ancient Villages of Northern Syria is both public and private, with the relative ratios varying between parks.

Public ownership is of two types. The monuments, churches, listed dwellings, archaeological sites, etc., are generally owned by the Ministry of Culture. The second type of public ownership is exercised by the Ministry of Agriculture, generally in the form of land reserves, sometimes in areas of low heritage value.

Private ownership is generally linked to family homes and farmed plots of land. However, a large part of Park No 3 is reported to have been bought by a company for a housing programme (see threats). The State Party has, however, indicated that this entire site has been declared a no-construction zone.

In most cases, there is no survey plan on which to record the properties. The creation of precise and reliable plans of the areas has been in progress since 2006 under the responsibility of Idleb and Aleppo governorates, in liaison with the Directorate General of Antiquities and Museums (DGAM). This is a priority for implementing the protection of the parks.

ICOMOS encourages the State Party to complete the survey of each site as quickly as possible, with the official input of the Directorate General of Antiquities and Museums (DGAM). The complete ban on the building project within Park No 3 must be confirmed.

## Protection

### Legal protection

The protection of cultural heritage is the responsibility of the Ministry of Culture aided by the Council of Antiquities of the Directorate General of Antiquities and Museums (DGAM).

All monuments and archaeological sites older than 200 years come under the Antiquities Law (No 222, 1963, revised 1974 and 1999). The DGAM defines the sites that form the national heritage and which must be protected by being officially inscribed on the Register of Archaeological Sites and Monuments. It obliges municipalities to make provision for their conservation in local development plans and land surveys. It makes provision for prohibiting construction and works within a 500 metre perimeter, as well any restoration under the control of the DGAM.

The listing of the property's first monuments began in 1937. At present (2008), 36 archaeological sites in the property, corresponding to the main villages and most important monuments, are protected by the Antiquities Law.

The Antiquities Law is augmented by various texts and regulations concerning the protection of heritage property, jointly by the Ministry of Culture (DGAM) and local authorities, notably with regard to illegal construction.

The other main national laws applicable to the property are:

- The Civil Code and Punishment Law (No 148, 1949),
- The Municipal Management and Administration Law (No 12, 1971, revised in 2003, Law No 15),
- The Laws on Urban Sites (1974),
- The Forest and Environmental Protection Decree (No 25, April 2007),
- The Regional Planning Law (No 26, June 2010) must enable inscription of the property within the context of a broader regional plan.

The recent decisions concerning the property's new management structure are:

- Ministerial Decrees (Prime Minister) for the creation of the eight archaeological parks (No 52/A to 59/A, 31 January 2010),
- Ministerial Decision (Culture) for the creation of the two Park Management Centres (336/A, 29 July 2010).
- Decree for the creation of a Maison du Patrimoine (26 August 2010).

The State Party is aware of the absence of legal protection of the cultural landscapes, essential in this instance. Consequently, discussions are in progress to revise the Antiquities Law to take this into account. However, it is a process that involves a certain amount of time and which must involve the local communities and take into account the new Regional Planning Law (June 2010). Consequently, a Decree by the President of the Council of Ministers (January 2010) has enabled the creation of the eight parks defining the nominated property and provides temporary protection of the landscapes.

In practice, protection is provided by the official guards, of whom there are about twenty (2008). Three of the sites are under permanent surveillance; for the others surveillance is in the form of regular patrols.

#### Traditional protection

A programme to raise awareness among the population living within the boundaries of the property's parks has been introduced.

#### Effectiveness of protection measures

ICOMOS considers that the legal protection in place is extensive and rapidly evolving, notably in the direction of regional planning and protection of the property's cultural landscapes. The relevant revision announced to the Antiquities Law is encouraged. The number of guards needs to be increased for those parks with the least supervision or most exposed to illegal activities.

---

In conclusion, ICOMOS considers that the legal protection dynamic is heading in the right direction and that it must be confirmed by the revision of the Antiquities Law.

---

#### Conservation

##### Inventories, recording, research

The data concerning the inventory for the archaeological sites of the Limestone Massif is held by the DGAM in Damascus. The conservation and management of this data is being modernised in order to prepare an archaeological map of the Limestone Massif by the DGAM jointly with the Syrian-French Archaeological Mission.

The architecture of the ancient remains in northern Syria has been studied since the 19<sup>th</sup> century, and is well known through numerous publications together with site documentaries in the form of maps, measurements, inventories, photographs, etc. Current archaeological and historical research on the sites is conducted by the DGAM with extensive international scientific cooperation.

Research is currently being intensified by means of 3-D digital recordings of the most important buildings, and biochemical analysis of organic debris.

##### Present state of conservation

The state of conservation of the natural and cultural landscape is considered very satisfactory by the State Party. The revival of agricultural activity in many places, using traditional methods, has had a positive impact on the maintenance and regeneration of the landscapes. Activities that are relatively incompatible with the conservation of the landscapes occur outside the park boundaries.

The inventory of the state of conservation of the landscapes reveals that some changes have occurred: some non-compliant reforestation, the existence of an industrial chicken farm, several instances of stone removal using a bulldozer, and alterations to the walls of the agricultural plot plans by farmers. These are, however, limited in scope.

The main alterations to the built vestiges are attributable to the illegal human actions mentioned above: unauthorised construction, vandalism, re-use of the stones, theft of sculpted elements, etc.



The blocks of limestone which are exposed to damp rising through the soil are affected and may be subject to deterioration. The sculpted elements are equally exposed to the effects of natural degradation, such as salt crystallisation.

#### Active Conservation measures

The conservation of the landscapes is a global and permanent process, expressed, on the one hand, by the application of protective measures and the active role of the guards and, on the other, by the implementation of an information and consultation policy involving the property's inhabitants to raise awareness of its values and how best to conserve them. The *raison du patrimoine* (2 locations) should encourage good practices compatible with sustainable and controlled economic development.

For the moment, there is no current or projected work to consolidate or restore the monumental elements. However, timely work has been carried out in the past in some instances, such as in *al-Balqa*, Saint Simeon Sanctuary and more recently in Serjilla.

An expert evaluation of stone disease from rising damp is currently being carried out, and ICOMOS notes that a drainage programme for the most affected areas will be implemented.

#### Maintenance

The maintenance of the three archaeological sites which have permanent guards and are open to controlled visits (Saint Simeon Sanctuary, Park No 1, Serjilla, Park No 4 and *al-Balqa*, Park No 6) is provided by the guards and employees allocated to these sites.

Under the application of the Antiquities Law, the other sites are maintained by the municipalities.

Farmers contribute to the maintenance of the landscapes insofar as they adopt relatively non-mechanised practices that are respectful of the ancient agricultural plot plan.

#### Effectiveness of conservation measures

ICOMOS considers that the current state of conservation of the landscape and the archaeological sites is good, but that this situation may be weakened in the future, notably from growing development pressure. These are large open sites with recent rural populations within their perimeter and margins, looking for legitimate income. The overall actions involving this population are important for reinforcing conservation effectiveness. They need to target both the protection of the sites and an information policy regarding conservation issues and the population's involvement in these areas.

ICOMOS considers that the property's state of conservation is adequate. While the conservation of the archaeological remains is assured overall, that of the

landscapes is only just beginning and it could be weakened by growing development pressure.

#### Management

Management structures and processes, including traditional management processes

The general body currently responsible for the property's management, both for scientific projects and the practical management, is the Directorate General for Antiquities and Museums (DGAM), located in Damascus and reporting directly to the Ministry of Culture. It is providing for the creation of a specialist department for monitoring sites inscribed on the World Heritage List. It has three local offices in charge of the protection and monitoring of the property's archaeological sites.

The Ministry of Tourism is in charge of drawing up the tourism management plan for the property.

Aleppo and Idleb governorates represent the State and its services in the region. The municipalities operate under each governorate and under the responsibility of the Ministry of Local Affairs; they are responsible for managing those sites not directly controlled by the DGAM, developing local infrastructure and controlling construction and works.

With its starting point a management structure historically highly centralised at the national level, an effort is being made, within the context of the inscription dossier, to decentralise operations towards local structures and encourage action within the sites themselves. A certain number of responsibilities are being transferred to the regional authorities, municipalities, and management authorities which are currently being established (park, *raison du patrimoine* and management centres).

The creation of the eight archaeological parks (January 2010) corresponds exactly to the property's eight landscape territories. It aims to develop local management and conservation compatible with the objectives of sustainable development that is respectful of the property's values.

The final structure for coordinating management of the parks is based in a *raison du patrimoine*, which is an autonomous legal entity with a local office in each of the two governorates. Currently being set up, it will be responsible for coordinating all projects concerning the conservation, monitoring and promotion of the parks. It will include:

- At the executive level, the *raison du patrimoine* will coordinate the management of the parks with all the parties involved, under the responsibility of the governors and the DGAM; its responsibilities will be broader than those currently exercised by the DGAM's local offices; it will eventually be invested with significant powers of action.

- The two *l'administration du patrimoine* offices each form a property management centre in each of the governorates.
- The *l'administration du patrimoine* Steering Committee will include representatives of the main stakeholders in the property's conservation and management. In particular, it will be in charge of defining and monitoring the protection and conservation of the sites and landscapes.
- A National Inter-Ministerial Committee will form the senior level of coordination and control.

ICOMOS considers that the property's management is currently provided by the DGAM (2009-2010), but on a transitional basis. The property's final management structure will include the eight parks associated with each of the sites, a management centre in each of the two governorates, and the *l'administration du patrimoine* to manage the ensemble and coordinate conservation, under the authority of the DGAM, the Ministry of Tourism and the provincial governors. The additional information provided by the State Party shows that the new management structure has effectively been in place since summer 2010. ICOMOS encourages this implementation, which must benefit from the human and material resources required for its effective operation.

Policy framework: management plans and arrangements, including visitor management and presentation

The management Plan incorporates general management objectives for the property and its landscapes, as well as the data needed to establish the new management system. An Action Plan (December 2010) has been created for its implementation.

In structural terms, the objectives are to:

- Reinforce or establish management of each of the parks and create their management centre,
- Define the overall mechanisms and management coordination for the serial property, by creating the *l'administration du patrimoine*,
- Define the missions of the *l'administration du patrimoine* along with the professional expertise required for their implementation,
- Create a process for the regular evaluation of the measures implemented and their outcomes.

In terms of the property's conservation and tourism development, the objectives mainly aim to:

- Define and plan with the relevant municipalities the protection and conservation of the ancient villages,
- Define and plan with the relevant municipalities the principles for landscape development and conservation,
- Support scientific research in the areas of archaeology and architecture, coordinate excavations and the actions of international archaeological missions,

- Prepare the archaeological maps of the eight parks,
- Develop a coordinated communication, promotion and tourism strategy between the various parks by writing a Tourism Development Plan.

The Management Plan aims to promote sustainable local development compatible with the conservation of the property's values and its landscapes, notably by:

- Improving the standard of living of the inhabitants by developing cultural tourism in small private tourism service entities,
- Overseeing and assisting sustainable rural development and reasonable exploitation from quarrying,
- Coordinating and ensuring the application of town planning regulations,
- Coordinating infrastructure within the sites (paths, roads, electricity, etc.).

Additionally, the property Management Plan must take into account a series of other local, regional and national plans and programmes:

- Priority national development plans: no heavy transport infrastructure is planned within the region of the serial property,
- The Ministry of Tourism's development plans that affect the sites (Park No 2),
- The local industrial development programme near the village of Jerada in Park No 5 (Jabal *al-Awiya*),
- Idleb Governorate's digitised land survey programme.

DGAM also coordinates various projects or programmes in partnership with other entities:

- The current project for the area of Saint Simeon Sanctuary by the Arab Fund for Economic and Social Development;
- The project for hiking tracks and cultural promotion in Jabal Sem'an with the Swiss Agency for Development and Cooperation, completed in 2007;
- The relocation and revision of the Sinkhar property development project by the Engineers Union in Aleppo.

ICOMOS considers that the property Management Plan includes both a review of the relatively diverse actions implemented to date and a general project for the future management of the sites, notably the Action Plan included in the additional documentation (December 2010). Given the recent or current implementation of the bodies responsible for the property's management (parks, management centres and *l'administration du patrimoine*), there is a risk of project diffusion or initiatives that are not in accordance with the correct conservation of the property and its landscapes. During the transition period, the DGAM's capacity for control over the property's management should be maintained. The Management Plan and the Action Plan need to be rapidly finalised with

a schedule of actions and their implementation timeframes.

risk preparedness

In the event of forest fires, there are emergency plans for each of the sites and their regions, with a network of access trails and firebreaks.

Visitor safety, notably with regard to falling stones, is included in the Management Plan.

The management centres ( *aison du patrimoine*) will be responsible for compiling a risk management plan.

Involvement of the local communities

The local communities are involved in the studies, definition and establishment of the boundaries of the serial property. It is planned that the *aison du patrimoine* will play an important role in raising awareness and support among the region's population in the areas of architecture, agriculture and tourism.

resources, including staffing levels, expertise and training

The personnel involved in the conservation and management of the nominated property are at present (January 2010) only those employed by the DGAM: in its central services in Damascus, in three regional offices and onsite.

It seems that the number of people effectively available for looking after the property is limited, or that they devote only part of their time to it, in Damascus notably (2 architects, 1 engineer and 1 heritage conservator).

The DGAM's local offices employ architects and engineers (5), technicians (5), survey staff (8), inspectors (around 30) and administrative staff (around 10). Here again, they do not all work full-time on the nominated property, as they often have other tasks to perform.

The site guards (around 20) or museum employees (around 10) are the field staff allocated full-time to the sites. The recruitment of an additional ten guards is scheduled for the period 2009-2010.

The State Party makes a critical analysis of this data, concluding:

- There are gaps, at times serious, with regard to the field staff, such as for example at Jabal Sem'an;
- A general effort is required for the allocation of personnel at the sites, especially in the parks and the two *aison du patrimoine* offices;
- The central department for the management of World Heritage Sites, recently created within the DGAM, is known to be understaffed;
- The policy for landscape protection and the development of cultural tourism implies the need for new staff and their training.

At present (January 2010), the financial resources for the property's conservation are almost exclusively those of the DGAM. These budgets steadily tended to increase until 2004 after which they became more irregular and then started to decrease. Foreign foundations (Saudi Arabia, Switzerland, France, etc.) focus their contribution on scientific projects, development associated with the management of a site, or management tools. The direct contribution by visitors to the conservation of the sites is for the moment only of any significance at Saint Simeon Sanctuary (90,000 visitors in 2007); its effect is more noticeable in terms of general economic input but should increase significantly within the context of cultural tourism projects.

ICOMOS considers that the State Party's critical analysis of the personnel allocated to the property's conservation, management and promotion is relevant, notably concerning the employees of the parks and the future *aison du patrimoine*. The recruitment and training of personnel for these positions is essential. The financial resources of the DGAM, parks and *aison du patrimoine* need to be consolidated.

effectiveness of current management

The past and current management of the conservation of the monumental components has been largely assured. It is, however, subject to pressure from the development of new human settlements. In response to this trend, the incorporation of the landscape dimension is both necessary and challenging. ICOMOS considers that significant human and financial resources must be rapidly made available to enable this challenge to be met, so that the unique cultural landscapes of the ancient villages are sustainably preserved, while still allowing economic growth compatible with their value. The DGAM must retain ultimate control for the sites' sectoral management plans and the quality and scientific monitoring of conservation throughout the transition period for the installation of the parks and the *aison du patrimoine*.

---

ICOMOS considers that the property's current management system is in a transitional phase, starting from a conventional monument management strategy by the DGAM and moving to cultural landscape management integrated with the local population's economic development. For this purpose, the parks and the *aison du patrimoine* must be given full responsibility, and their human and financial resources must be extended and consolidated. The Management Plan must be rapidly finalised with a schedule of actions and their implementation timeframes. During the transition period, the DGAM's prerogatives in the conservation and management programmes must be maintained.

---

## 6 Monitoring

Up until now, the archaeological sites and monuments have been monitored by the DGAM's regional offices.

ach provides an annual monitoring report of the sites within its jurisdiction. In future, the monitoring will be more detailed and broader, while remaining under DGAM administrative and scientific coordination. Its application will shortly be transferred to the Management Centres ( *aison du patrimoine*). It will retain the principle of an annual report on the monitoring of the state of conservation. To this end, a certain number of key indicators have been defined, and their application frequency established.

Conventionally, the indicators concern the monitoring of the state of conservation of the monuments (monthly or weekly), excavations and the monitoring of site conservation and development projects (annual). They also concern the application of protection and infringements of the Antiquities Law, tourist numbers, monitoring of economic activities and climate data. Annual monitoring using satellite photography is also planned.

---

ICOMOS considers that the monitoring is, as for the management, evolving towards a situation in which broader data regarding the state of conservation will be taken into account. Nonetheless, ICOMOS recommends that the planned indicators be precisely detailed to reflect the particularities of each site and based on more extensive landscape data.

---

## 7 Conclusions

ICOMOS recognises the Outstanding Universal Value of the Ancient Villages of Northern Syria. They form a unique monumental, archaeological and relict landscape ensemble providing testimony to rural lifestyles in late Antiquity and the Byzantine Period. ICOMOS considers the series is closed.

Recommendations with respect to inscription  
ICOMOS recommends that the Ancient Villages of Northern Syria, Syrian Arab Republic, be inscribed as cultural landscape on the World Heritage List on the basis of *r er d*.

Recommended Statement of  
Outstanding universal value

Brief synthesis

Located in a vast Limestone Massif, in the northwest of Syria, some forty ancient villages provide a coherent and exceptionally broad insight into rural and village lifestyles in late Antiquity and the Byzantine Period. Abandoned in the 8<sup>th</sup>-10<sup>th</sup> centuries, they still retain a large part of their original monuments and buildings, in a remarkable state of preservation: dwellings, pagan temples, churches and Christian sanctuaries, funerary monuments, bathhouses, public buildings, buildings with economic or artisanal purposes, etc. It is also an exceptional illustration of the development of Christianity in the East, in village communities. Grouped in eight archaeological parks, the

ensemble forms a series of unique and exceptional relict cultural landscapes.

*r er* The Ancient Villages of Northern Syria and their relict landscapes provide exceptional testimony to the lifestyles and cultural traditions of the rural civilisations that developed in the Middle East, in the context of a Mediterranean climate in mid-altitude limestone mountains from the 1<sup>st</sup> to the 7<sup>th</sup> centuries.

*r er* The Ancient Villages of Northern Syria and their relict landscapes provide exceptional testimony to the architecture of the rural house and civilian and religious community buildings at the end of the Classical era and in the Byzantine Period. Their association in villages and places of worship form relict landscapes characteristic of the transition between the ancient pagan world and Byzantine Christianity.

*r er* The Ancient Villages of Northern Syria and their relict landscapes provide an eminent example of a sustainable rural settlement from the 1<sup>st</sup> to the 7<sup>th</sup> centuries, based on the careful use of the soil, water and limestone, and the mastery of production of valuable agricultural crops. The economic functionality of the habitat, hydraulic engineering, low protective walls and the Roman agricultural plot plan inscribed on the relict landscapes are testimony to this.

Integrity

The architectural integrity is expressed adequately. The sites are sufficiently extensive; they encompass a large number of villages, places of worship, and monumental and archaeological testimonies to adequately express the Outstanding Universal Value. The number and quality of the relict landscapes are also adequate and essential to the expression of this value. Nonetheless, the recent trend of an agricultural re-settlement of the Limestone Massif could affect the built integrity of certain villages and the associated landscapes.

Authenticity

As a result of the absence of human occupation for a thousand years, the absence of any re-use of the stones and the absence of restoration/reconstruction campaigns in the 20<sup>th</sup> century, the property and its landscapes have retained a very high degree of authenticity. However, recent rural relocation could affect the conditions of authenticity, although replanting respectful of the ancient agricultural plot plan should contribute to revitalising the landscape without affecting its authenticity.

Management and protection requirements

The dynamic of the legal protection is heading in the right direction, notably following the decrees creating the parks, and to control farming and urban development compatible with the archaeological, monumental and landscape values of the sites. This must be reinforced by a revision of the Antiquities Law to improve the protection of the relict cultural landscapes.

The property is currently (2010) managed by the Directorate General of Antiquities and Museums (DGAM), but on a transitional basis. The final management structure for the property will include eight parks set up for each of the sites, two management centres and the *l'association du patrimoine* to manage the ensemble overall and coordinate conservation, under the control of the DGAM, the Ministry of Tourism and the provincial governors. These bodies are currently being set up and are essential. In liaison with the municipalities, they will be tasked with overseeing successful economic, social and tourism development compatible with the conservation and expression of the property's Outstanding Universal Value.

ICOMOS recommends that the State Party give consideration to the following:

- Pursuing and extending the policy of protection and conservation of the cultural landscapes, notably through the revision of the Antiquities Law;
- Increase the number of guards for those parks with the least number or which are most exposed to illegal activity;
- Confirm that Park No 1 (Saint Simeon Sanctuary) is not affected by a project for high voltage power lines;
- Confirm the complete rejection of the large property development project in Park No 3 (Sinkhar site);
- Confirm that the visual integrity of Park No 5 (Jabal *awiya*) is not compromised by large quarry and/or industrial projects;
- Complete as soon as possible the land surveys for each of the parks, under DGAM's supervision;
- Maintain throughout the management transition period, DGAM's prerogatives for the supervision of the preservation and conservation of the sites;
- Provide the *l'association du patrimoine* and park management centres with the human and material resources commensurate with their new missions for the protection, conservation, and economic and tourism development of the sites as stipulated in the Management Plan;
- Finalise the Management Plan and the Action Plan with a schedule of actions considered suitable for the property's conservation and its expression of Outstanding Universal Value, together with their implementation timeframes;
- Detail the monitoring indicators for the property's conservation as a function of the particularities of each site and as a function of more extensive landscape data.

ICOMOS also recommends that the State Party compile a report on the implementation of its new protection and management system for the property for examination by the 36<sup>th</sup> session of the World Heritage Committee in 2012.





Plan showing the boundaries of the nominated properties





Aerial view of Saint-Simeon site



Village of Sheikh Sliman





Bizzos Church, ouweyha



feir site



---

## The cultural sites of Al Ain United Arab Emirates No 1343

---

### Official name as proposed by the State Party

The Cultural Sites of Al Ain (Hafit, Hili, Bidaa Bint Saud and Oases Areas)

### Location

Abu Dhabi

Regions and districts of: Al Ain Central District, Al Jimi, Al Mutaredh, Al Mutawa'a, Al Muwaiji, Al Attara, Bidaa Bint Saud, Falaj Hazza, Hili, Jebel Hafit, Sanaiya and Shiab Al Ashkar

United Arab Emirates

### Brief description

The various sites of Al Ain and its neighbouring region provide testimony to very ancient sedentary human occupation in a desert region. Occupied continuously since the Neolithic, the region presents vestiges of numerous protohistoric cultures, notably from the Bronze Age and the Iron Age. Very diverse in nature, these testimonies include circular stone tombs, wells and partially underground afla irrigation systems, mud brick constructions designated for a range of social and economic purposes and, lastly, the characteristic landscape of oases. This expertise in construction and water management enabled the early development of oases and their agricultural use for five millennia, up until the present day.

### Category of property

In terms of categories of cultural property set out in Article I of the 1972 World Heritage Convention, it is a serial nomination of seventeen groups of buildings.

In terms of the Operational Guidelines for the Implementation of the World Heritage Convention (January 2008), paragraph 47, it is also a cultural landscape.

## 1 Basic data

Included in the Tentative List

5 February 2008

International Assistance from the World Heritage

fund for preparing the Nomination

None

Date received by the World Heritage Centre

11 January 2010

background

This is a new nomination.

### Consultations

ICOMOS consulted its International Scientific Committees on Archaeological Heritage Management and on Cultural Landscapes, and several independent experts.

### Literature consulted selection

Al-Jabir Al-Sabah, S., *Les Emirats du Golfe, histoire d'un peuple*, Paris, 1980.

Cleuziou, S., "French Archaeological Mission, 1<sup>st</sup> mission...", *Archaeology in the United Arab Emirates*, vol I, 1977.

Cleuziou, S., et al., *Essays on the late prehistory of the Arabian peninsula*, Rome, 2002.

Miry, S., *Line Wadi Suq Ware from Hili and Shimal Sites (United Arab Emirates): A Technological and Provenience Analysis*, 1987.

Said Al-Jahwari, N., "The agricultural basis of Umm an-Nar society in the northern Oman peninsula (2500-2000 BC)", *Arabian Archaeology and Epigraphy*, 20-2, 2009.

### Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the property from 11 to 16 October 2010.

Additional information requested and received from the State Party

Additional information was requested from the State Party on 27 September 2010, concerning:

- Justification for the serial approach;
- The list of monuments inscribed in the inventory of the Abu Dhabi Authority for Culture and Heritage (ADACH);
- The ratification of the Law for the Protection, Conservation, Management and Promotion of the Cultural Heritage of the Emirate of Abu Dhabi;
- The various conservation projects in progress.

The State Party replied on 9 November 2010 with an additional documentation file. The analysis of this documentation is included in the present report.

Date of ICOMOS approval of this report

10 March 2011

## 2 The property

### Description

Al Ain Oasis, formerly called Buraimi, means "spring" in Arabic. Today, it is one of the largest urban centres in the United Arab Emirates. Located close to the border with Oman, the property is near Jebel Hafit. It includes various archaeological, architectural, hydraulic, urban and landscape testimonies. The seventeen ensembles that make up the serial form four main groups, each of which is

characteristic of a period and/or dominant cultural or landscape theme. Even so, elements from different periods may lie close to each other at a given site.

#### Group1: The Hafit ensemble

The oldest regional archaeological remains are found around Jebel Hafit, in the form of traces of human settlements and flint tools dating from the Neolithic. In the heart of a desert region, the Jebel forms in itself a spectacular landscape fringed by a red sand desert and opening onto the green vegetation of the oasis.

Dating from the early Bronze Age (3200–2700 BC), built vestiges remain in the form of the circular tombs of the Hafit culture. In particular, they are found to the east and north of the Jebel. Built out of large stones, they are structures measuring six to eight metres in diameter, with a thick external wall and a central raised tumulus in the form of a cairn, typical of the Hafit culture. They may be as high as, or even exceed, three to four metres. The funerary chamber had an internal diameter of two to three metres and could contain several bodies. There are few artefacts or bones, as the tombs were generally visited or even reused at later periods. These tombs are the oldest-known stone monuments on the Arabian Peninsula.

1.1 Jebel Hafit Desert Park (site 001) is at the base of the Jebel of the same name; its eastern flank is around 20 kilometres south of Al Ain Oasis. It contains the largest number of Hafit culture necropolises, with 122 tombs identified in an area of over two square kilometres.

Mezyad Fort sits within the park boundaries close to the border. This large mud brick military construction dates from the 19<sup>th</sup> century and was restored at the end of the 20<sup>th</sup> century.

This funerary ensemble includes other tombs, along the same line running up the mountain flank to the north, towards Al Ain Oasis. These include the following:

1.2 The tombs to the north of Hafit Jebel (site 002) near Wadi Tarabat.

1.3 The tombs in Al Ain Wildlife Park (site 003) form an intermediate group between the Jebel and Al Ain oasis.

1.4 The West edge Hafit Tombs (site 004) form a group that is an immediate extension of the previous group, within the town.

1.5 Al Naqfa edge Tombs (site 005) form the northernmost Hafit property, with the remains of a necropolis bordering on the modern cemetery and overlooking the Al Ain central oasis (see 4.1). It includes the ruins of the former Naqfa Fort.

#### Group 2: The Hili ensembles

This is a relatively vast archaeological region, to the north of the current Al Ain city and near Jebel Al Hajar. Its occupation dates from the beginnings of the Bronze Age,

around 3000 BC, and continued through to the end of the Iron Age, around 300 BC. The main Bronze Age remains are located in Hili Archaeological Park and its various surrounding sites. The remains from the Iron Age are found further north.

2.1 The Hili Archaeological Park zone (site 006) comprises a central section, the actual park, and a wide ring-shaped band of open land around its periphery. The park is an enclosed public garden which includes the display of its archaeological remains as well as leisure activities. The following are the main elements:

- Hili 1 archaeological site bears witness to human settlement in the Bronze Age, based on the principle of a well at the centre of a built and fortified ensemble. Vestiges of a mud brick fort, a well, a tower, dwellings and a moat remain.
- Hili 10 comprises the remains of a circular mud brick tower and a well. The pottery found at various levels can be used to establish the site's chronology.
- Tombs 1 and N: the first is a large circular tomb from the 3<sup>rd</sup> millennium BC with six internal chambers. It has been restored, notably its external wall. These tombs contain numerous remains of human bones and an array of artefacts, and they have played an important role in the interpretation of the Umm an-Nar culture.

Outside the park, the most notable elements are:

- Hili 8 archaeological site completes the testimonies found at Hili 1 and Hili 10 for the Bronze Age in Al Ain. In particular it reveals the foundations of a vast round tower, surrounded by a moat, which protects a well. It is a mud brick construction with a surface render.
- Hili 14 reveals the remains of a vast 50-meter square building, described as an Iron Age caravanserai.
- Hili 15 is nearby; it is the outfall of a fala (underground water collection system, afla in the plural), dating from around 1000 BC. The drain-canal is 450 metres long and is probably the oldest known of this size.
- Hili 17 is an Iron Age human settlement including the remains of several mud brick dwellings.

2.2 Hili 2 (site 007) is an archaeological site to the west of the park. It was a relatively prosperous village in the Iron Age, and some walls are relatively well preserved. It enables an understanding of the habitat, and the finds reflect the development of irrigated agriculture.

2.3 Hili North Tomb A (site 008) is one of the largest tombs characteristic of the Umm an-Nar culture (Late Bronze Age). Utilising large blocks of dressed stone for the circular wall, it has four chambers on two levels. One of these has been found intact; it contained the remains of around twenty bodies and various artefacts, such as pottery, engraved stones in the form of vessels, copper objects and pearls. It bears witness to long-distance trade.

2.4 Hili North Tomb B (site 009) is a nearby tomb, similar in structure to the preceding tomb. Slightly less well preserved, it provides additional testimony to the Umm an-Nar culture.

2.5 umeilah Site (site 010) is a rectangular elongated mound measuring around 600 by 100 metres, about three kilometres west of the park. Its excavation has revealed two levels of occupation: the first at the end of the 2<sup>nd</sup> millennium BC, and the second corresponding to a village of the first millennium BC. A certain number of constructions from this period remain under the mound.

#### Group 3: Bidaa Bint Saud

Bidaa Bint Saud (site 011) corresponds to a circular outcrop around 25 kilometres north of Al Ain and 14 kilometres from Hili Park.

At the base of the eastern side, the site includes remains from the early Bronze Age similar to those of the Hafit culture, in the form of circular stone tombs with a central cairn.

Bidaa Bint Saud was also widely occupied during the Iron Age, as demonstrated by large tombs on the outcrop. It was in all likelihood an outpost on the caravan route, on the approach to Al Ain. The tombs adopt a variety of forms, built like those mentioned above with undressed local stone. They are generally circular, with internal walls defining the funerary chambers, but one is square.

To the east of the outcrop lie the remains of a wall and, to the west, the remains of a large mud brick construction. It seems to have been a place for the collective storage of crops and the management of water, as two afla have been discovered nearby along with a well and a large cistern.

#### Group 4: The oases

There are six Al Ain oases, marking by their presence the main thrust of local development over a lengthy period of history. They form a wide arc open to the east. The oases appeared in the second millennium BC, perhaps even before, in the form of a farm around a well used to irrigate trees, in particular palms, and lower levels of irrigated plants (shrubs and gardens). In particular, they grew with the development of the afla, a system for the collection of underground water, sometimes from considerable distances, providing a permanent and regular source of water. Today, the oases are surrounded by the city and its suburbs, providing simultaneously irrigated date palm gardens and city parks. In addition to their ecological value, they present an important cultural landscape, dating at least from the Iron Age. The crop-growing techniques have changed little, particularly for dates, and they are still provided with water by the afla.

The oases also have numerous specific built testimonies, notably around their perimeters. These generally date from the 19<sup>th</sup> century, sometimes a little earlier. Designed for military purposes, they are forts, watchtowers and

fortified houses (murabbas), used for refuge and storing harvests. There are also markets and mosques.

4.1 Al Ain oasis (site 012) is in the east-central part of the modern city, in the Central District. It is reputed to be the oldest oasis of them all. It is home to dense vegetation and few constructions, the majority being around its perimeter:

- Murab'a Fort is rectangular; it has a three storey tower and a large internal courtyard. Its entrance gate has a roof structure with traditional ceilings. Restored and maintained, it is a good example of the local mud brick construction techniques.
- The fort to the east (Sultan) is associated with the development of the role of the princelyayed family that reigned over Al Ain and the Abu Dhabi region at the end of the 19<sup>th</sup> century and early 20<sup>th</sup> century. It houses the Al Ain National Museum.
- Al Jahili Fort, played a historic role in defending the oasis at the end of the 19<sup>th</sup> century, similarly to that described above. It retains numerous old architectural elements, notably the round tower which undoubtedly predates the fort. It is an important national historical site which is open to the public; it is also used as an exhibition centre.

4.2 Hili Oasis (site 013) is located north of Al Ain, not far from Hili Archaeological Park. It comprises numerous remains of historical buildings, including:

- Hemad Bin Hadi al Darmaki fortified house located in the centre of the oasis. Today in ruins, it reputedly dates from the early 19<sup>th</sup> century. It has an enclosure with a large corner tower;
- Two watchtowers are built on artificial mounds: one is square, the other is round.

4.3 Al Jimi Oasis (site 014) is an intermediate oasis in the northern sector, four kilometres from the centre of Al Ain. It has numerous built remains and once belonged to the Al Dhahiri family.

4.4 Al Attara Oasis (site 015) is close to the above. Its main old buildings are:

- Murayjib constructions belonging to the oldest families of Al Ain, and dating from the early 19<sup>th</sup> century;
- Attara Tomb adjacent to the oasis on land associated with an old farm. It does not belong to the Hafit, Hili or Umm an-Nar cultures, as it is rectangular and narrow; it dates rather from the Wadi Suq period of the early second millennium BC.

4.5 Mutaredh Oasis (site 016) is located in the central-west part of Al Ain city. It has various built remains including the house of Sheik Mohammed benhalifa. It is an example of a mid-20<sup>th</sup> century palace in the immediate vicinity of the oasis, of traditional form but built of concrete.

4.6 The small Al Muwaiji Oasis (site 017) to the west of the old city of Al Ain includes Muwaiji Palace, built in mud brick on the remains of an ancient fort. It is a testimony to the history of the emirate of Abu Dhabi in the 20<sup>th</sup> century.

Other important testimonies to traditional mud brick architecture are found within the buffer zones and they are protected.

#### History and development

The oldest archaeological testimonies date from the Neolithic (8000 to 4000 BC). Nomads who raised goats and sheep occupied the Jebel Hafit region, attracted by the presence of springs. Finds, in the form of pottery shards, indicate ties with the pre-Uruk Mesopotamian culture in the 5<sup>th</sup> millennium BC.

In the early Bronze Age, from the end of the 4<sup>th</sup> millennium BC, and the start of the early 3<sup>rd</sup> millennium, people started to become sedentary in the hinterland of Jebel Hafit, especially on the eastern slopes of the Oman Mountains. This produced the round tombs of the Hafit culture, with their single chamber containing several sepulchres; almost 500 tombs of this type have been identified in the Al Ain region. Although relatively rare because of past pillage, funerary offerings have been found in the form of pottery, small bronze objects, engraved stones and fired pottery beads. They reveal extensive sea trade relations with the south and centre of Mesopotamia (sculpted boats). The importance of the region was probably linked to its copper mines (Jebel Hajar, Oman).

At this time, the region had the dual advantage of its subterranean water resources encouraging human settlement and its importance as a strategic relay on the "copper road". This period saw the start of agriculture irrigated from wells, enabling the subsistence of small communities. The wells were developed in the mid- and late- Bronze Age; they were located inside towers and fortified dwellings. The ensemble forms a sprinkling of small oases on the eastern and northern edges of Jebel Hafit, in the current region of the Hili Archaeological Park and the Bidaa Bint Saud outcrop. The excavations, notably of Hili 8, reveal a considerable diversity of plant and tree species cultivated by humans in the Bronze Age, similar to those in a modern-day traditional oasis. Domestic animal breeding went hand-in-hand with this sedentary farming.

The ties with Mesopotamia are evident in the remains in the Hafit tombs and cuneiform tablets from the end of the 3<sup>rd</sup> millennium BC, found among the artefacts at later archaeological sites. These relate to the Umm an-Nar culture (2500 to 2000 BC), well represented locally and characteristic of the mid and late Bronze Age. The region of the Al Ain oases then played a role as a caravan and trading stage on the route between the Gulf of Oman and the Persian Gulf, as well as for the copper trade. The construction of watchtowers and ramparts to protect the wells is also characteristic of this period, whereas the tradition of circular tombs continued and evolved into

larger monuments with several funerary chambers (Hili Archaeological Park). Umm an-Nar culture represents an initial high point in the region's development.

In the early 1<sup>st</sup> millennium BC, a major technical development made it possible to alter the scale of human settlements in mountainous desert regions lacking underground water, such as Al Ain. This was the water collection system called afla (qanat in Iran, foggara in the Maghreb). These are long, narrow, inclined channels, sometimes dug into the mountain, that allow underground or surface water to drain off and be conveyed under gravity to the foothills and plains. At their outlet, the provision of a constant supply of water enabled the oases to be extended. The word fala (afla in the plural) refers to a complete irrigation system for a community. It describes both an engineering and social structure for sharing water between all those entitled to it. The result was an increase in communities requiring centralised management, notably for the management of irrigation. This led to a new, hierarchical and regulated society that settled permanently in the region. This period of innovation is characteristic of the Iron Age during the 1<sup>st</sup> millennium BC, forming a second high point for the region.

The oases appear to have been used continuously throughout the historical periods, from antiquity to the present day. The Islamic period, starting in the 7<sup>th</sup> century, appears to have witnessed a revival and development of the oases. However, there are no clearly identified historic remains predating the Modern era. From the end of the 17<sup>th</sup> century, the political and military tension between the princes of Oman, the emirates and Arabia led to the construction of mud brick forts and watchtowers.

From the Bronze Age until recently, the local mud brick architecture appears to have developed continuously in the Al Ain oases. It features thick walls with small openings. The roofs are made of date palm timber and palm fronds. This use of mud bricks is specific to the architectural traditions of the hinterland of the Arabian Peninsula. However, there are few examples from all historical periods through to the early 19<sup>th</sup> century. It remained the main method of construction in Al Ain until the 1960s. At this time, a significant number of vernacular buildings were demolished, coinciding with urban and population growth associated with the arrival of the oil age.

### 3 Outstanding universal value integrity and authenticity

#### Comparative analysis

The arguments set out in the comparative analysis in the nomination file are based on the notion of a culture evolving throughout the millennia and a traditional lifestyle that is now disappearing. Also emphasised is the contribution of this to the growth of Arab society, and, lastly, the interactions clearly visible here between three types of societies: nomadic, oasis dwellers and long-distance caravan traders. Because of this there is

particular reference to the neighbouring Archaeological Sites of Bat, Al- hutm and Al-Ayn (Oman, 1988, criteria (iii) and (iv)), the Afla Irrigation Systems of Oman (2006, criteria (v)), and the Iranian properties of Bam and its Cultural Landscape (2004, criteria (ii), (iii), (iv) and (v)) and the Shushtar Historical Hydraulic System (2009, criteria (i), (ii) and (v)). The Al Liwa site, in the south of the Abu Dhabi mirate, is also referred to, but it essentially uses wells for irrigation and its built remains are far less numerous.

The two Omani properties are culturally very close: the first in terms of its habitat zone and necropolises from the 3<sup>rd</sup> millennium BC; and the second for its afla irrigation system. For the State Party, the nominated property has a more complete ensemble and spans a longer period as regards the funerary ensembles. Additionally, the Al Ain afla are considered older, and similar to the first irrigation systems of this type in the world. The Al Ain afla are also a living hydraulic ensemble, still in use in the oases. This system subsequently spread to the Mediterranean Basin, the Middle East and Central Asia.

The Al Ain palmeral, taken as a whole, is considered comparable to the Palmeral of Liche (Spain, 2000, criteria (ii) and (v)).

Architecturally, the Al Ain forts and watchtowers are judged very representative of a regional style that appeared at the end of the 17<sup>th</sup> century. It is an adaptation of the local tradition of mud brick construction for military buildings. A comparison is made with Bahla Fort (Oman, 1987, criteria (iv)) and asr al Masmak in Riyadh, Saudi Arabia, built at the end of the 19<sup>th</sup> century. For the State Party, Al Ain therefore forms an exceptionally complete ensemble, spanning more than five thousand years, of cultures that appeared and developed in the desert.

ICOMOS considers that the nominated property provides a broad range of cultural testimonies from very diverse periods and types, relative to successive desert civilisations. Initially, a series of points of view need to be considered.

The wealth of the testimonies appears above all valid for the protohistoric periods of the Bronze and Iron Ages, but the comparative study of the archaeological sites needs to be deepened in the United Arab Emirates, in Oman and across the entire region.

Irrigation following the appearance of the afla is an important aspect of the property but it remains insufficiently documented, and the assertion ex abrupto that it pre-dates all other similar sites is risky. Nearby afla have already been recognised for their Outstanding Universal Value (Oman). These show strong similarities in their comparable environmental and historical contexts; they also show a complex typology and a high level of integrity, the equivalent of which has not been demonstrated for Al Ain. Reconstruction for successive usage clouds the issue of dating and the origins of the afla still in use.

Furthermore, the long intermediate period from antiquity to the modern and contemporary eras is poorly represented, or not at all, in firmly dated and identified archaeological and heritage terms. The recently reconstructed forts and palaces, on the edge of or in the oases, were built over remains generally dating from the 19<sup>th</sup> century. The comparisons with properties from historical periods, of recognised outstanding universal value, are therefore not particularly well founded.

In conclusion, while a comparative study with other properties already inscribed on the World Heritage List has been performed with regard to certain specific points, an overall comparative analysis is difficult to establish and justify because of the diversity of the types of testimony taken into account (archaeology, hydraulic techniques, local architecture, military constructions, landscapes, etc.), as well as the diversity of periods considered (from the early Bronze Age through to the very recent period).

ICOMOS considers that the choice of sites and the components of the serial property form an overly disparate and insufficiently justified ensemble. The comparisons made with the properties already inscribed on the World Heritage List show that they are more coherent ensembles, based on a precise and clearly identified theme. Furthermore, the regional comparisons and those with properties on the Tentative List or with similar values, notably archaeological, have not been developed.

---

ICOMOS considers that the comparative analysis does not justify consideration of this property for the World Heritage List.

---

Justification of Outstanding Universal Value  
The nominated property is considered by the State Party to be of Outstanding Universal Value as a cultural property for the following reasons:

- Al Ain is a cultural site that provides major testimony to the Hafit, Hili and Umm an-Nar protohistoric cultures. In themselves, they have outstanding universal value. This testimony includes, in particular, a vast ensemble of circular tombs in the form of cairns and the agrarian sedentarisation of the first oases using water drawn from wells.
- These cultures continued throughout the millennia, up until the present day, and they have shaped a way of life specific to this part of Arabia. To this end, they have developed unique solutions for adapting to the desert in terms of irrigated agriculture, construction of dwellings, military architecture and funerary mausoleums.
- They invented the falaj system to collect underground water, making it possible to irrigate extensive oases, as early as the Iron Age. This led to a social organisation for water management and a defensive system of oasis towers.
- They assimilated cultural influences from the Persian Gulf, the Arabian hinterland, Oman, the Indian Ocean and Ancient Mesopotamia.

- Whilst these cultures gradually adapted to historical changes, maintaining their fundamental values, today they are threatened. Their vestiges, still numerous, significant and sufficiently complete, are expressed within the context of a cultural landscape combining the oases, the desert and mountains.
- Al Ain has always been a major post on the trade route between Oman and the Indian Ocean coast of the Persian Gulf and Mesopotamia.

ICOMOS considers that the justification of the property's value has been insufficiently demonstrated for several of the testimonies presented.

The afla appear to be important elements for establishing several of the property's values, at various periods, but they are not described either as archaeological remains or as hydraulic systems in use.

There are virtually no material testimonies ranging from antiquity to the 18<sup>th</sup> century, which undermines both the demonstration of the continuity of water supply to the oases and the significance of the cultural landscape.

The analysis of the value of the mud brick constructions is backed by very little documentation and it has been severely undermined by numerous reconstructions in the 1980s.

ICOMOS considers that the serial approach for the property is insufficiently justified by the choice of an excessive and overly disparate number of thematic ensembles, and the excessive number of prehistoric and historical periods. The leitmotif of water management in a desert country is too general and insufficiently justified; it is also insufficiently represented by coherent and well-documented ensembles. In its current state, the nomination file is more of an addendum of archaeological, architectural, engineering and landscape elements of a district, at all periods, rather than a dossier built around a central, well-illustrated theme with irrefutable testimonies. The protohistoric elements could fulfil this role, but their regional inventories need to be further explored.

#### Integrity and authenticity

##### Integrity

The State Party begins by justifying the choice of the seventeen components forming the property. The concern was to include the remains, buildings and oasis spaces testifying to the property's values in as appropriate and complete a manner possible. Sufficient spaces were also required to express the relations between the elements, notably using cultural landscapes (deserts, mountains and oases). Components of the property are often contained within the modern city, in a living relationship that has been the subject, notably for the Al Ain oasis, of particular attention. These projects concern the articulation between the oasis and its built environment and, more broadly, management of the urbanisation to preserve the visual

relationship between the oasis and the mountains and the desert. An effort to conserve the archaeological remains within their landscape has been made in the Jebel Hafit Desert Park (site 001).

Additionally, and despite urban pressure, the management and conservation of the property are based on a policy aimed at maintaining the integrity of the various components.

ICOMOS considers that the archaeological elements testify to various important protohistoric cultures in the form of many tombs as well as the remains of other constructions (wells, afla, dwellings, defence systems, etc.). A regional archaeological inventory and deeper knowledge of these ensembles would be needed to fully justify their integrity. Their nearby environments form landscapes associated with the desert, mountains and existing oases, but they are at times undermined by the proximity of anachronistic elements linked to contemporary development (theme park, modern constructions, road and hotel infrastructure, etc.). More broadly, the conditions of integrity of the nominated cultural landscapes are not fully met.

Begun in the 1960s, the galloping urbanisation has swept away numerous elements of the traditional built environment. Housing in general and working-class housing in particular have all but disappeared from the periphery of the oases. The urban testimony and landscapes historically associated with the periphery of an oasis have been reduced to the monumental restoration of numerous palaces and mud brick forts, generally dating from the 19<sup>th</sup> century. Furthermore, these palaces are presented as having a good degree of architectural integrity, notably in the additional documentation sent by the State Party which, in recent restoration projects, demonstrates respect for vernacular techniques.

Lastly, there is no descriptive analysis of the afla and their integrity has not been demonstrated.

ICOMOS considers that the nominated elements form ensembles which are too disparate to be able to qualify the serial as having integrity. The landscapes associated with the seventeen components of the property are numerous, and of unequal meaning and integrity.

##### Authenticity

The State Party considers that, in the spirit of the Nara Declaration, the components forming the property correspond to a high degree of authenticity, notably in terms of form, design and usage. The various sites represent particularly well the techniques developed by the successive Al Ain cultures and the vernacular architecture of the periods preceding the oil age. Respect for the materials and architectural styles has been a general rule for work on the buildings, especially since the 1980s. A programme to bring work done previously up to this standard is planned.

The shifting of the oasis towards a western perspective has aided conservation of the authentic archaeological, architectural and technical elements, notably those relating to the older Hafit, Hili and Umm an-Nar cultures.

ICOMOS considers that the majority of the monumental tombs from the protohistoric eras were in ruins when discovered by archaeologists in the second half of the 20<sup>th</sup> century. While there is no doubt as to the authenticity of the sites and associated artefacts, certain tombs, often those considered the most important, have undergone restoration or even substantial reconstruction, notably the Grand Tomb in Hili Archaeological Park, which limits the scope of their authenticity. To be able to fully assess the authenticity of these ensembles, it would be necessary to provide a more complete study of the archaeological sites (detailed maps and surveys) and an analysis of the reconstruction work carried out. Similarly, while the presence of afa in the Iron Age seems finally authenticated, the absence of any documentation about the afa precludes any assessment of their authenticity as a system.

The many restorations of palaces, forts and towers are necessitated by the use of mud bricks which need to be regularly maintained. Depending on when the work was performed and each specific case, respect for the initial architectural authenticity is variable. ICOMOS notes that this point has been insufficiently documented at this stage. Generally, considerable effort has been made to utilise vernacular techniques, using mud brick, palm wood and palm fronds, but there seems to be a significant level of interpretation, notably in restorations done in the 1980s performed primarily with a view to reuse.

The conditions of authenticity in terms of the usage of the oases are indeed very fragile, threatened by agricultural abandonment and the structural lowering of the aquifers exploited by the afa. For the time being, this is offset by the artificial injection of water brought in from the outside. The oases, notably Al Ain, have undergone major restorations of their paths and walls and they have tended to be transformed into public gardens.

---

ICOMOS considers that the conditions of integrity and authenticity of the property have not been met at this stage.

---

Criteria under which inscription is proposed

The property is nominated on the basis of cultural criteria (i), (iii), (iv) and (v).

Criterion (i): represent a masterpiece of human creative genius;

This criterion is justified by the State Party on the grounds that the Hili complex is one of the oldest irrigation systems using afa, if not the oldest. In particular, it proposes the invention of the fala as early as the Iron Age, as an undeniable element of human creative genius. It is a complex technical achievement with considerable and lasting consequences for the

creation and development of artificial oases. It demanded mastery of numerous scientific and technological elements for the calculation, construction, management and maintenance of an extensive hydraulic system.

While ICOMOS considers that the great value of the afa hydraulic systems is undeniable in its principle as it is in its regional importance for the development of oases, from as early as the protohistoric periods, the property in itself only partially illustrates their birth and early technical development. Moreover, there is a lack of understanding about them and they need to be documented within the context of the property.

---

ICOMOS considers that this criterion has not been demonstrated at this stage.

---

Criterion (iii): bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared;

This criterion is justified by the State Party on the grounds that the property provides a unique and exceptional testimony to the development of the successive cultures of the Bronze Age - Hafit, Hili and Umm an-Nar. They demonstrate sustained human development, reflecting the transition from hunter and nomadic societies to sedentarisation in oases. This socio-technical system is notably amplified by the management of water provided by the afa in the 1<sup>st</sup> millennium BC, and which continued throughout the historical eras while adapting to new contexts. These various periods also provide unique and diverse archaeological, architectural and urban testimonies, such as the circular tombs, towers, habitat and defence systems built in mud brick, administrative buildings and palaces, etc.

ICOMOS considers that the nominated property provides a diverse ensemble of testimonies to the cultural traditions of successive human groups throughout various protohistoric eras. A better definition of the property and deeper comparative analysis with the region's archaeological sites are needed to demonstrate this criterion. The argument of the continuity of the development of the cultural tradition of oases through to the present day is insufficiently justified in terms of its being a unique or exceptional fact.

---

ICOMOS considers that this criterion has not been demonstrated at this stage.

---

Criterion (iv): be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history;

This criterion is justified by the State Party on the grounds that each element of the property provides one or several exceptional examples of a type of construction, architecture or engineering ensemble, or



landscape, at a given time or period. In particular, this refers to the necropolises composed of circular tombs in the Bronze Age and for various cultures, the afla hydraulic system in the Iron Age, mud brick public and private built ensembles, watchtowers, defence systems around wells at various periods, and palaces and mosques from the Islamic period. The oases provide a cultural landscape illustrative of the development of irrigated agriculture since the early Bronze Age.

ICOMOS considers that the property provides eminent examples of several types of architectural and engineering constructions from various protohistoric periods. The tombs and architectural remains of the Hafit, Hili and Umm an-Nar cultures provide an exceptional illustration of human development in the Bronze Age and the Iron Age on the Arabian Peninsula. The afla system, introduced as early as the 1<sup>st</sup> millennium BC, is testimony to the management of water to develop artificial oases in desert regions. A better definition of the property and a more detailed analysis of the conditions of integrity and authenticity of these constituent elements are required to demonstrate this criterion.

---

ICOMOS considers that this criterion has not been demonstrated at this stage.

---

Criterion (v): be an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change;

This criterion is justified by the State Party on the grounds that the Al Ain oases have their roots in Bronze Age and Iron Age cultures. They represent in an outstanding manner a traditional and continuous use of a desert region. Their creation, supply with water and agricultural use required a set of skills and knowledge to sustainably master this interaction between man and one of the most challenging of natural environments. This interaction led to a model of social organisation for the equitable control of resources. Oases are fragile environments, and are today under threat. The fact that they continue to exist intact within modern urban ensembles is a symbol of the life of the past and the ability of the oldest civilisations to cope with the challenges of the desert.

ICOMOS considers that the man-made oases of Al Ain appear to testify, over a very long period of history, to the capacity of the civilisations of the northeast of the Arabian Peninsula, notably in the protohistoric periods, to sustainably and positively master a relationship with the desert environment. They knew how to establish the sustainable exploitation of water resources to create an environment of greenery, life and agricultural resources produced using sophisticated irrigation systems. However, neither the continuous use throughout historical periods, nor the exceptional value of the

testimonies, nor the conditions of integrity and authenticity of the material remains of the cultural landscapes of the oases have been demonstrated.

---

ICOMOS considers that this criterion has not been demonstrated.

---

ICOMOS considers that the serial approach is not satisfactory because of the accumulation of testimonies, themes and periods that are too different from each other. A redefinition of the property and a revision of the selection of its constituent elements are required.

---

ICOMOS does not consider that the criteria and Outstanding Universal Value have been demonstrated at this stage.

---

## 4 actors affecting the property

### Development pressures

Urban development has been very present in the immediate vicinity of several elements of the property since the early 1960s. This refers in particular to:

- Urban development around the periphery of Al Ain oasis (site 012);
- The industrial zone south of Al Ain, not far from the property's Group 1 components;
- The construction of motorways and express roads bordering on certain elements of the property, north of Jebel Hafit, for example (group 1);
- Hotel complexes, at times very visible within the landscape (site 001);
- The operation of large quarries and oil exploration infrastructure in the 1970s and 1980s that have left visible traces on the landscape.

Traditional agricultural production in the oases, dates especially, is tending to become much less profitable than in the past, within an otherwise prosperous economy. Two trends have arisen: the temptation to improve crops using non-traditional methods or the replacement of crops and farming with more profitable activities.

### Tourism pressures

Al Ain has several large modern hotels, leisure parks and cultural centres, some of which are close to the property's constituent elements or even within their perimeter.

Hili Archaeological Park (site 006) is both a leisure and theme park. Its installations are too close to the archaeological sites and tend to undermine their cultural and environmental context. Plans for a major tourism centre have been announced adjacent to the northern perimeter of Jebel Hafit, near Mezyad Fort.

ICOMOS considers it necessary to provide details and guarantees regarding the visual impact of the projected

tourist complex near Mezyad Fort, in conformity with paragraph 172 of the Operational Guidelines, if the property is inscribed.

ICOMOS considers that the use of 4x4 vehicles for off-road excursions is a mode of leisure activity that affects the natural environment and undermines the perception of authenticity of the sites concerned.

The current visitor numbers to the property's sites does not pose any particular problem and could increase significantly in park areas and open-air monuments. The situation is different in the oases where visitors must respect the agricultural work in the various private properties. The wide spaces and the isolation of certain components of the property may leave them open to deterioration and vandalism.

ICOMOS considers that one of the indirect consequences of excessive mass tourism would be increased pressure on the aquifer and would only aggravate the current situation of declining levels.

#### Environmental pressures

The natural environment is threatened in the eastern part of Jebel Hafit by the increased size of camel and goat herds.

The main air pollution is attributable to urban and periurban automobile traffic, together with airborne dust from soil erosion and wind.

There is a risk of water pollution from various potential sources: excessive fertilizer, lack of wastewater treatment, chemical contamination, etc. ICOMOS considers that this could damage the soil of the oases as they are located on lower ground and collect run-off when it does rain.

#### Natural disasters

The Al Ain sites are not threatened by any major earthquake, flooding or fire risks.

#### Impact of climate change

The main risk from climate change is the further drop in the aquifers. This is already a structural trend which for the time being is offset by the injection of additional water into the old afla system from desalination or wastewater treatment.

ICOMOS considers that the main threats to the property are poorly or uncontrolled urban and tourism growth near the sites and sometimes within their perimeter (Mezyad tourism complex), and the fragile aquifer system of the oases.

## 5 Protection conservation and management

Boundaries of the nominated property and buffer zone

The surface areas of the various components of the property and the associated buffer zones are listed in the following table:

Site No (group)	Surface area	Buffer zone
001 (1.1)	3,828.52 ha	a 5,909.92 ha
002 (1.2)	281.84	A
003 (1.3)	65.39	b 166.93 ha
004 (1.4)	92.86	B
005 (1.5)	0.78	A
006 (2.1)	193.83	c 518.40
007 (2.2)	1.71	C
008 (2.3)	0.57	C
009 (2.4)	0.12	C
010 (2.5)	5.43	C
011 (3)	112.09	d 659.20
012 (4.1)	119.78	A
013 (4.2)	63.55	C
014 (4.3)	78.81	e 274.73
015 (4.4)	64.38	D
016 (4.5)	24.90	f 43.80
017 (4.6)	10.89	g 32.48
Totals:	4,945.45 ha	7,605.46 ha

The number of people living within the components of the property is negligible; there are few inhabitants in the historic buildings in the oases.

The total population in the buffer zones is around 78,000, that is 16% of the population of Al Ain.

ICOMOS considers that it is difficult to assess from the dossier, at this stage if all the attributes of the potential outstanding universal value of the property are included in the nominated sites, and thus to make a decision about the appropriateness or otherwise of their boundaries.

ICOMOS considers that the boundaries of the nominated property's sites and the buffer zones need to be reviewed within the context of a new definition of the property. Furthermore, ICOMOS encourages marking out the boundaries of the property sites and buffer zones in open areas.

#### Ownership

The various property components fall under three different types of ownership. The main two are: ownership by the government of the emirate of Abu Dhabi for the museums and forts, private ownership for the most part of the oases and other buildings, and the exceptional case of royal ownership of the Muwajji palace and oasis.

For the emirate-owned components, ownership is exercised by the Abu Dhabi Authority for Culture and Heritage (ADACH).

ICOMOS considers it is necessary to clarify ownership. With regard to land, it is necessary to clarify who owns the parks (for example, Hili Archaeological Park seems to be a municipal property), to what extent the oases are in private ownership and who are these owners, and who own the tombs located outside the parks.

## Protection

### Legal Protection

The various components of the property are protected by the following texts and regulations:

#### Nationally:

- Al Ain Oases Law of 2004 which provides guarantees for cultural and heritage conservation;
- Law of 2005 on the Preservation of Palm Oases of Al Ain, forbidding any new construction within the oases and defining the missions of the Abu Dhabi Authority for Culture and Heritage (ADACH).

The Al Ain Town Planning Department, known as G 4, forbids the construction of any new buildings of more than four storeys and a maximum height of 20 metres.

The main historic monuments and archaeological sites within the property and its buffer zones are protected by their inscription on the national inventory managed by ADACH, as indicated in the additional documentation of November 2010.

Authorisations for archaeological excavations are issued by a special department of ADACH, which is also responsible for their protection. A Directive issued by Sheikayed Bin Sultan Al Nahyan created a protection zone around Hili Archaeological Park in order to facilitate excavations and conservation of the archaeological remains.

The Municipality of Al Ain and the ADACH's Historic Environment Department provide protection of the desert and steppe regions that are part of the property's cultural landscape.

The Abu Dhabi Environment Agency, in charge of Jebel Hafit Park, limits camel and goat herd numbers to protect the steppe areas of this part of the property. ICOMOS notes that this plan is to be strengthened and extended.

A law is currently under preparation for the protection, conservation, management and promotion of the cultural heritage of the emirate of Abu Dhabi. It is expected to integrate, extend and coordinate the existing provisions. The additional documentation provided in November 2010 included a copy of the draft law.

A law has been announced to protect the water resources supplying the afla.

## Traditional Protection

Water management expertise and practices, farmland irrigation and traditional agriculture by the oasis populations are an important aspect of the property's protection.

### Effectiveness of protection measures

ICOMOS considers that the property's protection is provided by numerous sectorial arrangements reflecting the complexity of the property's definition. The State Party will have fully effective protective measures once the new laws on heritage and on the water sources supplying the afla have been passed.

---

ICOMOS considers that the legal protection in place will be entirely appropriate once the new laws on the protection, conservation, management and promotion of cultural heritage, and the law on the water sources supplying the afla, have been passed.

---

## Conservation

### Inventories, recording, research

The list of the national inventory and ADACH's additional thematic lists form a database including a description and documentation specific to each monument. It serves as a diagnostic tool and for the preparation of works programmes for the conservation of the protected components.

The additional documentation provided in November 2010 lists 84 protected buildings and historic sites in the property and its buffer zones.

ICOMOS notes that a new information coordination and management system is planned.

### Present state of conservation

The conservation of the Hafit ensemble (group 1) is related to the overall management of the foothill areas of Jebel Hafit, notably to the north and east. This refers both to territorial management and conservation of the landscapes, and to the protection of the archaeological components. Seven tombs have been restored in accordance with their original forms. Two intact tombs remain, many others exist only in a vestigial state.

For the archaeological ensemble of the Hili sites (group 2) and Bidaa Bint Saud (group 3), excavation work is longstanding and well advanced, but it needs to be pursued in several places before any conservation work can be contemplated. It has been necessary to backfill several excavation sites to protect the remains of mud brick walls. Several archaeological sites have been protected with fences since their discovery.

The Hili Archaeological Park (006) and the Bidaa Bint Saud tomb site (011) are fenced.

In the oases and their peripheries (group 4), there has been numerous restoration of forts, palaces and houses, almost all in mud brick, notably in the 1980s. Of the 84 monuments inscribed, 40 have been restored. The initial trend was to encourage reconstruction-restoration of buildings, then in a very poor state or abandoned, in order to make them places of memory, museums and spaces for collective activity, notably around the urban periphery of the oases. This work was announced as being respectful of the heritage, but without the backing of appropriate scientific studies necessary for the restitution of these site's conditions of integrity and authenticity. In the past few years, the policy has been to either carry out far more scrupulous restorations in terms of respect for vernacular traditions, or to no longer perform any work on ruins and to leave them as they are. The latter case raises the problem of unauthorised use by poor immigrant workers. The mud brick walls and paths of the oases have undergone extensive restoration. In addition to their agricultural use, the oases have become pedestrian precincts for the city's inhabitants and visitors. The state of conservation of the afa is not mentioned.

#### Active Conservation measures

ADACH's Strategic Plan (2009-2013) sets out the conservation priorities and the programme of actions to be implemented for the conservation of the monuments and archaeological sites. Five main projects are underway or planned: Al Jahili Fort, Hemad Bin Hadi al Darmaki House, Mohammed Bin halifa House, Sultan Fort and Muwajji Palace. Extensive additional documentation was provided by the State Party in November 2010 regarding these programmes.

ADACH has an emergency works programme for the conservation of monuments.

The conservation of Al Ain oasis is carried out under the Al Ain Oasis Cultural Quarter Master Plan. There are specific programmes for the attara and Jimi oases. A restoration plan for six palmerals is in progress.

Any new development project that may potentially have an impact upon the landscape of the historical and archaeological sites requires a preliminary study by ADACH before its submission to the Town Planning Department.

There are various secondary research and/or conservation programmes, sponsored by various scientific or cultural institutions. They are authorised and supervised by ADACH.

ICOMOS considers that it is necessary to develop an overall archaeological programme for the property as part of its Management Plan.

#### Maintenance

ADACH's Historic Environment Department has a maintenance plan and has two patrols to oversee cleaning

and minor repairs. Both parks have supervisory staff providing similar functions.

Ai Ain Municipality is responsible for maintaining the oasis paths and the public thoroughfares around its periphery. It is also responsible for managing the oasis water through its Water Directorate.

#### Effectiveness of conservation measures

ICOMOS considers that the current conservation measures are effective and well directed. However, a scientific review of the restoration-reconstruction activities carried out in the 1980s and 1990s needs to be performed, in order to better understand the actual conditions of authenticity of certain built and archaeological components of the property.

It is necessary to consider a similar approach to document the afa and, more broadly, to guarantee their functional conservation by appropriate measures for water resources and their quality. Finally, it is necessary to develop an overarching programme for the archaeology and to include it in the Management Plan.

---

ICOMOS considers that the conservation of the property needs to be reinforced by programmes, integrated in the Management Plan, concerning: knowledge and conservation of the afa, evaluation of the restorations performed in the 1980s on the mud brick buildings and on the protohistoric tombs, and an overall archaeological programme.

---

#### Management

Management structures and processes, including traditional management processes

The Abu Dhabi Authority for Culture and Heritage (ADACH) is a semi-autonomous public body charged with a general mission for the preservation of cultural heritage. It reports directly to the emirate government; it defines preservation and conservation policies and implements them. It has several specialist departments coordinated by the Strategic Planning Office such as the Conservation Department and the Historic Environment Department, which includes the Cultural Landscapes, Historic Buildings and Archaeology Divisions.

For the management of the various sites, ADACH's Strategic Planning Office is responsible for the property's overall coordination. It works with the Municipality of Al Ain, notably its Town Planning Department, the Abu Dhabi Tourism Authority, the Environment Agency of Abu Dhabi, and the Abu Dhabi Urban Planning Council.

Through its many executive prerogatives, notably supervision and authorisation, ADACH provides a global institutional framework for the overarching management of the elements comprising the serial property.

Policy framework: management plans and arrangements, including visitor management and presentation

The ADACH Strategic Plan (2009-2013) deals with the conservation of the property's various components. It ties in with various local and regional plans and planning studies. In particular, these refer to:

- Strategic economic review and Tourism Sector Study for Al Ain and its region (2000) prepared for the Local Government (Dewan) of the eastern region
- Al Ain 2015 Master Plan (2007, Municipality of Al Ain, Town Planning Department);
- Al Ain 2030 Structure Framework Plan. This plan includes the Al Ain Cultural Quarter Master Plan concerning the city's central oasis and its near environment. It aims to coordinate the development of the oasis, its use by pedestrians, the development of its urban environment, the preservation of its landscapes and the visual authenticity of the oasis, interpretation of the site, museums, cultural centres and hotels;
- Al Ain Central District Plan (2010).

ICOMOS considers that the current plans, especially the Strategic Plan and various sector projects included in the additional documentation, need to be augmented with an overall programme iterating the planned actions and the schedule for their implementation.

#### Risk preparedness

The State Party is taking decisions in several areas to reduce air pollution (limiting vehicle speeds, rail transport, etc.) and to manage water (agriculture, sensible usage, etc.). It is also taking decisions aimed at soil conservation.

#### Involvement of the local communities

Participation by the local communities exists in theory through the Afla Council under the Municipal Water Directorate, but it no longer seems very active with the abandonment of agriculture and the issue of the exhaustion of traditional sources of water supply.

Resources, including staffing levels, expertise and training

ADACH has access to the public funds needed for its programmes and operation. It is a strategic project for the State Party and the funding is guaranteed for the long-term.

ADACH has its own human resources which are backed up by contributions from external firms and companies specialising in a variety of fields.

ADACH has the following scientific and technical employees:

- The Strategic Planning Office is headed by an archaeologist, specialising in heritage conservation

and management. He is assisted by two engineers and an administration manager.

- The Department of Conservation has a town planner and an architect, both specialists in heritage conservation, a chemist, thirty conservation technicians and labourers, and two archivists; additional recruitment is underway, notably for a building conservation supervisor.

Numerous partnerships with regional and external universities and leading internationally-renowned scientific institutions are being established in various areas relative to the archaeology, history and conservation of the property. ADACH contributes to the training of architecture and archaeology students through internships.

#### Effectiveness of current management

ICOMOS considers that a management system for the property is in place via the technical, scientific and coordination action exercised by the Abu Dhabi Authority for Culture and Heritage (ADACH) and the various sector plans announced in the additional documentation. Its functional resources are guaranteed and it has the human resources required to implement its actions. Its Strategic Plan provides an overall view of the serial property, but it needs to be augmented with an overarching management plan regrouping all the programmes of action and their implementation timeframes.

Its main local partner for the management of the property is the Municipality of Al Ain. Together, they would benefit from opening up to local communities by revitalising the Afla Council or an Oases Council, reviving the ancient community traditions specific to the region.

---

ICOMOS considers that the serial property benefits from an appropriate management system, but that it would be useful to augment it with an overarching management plan regrouping all the programmes of action and their implementation timeframes, as well as with an Afla Council or an Oases Council involving the traditional communities.

---

## 6 Monitoring

The culture and heritage authority ADACH is in charge of monitoring the property. It is closely involved in the inventory and documentation work currently in progress (see Conservation). Two levels of monitoring are implemented. The first involves the monitoring and standard maintenance of the property sites with frequencies ranging from daily to weekly. The second is for the scientific monitoring of the individual components that make up the serial property, updating information about current knowledge and state of conservation. It employs systematic technical methods such as digital databases, photogrammetry, etc. Three monitoring indicator tables have been defined for the Hafit ensemble, the Hili and Bidaa Bint Saud ensembles, and the oases. Frequencies are annual; in some cases they are biennial.

Particular attention is paid to the physical and social threats liable to affect the conservation of the property's components.

ICOMOS notes that the monitoring of the delicate issue of water, its uses, and the conservation of the *afla* is not mentioned. Monitoring the growth in tourism uses of the property would also be useful.

---

ICOMOS considers that the monitoring is effective but needs to be extended to include the *afla* and tourism.

---

## 7 Conclusions

ICOMOS considers that the nominated sites form an accumulation of an excessive number of themes and overly different periods for the outstanding universal value of the serial property to be demonstrated. The very general name proposed for the property illustrates this difficulty. It is necessary to review the property's definition and the selection of the serial components and to focus them on a main theme and/or a more coherent and better defined period. The testimonies of the protohistoric cultures could meet such a requirement. However, a more detailed study of the archaeological sites and a comparative analysis extended to include similar neighbouring and regional properties are required.

### Recommendations with respect to inscription

ICOMOS recommends that the examination of the nomination of the Cultural Sites of Al Ain (Hafit, Hili, Bidaa Bint Saud and Oases Areas), United Arab Emirates, to the World Heritage List be deferred in order to allow the State Party to:

- review the property's definition and the selection and identification of the components forming the serial, by supplying more complete scientific documentation about the archaeological sites and the ancient *afla* hydraulic systems, in order to enable the determination of the property's Outstanding Universal Value;
- extend the comparative analysis to the protohistoric sites in the United Arab Emirates, Oman and the region;
- Clarify the situation regarding public ownership within the property, for the parks and the tombs outside the parks in particular, as well as for the private ownership of buildings and land within the property;
- Pass the new law for the protection, conservation, management and promotion of cultural heritage and confirm the drafting of a law on the protection of water resources for the traditional *afla* system;

- Pursue research to clarify the issues of authenticity and integrity of the restorations of the protohistoric tombs and mud brick constructions performed prior to the 2000s;
- Augment the strategic plan and the various sector plans with a management plan describing the actions actually programmed for the ensemble of the serial property and their implementation schedule;
- Develop an overall archaeological programme and include it in the management plan.

ICOMOS considers that any revised nomination would need to be considered by an expert mission to the site.

ICOMOS further recommends that the State Party give consideration to the following:

- extend the systematic monitoring to include tourism;
- Improve the distinction between the archaeological spaces and leisure spaces in the Hili Archaeological Park;
- Mark out the boundaries of the property sites and buffer zones in open areas.



Map showing the boundaries of the nominated properties





Al Ain Oasis and Sheikh Saeed Palace Museum



Mezayad Fort with Jebel Hafit in the background





Hili 8



Bidaa Bint Saud tomb

C Asia - Pacific

New Nominations

---

West Lake of Hangzhou  
China  
No 1334

---

Official name as proposed by the State Party  
West Lake Cultural Landscape of Hangzhou

Location  
Hangzhou City, Zhejiang Province  
People's Republic of China

**Brief description**  
West Lake, is surrounded on three sides by 'cloud-capped hills' and on the fourth by the city of Hangzhou. Its beauty has been celebrated by writers and artists since the Tang Dynasty (AD 618-907). In order to make it more beautiful, its islands, causeways and the lower slopes of its hills have been 'improved' by the addition of numerous temples, pagodas, pavilions, gardens and ornamental trees which merge with farmed landscape. The main artificial elements of the lake, two causeways and three islands, were created from repeated dredgings between the 9<sup>th</sup> and 12<sup>th</sup> centuries.

Since the Southern Song Dynasty (thirteenth century) ten poetically named scenic places have been identified as embodying idealised, classic landscapes that manifest the perfect fusion between man and nature.

In the last twenty years, the city of Hangzhou has developed rapidly and no longer bears any resemblance to the small, walled town that once framed the lake. In the same time span, the lake landscape has been restored from the neglect of the earlier two decades.

To the west of the Lake are included extensive Longjing tea plantations in the folds of the hills.

**Category of property**  
In terms of categories of cultural property set out in Article I of the 1972 World Heritage Convention, this is a site.

In terms of the Operational Guidelines for the Implementation of the World Heritage Convention (January 2008), paragraph 47, it is also a cultural landscape.

## 1 Basic data

Included in the Tentative List  
28 March 2008

International Assistance from the World Heritage Fund for preparing the Nomination  
None

Date received by the World Heritage Centre  
27 January 2010

**Background**  
This is a new nomination.

**Consultations**  
ICOMOS has consulted its International Scientific Committee on Cultural Landscapes and several independent experts.

Comments on the assessment of this cultural landscape were received from IUCN on 1<sup>st</sup> February 2011.

This information was carefully considered by ICOMOS in reaching its final decision and recommendation in March 2011; IUCN reviewed the presentation of its comments, as included in this report by ICOMOS.

## Literature consulted selection

Grimes, S., *West Lake reflections: a guide to Hangzhou*, 1983.

Ho Chi Chih Chang-yao (eds), *A picture album of the West Lake in days of old*, Hangzhou, 1985.

Holledge, S., *Hangzhou and the West Lake*, Hong Kong, 1981.

Hsi-hu t'u, *Map of West Lake*, Hang-chow, Hangzhou, 1880.

Lee Hui-shu, *Exquisite Moments: West Lake Southern Song Art*, New York, 2001.

Tang Tzu-ch'un Ch'en ung-ch'i, Kai-liang Hsi-hu chi-fang t'u. *A tourist map of the West Lake*, Che-chiang province, Hangzhou, 1911.

**Technical Evaluation Mission**  
An ICOMOS technical evaluation mission visited the property from 26 to 30 September 2010.

**Additional information requested and received from the State Party**  
By letter of 12 October 2010, ICOMOS requested the State Party to supply further information to justify the inclusion of the area of tea plantations and associated villages in the nominated property. The State Party responded on 10 November 2010 and details from their response are included in this report.

On 15 December 2010, ICOMOS requested the State Party to consider modifications to the boundaries of the property to exclude the tea plantations and their villages. The State Party responded on 22<sup>nd</sup> February with two suggestions for boundary modifications and again on 4<sup>th</sup> March with a further three suggestions, plans A, B and C. These further details are reflected in this report.

Date of ICOMOS approval of this report  
10 March 2011

## 2 The property

### Description

The property covers the extensive West Lake and the surrounding hills on three of its sides. On its north side, to the east, is a narrow lake shore strip in front of the coastal city of Hangzhou, to the south of the Hangzhou Bay. The city is not included in the property. To the west are tea plantations in the folds of hills. The State Party agreed to slight revision to the boundary to exclude large areas of tea plantations and their associated villages as set out in their plan A submitted on 4<sup>th</sup> March.

In all, the nominated area is 3,322.88 hectares, of which 559.30 hectares is the lake.

The property is surrounded by a buffer zone of 7,270.31 hectares, mainly protecting areas to the north-east and south-west of the property.

The roughly circular water body of West Lake is divided into five areas known as the Outer Lake, Lesser South Lake, West Inner Lake, Quchu Lake and North Inner Lake. These discrete areas have been defined by two bridged causeways, Bai Causeway and Su Causeway, and three small islands, Lesser Hangzhou Isle, Mid-lake Pavilion Isle and Qiangongdun Isle, all of which are the products of repeated dredging of the Lake from the 9<sup>th</sup> to the 19<sup>th</sup> century.

To the south of the Lake is Quchu Hill and Wushan Hill, to the west Nangao Peak, Lingyin Hill and Beigao Peak, and to the north Gushan Hill. To the east the walls of Hangzhou city formerly fringed the lake.

Since the 9<sup>th</sup> century, the picturesque qualities of West Lake, have inspired many famous scholars and artists, notably Bai Juyi, and Su Shi, and have been gradually 'improved' through the addition of numerous temples, pagodas, pavilions, gardens and ornamental trees in and around the Lake which overlay the wooded and farmed landscape.

Its development and the ideas associated with it, have been extraordinarily well documented in words and images for over ten centuries.

Trees were planted to add colour to the scenery in specific seasons: peach blossom, lotus, sweet osmanthus and plum for spring, summer, autumn and winter respectively; and, since the Song Dynasty (11<sup>th</sup>-13<sup>th</sup> century), the two causeways and shorelines of the Lake have been planted with alternating peach and willow trees.

The successful fusion of these interventions with the natural hills and water has been formally recognised since the Southern Song Dynasty (13<sup>th</sup> century) in a series of ten poetically named scenic places which capture the visual and aural impact of various seasons,

times of day, fleeting clouds, the sound of gentle wind, or the music of birds and bells:

- Su Causeway in the Morning of Spring
- Breeze-ruffled Lotus at Winding Garden
- Autumn Moon Over the Calm Lake
- Lingering Snow on Broken Bridge
- Viewing Fish at Flowery Pond
- Orioles Singing in the Willows
- Three Pools Mirroring the Moon
- Twin Peaks Piercing the Cloud
- Leifeng Pagoda in Evening Glow
- Evening Bell Ringing at Nanping Hill

These views are seen to embody perfection in terms of the way they encapsulate the fusion between people and nature.

Overall the West Lake landscape is seen to have become a classic example of the poetic and picturesque fusion between art and gardening that was practiced by the Chinese intellectual elite since the Song dynasty. The landscape reached its climax in the Ming Dynasty.

Such is the fame of West Lake that it has exerted a lasting influence on the development of landscape design and gardening art in China, Japan and the Korean Peninsula since the 9<sup>th</sup> Century, and particularly on the Ming Dynasty imperial gardens in the 18<sup>th</sup> century.

Slightly hidden away in the folds of the hills to the north of the Lake is the Baopu Taoist Monastery.

To the west, out of view from the lake behind the first hills, and between the further range, is an extensive area of tea gardens (or tea plantations) and their villages, covering approximately 1,100 hectares. These were included in the initial nomination, but a number have now been excluded in the revised plan A that has been submitted.

These aspects of the property are dealt with separately:

### Poetic and Picturesque Landscape

This extends from the tops of the surrounding wooded hills on three sides of the lake, to the lowland areas around the water, and across the lake to the edge of the city of Hangzhou.

The lake landscape has been 'improved' through the introduction of causeways, islands, gardens and buildings.

### Causeways

The two main causeways divide off parts of the West Lake but leave them connected to the main Lake with arched bridges.

The 9<sup>th</sup> century Bai causeway joins the Gushan Hill peninsula to the east end of the Lake, thus separating off

the north inner Lake. Its construction was the result of dredging under the direction of Bai Juyi in the Tang Dynasty. It is 987 metres long. At the east end of the causeway is the so called Broken Bridge, originally built before the Tang Dynasty and repaired many times since. It consists of two long, shallow, masonry ramps meeting over a small semi-circular arch, with at its northern end two pavilions. At the west end of the causeway is Jindai bridge. Originally in the 12<sup>th</sup> century a wooden bridge, it was reconstructed in stone in the 17<sup>th</sup> century.

The 11<sup>th</sup> century Su Causeway at the western end of the Lake separates off the West Inner Lake and the small south lake. It was the result of dredging in 1090 AD under the direction of Su Shi, a famous scholar and prefect of Hangzhou during the Northern Song Dynasty. The causeway extends for over two kilometres and joins the north and south banks of the lake. Piercing it are six, single-arched carved stone bridges, also from the Northern Song Dynasty. From south to north they are: Lingbo Bridge, Suolan Bridge, Wangshan Bridge, Qianjiang Bridge, Dongpu Bridge and Qianjiang Bridge.

Both causeways are planted on either side with alternating peach trees and willows in a pattern of planting that has persisted since the Song Dynasty. This planting also continues along part of the shore.

A third, smaller causeway links the Dongpu Bridge of Su Causeway to the west bank of West Lake and separates Xuehu Lake from the West Inner Lake. Originally constructed in the 13<sup>th</sup> century, it was rebuilt in 1731 with a three-arched bridge at its centre. The current three-arched bridge with a pavilion on top was rebuilt in the 20<sup>th</sup> century in a traditional style.

#### Islands

Within the main West Lake are three islands created from dredgings in the Tang and Song Dynasties.

The 10<sup>th</sup> century Lesser Lingzhou Isle has an inner small island linked to an outer ring-shaped causeway by four winding bridges with four pools of water in the interstices, forming the Chinese character 田. Three small stone Pagodas originally built in the Southern Song Dynasty were rebuilt in the Ming Dynasty. The overall layout of the landscape garden dates from the early 17<sup>th</sup> century (Ming Dynasty). The plants on the isle are dominated by willows, lotuses, maples and cotton roses that provide colour throughout the seasons.

The almost circular 11<sup>th</sup> century Mid-lake Pavilion Isle covers an area of about 5,032 square metres. A courtyard complex now dates mainly from the Ming Dynasty. This includes a Stone Archway (built in 1936), the Qiling Pavilion, originally built in the Ming Dynasty, and the Henu Pavilion.

The early 19<sup>th</sup> century Xiangongdun isle (1809) is also almost circular and covers an area of about 6,253 square

metres. This isle has no structures and is now a wild area managed for birds.

#### Pagodas, Pavilions and Temples

##### Liuhe Pagoda

Liuhe Pagoda is one of the best-preserved brick and wood pagodas extant in China. Originally built in 970 AD, the inner brick core is the result of a reconstruction in 1165. The multi-layered eaves of the pagoda have been repeatedly destroyed and rebuilt in its history. The current wooden eaves date to 1899.

##### Baochu Pagoda

Initially built in 976AD, Baochu Pagoda has always been an important Buddhist landmark in the West Lake Landscape. Within the panorama of the landscape, Baochu Pagoda and Leifeng Pagoda echo each other across the Lake. Baochu Pagoda perches on Baoshi Hill, to the north of the Lake. It was reconstructed several times after the Song and Yuan dynasties. The current brick pagoda underwent a major restoration in 1933.

##### Leifeng Pagoda

Leifeng Pagoda was initially built in 977 and became the largest Buddhist Pagoda in China. After a collapse in 1924 what remains are the base, verandah at first floor level and the underground chamber.

It is sited on the ridge of Zizhao Hill, to the south of the Lake. It is an important element of Leifeng Pagoda in 'Evening Glow', one of the Ten Poetically Named Scenic Places. From 2000 to 2002, a new pagoda was built to protect the ruin of old Leifeng Pagoda and to keep the image of the pagoda in the landscape.

##### Lingyin Temple

Lingyin Temple is the earliest Buddhist building complex built in Hangzhou, on the south side of Beigao Peak. According to legend, its construction was started by Huiji, a Hindu monk, in 326AD. This temple complex rose to prominence during the 10<sup>th</sup> -13<sup>th</sup> centuries. It was reconstructed in the Ming Dynasty. Along a 300 metre access are arranged the Hall of Heavenly Kings, Shrine of Sakyamuni Buddha, Hall of Bhaisajya, Library of Buddhist Scriptures and Huayan Hall, flanked by the Bell Tower, Drum Tower, the hallway, the reception room, Jialan Hall, Arhat Hall, East Side Hall and West Side Hall.

##### Ten poetically named scenic Views

The beauty of the landscape arising from the successful fusion of the various interventions with the natural hills and water was during the Song Dynasty distilled into ten most poetically named scenic places.

Poetically named scenic places are the product of incorporating the art of Chinese landscape painting and landscape poetry into landscape appreciation. A painting that frames the scenery was given by a poet a four-

character name, according to the aesthetic features of the paintings, and then viewers formed a landscape unit out of the scenery represented by the painting.

The ten poetically named scenic places of West Lake recognised not just the visual beauty of the landscape in different seasons and times of day, but also its aural and mobile qualities, the sound of gentle wind or the music of birds and bells, and the changing patterns of fleeting clouds. The ten places are:

- Su Causeway in the morning of Spring
  - views of the lake from the centre of the causeway to both east and west.
- Breeze-ruffled lotus at Winding Garden
  - views from a garden with lotuses in summers near the North end of the Su causeway.
- Autumn moon Over the Calm lake
  - views from the north-east of the main Lake to the three isles, hills to the west, south and east sides of West Lake.
- Lingering Snow on Broken Bridge
  - view to Duanqiao, Broken Bridge at the east end of Bai Causeway and beyond to the west.
- Viewing fish at Lowery Pond
  - views of between the Small South Lake and Inner West Lake in the west.
- Orioles Singing in the Willows
  - views along the north-east shore.
- Three Pools mirroring the moon
  - views of the pools of Lesser Lingzhou isle and the hills to the east and south of the main Lake and to the west across the Su Causeway.
- Twin Peaks Piercing the Cloud
  - views of the Nangao and Beigao Peaks southwest of the lake.
- Leifeng Pagoda in Evening Glow
  - views of Lizhao Hill, Leifeng Pagoda, the area between Lizhao Hill and Chang Bridge.
- Evening Bell Ringing at Nanping Hill
  - views at the foot of the Nanping Hill, south of the lake and the bell of Leifeng Pagoda.

These views are seen to embody perfection in terms of the way they encapsulate the fusion between the interventions of people and nature.

#### Baopu Taoist Monastery

In the Eastern Jin Dynasty (317-420), Ge Hong, famous Taoist alchemist, settled in West Lake. In the Tang Dynasty (618-907), Baopu Cottage was gradually expanded to become a monastery. After the Song Dynasty, it was abandoned. From the 13<sup>th</sup> century onwards, many restorations and reconstructions occurred. After the founding of the People's Republic of China, the monastery was again repaired and opened to the public.

#### Longjing Tea Gardens

Longjing Tea Plantations covers an area of 240ha to the west of West Lake on the western side of Nangao Peak and are therefore not visible from the Lake. The area includes 8 villages: Longjing, Manjuelong, Jiuxi, Wenjiashan, Angmeiling, Shuangfeng, Linyi and Maojiabu.

The renowned Longjing Tea, was first planted in the 11<sup>th</sup> century and was served on social occasions and at religious preaching in Buddhist temples in the West Lake area. The tea grows only in the particular microclimate and soil conditions near West Lake. The Longjing Tea Gardens have also attracted the attention of scholars and artists, who gathered at the Longjing Well, a circular pond, was first built in of the Three Kingdoms period (220-265). When emperors of the Ming dynasty travelled to West Lake, they also visited the Longjing tea plantations.

The extensive tea plantations extend far beyond the nominated area to encompass altogether around 2,500 hectares.

A few tea plantations are included in the nominated area, with more within the buffer zone.

And also within the property are the Site of Qiantang Gate, built 1148 and demolished 1912, the Site of the Temporary Imperial Palace of the Ming Dynasty, 1705, the Stele of Wu-he-fu and Lin Bu's Tomb, 1695 and 1028, Yue Fei's Tomb, 1221 and the Wenlan pavilion, 1782 reconstructed 1880, both associated with Confucianism, Jingci Temple, 954, associated with Buddhism, and the building complex of the Ling Seal Engravers Society, 1904.

#### History and development Tang and Song Dynasties (9<sup>th</sup>-12<sup>th</sup> century)

Between the 9<sup>th</sup> and 12<sup>th</sup> centuries, through a series of large-scale dredging and landscape design projects, closely related to the development of the city of Hangzhou, the two main structural elements of the West Lake were put in place - the two causeways planted with peach and willow trees - under the direction of two distinguished literary figures in Chinese history - Bai Juyi of the Tang Dynasty and Su Shi of the Song Dynasty. They integrated elements of Zen Buddhism with the ideas of Tang and Song Dynasty literature and art.

During the late Tang Dynasty and the subsequent Five Dynasties period (early 10<sup>th</sup> century), the Liao regime of the Wuyue Kingdom (907 - 978) made Hangzhou its capital. Their five kings of three generations had a large number of temples, pagodas and grottoes built around West Lake and the area became a Buddhist centre.

#### Southern Song Dynasty (12<sup>th</sup> to 13<sup>th</sup> century)

Two centuries later, the Southern Song Dynasty (1127-1279) also made Hangzhou (Lin'an) its capital and the



West Lake landscape developed during a period of economic prosperity and cultural growth. In the 13<sup>th</sup> century, the ten four-character poetically named scenic places of West Lake came into being, and this marked the establishment of West Lake as a discrete, large scale Chinese landscape combining hills, lakes and vistas. The setting of West Lake, consisting of hills on three sides and the city of Hangzhou on the fourth, took on a distinctive form during this period. Over 480 Buddhist monasteries dotted the surrounding landscape. Temples of the ten sect, including Lingyin Temple, Jingci Temple and Hongtianshu Temple were built at this time.

#### Yuan Dynasty (13<sup>th</sup> to 14<sup>th</sup> century)

During the Yuan Dynasty (1271-1368), the Mongol rulers considered that the Southern Song Dynasty court had become too immersed in the beauty and pleasures of West Lake, and this they saw as a major cause of the collapse of the Dynasty. As a result, the Mongol rulers decided to abandon West Lake. Without regular dredging and maintenance, the lake quickly became silted. The area nevertheless continued to be a spiritual home for writers and artists.

#### Ming Dynasty (14<sup>th</sup> to 17<sup>th</sup> century)

During the Ming Dynasty (1368-1644) there was a renaissance of Tang and Song Dynasty cultures, and the design and construction of the West Lake landscape underwent a period of revival. Large scale dredging was restored and scenic places built include the Three Pools, Lesser Hangzhou Isle, Mid-lake Pavilion Isle and Jindai Bridge. This renaissance led to the creation of many literary and artistic works based on the lake's landscape.

#### Qing Dynasty (17<sup>th</sup> to 19<sup>th</sup> century)

During the Qing Dynasty (1644-1911), the emperors paid many visits to Hangzhou, leaving behind calligraphic works and poems on the West Lake Landscape. The Lake was again dredged and the temples were repaired. In 1809 Wangongdun Isle was created with lake-bottom silt and thus the landscape of West Lake reached its climax with its two causeways and three isles. The Ten Poetically Named Scenic Places of West Lake were given imperial authorization.

#### Modern Period (20<sup>th</sup> to 21<sup>st</sup> century)

During the late Qing Dynasty and the early years of the Republic of China, a number of distinctive villas and gardens were constructed around the edges of West Lake.

Between 1912 and 1922, the wall that stood between the city and the lake was removed. After the founding of the People's Republic of China in 1949, the West Lake Landscape was declared a protected site and dredging was started again in 1952. Buildings were repaired and opened to the public. Since then the restoration of the landscape has gradually been achieved, with much work being carried out over the past twenty years.

### 3 Outstanding Universal Value integrity and authenticity

#### Comparative analysis

The comparative analysis provided in the nomination dossier uses as its basis the fact that West Lake is an Oriental lake with cultural meanings, is a classic example of the aesthetic style of Chinese landscape, and displays a distinct manifestation of the harmony between man and nature. ICOMOS considers that this is a summary of the potential Outstanding Universal Value of the property and its attributes and thus is the correct basis for the analysis.

Comparisons are made with 30 properties already inscribed on the List or on Tentative Lists in various categories.

In terms of comparisons with inscribed properties, first the property is compared to cultural landscape sites that have lakes. The analysis shows that only Fert / Neusiedlersee Cultural Landscape (2001, criterion (v)), Austria and Hungary, is a cultural landscape with a lake and the landscape around it was not developed for aesthetic reasons. There is thus no cultural landscape already inscribed on the World Heritage List that has a similar combination of value and attributes.

The property is also compared with natural and mixed sites that are already inscribed and none are seen to be revered for their cultural meanings.

The property is also compared with 20 lake properties on Tentative Lists. This shows that only four, apart from West Lake, are related to 'lakes with meanings'. These are Lake Maggiore, Italy, the Lake District, UK, Inle Lake Myanmar, and the Cultural Heritage Complex of Thang Long-Hanoi, Vietnam which includes West Lake Hanoi. This demonstrates that out of these sites, only the Lake District National Park and Lake Hanoi can be said to be similar in terms of lakes that have been improved or 'venerated' to enhance their cultural meanings related to their associations with significant writers and artists, and to have been influential outside their own regions. However the Lake District is seen to reflect very different European landscape cultural traditions from West Lake.

No detailed comparisons are offered with Lake Hanoi, but this lake is now less complete as an expression of the way it was overlaid in response to aesthetic ideals, and has been far less influential.

Within China, comparisons are made with 35 other 'West Lakes' which were similarly cultural symbols of the Tang and Song Dynasties. 31 survive and 7 are seen to have aesthetic and historic value. Two in Hangzhou and Huizhou are seen to be comparable in aesthetic terms for their associations with Su Shi. Hangzhou no longer exists and Huizhou, although having many similarities, is not considered to have been as revered or as influential reinforcing the views of 16<sup>th</sup> century Chinese scholar



who considered that West Lake Hangzhou was the most famous of the 35.

---

ICOMOS considers that the comparative analysis justifies consideration of this property for the World Heritage List.

---

Justification of Outstanding Universal Value  
The nominated property is considered by the State Party to be of Outstanding Universal Value as a cultural property for the following reasons:

- West Lake comprises six elements:
  - Natural hills and water
  - Spatial feature between lake and city as cloud-capped hills on three sides and the city on the fourth
  - Two causeways and three isles
  - Ten poetically named scenic places
  - Historic monuments and sites
- Distinctive flora West Lake is the most classic landscape design of Chinese landscape aesthetics, based on the philosophy of harmony between man and nature, nourished by Chinese classical literature and fine art and utilising the skill and art of gardening. It manifests poetic and picturesque appeal and exerted a broad influence on landscape design in the East between the 9<sup>th</sup> and 20<sup>th</sup> centuries.
- West Lake is an exceptional testimony to the development and passing down of ancient and enduring Chinese cultures and traditions such as those of Confucianism, Buddhism and Taoism, loyalty and filial piety, hermitage life, book collection, Tea-ven and sphragistics (the making of seals).
- West Lake is a designed landscape, an associative landscape and an evolving landscape.

ICOMOS considers that West Lake is an outstanding landscape for the way it manifests the ideals of classical Chinese landscape literature and painting through the way the natural landscape has been improved with addition of causeways, island and strategically placed pagodas, pavilions and bridges to make it into a large scale 'garden' that reflects harmony between man and nature. The landscape of West Lake did exert a powerful influence directly and through the extensive artistic representations of it on landscape design in the East over many centuries.

ICOMOS does not consider that West Lake can be seen to be outstanding as an exceptional testimony to Confucianism, Buddhism, and Taoism, as more extensive and important manifestations of these can be found in other landscapes. It also does not consider that a case has been made for the landscape being seen as an exceptional representation of loyalty and filial piety, hermitage life, book collection, Tea-ven and sphragistics (the making of seals).

ICOMOS does consider that West Lake is a designed landscape and an associative landscape in the sense

of the natural landscape being enhanced by causeways, islands, bridges, temples and the planting of ornamental trees, to reflect classical ideals of harmony and beauty. West Lake is an outstanding example of such a cultural landscape that manifests with great clarity the ideals of Chinese landscape aesthetics as expounded by writers and scholars in Tang and Song Dynasties.

The 'improved' landscape had a profound impact on the design of gardens not only in China but further afield where lakes and causeways imitated the harmony and beauty of West Lake.

ICOMOS does however not consider that West Lake can be seen as an evolving landscape. The process of creation and evolution of West Lake spanned from the Tang to the Ming dynasties, after which the key aspects of the landscape have been restored and consolidated. The cultural climate within which the landscape was created was the classical literary and artistic culture of these Imperial Dynasties. Of course the landscape has to a degree evolved since, but its significance relates to the creativity of the Imperial dynasties.

The one area of the landscape that ICOMOS did not consider fully exemplified the ideals of landscape aesthetics were the extensive area of tea gardens to the west of the lake. Although the mountains that rise above the tea gardens form part of the backdrop of the lake the tea plantations are a 'farmed' landscape that do not contribute to the designed landscape.

ICOMOS raised this issue in its letter dated December 2010. In its response the State Party accepted that the tea plantations do not contribute to Outstanding Universal Value. A revised boundary has been put forward that reduces the boundary so that it follows a visual circle of the Ten Poetically named scenic places. It includes Beigao Peak and Nangao Peak which are directly associated with the scenic places and all of the nominated historic monuments and sites, but excludes large areas of tea plantations and their associated villages.

#### Integrity and authenticity

##### Integrity

ICOMOS considers that the nominated property contains all the key attributes of Outstanding Universal Value in terms of the lake, the wooded hills surrounding it on three sides up to their skyline and the causeways, islands, bridges, temples, pagodas and ornamental planting that create the beautiful landscape within which are the ten poetic views.

Within the original nomination there were also comparatively large areas within the boundary that do not contain attributes, such as the tea plantation area. Although the nomination dossier suggests that the tea growing area is part of the nature that is linked to the beauty of the lake, the reality is that the tea plantations

are almost all hidden from the lake at the back of the hills on the western side and do not contribute to the viewscape of any of the ten views. They cannot be considered as contributing to Outstanding Universal Value although the hills that rise above them form part of the backdrop of the lake. The revised boundary suggested by the State Party that excludes the major areas of tea plantations is satisfactory.

The physical fabric of the property and its significant features are mostly in excellent condition. The Lake itself and surrounding landscapes, along with scenic places, historic monuments and sites are well maintained. No signs of neglect are detected and the deterioration processes seem mostly controlled. Thus none of the key attributes that relate to Outstanding Universal Value are under threat.

The visual integrity of the property is well maintained towards the three hill sides, which seem to have been almost similar for the past 1,000 years. The views to the east are vulnerable to further expansion of Hangzhou city. However, considering the drastic urban changes of Hangzhou city over the past 10 years, from a regional town to a metropolis of eight million people, the property's visual integrity toward the city side is well managed. The skylines of the buildings are under the strong municipal regulations to maintain current heights and mass limits and to stop expansion that might impact on the skyline of West Lake.

Overall ICOMOS considers that the conditions of integrity have been met.

#### Authenticity

The West Lake still clearly conveys the idea of a lake with cultural meaning', as all the key components that were created by the time of the Song dynasty can be read clearly in the landscape, and the beauty of the ten views can still largely be readily appreciated. There is an abundance of documents recording the development of the lake (although more for some elements than others) and these are well archived in official institutions, such as the West Lake Museum, Su Dongpo Memorial Hall, and Hangzhou History Museum. These records and documents are a basis for the authenticity of the property. From cloud capping hills' and lakeshore settings, down to the single willow trees, and the West Lake itself, all reflect elements of the landscapes as described in the old texts since the 10<sup>th</sup> century.

The views to the east over Hangzhou have changed dramatically over the past fifty years and the lake is no longer closed on its north side by a low lying town that relates in scale to the overall landscape and is in itself beautiful (as Marco Polo described). Hangzhou with its tall buildings dominates the view to the east and tends to dwarf the lake buildings. However the skyline of hills to the north and south as viewed when looking east is still intact and the Baochu Pagoda can be seen against the sky. ICOMOS considers that it will be absolutely crucial

that this skyline is maintained and that there is no encroachment of the city behind those hills that are visible from the lake.

The other potential threat to authenticity is from visitors. Already 20 million people visit each year and if World Heritage status were to increase this number, without a strong visitor management system being in place, the fragile landscape could be overwhelmed.

---

ICOMOS considers that the conditions of integrity and authenticity have been met.

---

#### Criteria under which inscription is proposed

The property is nominated on the basis of cultural criteria (iii), (iv), (v) and (vi). ICOMOS considers that criterion (ii) should also be considered.

Criterion (ii): exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design;

This criterion was not put forward by the State Party. However, ICOMOS considers that part of the justification for criterion (iv) is relevant for this criterion.

The overall landscape design of West Lake, with its causeways, islands, bridges, temples, pagodas and well defined views, was widely copied over China, particularly the long causeways formed of dredged material. In the summer Palace at Beijing is a recreation of the west Lake causeway in Kunming Lake. Since the 15<sup>th</sup> century, some 16 gardens in Japan have adopted this motif in water gardens, as well as other elements of the West Lake landscape such as bridges and temples.

The notion of ten poetically named scenic places persisted for seven centuries all over China and also spread to the Korean peninsula after the 16<sup>th</sup> century when Korean intellectual made visits to the West Lake.

The improved landscape of West Lake clearly had a major influence on landscape design in East Asia. In terms of an interchange of ideas, linking emotion to the aesthetics of landscape can in turn be seen to reflect Buddhist ideals 'Buddhist peacefulness' and nature as paintings' imported into China from India.

---

ICOMOS considers that this criterion has been justified for the revised boundary.

---

Criterion (iii): bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared;

This criterion is justified by the State Party on the grounds that West Lake is an exceptional testimony to Chinese cultural traditions such as Buddhism, Taoism, filial piety, hermitage life, book collecting, tea-zen and shragistics. As a result many historic monuments and

sites are found here such as temples, pagodas, tombs, statues and the remains of an Imperial Palace. Since the 9<sup>th</sup> century, Hangzhou has gradually acquired its position as the economic, political and cultural centre of the region. The Buddhist buildings are witness to the development of Buddhism in southern China in the 12<sup>th</sup> century and became an important place for Buddhism. The ten scenic views reflect a fusion between Buddhist ideas and the landscape. A group of statues fill a gap in the history of stone carving in the Yuan Dynasty and are the sole examples in Tibetan style. Liuhe Pagoda is the most outstanding octagonal pagoda in China. The stele of the tomb of Lin Bu, a hermit in the Song Dynasty, is said to bear witness to the spread of the hermitage tradition in East Asia. The Longjing Tea plantation is said to reflect the Green-Tea tradition. Baopu Taoist monastery is one of the most important Taoist monasteries in China. The grave of Yue Fei, a model of loyal filial piety, conveys Confucian traditions and gives the lake a moral dimension.

ICOMOS considers that to justify this criterion it is necessary to show how the property as a whole manifests in an exceptional or unique way a distinct cultural tradition. The justification provided above sets out many cultural traditions each of which are reflected in certain parts of the property. ICOMOS does not consider that any of these separately can be considered to be a justification for the criterion, nor does it consider that the sum of all the manifestations to the various cultural traditions adds up to a sufficient justification.

However, ICOMOS does consider that the main part of the nominated West Lake landscape, excluding the tea-gardens, can be said to be an exceptional testimony to the very specific cultural tradition of 'improving landscapes to create a series of pictures' that reflect what was seen as a perfect fusion between people and nature, a tradition that evolved in the Tang and Song dynasties and has continued its relevance to the present day. The 'improved' West Lake with its exceptional array of man-made causeways, islands, bridges, gardens, pagodas and temple, against the backdrop of the wooded hills, can be seen as an entity to manifest this tradition.

---

ICOMOS considers that this criterion has been justified for the revised boundary.

---

Criterion (iv): be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history;

This criterion is justified by the State Party on the grounds that West Lake reflects the theory of Chinese landscape aesthetics on achieving harmony between nature and man and projecting personal feelings on to the landscape. The ten poetically named scenic places are the most classic, complete and influential exemplars of scenic places in the East. The West Lake landscape has served as an important model in the design of

18<sup>th</sup> century Imperial Gardens in China, on Japanese Garden design and on the design of gardens in the area.

ICOMOS considers that a justification for this criterion needs to set out what is the significant stage in human history and then show how the property manifests that stage. No such stage is identified. The justification put forward for the outstanding nature of the landscape as a reflection of Chinese landscape aesthetics is relevant for criterion (iii).

The justification put forward for the influence the overall landscape design has had down the centuries in China, Japan and the area is relevant for criterion (ii) which should be considered as indicated above.

---

ICOMOS considers that this criterion has not been justified.

---

Criterion (v): be an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change;

This criterion is justified by the State Party on the grounds that the lake is a classic example of well used water resources that has persisted over a thousand years. It has been serving ecological, culture and tourism functions for Hangzhou in the face of the rapid urbanisation of the city. The lake is seen as part of an active fight against its natural evolution into a swamp.

ICOMOS considers that this criterion normally applies to landscapes that reflect traditional ways of interaction between people and their environment that have persisted, repetitively, over time. West Lake cannot be said to manifest the shaping of traditional processes over time but rather to reflect exceptional and one-off processes in terms of the way intellectual ideas were applied to the landscape and it was shaped, augmented and improved to make it into something that was, and still is, perceived to have great beauty.

---

ICOMOS considers that this criterion has not been justified.

---

Criterion (vi): be directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance;

This criterion is justified by the State Party on the grounds that West Lake was the spiritual home for the Chinese elites for over seven centuries. The way the lake landscape reflects personal feelings projected onto the landscape has inspired both classical and popular literary and artistic works - some 400 literary works and 2,000 famous paintings - as well as folk stories. It is also considered as a reflection of the Tang and Song cultures in East Asian circles. West Lake was featured in

Japanese poetry, literature and painting, over several centuries. Between the 16<sup>th</sup> to 18<sup>th</sup> centuries, Korean intellectuals accepted West Lake as their ideal spiritual home for its association with hermetic traditions. Finally Hangzhou was introduced to the West by Marco Polo.

ICOMOS considers that to justify this criterion there is a need to identify events, living traditions, ideas, artistic or literary works of outstanding universal significance. And then suggest how the nominated property manifests those events, ideas, etc. In terms of West Lake, ICOMOS considers that there were literary and artistic traditions of outstanding universal significance associated with West Lake and that these were the Tang and Song culture of demonstrating harmony between man and nature by improving the landscape with causeways, bridges, pagodas and ornaments planting to create pictures of great beauty, captured by artists and given names by poets. The value of that tradition has persisted for seven centuries in West Lake and has spread across China and into Japan and Korea, turning it into a tradition of outstanding significance. West Lake still manifests the key structures that had created the beautiful landscapes by the Song dynasty and the ornamental planting that has persisted or has been re-created.

ICOMOS considers that this criterion can be applied to the part of the property that reflects the ten key views and the landscape and its structures that underpinned them. It does not consider that this applies to the tea plantations - which have been excluded in the revised boundaries.

---

ICOMOS considers that this criterion has been justified for the revised boundaries.

---

ICOMOS considers that the nominated property meets criteria (ii), (iii) and (vi) for the revised boundary and conditions of authenticity and integrity for the smaller area and that Outstanding Universal Value has been demonstrated for the smaller area.

---

#### Description of the attributes

The attributes of the nominated area are the lake, the skyline of the surrounding hills, and the man-made elements that have been introduced into the landscape between the Tang and Song Dynasties, such as the man-made causeways, islands, bridges, gardens, pagodas, temples, the ornamental planting along the causeways and lake edges, and the forests that stretch up the hills that together have made possible the views that are celebrated as the ten poetically named scenic places.

## 4 actors affecting the property

### Development pressures

There are a few tall buildings in the nominated area of which the most prominent is the Shangri-La Hotel built in 1961 which is prominent in views from Hangzhou. It is accepted that this is inharmonious and the local government has agreed it will be demolished when its economic contract ends. The building has become a landmark in relation to changes in the attitude of local government and the public to the need to conserve rather than develop the Lake and its hinterland.

ICOMOS considers that it would be helpful to have a commitment from the local government that in due course this building will either be lowered or demolished.

The main development threats are likely to come from further growth of Hangzhou which has grown rapidly in the past twenty years to a city of some 8 million people. However urban planning regulation have recently been adopted that constrain overall development on the waterfront side of the city, both laterally and upwards, and the regulations also stipulate that no inharmonious buildings shall be built in the property or its buffer zone. ICOMOS considers that it will be absolutely essential that the city does not spread to meet the slopes of the hills that frame the view of the lake from the causeway. This will mean defining very clearly what is an acceptable overall profile of the city from this view and ensuring that all relevant development is subject to Heritage Impact Assessments that consider impact on the attributes of Outstanding Universal Value.

There is acknowledgement of 'discordant' elements in the property and the local government is taking steps to address these. This includes the need to remove traffic in front of the Jingci temple to re-connect it to the landscape and ICOMOS notes that a project to put the road into a tunnel has been approved.

ICOMOS considers that there is a need to ensure that removing discordant elements does not allow for unnecessary removal of development layers that reflect the history of the Lake; all changes need to be based on historical evidence.

### Tourism pressures

The rapid growth in tourism has been one of the causes of discordant elements as facilities were quickly introduced to cope with very high visitor numbers. According to the nomination dossier recorded visitor numbers have reached 368,700 per day which translates into about 20 million each year. If these grow further, as a result of inscription, there will be a need for more proactive visitor management. Although the property is large, its carrying capacity is limited, and this is acknowledged with capacities being set for each scenic spot. The management body has adopted means such as utilizing regional resources to divert tourists to attractions in the

neighbouring regions. Measures such as traffic control have also been adopted to control the number of visitors.

#### Environmental pressures

IUCN considers that the natural aspects of the landscape that are most critical in relation to its protection and conservation relate to protection of vegetation, and the management of water as key components of the visual quality of the property.

They consider that one significant challenge is likely to be in relation to the protection of water quality considering the large and growing urban area that abuts part of the property and the other land-uses that take place in the catchment of the lake. IUCN welcomes the adoption of regulations to adopt electric motored boats for use on the lake which address one particular source of pollution.

IUCN recommends that any plans for urban development in areas surrounding the property and its buffer zone, need very careful attention to be paid to the management of urban drainage and the management of waste water, in order to maintain and enhance the water quality of West Lake. This should include the management of surface water runoff, including that which arises in storm conditions. IUCN recommends that ICOMOS clarify the water quality status of West Lake, the means of its long-term protection and the likelihood of increases in its quality, as this information is not fully documented in the nomination.

ICOMOS considers that the impact of the urban areas on air and water quality is well monitored. The quality of the water in the lake has been drastically improved as a result of a major dredging project between 1999 and 2003 and by strictly controlling source of pollution, through such measures as the relocation of polluting enterprises, stopping all sewage discharge into the Lake by constructing a comprehensive sewage networks, purification of residential sewage along streams, and converting all tour boats to more environmentally friendly battery power. Six water inlets in the west and south, and nine controllable water outlets in the east, north, and north-west of the Lake have been built to purify the water source and to improve its quality and quantity.

The ecological environment of the water has been restored and a wetland ecological system established through cultivation of aquatic plants and nourishing the wetlands.

ICOMOS agrees with IUCN that water quality is of the utmost importance.

#### Natural disasters

Disaster prevention and response measures are in place for foreseen disasters such as flooding, fires and thunderstorms. A satellite monitoring and processing system, remote-sensing data-sharing, and other technological tools contribute to daily monitoring. In

addition to a comprehensive fire-control regime, a rapid reaction force has been established for the scenic area, comprising over a thousand local residents, which have effectively prevented major fire disasters.

#### Impact of climate change

Heavier rainfall in the catchment area for the lake could have severe adverse consequences on water levels and thus on the causeways and buildings around the edge of the lake.

---

ICOMOS considers that the main threats to the property are fire, development and over-visiting. Satisfactory measures are in place to address fire and development but ICOMOS considers that visitor management needs to be strengthened.

---

## 5 Protection conservation and management

### Boundaries of the nominated property and buffer zone

The boundaries of the property include the hills surrounding it on three sides. To the north-west and south-east the boundaries are drawn along the ridge and do not include the areas facing away from the lake. On the west side, however, the original boundaries were drawn much further back and included several ranges of hills with extensive tea plantations in between.

The tea plantations constitute a quite different type of landscape with tea bushes below the forests and interspersed with villages. The revised boundaries have been adjusted so that the property includes the designed landscape of West Lake only.

ICOMOS raised this issue in its letter dated December 2010. In its response the State Party accepted that the tea plantations do not contribute to Outstanding Universal Value but would still prefer to keep them within the boundaries. They did however also offer to exclude a large number of tea plantations and put them as part of the buffer zone.

The buffer zone surrounding the property covers 7,270.31ha. It is demarcated to conserve the integrity of the property and to withstand the pressure of urban construction. The buffer zone is divided into eight areas and grouped in three categories, according to which specific control measures for new construction, especially regarding its height, mass, and colour, are provided respectively in details. The boundary of the buffer zone seems large enough to work well for the protection of the property. The nominated property boundary along the Jiantang River is the only property area where there is no buffer zone.

---

ICOMOS considers that the revised boundaries of the nominated property and the boundaries of the buffer zone are adequate.

---

#### Ownership

The nominated property is mainly state owned with a small part around the tea plantations collectively owned.

#### Protection

##### Legal Protection

The nominated property is protected at both national and provincial level by laws and regulations. These include the Law of the People's Republic of China on the Protection of Cultural Relics (national), Regulations on Scenic Areas (national), Regulations on the Conservation and Management of World Cultural Heritage Sites in China (national), and Regulations on the Conservation and Management of West Lake Cultural Landscape of Hangzhou (local). The most relevant national protection is afforded by the national West Lake Scenic Area - the nominated property is within the boundaries of the area that was promulgated in 1982.

The most recent new protection afforded by municipal regulations approved in October 2010 by the Hangzhou Municipal People's Government on the Specific Control Plan for the Buffer Zone of West Lake Cultural Landscape. That puts in place constraints on the overall development of the city in relation to its potential impact on the West Lake landscape.

The nominated area also includes 15 priority protected sites at state, provincial, and municipal levels, and one site on the municipal tentative list for protection. These include the Fei's Tomb (and Temple), Liuhe Pagoda, Statues on Feilaifeng Peak, Wenlan Pavilion, Site of Lin'an City (including Jiangtang Gate) and Building Complex of Ling Seal Engravers Society. Province priority protected sites are: Site of Leifeng Pagoda, twin stone pagodas and twin sutra stelae of Lingyin Temple, Stone Pagodas of Three Pools of West Lake, and Baochu Pagoda. The municipality priority protected sites are: Stele of Wu-he-fu, Site of the temporary imperial palace of the Ming Dynasty, West Lake causeways, and Longjing Well. Baopu Taoist Monastery is on the municipal tentative list for protection.

##### Effectiveness of protection measures

Overall the protection measures are adequate, although ICOMOS considers that it would be desirable for the nominated area to have national protection for its overall cultural qualities.

---

ICOMOS considers that the legal protection in place is adequate.

---

#### Conservation

##### Inventories, recording, research

Although various records are listed in the nomination dossier such as reports and surveys of various aspects of the property mainly its built structures, an inventory of the property in terms of a documentary record of its key visual attributes does not appear to exist in the form of survey drawings or through a systematic photographic record of its condition, although the individual structures are very well documented. ICOMOS recommends that such a record needs to be established as a base line for future monitoring of the inter-relationship between the various components.

Historic records of the property are securely archived in the Museum of West Lake and administrative records of the property are kept in the branches of the Gardens and Cultural Heritage Administration, a municipal office of Hangzhou.

The West Lake is extraordinarily well documented in terms of the writings of scholars and poets and the images of artists from the Tang Dynasty to the present day. It has also been the subject of extensive research. A complete collection of literature on the Lake has been published.

##### Present state of conservation

As a result of extensive conservation programmes over the past 50 years, the overall state of conservation of the property is very high. The ten poetically named scenic places are presented as they were originally intended and later admired by the emperors Kangxi and Qianlong of the Qing dynasty; various historic monuments and sites reflecting Confucianism, Buddhism and Taoism, are in good condition and the waters of the Lake are also in good condition having been much improved since 2001 (see History and development). The forests and individual trees are very well conserved.

##### Active Conservation measures

Conservation along with protection and management, is the responsibility (and has been since 1949) of the Hangzhou Administration of Gardens and Cultural Heritage, a government branch of the Hangzhou Municipal Government. This conservation is multi-disciplinary as the Administration looks after both natural and cultural heritage as well as social issues. Conservation is carried out according to a mixture of regular maintenance and projects as required. This applies to both plants and buildings - traditional plants such as peach and willow, which are key parts of the main views, are the subject of both daily maintenance and regular replanting.

##### Maintenance

Maintenance is a seamless part of conservation carried out by the the Hangzhou Administration of Gardens and Cultural Heritage.

effectiveness of conservation measures

The detailed conservation measures are very effective in conserving the built and natural aspects of the landscape through regular attention, and conservation projects based on sound conservation principles.

---

ICOMOS considers that the conservation arrangements are appropriate for the property.

---

#### Management

Management structures and processes, including traditional management processes

Management for scenic resources, cultural relics, historic monuments and sites, planning, land, environmental protection, countryside, public security, industrial and commercial administration and religious affairs within the property area is the responsibility of the Hangzhou Administration of Gardens and Cultural Heritage with advice from the provincial bureau of cultural heritage in Zhejiang and the national State Administration of Cultural Heritage (SACH). This arrangement has the clear advantage of there being one authority in charge of the management of the property.

The authority operates both as an "internal institution" and as a "grassroots unit". The grassroots units work in eight sub-zones as well as with various local organisations and with communities and villages.

Policy framework: management plans and arrangements, including visitor management and presentation

An Outline of the Conservation and Management Plan of West Lake Cultural Landscape of Hangzhou (2008-2020) provides a basis for the systematic conservation and management of the West Lake Landscape and for implementing the protection measures in compliance with national standards for the protection of world heritage sites. This sets out basic aims and it is stated that more detailed plans will follow. There is also a Master Plan for the West Lake Scenic Area first drawn up in 1986 and subject to several revisions. The current plan is for 2002-2020. It includes 19 sub-plans covering protection, tourism, transportation, electricity, telecommunications, water supply and drainage, gas facilities, sanitary facilities, protection of the West Lake water body and water quality, disaster prevention, social regulations on residents, guidance on economic development, coordination in land use, and plans for phased development. In coordinating these two plans, the principle has been adopted that the 'conservation and management of the scenic zone should be set in accordance with the requirements of World Heritage nomination'.

A further Urban Plan for Hangzhou 2002-2020 includes a chapter on the Protection of West Lake Scenic Area, which covers the control over construction projects in the area, environmental and ecological protection in the

buffer zone, and protection of architectural styles in the buffer zone.

The Municipal authority has also drafted nine special plans for scenic areas within West Lake. Other special plans have been prepared such as the Master Plan for Transportation in West Lake Scenic Area of Hangzhou, the Plan for the Integration of the South-outer Scenic Places of West Lake of Hangzhou, the Detailed Plan for the Control over the Westward expansion of West Lake, the Plan for the Protection of the Beishan Historic and Cultural Street, the Detailed Plan for the Control over the Lingyin Scenic Area, and the Plan for the Construction of the New Socialist Countryside in the Hangzhou West Lake Scenic Area.

Plans in preparation include the Master Plan for Transportation in West Lake Scenic Area (2008--).

Risk preparedness

The management authority has put in place protective facilities, routine monitoring, emergency plans, rescue conservation measures, and the training of personnel in skills for preventing and fighting against natural disasters. A system of disaster control measures has also been formed for an effective reduction of damage.

Involvement of the local communities

25,000 people live in the property and its buffer zone, mainly in villages in the tea-growing area and to the north of the lake. Apart from villagers being involved in disaster mitigation, other aspects of active participation are not yet in place. However the Outline Management Plan includes the aims to Build Community Management System and to coordinate the Interests of Stakeholders.

Resources, including staffing levels, expertise and training

The Hangzhou Administration now has management and technical teams specialised in heritage conservation and management, cultural relics protection, museum management, landscaping technique, plant protection, environmental protection, planning and construction, tourism and service. These teams have a balanced composition of personnel at senior, middle, and junior technical levels.

Staff receive skills, professional and technical training through routine study, regular training and off-the-job training. The staff members are also offered regular professional and technical training.

Extensive expert advice is available to these staff from experts in the national and provincial cultural heritage organisations.

The resources for the management of the property mainly come from special fiscal appropriations of central and regional governments and the revenue of places where a fee is charged. Between 2002 to 2007, West



Lake conservation funds from various sources totalled MB 8,572 million ( 1,300 million.). Of this 71.4 came from State and Provincial government and this is a pattern set to continue. Funding peaked between 2003-2005 when the major conservation work was carried out.

Effectiveness of current management

The clear management structure, in the hands of one authority with responsibility for both cultural and natural aspects of the property, is clearly an advantage. The property is well resourced and the support of national and provincial governments is likely to continue. Staff are well trained and have access to excellent expert advice.

---

ICOMOS considers that the management system for the property is adequate.

---

## 6 Monitoring

Since 2006, when West Lake Landscape was included on the Tentative List, the Hangzhou Administration has been monitoring the property and its setting including both cultural and natural elements, social-economic development, including population, land, construction and transport. The process and effects of protective measures on the nominated elements and historic environment are also monitored. Detailed and wide-ranging indicators have been established and the periodicity of their monitoring established. These cover all the attributes of Outstanding Universal Value and their wider context.

---

ICOMOS considers that monitoring of the property is adequate.

---

## 7 Conclusions

West Lake is an outstanding example of a cultural landscape that manifests with great clarity the ideals of Chinese landscape aesthetics as expounded by writers and scholars in Tang and Song Dynasties. Even though the city of Hangzhou is now a metropolis at its eastern end, rather than the walled city that once complemented the open lake, sufficient of West Lakes' key components remain to allow it still to inspire people to project feelings onto the landscape'. The visual parameters of this vast landscape garden 'three sides by cloud-capped hills' and on the fourth the city of Hangzhou are clearly defined rising to the ridges of the surrounding hills as viewed from Hangzhou.

The original nominated area included not only this visually discrete unit but also the Longjing tea plantation over the hills to the west. Even though the tea plantation flourished as Hangzhou flourished, and attracted the attention of artists, as a landscape they are completely distinct from West Lake in visual terms and cannot be

said to be designed as the main landscape of West Lake is, and do not include any exceptional characteristics or any of the attributes related to the Outstanding Universal Value of West Lake.

The revised boundaries exclude most of the tea plantations. ICOMOS considers that the tea plantations should be considered as a separate unit and not included within the nominated area. Tea growing is of fundamental importance to Chinese society and perhaps consideration could be given to including Longjing with other properties in a nomination that reflects aspects of tea culture.

The West Lake is both robust and vulnerable: it can absorb comparatively large number of visitors but beyond a certain point, the needs of the visitors and their impact on the landscape could impact adversely on the authenticity of the property, on the quality of their visits, and on the ability of the landscape to inspire. Visitor management needs to be given a high priority in relation to the overall management of the property.

Although the protection in place is strong, there will be a need to ensure that such protection is adequately applied in practice so that incremental change does not impact on the overall harmony of the landscape. The West Lake needs to be seen as an inspirational place and much more than a public park.

Recommendations with respect to inscription  
ICOMOS recommends that the West Lake Cultural Landscape of Hangzhou, China, be inscribed on the World Heritage List on the basis of **criteria i, ii, vi**

Recommended Statement of  
Outstanding Universal Value

Brief synthesis

West Lake is surrounded on three sides by cloud-capped hills' and on the fourth by the city of Hangzhou. Its beauty has been celebrated by writers and artists since the Tang Dynasty (AD 618-907). In order to make it more beautiful, its islands, causeways and the lower slopes of its hills have been 'improved' by the addition of numerous temples, pagodas, pavilions, gardens and ornamental trees which merge with farmed landscape. The main artificial elements of the lake, two causeways and three islands, were created from repeated dredgings between the 9<sup>th</sup> and 12<sup>th</sup> centuries.

Since the Southern Song Dynasty (thirteenth century) ten poetically names scenic places have been identified as embodying idealised, classic landscapes that manifest the perfect fusion between man and nature.

West Lake is an outstanding example of a cultural landscape that display with great clarity the ideals of Chinese landscape aesthetics, as expounded by writers and scholars in Tang and Song Dynasties. The

landscape of West Lake had a profound impact on the design of gardens not only in China but further afield, where lakes and causeways imitated the harmony and beauty of West Lake.

The key components of West Lake still allow it to inspire people to project feelings onto the landscape'. The visual parameters of this vast landscape garden are clearly defined, rising to the ridges of the surrounding hills as viewed from Hangzhou.

**r er** The improved landscape of West Lake can be seen to reflect Buddhist ideals imported into China from India such as 'Buddhist peacefulness' and 'nature as paintings', and in turn it had a major influence on landscape design in East Asia. Its causeways, islands, bridges, temples, pagodas and well defined views, were widely copied over China, notably in the Summer Palace at Beijing and in Japan. The notion of ten poetically named scenic places persisted for seven centuries all over China and also spread to the Korean peninsula after the 16<sup>th</sup> century, when Korean intellectuals made visits to the West Lake.

**r er** The West Lake landscape is an exceptional testimony to the very specific cultural tradition of improving landscapes to create a series of 'pictures' that reflect what was seen as a perfect fusion between people and nature, a tradition that evolved in the Tang and Song dynasties and has continued its relevance to the present day. The 'improved' West Lake, with its exceptional array of man-made causeways, islands, bridges, gardens, pagodas and temples, against a backdrop of the wooded hills, can be seen as an entity that manifests this tradition in an outstanding way.

**r er** The Tang and Song culture of demonstrating harmony between man and nature by improving the landscape to create pictures of great beauty, captured by artists and given names by poets, is highly visible in the West Lake Landscape, with its islands, causeways, temples, pagodas and ornamental planting. The value of that tradition has persisted for seven centuries in West Lake and has spread across China and into Japan and Korea, turning it into a tradition of outstanding significance.

#### Integrity

The property contains all the key attributes of Outstanding Universal Value in terms of the lake, the wooded hills surrounding it on three sides up to their skyline and the causeways, islands, bridges, temples, pagodas and ornamental planting that create the beautiful landscape within which are the ten, celebrated, poetic views.

The physical fabric of the property and its significant features are mostly in excellent condition. The Lake itself and surrounding landscapes, along with scenic places, historic monuments and sites are well maintained. No signs of neglect are detected and the deterioration

processes seem mostly controlled. Thus none of the key attributes that relate to Outstanding Universal Value are under threat.

The visual integrity of the property is well maintained towards the three hill sides, which seem to have been almost similar for the past 1,000 years. The views to the east are vulnerable to further expansion of Hangzhou city. However, considering the drastic urban changes of Hangzhou city over the past 10 years, from a regional town to a metropolis of eight million people, the property's visual integrity toward the city side is well managed. The skylines of the buildings are under the strong municipal regulations to maintain current heights and mass limits and to stop expansion that might impact on the skyline of West Lake.

#### Authenticity

The West Lake still clearly conveys the idea of a lake with cultural meaning', as all the key components that were created by the time of the Song dynasty can be read clearly in the landscape, and the beauty of the ten views can still largely be readily appreciated. There is an abundance of documents recording the development of the lake (although more for some elements than others) and these are well archived in official institutions. These records and documents are a basis for the authenticity of the property. From 'cloud capping hills' and lakeshore settings, down to the single willow trees, and the West Lake itself, all reflect elements of the landscapes as described in the old texts since the 10<sup>th</sup> century.

The views to the east over Hangzhou have changed dramatically over the past fifty years and the lake is no longer closed on its north side by a low lying town that relates in scale to the overall landscape and is in itself beautiful (as Marco Polo described). Hangzhou with its tall buildings dominates the view to the east and tends to dwarf the lake buildings. However, the skyline of hills to the north and south as viewed when looking east is still intact and the Baochu Pagoda can be seen against the sky. ICOMOS considers that it will be absolutely crucial that this skyline is maintained and that there is no encroachment of the city behind those hills that are visible from the lake.

#### Management and protection requirements

The nominated property is protected at both national and provincial level by laws and regulations. These include the Law of the People's Republic of China on the Protection of Cultural Relics (national), Regulations on Scenic Areas (national), Regulations on the Conservation and Management of World Cultural Heritage Sites in China (national), and Regulations on the Conservation and Management of West Lake Cultural Landscape of Hangzhou (local). The most relevant national protection is afforded by the national West Lake Scenic area that was promulgated in 1982.

The Hangzhou Municipal People's Government Specific Control Plan for the Buffer zone of West Lake Cultural Landscape, 2010, puts in place constraints on the overall development of the city in relation to its potential impact on the West Lake landscape.

It is crucial that these constraints ensure that there is no encroachment of the city behind the hills that are visible from the lake and that all relevant development is subject to Heritage Impact Assessments that consider impact on the attributes of Outstanding Universal Value.

Management is the overall responsibility of the Hangzhou Administration of Gardens and Cultural Heritage with advice from the provincial bureau of cultural heritage in Zhejiang and the national State Administration of Cultural Heritage (SACH). The authority operates both as an "internal institution" and as a "grassroots unit", with various local organisations and with communities and villages. There is however a need to strengthen the community management system and to coordinate the interests of stakeholders.

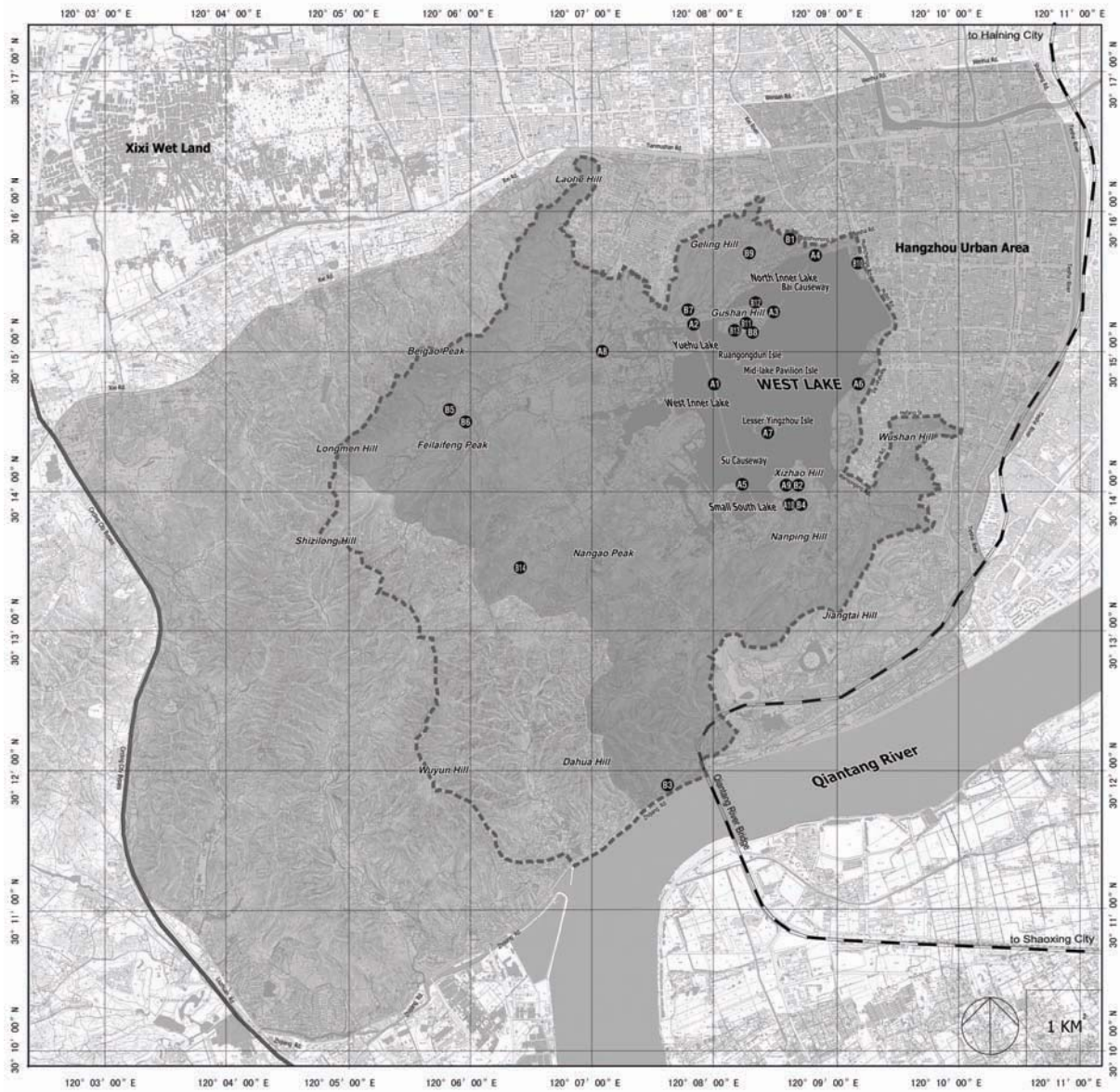
The Conservation and Management Plan of West Lake Cultural Landscape of Hangzhou (2008-2020) provides a basis for the systematic conservation and management of the property and for implementing protection measures in compliance with national standards for the protection of world heritage sites. There is also a Master Plan for the West Lake Scenic Area, 2002-2020. In order to contain incremental change that might impact on the harmony of the landscape and its key views, an inventory needs to be established of key visual attributes as a basis for monitoring.

The Municipal authority has drafted nine special plans for scenic areas within West Lake. Other special plans have been prepared such as the Master Plan for Transportation in West Lake Scenic Area of Hangzhou, the Plan for the Integration of the South-outer Scenic Places of West Lake of Hangzhou, the Detailed Plan for the Control over the Westward Expansion of West Lake, the Plan for the Protection of the Beishan Historic and Cultural Street, the Detailed Plan for the Control over the Lingyin Scenic Area, and the Plan for the Construction of the New Socialist Countryside in the Hangzhou West Lake Scenic Area. Plans in preparation include the Master Plan for Transportation in West Lake Scenic Area.

The West Lake is both robust and vulnerable: it can absorb a comparatively large number of visitors but beyond a certain point, the needs of the visitors and their impact on the landscape could impact adversely on the authenticity of the property, on the quality of their visits, and on the ability of the landscape to inspire. Visitor management needs to be given a high priority in relation to the overall management of the property.

ICOMOS recommends that the State Party give consideration to the following:

- Strengthening visitor management arrangements;
- Gaining a commitment from the local government that in due course the Shangri-La Hotel will either be lowered or demolished;
- Establishing an inventory of the property in terms of a documentary record of its key visual attributes in the form of survey drawings or through a systematic photographic record of its condition as a base line for future monitoring the inter-relationship between the various components;
- Maintaining the skyline of hills to the north and south as viewed when looking east and ensure that there is no encroachment of the city behind those hills that are visible from the lake and that all relevant development is subject to Heritage Impact Assessments that consider impact on the attributes of Outstanding Universal Value;
- Ensuring that the protection in place is adequately applied in practice so that incremental change does not impact on the overall harmony of the landscape.



Map showing the revised boundaries of the nominated property



General view of West Lake



Su Causeway in the Morning of Spring





Breeze-ruffled Lotus at Winding Garden



Viewing Fish at Flowery Pond

---

the Persian Garden  
Iran  
No 1372

---

Official name as proposed by the State Party  
The Persian Garden  
Islamic Republic of Iran

Location

City of Shiraz, Fars Province  
City of Isfahan, Isfahan Province  
City of Behshahr, Mazandaran Province  
City of Mahan, Qazvin Province  
City of Yazd, Yazd Province  
City of Mehriz, Yazd Province  
City of Birjand, Southern Khorasan Province

Brief description

The Persian Garden is a collection of nine gardens selected from various regions of Iran. They provide a tangible representation of the diversity of designed gardens as well as the role they have assumed over the centuries and in different climatic conditions. They demonstrate the adaptability and longevity of the *Chahar bagh*, or original principle of the Persian Garden, which has remained unchanged over more than two millennia. Its first mature expression can be found in the garden of Cyrus the Great's palatial complex, in Pasargadae.

Category of property

In terms of categories of cultural property set out in Article I of the 1972 World Heritage Convention, this is a serial nomination of 9 *sites*.

According to *the Operational Guidelines for the implementation of the World Heritage Convention* (January 2008) paragraph 47, this is also a serial designed *cultural landscape*.

1 Basic data

Included in the tentative List  
9 August 2007

International Assistance from the World Heritage Fund for preparing the Nomination  
None

Date received by the World Heritage Centre  
29 January 2010

Background  
This is a new nomination.

Consultations

ICOMOS has consulted its International Scientific Committees on Cultural Landscapes and on Archaeological Heritage Management and independent experts.

Literature consulted selection

Stronach, D., "The Royal Garden at Pasargadae: Evolution and Legacy" in *Archaeologia Iranica et Orientalis Miscellanea in Honorem Louis Andenorghe*, vol. 1, ed. L. de Meyer and J. Haerincx, Ghent, 1989.

Thacker, C., *The History of Gardens*, Berkeley, Los Angeles, 1979.

Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the property from 1 to 12 October 2010.

Additional information requested and received from the State Party

ICOMOS has sent a letter to the State Party on 22 September 2010 requesting additional information on the following:

- The rationale underlying the selection of the nine components of the serial property and the reasons for their Outstanding Universal Value;
- The criteria adopted in defining the boundaries of the nominated components and their buffer zones;
- The legal and planning framework and provisions made for the protection of the nominated property;
- The overall management framework and instruments in place.

On 8 November 2010 ICOMOS received additional information provided by the State Party on these subjects. The specific information is discussed in the relevant sections.

On 13 December 2010 ICOMOS sent a further letter to the State Party concerning the following issues:

- Possibly extending the south-eastern boundaries of the buffer zone of Bagh-e Dolat Abad in Yazd between Nanghelab St. and Iranshahr St. (now Afshar St.) to reach Chahar Manar Alley;
- Possibly extending the buffer zone in Isfahan where the Chahar Bagh Avenue is historically a part of cultural landscape and already managed as a historical cultural axis in the urban master plan.

The State Party responded on 22 February 2011 and the specific information provided is discussed in the relevant sections.

Date of ICOMOS approval of this report  
10 March 2011

## 2 The property

### Description

#### The concept of the Persian Garden

Gardens were originally just plots of land enclosed by walls and where plants were grown, but this practice later evolved into a codified form of art.

There are two factors which are necessary to understand the Persian Garden: its internal organisation and its external setting. A variety of gardens have been created, among which the nominated ones, in particular, demonstrate a tangible expression of the original concept.

The basic elements of Persian Garden design are the use of right angles, the division of the garden plot into four right-angled sectors (with two axes perpendicular to each other), the role of geometry and symmetry, and well-defined delimitation using walls.

The division of a site into four sectors (*Chahar agh* or Four Gardens), opening out in the four cardinal directions through the two main axes (*Chahar Taqi*), is symbolic of the creation of Eden as well as the four oroastrian elements of sky, earth, water and plants. These should always be considered when creating a garden.

The design of the Persian Garden is dominated by geometry, which serves a mythical function. It reflects the cosmic order of the world in the Garden like Paradise on earth. The role of symmetry is different, as it is only used to ensure that certain preferential viewpoints offer a symmetric view of the garden. Indeed the layout of the garden is rarely completely symmetric.

The sacred dimension of the Persian Garden also depends on the importance that water and vegetation have in this arid land.

The climatic conditions of the Iranian Plateau do not favour the growth of plants and the establishment of gardens; therefore the ecosystem of the Persian Garden is entirely artificial and carefully conceived to exploit the scarce resources available. The functional elements of the garden are nevertheless enriched with aesthetic meanings.

The main physical components of the garden are the surroundings, walls, entrances, the *Chahar agh* (which is also the original principle of all gardens), the two axes, water and related elements, vegetation, shade, and architectural features such as pavilions.

Water is a central element in that without it, no garden, or indeed life, would be possible. Water features include the pool at the intersection of the two axes, waterways, fountains, brooks and channels. Supplying a garden with water was difficult at first but this problem was overcome by Iranian engineers who developed the *qanats*, which appear to date back to the Achaemenid period (6<sup>th</sup> century BC).

*anats* are underground tunnels that conduct water from melted mountain snow for thousands of meters to settlements. The *qanat* usually releases its water into a garden pool from which it can be distributed to all parts of the *bagh* and then used to sustain the life of the community (e.g. milling, energy supply, irrigation).

The external surroundings of the garden highlight the symbolic nature of the Persian garden: the aridity of the land beyond the garden walls emphasises its cosmic representation.

The walls are a necessary component that ensure the protection of the plants and flower-beds from wind and dust. They also concretely delimit two different existential dimensions. Indeed, the entrances are magnified by complex pieces of architecture to show that they delimit not merely a physical threshold.

Water, as mentioned above, is a central element of the garden and plays both a functional and aesthetic role. Water is present in the original bi-axial structure of the *Chahar agh*, as the axes are formed by the central pool and the main waterways, which are subdivided into smaller channels or brooks. Fountains are used to draw attention to the sources of water.

Vegetation in the Persian garden consists of trees (evergreen or deciduous), shrubs (with or without flowers), bushes and flowers. Trees were carefully selected to provide shade and reduce the rate of evaporation. They were essential in maintaining the micro-climate of the garden in relation to its hot and arid surroundings.

Nine component gardens have been selected by the State Party to tangibly represent the various forms the Persian Garden can assume depending on different climatic conditions, locations and epochs.

### 1 Pasargadae

Pasargadae (249.65ha), the royal palatial complex, was built by Cyrus the Great in the 6<sup>th</sup> century BC and has been on the World Heritage List since 2004 under criteria (i), (ii), (iii) and (iv). The establishment of the Achaemenian kingdom and its language of art is materialised in its architecture which draws its features from a number of different civilizations. The royal Garden is one of these original elements. Indeed, the main features of the Persian garden are fully expressed here: there is reference to the four basic elements of oroastrian religion and they are integrated into the architecture, as well as geometry, use of architectural elements and the presence of water. Basically, the Pasargadae royal Garden followed the *Chahar agh* model which was consequently transmitted to subsequent civilisations virtually unaltered. Additionally, the layout of the buildings and of the open spaces conveys the sense that all the components work together to shape a royal residence in the form of a garden. Archaeological evidence shows that the water supply for the complex originated from a system of dams and canals built over the Polvar river, 35km north-east of Pasargadae. Since the second half of the 20<sup>th</sup> century, numerous



conservation campaigns have been carried out on the archaeological remains.

## 2 Bagh-e ram

The nominated component (12.70ha) is located in Shiraz, in the mountainous region of southern Iran. The climate here has above-average humidity but overall is more balanced than other areas.

Bagh-e ram occupies a rectangular terrain with a west-to-east slope on a longitudinal axis and is oriented east-west. The predominant building in the garden, an elegant, relatively complete mid-ajar pavilion with a pool in front of it, faces east. Today, this is regarded as the main feature of the garden. It has three floors, a gable roof, a columned porch and large openings that let light filter into the entire structure. Delicate carvings and murals refine the architecture of the pavilion. There are two other buildings: the *Andarooni* building or seraglio, which lies behind the pavilion, and the Gholam-Neshin. The garden retains two of its facade entrances, both on the northern side of the garden. It is made of brick and decorated with coloured tiles. The garden used to be delimited by a wall but this was replaced in modern times with an iron rail.

The water supply in the garden was provided by a brook branching off from a stream, formed from spring water and other several *qanats*, which also provided Shiraz with water. However, this system eventually collapsed and nowadays the garden is irrigated by the water from two wells.

The vegetation of the garden includes fructiferous and non fructiferous trees, bushes, creeping plants, and flowers, especially roses. Among the trees, we find one exceptional example of a cedar tree.

## 3 Bagh-e Chehel Sotun

The name of this nominated component (5.80ha) is derived from the symbolic number of columns (*chehel sotun* forty columns) in the garden hall. The number forty is used to represent multiplicity.

Bagh-e Chehel Sotun is a pavilion garden. The main axes of the garden go from west to east and plain trees have been planted along them.

The pool is the most important manifestation of water here: the twenty columns of the hall porch are mirrored in the pool, thus becoming forty, which is an uncountable number. The palace as we know it today is the result of consecutive additions to an initial rectangular hall covered with three domes. The most recent addition is the columned portico. The palace, except for the portico, has the proportions of a cube. Much of the original decoration survives, including paintings, mirrors, stained-glass windows and inlaid works. The 18<sup>th</sup> century painted ceiling of the portico, with its battle scenes and prominent western guests, and the mirrored ceiling of the hall still exist, as well as other rooms with miniatures and wall paintings.

The variety of vegetation in Bagh-e Chehel Sotun is exemplary of the careful selection of trees and other plants in the Persian Garden. They would have been chosen on the grounds of their ability to adapt to climatic and soil conditions as well as to enrich the décor of the garden. The following species of tree are found in Chehel Sotun: Persian Pine, Juniper, Cedar (evergreen), Elm, Black Maple, Plane, Mulberry, Claw Leafed Maple, Aspen, Poplar, Acacia, Fig, Silk, alzalak, and Ash (deciduous). Among the shrubs, we find: Laurel, Box Tree (evergreen) and Turi (deciduous).

## 4 Bagh-e Fin

Bagh-e Fin (7.60ha) is located in a homonymous village close to Isfahan city, in an arid region delimited by mountains on one side and desert on the other.

The garden has an approximately quadrangular shape with the pavilion being at the intersection of the two main axes. The pool is situated northwards, from which the main waterway originates.

Water at Bagh-e Fin is supplied by a spring 3km south of the garden. There are 17 wells in total, from where the water emerges until it reaches the garden. Here the water is divided into two branches, one supplying the water mills and the other feeding, via two artificial springs, the main and subsidiary water bodies of the garden, before heading out to the surrounding farms and fields. Water in the garden is sent to three main areas where the natural properties of gravity, water speed and pressure are used to create special effects, along with the aid of man-made features such as ponds, fountains, channels, hidden ducts and water tile pipes.

Bagh-e Fin contains several constructions, namely pavilions, alcoves, a women's quarter, a bath house, the ensemble of which is encircled by mud-walls with ramparts, only broken by a monumental entrance.

The planting of dense rows of cedar trees along the main axes has given the garden a clear order and spacing and a compactness which is particular to Bagh-e Fin. Subsidiary walkways contradict this feature and give a sense of openness to the garden. Tall trees at the boundaries separate the garden space from the exterior and help create a micro-climate favourable to the growth of fruit-trees and flowers.

The particularities of this garden include its pre-Islamic origin, the ancient and highly-developed water system, the organisation of the vegetation, the use of cedars, its asymmetry, and the building materials used for the structures (mud or sun-dried bricks).

## 5 Bagh-e Abas Abad

Bagh-e Abas Abad (420.20ha) is an example of how the Persian Garden model adapted to a rainy and vegetated environment in the Safavid epoch.

The garden complex is located amid a forest, in northern Iran, and consists of a garden, a dam, a dual brick tower, a water mill, a palace, stone-paved paths, and waterworks.

The garden receives water from a spring which supplies a basin, created by means of a dam. The water was channelled from the basin through an open canal or ceramic pipes to a basin which was the starting point of the irrigation system. The *Chahar agh* compound is the source of water for the entire garden, due to its relatively elevated position. The water runs through a system of pipes, canals and basins, and the flow is maximised by exploiting the slope, gravity and water pressure. Most of the structures in this garden are of archaeological interest today: the waterworks, pool and bath house; *Chahar Taqi* (in the dam basin) both with functional use in water spill control (the central pier with meshed holes worked as an emergency valve) and recreational ones; two brick towers, conceived to work as safety valves, siphon traps and pressure relief devices.

The plan and features of this garden are unlike those of any other Persian Garden especially considering the culmination of waterworks engineering, represented by the interconnected system of the dam, the network of underground channels and pipes, the *Chahar Taqi* and the towers with their safety function.

#### 6 Bagh-e Shahzadeh

The garden is located in an isolated area of desert 35km south-east of Isfahan and 6km from Mahan.

The garden has an elongated rectangular shape and is structured along a longitudinal axis which intersects the main entrance and the pavilion, which is the only building inside the garden, the others being located along its perimeter. A high composite wall completes the enclosure. The internal organisation of the garden is based on flat steps laid along the main axis, corresponding to the typology of *Takht* (step) gardens.

The vegetation collaborates to build a refined design, in which the arrangement of different types of tree and shrub forms accurate patterns of shade and seasonal colours.

Water enters the garden from its upper section through *Tigran anat*, which collects waters from the surrounding mountains, and distributes it longitudinally to irrigate the flowers and lawn beds. The longitudinal axis and topography are also highlighted by means of brooks and a series of small cascades along the stepped slope.

The main building, *Sardar haneh*, is situated in the highest part of the garden. Centred on its main axis, it consists of a central pavilion flanked on both sides by two elongated wings. Its layout and elevation are somewhat Baroque in character. There are two other edifices in the enclosure: firstly, the residential building, *ala haneh*, which is smaller and simpler with a central structure and two wings; secondly, *aeem ashi* House,

in the southern section of the garden, whose original function is unknown, but it was probably designed for domestic animals. The building materials consist mainly of sun-dried or mud brick, thatch and gypsum plaster. Decorative elements are paired columns, stucco works and tiles. The particular features of this garden are the innovative irrigation system, which coupled functional and aesthetic goals, and its desert setting.

#### 7 Bagh-e Dolat Abad

The Garden (8ha) is located in Yazd, a town lying at 1215 masl, surrounded by desert and sandy lands. The garden is rectangular in shape and is articulated along a strong east-west axis with flowerbeds divided by brooks. The garden served as a fruit and governmental garden, with a summer and winter residence. The water was supplied by Dolat Abad *anat* (water is now obtained from a well) which reaches the garden from behind the summer mansion and fills a basin from which the water is divided into two branches. One flows to serve the kitchen and the other feeds a series of basins, then reaches a water wheel, from where it flows to another set of pools and, from there, irrigates the surrounding fields. One of the distinguishing features of this garden is the wind-catching structure and several water basins and jets.

#### 8 Bagh-e Pahlavanpur

The garden (3.50ha) is located south-east of Mehriz and, thanks to the abundance of water, enjoys rich vegetation. In fact, the area consists of a master's and a peasant's garden. It was conceived to host scholars but was transformed into a garden pavilion. Water is supplied by a *qanat*: it enters the garden and flows through a watermill, fills a basin, passes through the gutters then goes along the main axis of the garden before flowing again into a watermill, from which it irrigates the surrounding fields. The buildings are grouped into the winter and summer residence complexes and include subsidiary structures. Among the particular elements of this garden are the link between the water and the mansion (the main brook actually passes through the mansion) and the presence of two watermills which reap the benefits of hydraulic power.

#### 9 Bagh-e Akbariyeh

This garden was built 5km from the centre of Birjand and functioned as a resting place. The selected vegetation selected includes several indigenous species. The water was supplied by a *qanat*. Due to frequent severe water shortage, water was stored in basins to be used when needed. Ceramic elements were inserted into the slope to slow down the water and prevent soil erosion. Water enters under the garden and fills a basin which is divided into two branches that irrigate the trees through subsidiary canals. The buildings featured in this garden are the main entrance and other buildings added to the complex in subsequent periods: the *Miansara*, the main pavilion with the Mirror Hall, and the *ivan haneh*. The ensemble is completed by subsidiary buildings. The presence of exotic plants and rows of pine instead of

cedar trees along the main axis are particular features of this garden.

#### History and development

Gardens are an inherent element of Iranian dwelling culture and are also deeply linked to the religious beliefs of the pre-Islamic populations of modern-day Iran. The first patterns of the *Chahar agh* concept were found depicted on an earthen bowl in Samaria dating back to 2000 BC. Mention is made in Elamite and Assyrian scripts of holy gardens, which were treated as temples.

During the Achaemenid reign, mythological notions were materialised in architectural forms: Pasargadae complex with its garden (6<sup>th</sup> century BC) is exemplary in this respect and it was during this period that the main elements of the Persian Garden, namely *Chahar agh*, were laid down.

Persia was later occupied by Alexander of Macedonia and Hellenistic culture absorbed elements of Persia into its garden art.

During the Sassanid period (3<sup>rd</sup> - 7<sup>th</sup> century AD) the role of water in the garden developed beyond its functional dimension, due to the influence of Zoroastrianism.

Arabs developed the aesthetic dimension of the garden and rules were elaborated to achieve refined results. Gardens from this period may be divided into two groups: those inside and outside the cities. The former were often linked to administrative centres whilst the latter were destined for summer time.

The Mongol taste for ornate decorations emphasised this aspect of the garden and its buildings, and the Persian tradition of garden-building spread to other parts of Asia, notably India and Pakistan where the art of the garden reached its peak in a handful of examples.

During the Safavid and later the Qajar Dynasties, contact with western civilisations influenced garden patterns, especially in the choice of plants and flowers.

#### Pasargadae

The palatial complex was founded by Cyrus the Great in the battlefield where he had defeated the Medes in 550 BC. The royal residences and the garden are dated back to around 530 BC. Former traces of human occupation date back to the Middle Palaeolithic epoch (250,000-40,000 BP). Findings from subsequent epochs come from the Parthians (mainly consisting of different types of burial sites) the Sassanids (predominantly inscriptions) and the Islamic era (represented by holy shrines, caravanserais, castles, and villages).

#### Bagh-e Ram

This garden dates back to the 11<sup>th</sup> century C. It was built during the Seljuk period, supposedly by the Governor of Fars. In the 14<sup>th</sup> century, the garden was used as the seat of government by the Inju Sheikh. Nothing much is known about this garden before the 19<sup>th</sup> century, although it is

likely that it underwent restoration works in the first half of 18<sup>th</sup> century. During the Qajar rule, Bagh-e Ram was used once more as the seat of government. The garden was confiscated by the government and restored in the period 1966-1971. It was listed as a historical heritage item on 3 August 1974. Until the 1980s the Belvedere building was used by the Faculty of Law, but it was moved to the university campus in 2003. Restoration work started soon afterwards.

#### Bagh-e Chehel Sotun

The garden dates back to the Safavid epoch, and the construction of the palace inside it seems to have been completed in 1674 AD, after two subsequent building campaigns. Documented conservation work date back to the second half of the 20<sup>th</sup> century: this led to the discovery of paintings and inscriptions, which help to understand the appearance of the building and its different phases.

#### Bagh-e Fin

The garden dates back to the pre-Islamic era according to historic sources, and one of its earliest features is the spring. However, the actual position of Bagh-e Fin was established in 11<sup>th</sup> century AH (17<sup>th</sup> century C) and most of the structures were built in this period. After the end of the Safavid reign, the Qajar dynasty took care of the garden, which, however, was extensively damaged in an earthquake which happened in 1743 AD. In the early period of the Qajars the garden was restored, expanded and enriched in decoration. However, later on in the Qajar epoch the garden fell into disrepair and it was only at its end when several restoration interventions were put forward. During the constitution movement in Iran, the garden was used as the insurgent headquarters and suffered damages and looting. From the 1930s, the importance of the garden, although severely damaged, was recognised and substantial restoration work was carried out.

#### Bagh-e Abas Abad

The garden was constructed in the 17<sup>th</sup> century C in the context of a development programme to expand Ashraf village and transform it into Shah Abas' residence. Between the end of 16<sup>th</sup> and the beginning of the 17<sup>th</sup> century, during the civil war between Afghan rulers and in the Qajar period, the garden complex was almost completely destroyed.

#### Bagh-e Shahzadeh

The garden was built during the Qajar reign (18<sup>th</sup>-19<sup>th</sup> century C) and remained unfinished as its founder died. It was subsequently subdivided and neglected for political and social reasons and suffered much damage. The first conservation work started in 1959 and the garden was listed in the List of National Heritage in 1975. In 1981 an earthquake inflicted severe damage and conservation work had to be carried out again in 1991.

#### Bagh-e Dolat Abad

The garden was established in the Qajar period (1750-1759 AD). After its founder died, the garden was

neglected and was only restored under Qajar rule. The earliest conservation works were carried out in 1354-1361 AH (1935-1942 AD) by the technical office for conservation in Qazvin. On this occasion, the wind tower, which had partially collapsed, was restored. The garden has maintained its features and only the northern side of the garden was altered due to the opening into Dolat Abad Street.

#### Bagh-e Pahlavanpur

This garden was also built in the Qajar period and combines traditional elements along with others drawn from modernity and the influences of western culture.

#### Bagh-e Akbariyeh

The garden complex was established in two phases, in the Qajar and Pahlavi eras. The garden buildings were later used as governmental edifices.

### 3 Outstanding universal value integrity and authenticity

#### Comparative analysis

The comparative analysis was carried out with gardens from other geo-cultural regions, assuming that the Persian Garden is being nominated as a masterpiece of human ingenuity that materialises Paradise on earth.

The State Party identified the following garden typologies and related examples as relevant for comparison: the Indian and Mogul Gardens, with specific aspects of the Islamic Garden in India (Taj Mahal, India, 1983, (i)); Fort and Shalimar Gardens in Lahore, Pakistan, 1981, (i), (ii), (iii)), the Arabic-Spanish Garden (Alhambra, Generalife and Albayz n, Granada, Spain, 1984/1994, (i), (iii), (iv)), the Chinese Garden (Classical Gardens of Suzhou, China, 1997/2000, (i), (ii), (iii), (iv), (v)), the Japanese Garden (Historic Monuments of Ancient Nara, Japan, 1998, (ii), (iii), (iv), (vi)), the Western Garden, articulated in the Italian Garden (18<sup>th</sup>-Century Royal Palace at Caserta, with the Park, the Aqueduct of Vanvitelli, and the San Leucio Complex, Italy, 1997, (i), (ii), (iii), (iv)), the French Garden (Palace and Park of Versailles, France, 1979, (i), (ii), (vi)) and the English Garden (Blenheim Palace, United Kingdom, 1987, (ii), (iv)). One or more examples of each typology were selected and accurately described, followed by comparison with the nominated serial property.

The State Party has concluded that the Persian Garden (*Chahar bagh* model dating back to the 6<sup>th</sup> Century BC) is original in its conception, and different from all other typologies in terms of selected concrete examples in design principles, layout, architectural features, use of vegetation and natural elements, water management, and symbolic meanings and uses.

The additional information received by ICOMOS on 8 November 2010 explained that the nine nominated components for the Persian Garden were selected as the best examples showing the gradual evolution of the

Persian Garden in the layout, in the design of the architectural features (*ushk*, Gateway, service and residential buildings), of the *arts* and of the use of water for both functional and aesthetic purpose. Other element considered for selecting the gardens were: their environmental context, geometry, shadow, walls.

Each garden was selected by comparing it with others from the same epoch and region and on the grounds of their completeness and integrity.

Pasargadae was selected as a prototype of the Persian Garden in that it still clearly exhibits the *Chahar bagh* structure.

Bagh-e Ram is reputedly the best example in terms of architectural design, vegetation and water systems.

Bagh-e Chehel Sotun was chosen for its magnificent architecture and water system, garden landscaping and arrangement of plants.

Bagh-e Fin exhibits significant elements of the Persian Garden pattern, organisation of waterworks, old vegetation and architectural and artistic elements.

Bagh-e Dolat Abad possesses the most complete layout among surviving Persian Gardens.

Bagh-e Pahlavanpur exemplifies the Persian Village Garden pattern, where traditional garden meets modern landscape.

Bagh-e Shahzadeh exemplifies the *Takht* Persian Garden model, created in an extreme climate with the help of innovative irrigation methods and the functional and aesthetic use of water.

Bagh-e Abbas Abad may be held up as an example of how the Persian Garden can be adapted to a humid climate.

Bagh-e Akbariyeh is representative of South Iranian Gardens in its architectural design, planting and water system.

ICOMOS observes that the State Party has elaborated a well-structured comparative analysis that includes examples from within the country, the same geo-cultural region, as well as from other regions around the world. Several other examples could have been taken into account in the comparative analysis i.e. the Aranjuez Cultural Landscape (Spain, 2001, (ii), (iv)), Würzburg Residence with the Court Gardens and Residence Square (Germany, 1981, (i), (iv)), Villa d'Este, Tivoli (Italy, 2001, (i), (ii), (iii), (iv), (vi)), the gardens in the residences of the Royal House of Savoy (Italy, 1997, (i), (ii), (iv), (v)). Other relevant properties would have been those on the tentative list of State Parties that are currently being nominated i.e. Bagh-e Babur (Afghanistan), Hiraizumi Temples, Gardens and Archaeological Sites representing the Buddhist Pure

Land (Japan), and the West Lake Cultural Landscape of Hangzhou (China).

Nevertheless, despite the absence of a number of comparable examples, the comparative analysis convincingly demonstrates that the Persian Garden is missing from the list of historical gardens inscribed on the World Heritage List. Its originality is only partly reflected by Mogul and Arabic-Spanish garden morphologies, which derived from the Persian *Chahar agh*.

ICOMOS considers that, on the basis of the State Party's accurate examination of surviving gardens within Iran, the comparative analysis justifies the selection of the components.

---

ICOMOS considers that the comparative analysis justifies consideration of this property for the inscription on the World Heritage List.

---

Justification of Outstanding Universal Value  
The nominated property is considered by the State Party to be of Outstanding Universal Value as a cultural property for the following reasons:

- Natural and manmade elements meet in the Persian Garden to create a unique artistic achievement that reflects the ideals of art, philosophical, symbolic and religious concepts.
- The perfect design of the Persian Garden, along with its ability to respond to extreme climatic conditions, is the result of inspired and intelligent application of different fields of knowledge including technology, water management and engineering, architecture, botany and agriculture.
- The notion of the Persian Garden permeates Iranian life and artistic expression and references to *aghs* may be found in literature, poetry, music, calligraphy carpet design. These, in turn, also influence the arrangement of the gardens.

The nine selected gardens reflect and tangibly articulate the proposed Outstanding Universal Value in physical expressions from different epochs and climates. They demonstrate the flexibility and permanency of the *Chahar agh* originating principle at the heart of the Persian Garden in adapting to different terrains and climates, as well as to changing trends and cultural influences.

ICOMOS considers that this justification is appropriate because these orderly gardens, with their intersecting paths and waterways reflect an evolutionary process in terms of form and composition, while always adhering to the early geometric model of *Chahar agh*. This acted as an originating principle for gardens and soon spread beyond Persia, as far as India and Spain, where the art of gardening flourished, creating outstanding examples which have survived to this day.

Integrity and authenticity

Integrity

The State Party has examined the integrity of each component from a visual, structural and functional point of view, and has concluded that the integrity of the nine gardens has been retained. From a functional perspective, all the selected gardens were used by the public, at the same time maintaining the integrity of their structural elements.

As for the rationale of the serial nomination, the State Party holds that these nine gardens were selected from amongst hundreds of gardens in Iran with a variety of background typologies and located in diverse climatic conditions and settings. This reflects the adaptability of the *Chahar agh* model to different conditions.

ICOMOS considers that each garden contains sufficient elements to express its Outstanding Universal Value. Furthermore, their respective sizes and components are the key characteristics and features of their importance. Finally, none of these gardens have been damaged by development or a lack of constant maintenance, although many of them have undergone substantial restoration work since their significance was officially recognised.

ICOMOS observes that the nine nominated gardens date back to different historical periods and belong to various climatic areas of Iran. These gardens belong to different provinces, from across Iran, and reflect the diversity of forms and layout that the *Chahar agh* principle can sustain. ICOMOS considers that the series is closed.

Authenticity

The State Party has examined the conditions of authenticity for each garden separately and concludes that overall, their authenticity has been retained with regard to design, technology, material and setting. As for water management and distribution, all the gardens, except Bagh-e Ram and Bagh-e Dolat Abad, have retained their traditional *qanat*-based system. Water circulation within the gardens has maintained its original layout. The setting of the gardens in rural areas or villages has retained its aspect, whereas the city gardens have experienced a modification in their setting. Despite this, planning regulations ensure that surviving elements of the original setting are preserved and the current environment is improved.

ICOMOS considers that the Persian Garden, as documented over the course of more than two millennia, has developed alongside the evolution of Persian society whilst always adhering to the early geometric model. These gardens may be considered true cultural landscapes in that they reflect an evolutionary process in terms of form and composition. The gardens of Pasargadae and Bagh-e Abas Abad can be considered "fossils" in that today they are archaeological sites as their

evolutionary processes as gardens have come to a halt. The other seven gardens conserve their active role based on an early typology and, similarly to palimpsests, they have been subjected only to repairs, modifications or restoration, and sometimes the replacement of plants that died due to natural causes.

ICOMOS therefore considers that the nominated property bears credible and exceptional witness to the proposed Outstanding Universal Value.

---

In conclusion, ICOMOS considers that the conditions of integrity and authenticity have been met.

---

Criteria under which inscription is proposed

The property is nominated on the basis of cultural criteria (i), (ii), (iii), (iv) and (vi).

*Criterion i represent a masterpiece of human creative genius*

This criterion is justified by the State Party on the grounds that the Persian Garden has been acknowledged as a masterpiece of human genius by numerous historians and travellers over the centuries. The oldest evidence of the innovative character and of the originating principle of the Persian garden is seen in Pasargadae (6<sup>th</sup> century BC ). Here, the wise management of water, careful selection of plants and garden layout based on straight and orthogonal lines were already present. The subdivision into four areas around two orthogonal lines or *Chahar agh* finds its roots in Zoroastrianism and is associated with the four elements, the four gardens of Creation and the four rivers of Paradise. The Persian Garden is, in fact, considered to be the symbolic representation of Paradise on earth. It has evolved throughout the centuries in diverse forms, adapting to different aesthetic, functional and social exigencies and climatic conditions, its originating model always remaining intact. The arid climate of most of Iran forced garden builders to elaborate ingenious systems to obtain and channel water from the source to the gardens.

ICOMOS considers that the powerful originating principle of Persian Gardens - *Chahar agh* though it originated in Persian civilization, possesses a strong symbolism associated with philosophical, mythical and religious concepts shared by several cultures. Its great flexibility has allowed the Persian Garden to evolve into diverse tangible manifestations, yet always exhibiting a necessary element of permanence.

---

ICOMOS considers that this criterion has been justified.

---

*Criterion ii exhibit an important interchange of human values over a span of time or within a cultural area of the world on developments in architecture or technology, monumental arts, town planning or landscape design;*

This criterion is justified by the State Party on the grounds that the Persian Garden has been the principal

reference for the development of garden design in Iran, India, Pakistan, Afghanistan, and in Arab countries, reaching lands as far as Spain. The geometrical layout, the use of symmetry, the water circulation and water management have particularly influenced the art of garden creation in different cultures.

ICOMOS considers that the design and technological achievements adopted to create the Persian Garden have had a profound and long-lasting influence on a vast cultural region, as well as others with which Persian culture made contact.

---

ICOMOS considers that this criterion has been justified.

---

*Criterion iii bear a unique or at least exceptional testimony to a cultural tradition or to a civilisation which is living or which has disappeared*

This criterion is justified by the State Party on the grounds that the Persian Garden has evolved over a span of more than two millennia, and in its manifestations along the centuries has shown deep links with every expression of life and culture: private residences, palaces, public and religious buildings were accompanied by gardens. This tradition has also influenced other cultural expressions such as poetry, music, painting, carpet making, architecture and urban planning.

ICOMOS considers that the notion of the Persian Garden has shaped Iranian culture so deeply that it is reflected in almost all other expressions of art.

---

ICOMOS considers that this criterion has been justified.

---

*Criterion iv be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates a significant stage in human history*

This criterion is justified by the State Party on the grounds that the Persian garden is an outstanding type of garden, resulting from the ingenious mix of natural elements and manmade components. It also integrates significant achievements in Persian culture and symbolic meanings into a refined and complex artistic manifestation. The Persian Garden may be considered as the prototype of Western geometrical garden design, as a counterpoint to the Chinese Garden which may be considered the reference for oriental garden design. The most important components of the Persian garden model are as follows: garden elements (water supply and circulation systems, walls, design, use of plants, use of geometry and symmetry); relationship with the surrounding environment; cultural associations. These components are described in the treatise on agriculture, written by Heravi in 18<sup>th</sup> century, which is one of the references for Western symmetrical garden design. The scarcity of water has stimulated the inventiveness of Persian garden builders to develop advanced systems and technologies to collect and use water and exploit the

properties of vegetation types to create a micro-environment favourable to the self-sustenance of the garden and to human delight.

ICOMOS considers that there are strictly geometric gardens in China, specifically the gardens of many places of worship and many public and private residences, especially in the cities.

---

ICOMOS considers that this criterion has been justified, with the exception of the reference to Chinese Gardens being considered a counterpoint to the Persian Garden model.

---

*Criterion vi be directly or tangibly associated with events or living traditions, with ideas or with beliefs, with artistic and literary works of outstanding universal significance*

This criterion is justified by the State Party on the grounds that the Persian Garden is directly associated with several other cultural expressions of Persian culture, namely literary works, poetry, carpet design, miniature painting, music, architectural decoration elements. The Zoroastrian concept of four main natural elements (earth, heaven, water and plants), as well as the Heavenly Garden, merge with the Islamic concept of Paradise on earth. The Persian Garden is a pleasant environment created to favour meditation, intellectual discussions, the composition of poetry, music and art.

ICOMOS concurs with this view.

---

ICOMOS considers that this criterion has been justified.

---

ICOMOS considers that the serial approach is justified and that the selection of components is appropriate.

---

ICOMOS considers that the nominated property meets criteria (i), (ii), (iii), (iv) and (vi) and conditions of authenticity and integrity and that Outstanding Universal Value has been demonstrated.

---

#### Description of the attributes

The attributes of the Persian Garden supporting the Outstanding Universal Value of the property are the following, considered materialised in all nine components:

- The layout of the garden expressed by the specific adaptation of the *Chahar bagh* within each component and articulated in the *khavars* or plant/flower beds;
- The water supply, management and circulation systems from the source to the garden, including all technological and decorative elements that permit the use of water for functional and aesthetic exigencies;
- The arrangement of trees and plants within the garden that contribute to its characterisation and specific micro-climate;

- The architectural components, including the building, but not limited to these, that integrate the use of terrain morphology and vegetation to create unique manmade environments;
- The association with other forms of art that, in a mutual interchange, have been influenced by the Persian Garden and have, in turn, contributed to certain visual features and sound effects in the garden.

## 4 actors affecting the property

### Development pressures

The State Party states that the gardens in urban settings have suffered in the past from the pressure of urban development, resulting in the obliteration or separation of some portions of gardens for road openings and new constructions. In some gardens, such as Bagh-e Fin, development pressures are higher and come from the construction of the Bafq Isfahan highway, as well as the increasing population of the surrounding neighbourhood and the presence of a parking lot near the garden. In Bagh-e Abas Abad the construction of visitor facilities in the nearby forest have altered the setting, although after the establishment of the office for the protection of the garden (ICCHTO Base), all projects have come to a halt.

### Tourism pressures

The State Party holds that only a few gardens, i.e. Bagh-e Namak, Fin, Chehel Sotun, Dolat Abad, are subject to visitor pressure, although management policies have been established to control the impact of tourism.

ICOMOS observes that some damage caused by humans, such as graffiti, does occur, although existing security staff manages to limit these episodes.

### Environmental pressures

Major effects of environmental conditions can be observed on the surviving structures in Pasargadae. Indeed, weathering, frost and thermal cycles have caused damage to the manmade structures as well as to vegetation in all the gardens. Uncontrolled vegetation growth is also responsible for some damage to garden components.

ICOMOS considers that the felling of 120 cypresses in Bagh-e Fin, killed or weakened by frost, is a cause for concern and recommends that any future measure of such drastic nature be carefully assessed beforehand and subjected to specific scientific investigation.

### Natural disasters

According to the State Party, the major threat to the nominated property is from Iran being an earthquake-prone country, although not all components are located in areas with high seismicity. Other threats may come from fire.



## Impact of climate change

ICOMOS considers that the most likely effects of climate change would be a reduction in snowfall and consequent shortage of water supply, unpredictable weather events, and increasing harshness of climate, especially in summer.

---

ICOMOS considers that the main threats to the property are urban development for those components located in urban areas, and environmental pressures where these are coupled with lack of maintenance.

---

## 5 Protection conservation and management

### Boundaries of the nominated property and buffer zone

The boundaries of each of the nominated Persian gardens were properly identified and are defined in both the nomination dossier and the attached maps with precise geographic coordinates. These boundaries have been selected with great attention and detail and correspond to those used to delimit the gardens for their protection under Iranian legislation.

In addition, the buffer zones for each component have been clearly delimited, officially notified and protective measures tailored to the needs of each garden.

The additional information received by ICOMOS on 8 November 2010 explained that the boundaries of the nominated components are laid down to include all elements conveying the significance of the garden and therefore contribute to express the Outstanding Universal Value of the nominated serial property. The rationale for defining the boundaries of the buffer zones varies according to the setting of each garden. For those included within or close to urban areas the buffer zones have been designed to protect them from the impacts and effects of development pressures, in other cases the buffer zone acts as a prelude to the garden, where its values are somehow announced by the context.

ICOMOS considers that the nominated areas of each of the nine protected gardens include all the elements that make up the Outstanding Universal Value of the serial property. Furthermore, all of the proposals for regulating and protecting each of the gardens are appropriate and offer the best possible solutions for their conservation and enhancement.

ICOMOS further observes that the Pasargadae gardens are located in and are part of Pasargadae archaeological site, which was inscribed on the World Heritage List in 2004, on the basis of criteria (i), (ii), (iii), (iv).

ICOMOS, however, considered that the south-eastern boundaries of the Bagh-e Dolat Abad of Azad buffer zone between Rahnghlab St. and Iranshahr St. (now Afshar St.) are not well identified. Specifically, the line between points

B5, B6, B7 and B8 cut through a compact, old inhabited area with a long section of boundaries that are difficult to identify. ICOMOS deemed it appropriate to expand the buffer zone of this portion of the inhabited area so that it reaches Chahar-Monar Alley. This new solution was reputed more than necessary, given the value of the old inhabited area.

On 13 December 2010, ICOMOS sent a letter to the State Party requesting to consider the possibility of revising the south-eastern boundaries of the buffer zone to reach Chahar-Monar Alley and the State Party officially informed ICOMOS that they have been modified according to ICOMOS' recommendation.

Additionally, ICOMOS considered that it could be appropriate to extend the buffer zone of Bagh-e Chehel Sotun in Isfahan where the Chahar Bagh Avenue is historically a part of the cultural landscape, and already managed as a historical cultural axis in the urban master plan.

ICOMOS has sent a letter to the State Party on this issue and the State Party officially responded that all the elements that make up the historical-cultural axis of Isfahan have been included within a protective zone since 1993 AD, with specific protective measures developed by Isfahan ICHHTO Base, which is also responsible for its management.

---

ICOMOS considers that the boundaries of the nominated property and of its buffer zones are adequate.

---

### Ownership

All gardens comprised in the serial property, except for Bagh-e Dolat Abad and Bagh-e Akbariyeh, which are owned by the Waqf organisation, a charitable trust holding an inalienable religious endowment, are under state ownership (Bagh-e Azad is owned by the University of Shiraz, while the others are under the Iranian Cultural Heritage, Handicraft and Tourism Organisation - ICHHTO).

### Protection

#### Legal Protection

The legal provisions for the protection of cultural heritage in Iran are to be found in general (e.g. the 1920 Constitution and the 1996 *Penal Code*) and specific law, such as the 1930 *Law for the protection of national heritage*.

The 1930 law defines the procedures for the identification of cultural heritage and establishes the National Heritage List, together with the criteria for inclusion on this list. It also defines provisions for archaeological excavations, further detailed by the 1980 *Law concerning unauthorised excavations*. Further provisions concerning the acquisition of property of cultural significance are to be found in the 1979 *Law concerning acquisition of land, buildings and Premises*.

This regulates the modes of acquisition of immovable property on the part of the State for the purpose of protecting or improving the presentation of cultural property.

Legal provisions specific for natural resources that are relevant also for the protection of the nominated property are: art. 50 of the Constitutional law (1920), the Environmental Conservation Act (1974), the Act for the Conservation and Promotion of Green Spaces in Urban Areas (1980), the Law for Natural Disasters (1991), the Forest and Natural Resources Act (1992).

In 1979 the Iranian Cultural Heritage Organisation (later renamed the Iranian Cultural Heritage, Handicraft and Tourism Organisation ICHHTO) was established to ensure the management of cultural heritage. This organisation is responsible for studying, investigating, surveying, identifying, and registering movable and immovable property of historical, archaeological, and cultural value. The ICHHTO is also responsible for preparing and implementing plans aimed at repairing and revitalizing monuments, buildings, and valuable cultural-historical complexes.

In 2001 it was decided that all public organizations must conduct studies to assess the cultural/historical impacts of major development projects at the earliest stage of a scheme.

The nominated Historical Gardens of Iran have been registered in the list of Iran's national monuments with the reference numbers below: *The Ancient Garden of Pasargadae* was inscribed with no. 19 in 1931; *agh e ram* with no. 1013 in 1974; *agh e Chehel Sotun* with no. 108 in 1932; *agh e Fin* with no. 238 in 1935; *agh e Abas Abad*, Behshahr with no. 745 in 1967; *agh e Shah ade*, Mahan with no. 1012 in 1975; *agh e olat Abad* with no. 774 in 1967; *agh e Pahlavanpur* with no. 6334 in 2003; *agh e Akbariyeh*, Birjand with no. 2326 in 1999.

Each nominated garden in the list is also protected by means of specific regulations set up for the 'core' and 'buffer zone', according to Iranian legislation. These provisions must be respected by all planning instruments in force.

The additional information received by ICOMOS on 8 November 2010 explained that ICHHTO is responsible for developing the protective measures for listed national monuments. Maps of the boundaries of the 'core' and 'buffer zones' of protected national monuments are presented at Ministry of Housing and Urban Development (MHUD) which has the duty to transmit them to the consultants charged with the preparation of the master/development plans for urban areas.

Urban Master Plans are approved by the Higher Council for Architecture and Urban Planning (HCAUP), which also contains the Head of ICHHTO. The HCAUP has four main functions: developing overall urban planning policies,

commenting on bylaws affecting land use and zoning, adopting urban regulations and bylaws, and approving urban master plans. Plans are prepared at a provincial level by consultants hired by Housing and Urban Development Organisations (HUDO), which are provincial branches of the Ministry for Housing and Urban Development, and are then reviewed and approved by HCAUP. Detailed plans are approved at a provincial level by a specific Commission which includes representatives from local administration and ministries.

All nine Gardens are covered by a master plan which has taken into account the values of the nominated components as items listed in the National List of Monuments.

Effectiveness of protection measures

A specific ICHHTO base has been established for each garden with responsibilities ensuring that provisions and regulations issued for the buffer zones are respected and conservation and maintenance work is carried out. A National Base for the Persian Garden has been established and is responsible for coordinating all the activities of provincial bases, providing technical advice, supporting documentation activities and scientific research.

ICOMOS considers that overall, the system of legal protection is adequate. The planning provisions and regulations that have been set up are appropriate to protect the value of the nominated property.

ICOMOS observes, however, that the regulations for the buffer zones of Bagh-e Dolat Abad and Bagh-e Akbariyeh include a provision which does not appear fully adequate to the specific context, in that new buildings are only permitted to have one storey and a maximum height of 4.5m while existing buildings in the area have an average of two storeys. ICOMOS therefore suggests that the State Party considers modifying this provision to better reflect the existing situation, by accepting also new buildings with two storeys with the same maximum height of 4.5m, so that the character of the area is better preserved.

As a general observation, ICOMOS considers that the provisions for the nominated properties and their buffer zones should be tailored to their specific situations and needs, to ensure protection of the value and character of the areas involved. Measures should not be limited to the height of the buildings but should also include size of building lots, materials, architectural language, and functions.

ICOMOS considers that the legal protection in place is adequate. ICOMOS observes that the protective measures for the property are adequate overall, but suggests that the State Party considers the possibility to amend the provisions concerning the height of the buildings in Bagh-e Dolat Abad and Bagh-e Akbariyeh buffer zones to allow buildings with two storeys and a

maximum height of 4.5m, to preserve better the character of the area.

---

## Conservation

### Inventories, recording, research

The State Party informs that systematic inventorying of plants in all gardens is almost concluded. Research and investigations into the water supply and circulation systems in Pasargadae and Bagh-e Abas Abad are underway.

### Present state of conservation

The State Party reports that conservation programmes are being implemented in all nine gardens.

Most of the gardens have undergone repeated restoration/conservation campaigns. The constant and regular monitoring and conservation activities ensure that the architectures included in the gardens, consisting of pavilions and other structures, are in an appropriate condition. In the archaeological gardens of Pasargadae decay phenomena related to frost and other environmental factors have been detected. In the garden of Abas-Abad, superficial damage caused by humidity has occurred but is currently under control by means of regular interventions and monitoring.

The traditional water management systems have survived in most of the gardens and have been repaired and restored to functional use.

### Active Conservation measures

The State Party reports that each garden is covered by a thorough conservation programme that includes a variety of conservation and maintenance measures which started several years ago.

ICOMOS recommends that conservation work be based on the principle of minimum intervention and that over-restoration be avoided in order not to threaten the authenticity of the nominated property.

## Maintenance

Maintenance appears to be part of the conservation programmes.

ICOMOS recommends that plans for the programmed maintenance of the gardens be established to ensure the correct and timely prioritisation of interventions, thus maximising the use of available resources and reducing the need for substantial restoration work.

### Effectiveness of conservation measures

The conservation measures have proven to be effective in enhancing the conditions of the nominated property.

ICOMOS, however, recommends that conservation activity always be based on the principle of minimum intervention.

---

ICOMOS considers that overall the present state of conservation of the nine components of the nominated property is adequate. The conservation activities and measures cover a range of aspects that guarantee the transmission of the protected values. However, ICOMOS recommends that conservation work respect principles of prudence and minimum intervention and that programmed maintenance plans be developed for each garden, to maximise the available resources.

---

## Management

### Management structures and processes, including traditional management processes

The management framework of the property is based on the integration of legal protection provisions, existing planning instruments, administrative and technical bodies (National Garden ICHHTO Base and the provincial bases), conservation objectives, SWOT analysis, implementation strategies, and operational programmes.

The ICHHTO has the responsibility of preserving all registered and non-registered cultural property. It fulfils its task through the High Technical Council and provincial bases. Each base refers to an advisory steering committee of distinguished experts. Provincial bases are composed of distinct teams for conservation, research, public affairs, security, and funds.

The National Base for the Persian Garden is in charge of the overall management system and strategies and of the coordination and harmonisation of management objectives and activities for each component.

Additional information received by ICOMOS on 8 November 2010 provided detailed description of the objectives set up for each component of the nominated property.

All the nine gardens have sufficient facilities for visitors, although there is an acknowledged need to improve such facilities. A programme to strengthen presentation and promotion has been elaborated, this includes increasing awareness of the importance of the Persian Garden among the public, promoting the cultural value of the nominated property, identifying the economic benefits of promoting the nominated property and working with local partners in this direction.

ICOMOS observes that the National ICHHTO Base for the Persian Garden guarantees that the management framework is one for all the individual components.

Policy framework: management plans and arrangements, including visitor management and presentation

The Management Plan is articulated in objectives common to all components of the serial property and others, specific to each garden. The Plan provides for short-, mid- and long terms objectives for each nominated component.

All nine gardens have sufficient facilities for visitors, although it has been acknowledged that improvements need to be made. Additionally, a programme for strengthening presentation and promotion has been elaborated. This includes increasing public awareness of the cultural value of the nominated property, identifying the economic benefits of promoting it and working with local partners towards these goals.

ICOMOS observes that the architecture of the management framework and of the management plans for each garden is adequate and covers all relevant aspects to ensure proper management of the property. However, it is not clear whether the Management Plan is already in place and officially enforced.

risk preparedness

There is no heading in the nomination dossier on this subject.

ICOMOS recommends that a strategy for dealing with natural or manmade disasters be implemented as soon as possible for each garden, following common principles established for the entire serial property.

Involvement of the local communities

There is no specific heading on this matter in the nomination dossier, however, involvement of stakeholders is a recurrent goal in each management objective chart.

resources, including staffing levels, expertise and training

The financial resources for the nominated property are derived from several sources, namely governmental budget, revenue from admission fees, charges for special events and the sale of gadgets. In the last three years a total amount of 60,000 millions I (around 6,000,000 USD) has been distributed for the management of the nine gardens.

The National Base for Persian Garden received 6,200 millions I for research and restorations in 2009.

The technical and professional human resources for each of the nominated components are sufficient in number, and adequate in technical preparation and training. The expertise of permanent staff and hired professionals covers a wide range of fields, namely archaeology, architectural conservation, botany, natural sciences, structural engineering, gardening, security and computer science. Each ICHHTO Provincial Base has a monitoring

and a maintenance team, encompassing virtually all relevant expertise.

effectiveness of current management

ICOMOS considers that the management structures put in place appear effective, although it is not clear whether this framework has been formalised and implemented or if it is still in a developmental stage.

---

ICOMOS considers that the management system for the property is adequate. However, ICOMOS recommends that the Management Plan for the nominated property be approved and implemented as soon as possible.

ICOMOS further recommends that a strategy for dealing with natural or manmade disasters be implemented as soon as possible for each garden, following common principles established for the entire serial property.

---

## 6 Monitoring

The monitoring system identifies its overall aim as the preservation of the value, integrity and authenticity of the Persian Garden. Accordingly, the following relevant areas for monitoring have been identified: architecture, irrigation system, plants, tourism and development. Each area encompasses a number of sensitive components and for each component, indicators, monitoring actions and frequency have been determined. Monitoring is carried out by each ICHHTO Provincial Base, in which both a monitoring and a maintenance team have been established. Data collected remains at each provincial base, which reports to the National Base for the Persian Garden. The nomination dossier gives a detailed description of the monitoring objectives for each garden as well as the results of previous monitoring exercises, focussing mainly on visitors and environmental parameters.

---

ICOMOS considers that the monitoring strategy, aims and objectives are appropriate. However, ICOMOS notes that the successful implementation of this monitoring framework requires a continual exchange of information with other authorities and agencies. ICOMOS therefore recommends that at each Base a monitoring body is established that includes representatives from all relevant institutions and agencies for monitoring purposes.

---

## 7 Conclusions

The nomination dossier convincingly demonstrates through learned, documented and clearly exposed arguments, that the Persian Garden represents one of the highest achievements in the conception and creation of art. Philosophical, mythical and religious concepts, as well as literary and artistic aims, are materialised in outstanding tangible manifestations through the ingenious and skilful application of water management technology,

engineering, architecture, agriculture and botany. The Persian Garden encompasses a variety of tangible manifestations, whilst always exhibiting an evident unity of conception in the use of the *Chahar agh* model throughout the centuries and in diverse climatic conditions.

Recommendations with respect to inscription  
ICOMOS recommends that the Persian Garden, Islamic Republic of Iran, be inscribed on the World Heritage List on the basis of **Criterion i** and **Criterion iv**.

Recommended Statement of  
Outstanding Universal Value

Brief synthesis

The Persian Garden consists of a collection of nine gardens, selected from various regions of Iran, which tangibly represent the diverse forms that this type of designed garden has assumed over the centuries and in different climatic conditions. They reflect the flexibility of the *Chahar agh*, or originating principle, of the Persian Garden, which has persisted unchanged over more than two millennia since its first mature expression was found in the garden of Cyrus the Great's Palatial complex, in Pasargadae.

Natural elements combine with manmade components in the Persian Garden to create a unique artistic achievement that reflects the ideals of art, philosophical, symbolic and religious concepts. The Persian Garden materialises the concept of Eden or Paradise on earth. The perfect design of the Persian Garden, along with its ability to respond to extreme climatic conditions, is the original result of an inspired and intelligent application of different fields of knowledge, i.e. technology, water management and engineering, architecture, botany and agriculture.

The notion of the Persian Garden permeates Iranian life and its artistic expressions: references to the garden may be found in literature, poetry, music, calligraphy and carpet design. These, in turn, have inspired also the arrangement of the gardens.

The attributes that carry Outstanding Universal Value are the layout of the garden expressed by the specific adaptation of the *Chahar agh* within each component and articulated in the *kharts* or plant/flower beds; the water supply, management and circulation systems from the source to the garden, including all technological and decorative elements that permit the use of water for functional and aesthetic exigencies; the arrangement of trees and plants within the garden that contribute to its characterisation and specific micro-climate; the architectural components, including the buildings but not limited to these, that integrate the use of the terrain and vegetation to create unique manmade environments; the association with other forms of art that, in a mutual interchange, have been influenced by the Persian

Garden and have, in turn, contributed to certain visual features and sound effects in the gardens.

**Criterion i** The Persian Garden represents a masterpiece of human creative genius. The design of the Persian Garden, based on the right angle and geometrical proportions, is often divided into four sections known as *Chahar agh* (Four Gardens). The creation of the Persian Garden was made possible due to intelligent and innovative engineering solutions and a sophisticated water-management system, as well as the appropriate choice of flora and its location in the garden layout. Indeed, the Persian Garden has been associated with the idea of earthly Paradise, forming a stark contrast to its desert setting.

**Criterion iv** The Persian Garden exhibits an important interchange of human values, having been the principal reference for the development of garden design in Western Asia, Arab countries, and even Europe. It is the geometry and symmetry of the architecture, together with the complex water management system, that seem to have influenced design in all these gardens. The word Paradise entered European languages from the Persian root word "Pardis", which was the name of a beautiful garden enclosed behind walls.

**Criterion v** The Persian Garden bears exceptional, and even unique, testimony to the cultural traditions that have evolved in Iran and the Middle East over some two and a half millennia. Throughout its evolution, the Persian Garden has had a role in various cultural and social aspects of society, becoming a central feature in private residences, palaces and public buildings, as well as in ensembles associated with benevolent or religious institutions, such as tombs, park layouts, palace gardens, Meidans, etc.

**Criterion vi** The Persian Garden is an outstanding example of a type of garden design achieved by utilising natural and human elements and integrating significant achievements of Persian culture into a physical and symbolic-artistic expression in harmony with nature. Indeed, the Persian Garden has become a prototype for the geometrically-designed garden layout, diffused across the world.

**Criterion vii** The Persian Garden is directly associated with cultural developments of Outstanding Universal Value. These include literary works and poetry for example by Sa'di, Hafez and Ferdowsi. The Persian Garden is also the principal source of inspiration for the Persian carpet and textile design, miniature painting, music, architectural ornaments, etc. In the *Avesta*, the ancient holy book of the Zoroastrians, the Persian Garden and its sacred plants are praised as one of the four natural elements (earth, heavens, water, and plants). The *Chahar agh* is a reflection of the mythical perception of nature, and the cosmic order in the eyes of the ancient Iranian peoples.

## Integrity

The Persian Garden comprises a sufficient number of gardens from across Iran and each garden contains sufficient elements to concur to express the Outstanding Universal Value of the series. The component gardens are in good conditions and well maintained.

## Authenticity

The Persian Garden, through its components, has developed alongside the evolution of the Persian society, while adhering to its early geometric model, the *Chahar agh*. Pasargadae and Bagh-e Abas Abad may be read as fossil landscapes while the other seven gardens retain their active role within their physical and social contexts.

## Management and protection requirements

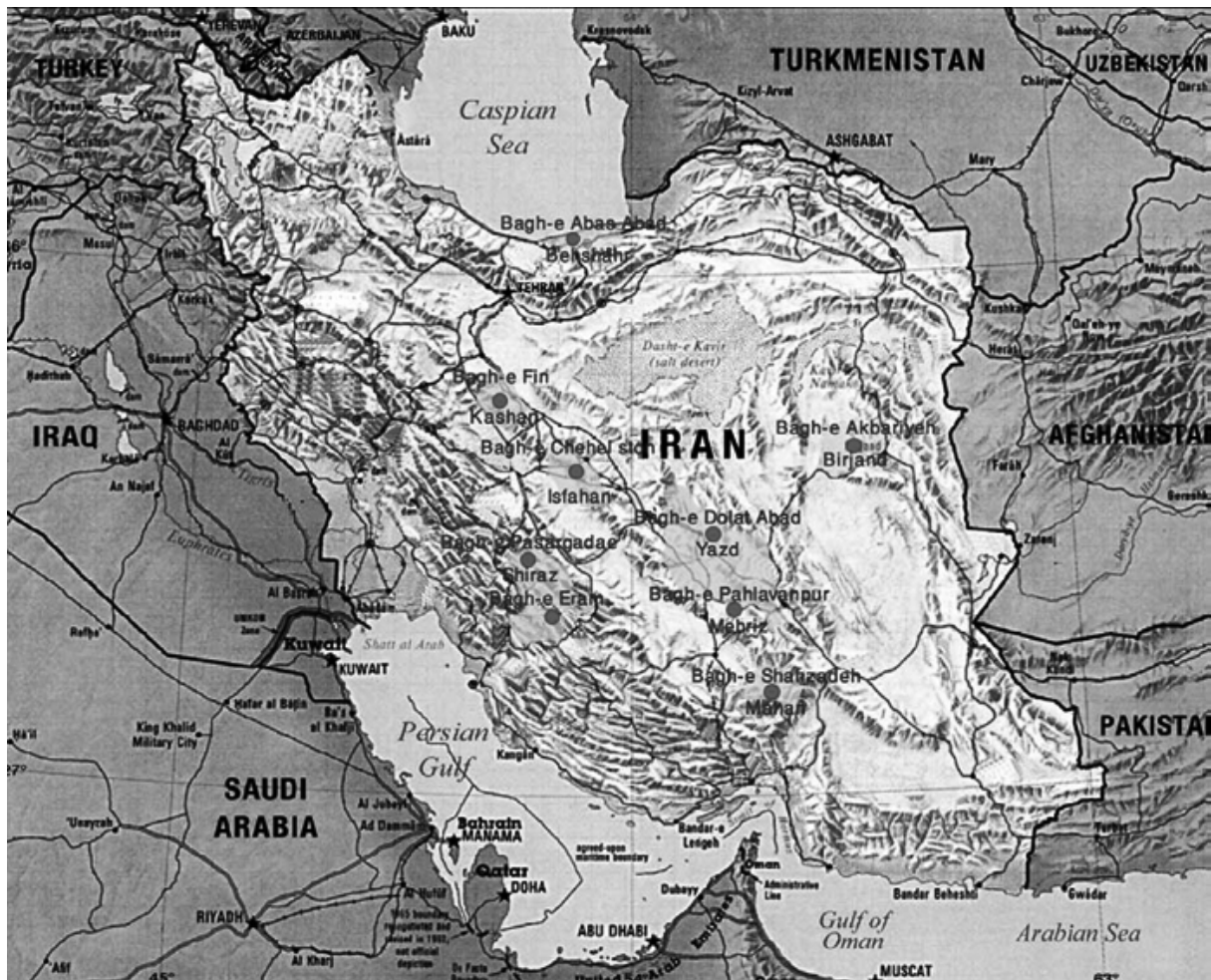
Each garden is registered in the National Heritage List and therefore protected according to the Iranian legislation. Protection provisions established for the gardens and their 'buffer zones', defined according to the Iranian law in force, are also included in the Master Plans, the approval of which is issued by the Higher Council for Architecture and Urban Planning, in which sits also the Head of the Iranian Cultural Heritage, Handicrafts and Tourism Organisation (ICHHTO).

The existence of the National ICHHTO Base for the Persian Garden ensures that the management framework is one for the whole series, granting the coordination and harmonisation of strategies and objectives. The Management Plan includes objectives common to all component gardens of the series and a programme for strengthening presentation and promotion to the public has been developed.

ICOMOS recommends that the State Party give consideration to the following:

- Finalise and approve the Management Plan for the Persian Garden and for each of its components;
- Amend the provisions concerning the height of the buildings in Bagh-e Dolat Abad and Bagh-e Akbariyeh buffer zones to allow buildings with two storeys and a maximum height of 4.5m;
- Ensure that conservation work respect principles of prudence and minimum intervention and develop programmed maintenance plans for each garden, to maximise the available resources;
- Assess carefully any possible future measure concerning the replacement of plants beforehand and on the basis of specific scientific investigation;
- Implement a strategy for dealing with natural or manmade disasters as soon as possible for each garden, following common principles established for the whole serial property;

- establish at each ICHHTO Provincial Base a monitoring body that includes representatives from all relevant institutions and agencies for monitoring purposes.



Map showing the location of the nominated properties





Ancient garden of Pasargadae



Bagh-e Eram



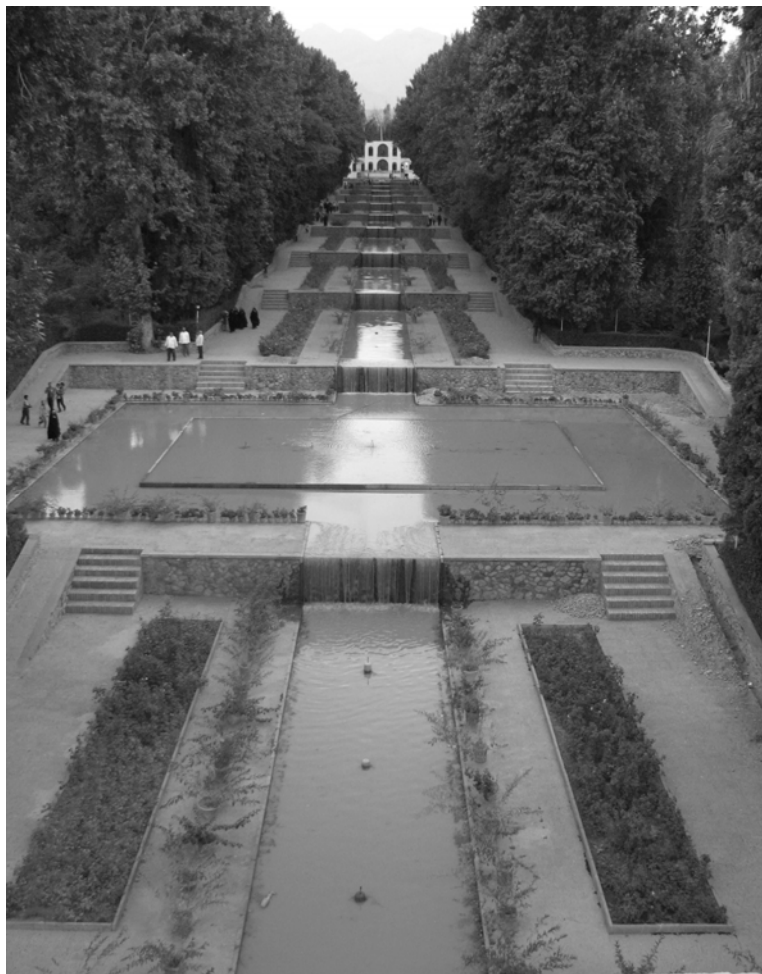
Bagh-e Chehel Sotun



Bagh-e Fin



Bagh-e Abbas Abad



Bagh-e Shahzadeh

---

Palapese Stone Money Sites  
Republic of Palau  
Federated States of Micronesia  
No 134

---

Official name as proposed by the States Parties  
Palapese Stone Money Sites in Palau and Yap

Location

Airai State, Republic of Palau  
Ap State, Federated States of Micronesia

Brief description

Hidden away in the Palau and Western Micronesia archipelagos of the Pacific Ocean around 600 kilometres east of the Philippines, the Palapese Stone Money Sites represent the production and use by the Palapese people of one of the most remarkable forms of currency in the world. Huge stone money discs known as rai. Quarried from calcite sites in the rock islands of Palau, the discs were then transported over hundreds of kilometres of open ocean to be eventually distributed in Yap as part of a traditional island exchange network. Still in use today, they are associated with sacred dancing grounds and ceremonies related to important community and family events.

Category of property

In terms of categories of cultural property set out in Article I of the 1972 World Heritage Convention, this is a transboundary serial nomination of four sites.

1 Basic data

Included in the Tentative List  
Micronesia: 29 December 2004  
Palau: 26 August 2004

International Assistance from the World Heritage Fund for preparing the Nomination  
Palau: 2006

Date received by the World Heritage Centre  
1 February 2010

Background

This is a new nomination.

Consultations

ICOMOS has consulted its International Scientific Committees on Archaeological Heritage Management and Pacific Islands. ICOMOS has also consulted several independent experts.

Literature consulted selection

Alkire, W.H., Technical knowledge and the evolution of Political Systems in the Central and Western Caroline Islands of Micronesia, *Canadian Journal of Anthropology*, 1980 pp. 229-237.

Early Human Expansion and Innovation in the Pacific, ICOMOS Thematic Study, December 2010.

Fitzpatrick, S. M. (ed), *Voices of Discovery: The Archaeology of Islands*, Praeger, London, 2004.

Hage, Per, Hararay, Frank, *Island Networks: Communication, Kinship, and Classification Structures in Oceania*, Cambridge University Press, 1996.

Intoh, Michiko, Leach, Foss, *Archaeological Investigations in the Yap Islands, Micronesia: First Millennium B.C. to the Present Day*, BA International Series 277, Oxford, 1985.

Irwin, G., *The Prehistoric Exploration and Colonisation of the Pacific*, Cambridge University Press, 1992.

Mankiw, G. N., *Macroeconomics*, De Boeck, 2003.

Meyer, A. JP, *Oceanic Art*, Nemmann, In, 1995.

Morgan, W. N., *Prehistoric Architecture in Micronesia*, University of Texas Press, Austin, 1988.

Widjandane, I Wayan, *The Crossroads of Denpasar*, Isewhere' Radio National, Australia, 18.09.2010.

Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the property from 19 to 30 September 2010.

Additional information requested and received from the States Parties

A letter was sent to the States Parties on 23 September 2010 asking how the chosen sites were selected; how they relate to the overall Outstanding Universal Value of the property and how they are functionally linked.

The States Parties replied on 3 November 2010 essentially restating and enlarging upon the information in the nomination dossier. This information has been incorporated into the relevant sections of the evaluation below.

Date of ICOMOS approval of this report  
10 March 2011

2 The property

Description

The components of the property are located in the two archipelagos of Palau and Yap. Palau is part of the Western Caroline Islands about 600km east of the Philippines and about the same distance north of Irian Jaya. The Yap islands are located a further 500km to the north-east of Palau and further on still to the north-east are Guam and the Marianas.

The property consists of four sites. Two of the sites, Chelechol ra Orrak and Uet el Daob me a Uet el Chutem are on Orrak Island, which is in Airai State, Palau, and located one km east of the south-eastern tip of Palau's largest island, Babeldaob. Chelechol ra Orrak covers 0.03ha and Uet el Daob me a Uet el Chutem covers 0.02ha. The buffer zone for these two sites covers the whole island of Orrak and its surrounding waters to several metres offshore, a total area of 50ha.

The other two sites, Mangyol Stone Money Bank and O'Keefe's (Taraang) Island are in Ngap State, Micronesia. Mangyol Stone Money Bank covers 0.04ha and is surrounded by a buffer zone of 1.5ha; O'Keefe's Island is the whole island of Taraang, an area of 2.7ha surrounded by a buffer zone extending 50 metres offshore of 5.0ha.

These four sites represent the production and use by the Ngapese people of one of the most remarkable forms of currency in the world – huge stone money discs known as rai. The discs are roughly circular, the largest up to 4m in diameter, and are perforated with a central hole.

#### Palau - Orrak Island

The two sites on Orrak Island, Palau are quarry sites where the stone money was produced. The island is one of the rock islands of the Palau archipelago formed as a result of uplifting coral reef systems. It is a source of the fine white limestone, highly prized as a rare material and used to make the stone money. The limestone is not found in the islands of the Ngap inner group, which have no raised coral reef but comprise volcanic and metamorphic formations. The uplifted coralline rock islands weather to form jagged pinnacle and pit (karst) topography including caves with stalagmites and stalactites. Orrak Island is approximately 1.1km long and 0.5m wide at its widest point and connected to Airai Village in Babeldaob by a prehistoric causeway constructed of coral rubble now covered in mangrove vegetation. The island's edge is extremely steep and covered in dense vegetation including palms and mangrove forest except for a beach along the western side, which is completely covered at high tide.

Chelechol ra Orrak is located on this western side and consists of several caves, rock shelters and small overhangs that stretch for about 200m just behind the shoreline. It was identified as a Ngapese stone money quarry in 1993 and subsequently excavated in three seasons between 2000 and 2007. The archaeological research indicates original use as a Palauan burial site dating back to ca 3,000BP, and after about 1,800BP, use as a temporary living site. Ngapese quarrying is evidenced by a limestone outcrop with a series of carved circular depressions; stone constructions including stone walls and mounds, two limestone rubble docks or track ways constructed within an inlet at the mouth of the cave, and an unfinished stone money disc. The stone disc is half-moon shaped and still attached to bedrock within the cave. It measures 2.4m long, 1.3m high and is 30 - 40 cm thick. The structural features suggest that the stone discs were propped up for final carving and then placed on

wooden rollers to be moved down to the water where they could be secured to a raft for the trip to Ngap and transported to deeper water as the tide rose. Dating for the Ngapese use is unclear but appears to have been during the historic period.

Uet el Daob me a Uet el Chutem is located in the interior of the island in a small valley containing two marine lakes. It comprises a rock shelter and several caves. Archaeological surveys have located several stone money discs in various stages of production and stone architectural features including retaining walls and alignments. Among many unfinished pieces is one complete, perforated money disc measuring 3m in diameter and 40cm thick sitting upright at the upper part of the site. Lower down is a large piece still attached to the flowstone formation measuring roughly 4m in diameter. No excavations have been conducted but surface features have been recorded. Dating of marine shells found as surface scatter, which may be associated with quarrying activities, indicates the historic period.

#### Ngap

Ngap State comprises four main islands; Ngap, Maap, Tomil and Umung and around 15 low lying atolls and raised limestone islands that extend 1,000km eastwards – often referred to as the 'outer islands'. The four main islands are very close together within an outer barrier reef. The land is mostly rolling hills covered with dense vegetation and fringed with mangrove swamps.

Mangyol Stone Money Bank is a traditional dancing ground still in use where stone money is exchanged and stored. It is located on Tomil Island in Makiy village, Gagil Municipality, in north-eastern Ngap State a short distance from the coast. The dancing ground consists of a crossway named as Mangyol on the north-south axis and Baleyrech (Balaarach) on the east-west axis. The word Mangyol refers to the traditional customs in Ngap handed down from Arach, the upper world, and introduced to our world by Le'birang. Baleyrech refers to the Ngapese hereditary chieftain or ancient ancestors. Irregularly shaped platforms built up along the edges of the pathways with basalt stones to a level of 50-70cm above the path are enclosed within the angles of the crossway. The platform of the most recent men's meeting house (the house itself no longer exists) is located in the south-east quadrant. The whole is surrounded by dense vegetation. This crossway configuration is believed to be unique in Ngap.

ICOMOS notes that no details are provided on the role of the vegetation, however it is a cultivated plantation including plants of a 'magical' and pharmaceutical nature.

ICOMOS also notes that according to oral tradition the east-west pathway was created later than the north-south path, and this is evidenced by the remains of the platform of a men's meeting house which lay parallel to and west of the north-south pathway across the axis of the current east-west path. Creation of the east-west path to form a crossway is associated with people who also taught the

apese how to do traditional tattooing, and with the meeting house platform in the south-east quadrant, where tattooing still takes place. It seems that these were people from Palau, and the creation of the crossway dates from the first voyages made to quarry money there by the apese.

apese oral history records that Mangyol is the place where the spiritual ancestors handed down the apese' traditional customs, skills and knowledge through the female spirit *gul*, one of the seven apese founding spirits. From there the knowledge spread to other parts of *ap*. Hence it is a significant place for the people of other villages and estates also. Various dances have been and continue to be performed there, including special dances by villagers from Bulwol, Waloy and Plaw.

In 2007 over 80 pieces of stone money were recorded lining the edges of the crossway, propped up against the sides of the platforms in groups of up to several pieces leaning against each other. However the exact number of pieces existing today is unclear. Some pieces are owned by villagers of Bulwol, Plaw, Waloy and Amun. Four important sets of two discs each belong to the four paramount chief estates in *ap* (*Bilef'iy* in Maa village, Tomil municipality; *Pebinaw* and *Miryang* both in Gachpar village, Galgil municipality; *Nimath* in Teb village, Tomil municipality) and their counterpart estates in *Makiy* village (*Pagrwo*, *Bileblaw*, *Tubthung* and *Taflang* respectively). The stone money discs represent or symbolise the paramount chief estates' authorities over the dancing grounds. Each of the estates has its own rights, tributes and obligations to the dancing ground and stone money. Behind the discs are the platforms and backrests of members of these estates with a special one for the shaman of *Uryuw*, a sacred site in *Makiy*. The traditional chiefs make their requests to the spirits through the shaman for good harvests of fish and fruit, expulsion of sickness or help in time of war.

O'Keefe's (*araang*) Island is located in the large bay between Tomil and Weloy municipalities, a little more than 1km north/north-east of the main town and capital of *ap*, Colonia. It is 0.3km long (north-south), 0.18km wide and covered in dense vegetation which now obscures most of the historic and archaeological features. The island's significance and designation as O' eefe's' derive from the American ship captain David Dean O' eefe who settled there in the late 1800s and established a lucrative trade in copra, *b che-de-mer* and various other transactions with locals and foreigners, including transporting apese labourers and stone money to and from Palau. He hired workers from *ap* and other islands, married, had children and became wealthy. The island went from being a little known stopover to a thriving trading outpost. Apart from O' eefe's two-storey red brick house there was a spacious warehouse, living quarters for the workers and a long stone wharf. All that is left now as identified by surface survey are the remains of crumbling concrete stairs, floors and platforms, cisterns, iron carts and tracks, hardened cement bags, iron and concrete bollards, pipes, a porcelain toilet, coral rock alignments, pathways from

the promontory to the shore, the boat/canoe landing and some picnic tables using bricks from the ruins as supports for concrete tops made to resemble stone money discs. The site functions now as a picnic area for the apese.

The nomination dossier includes plans of three features recorded during the archaeological survey: O' eefe's House; a Micronesian house platform and O' eefe's cistern.

ICOMOS notes that anchors have been discovered underwater, and there are likely to be other related objects in the waters around O' eefe's wharf.

ICOMOS also notes that there is a lack of detailed description of the site. However the key attributes of the site relating to O' eefe's involvement with the stone money are the archaeological remains, best described in the report of the archaeological survey.

#### History and development

Excavations on *oror* and *Babeldaob* islands of Palau indicate that settlement there occurred around 3,500BP. Recent genetic evidence indicates that the Marianas and *ap* were probably settled independently from island South-east Asia and also from Central-eastern Micronesia. Palau appears to have genetic contributions from South-east Asia, Central-eastern Micronesia and New Guinea. Although the designations for different cultural periods differ according to researchers, it is generally agreed today that initial settlement in Palau took place by 3,500-4,000BP, if not earlier, and *ap* by at least 2,000BP, if not earlier.

The earliest date for the appearance of stone money has not been determined. The use of shell valuables in the form of small discs of shell and stone are known from *ap* around AD 175. Most island currencies were made from materials hard to obtain: some were deep water seashells, turtle-shell, or the feathers of rare birds. Recent research indicates that limestone, specifically calcite, was the predominant mineral used for producing the stone money discs. Apese tradition records that a apese navigator named *Anagumang* first discovered the stone in a Palauan cave and ordered his men to cut it into the shape of a fish and then into a full moon, and that a hole was put in the moon shape to make it easier to carry. The discs were taken back to *ap* and subsequently became highly prized. Another narrative describes a similar expedition by fishermen from Tomil.

ICOMOS notes that an alternative narrative in *ap* records that expeditions were sent out to find a suitable valuable for exchange purposes and were intent on obtaining the moon. The people of *ull* and Tomil brought back calcite from Palau, while those from *Gagil* brought stone from Guam. The Palauan stone was considered the finest as it was white and smooth like the moon. The Guam stone was rejected.

Oral traditions describe subsequent expeditions involving outer islanders who were superior navigators,



not only to quarry stone money in Palau and possibly Guam, but also to Chuuk in the eastern Carolines to obtain rare shell valuables to trade in return for access to the quarry sites in the rock islands. It is thought by researchers that this was part of the exchange system between Yap and the outer islands known as the sawei, which involved annual visitations to the Gagil district of Yap by outer islanders to engage in reciprocal hospitality and exchange gifts. As described by W.H. Alkire ('Technical knowledge and the evolution of Political Systems in the Central and Western Caroline Islands of Micronesia', in the *Canadian Journal of Anthropology* (1980), pp. 229-237), the tribute was delivered to Yap by a fleet of canoes composed of one or more representatives from each of the outer islands. The expedition began at the more distant islands with the canoes proceeding from island to island on their way to Yap. At each stop local representatives and canoes joined the fleet so that by the time the convoy reached Yap it included 10 or more canoes. Four of the outer islands were focal points for the expedition. These were Lamotrek, Wottagai at Wolei, Fais, and Mogmog at Ulithi. In the context of the sawei these islands were ranked higher than the other outer islands and their chiefs consequently were responsible for the expedition as it made its way to Yap.

According to oral tradition, gifts from the chiefs of Yap to the chiefs of Palau in return for quarrying rights occurred long before European arrival on the islands. Traditionally the Yapese only had access to those quarries that were under the control of the village chiefs with whom they had some affiliation.

In 1783 Captain Henry Wilson in the *Antelope* foundered on the reef west of Ulong, south-west Palau and built a new ship there over several months with the help of the chief of Koror. On his departure he presented the chief with his surplus tools.

Ethno-historical accounts of the early 19<sup>th</sup> century attest to the significance attached to white stone by chiefs in Yap, and to yellow stone in Palau, both of whom used it for their seats of honour. Captain Andrew Cheyne travelled through the Pacific 1841-4 and recorded that the Yapese money consisted of a round stone with a hole in the centre, "similar to a small upper mill stone", and that these were rare and highly prized. Oral histories and ethno-historical accounts report that the Yapese travelled to Palau in canoes and carved discs of stone inside limestone caves by splitting off rock slabs using fire and shell adzes. Le Hunte reported in 1883 that he found around 100 Yapese at Palau cutting stones and preparing them for transport. They drilled a hole in the centre using a reef stone with a fire drill. The stone discs were then moved by placing timbers through the hole so that it could be carried by several men to rafts or boats and transported back to Yap. The nomination dossier provides several illustrations and diagrams of traditional bamboo rafts and outriggers that could have been used for this purpose, showing how the weight would have been supported.

In the late 1800s the island of Koror in Palau became a major centre of European trade due to its suitable port, and became increasingly powerful within Palau due to its access to metal and weapons brought in by Europeans. Having been claimed by Spain in 1885, Palau subsequently became a German possession following Spain's defeat in the Spanish-American war of 1898. Germany also took over Yap, where it had a major naval communications centre before WWI. Both Palau and Yap were occupied by Japanese forces during WWI and after the war were awarded to Japan as mandated territory under the League of Nations.

The traditional methods of quarrying were transformed firstly through the use of metal tools and then by transport of discs on foreign ships with the aid of traders such as Captain David Dean O'Keefe, an Irish-American who lived in Savannah, Georgia. He arrived in Yap around 1873 and after some failed trading ventures eventually succeeded in an enterprise involving the Yapese chiefs. Beginning in about 1875 he carried Yapese labourers to Palau and stone money back to Yap in exchange for a set amount of copra according to the size of each stone disc carried. He traded this on to the Far East, becoming wealthy, widely known and well thought of by the Yapese and Palauans. But by the late 1800s due largely to the activities of O'Keefe, and other minor and short-lived players, Yap was reported to be inundated with stone money. As a result, it lost value. O'Keefe had set up his establishment on Yap's Taraang Island, but with the ban on inter-island voyaging imposed by German administrators at the turn of the century the lucrative transport of stone money between Palau and Yap collapsed. O'Keefe disappeared at sea in 1903, but his family continued to live on the island and the trading business was taken over by a German firm. During World War II the island was used as a Japanese munitions dump and bombed by US planes in 1944.

The nomination dossier includes a table showing the historical sequence of stone money production based on ethno-historical accounts and research reports, which indicate that stone money quarrying may have begun as early as 1200AD using shell and stone tools producing discs ranging in size from 1.5 to 2m in diameter. With the introduction of metal tools post-Western contact in the late 18<sup>th</sup> century stone money increased in size, and with the assistance of O'Keefe's ships for transport could be made up to 4m or more in diameter. The last stone disc is recorded as being quarried in 1931.

After arriving in Yap the money would be distributed by the village chief who was the sponsor of the quarrying expedition, and placed in front of residences, meeting houses, platforms or along pathways, which are termed "money banks". Stone money was exchanged in connection with important family events including birth, name-giving rite, marriage, and others such as making amends for an insult, support in conflict, ransom of a corpse, a loan, a gift or purchase of goods. A table documenting these types of exchanges is given in the nomination dossier. The discs themselves are not



always moved. Oral traditions kept/keep track of the ownership and each piece has its own pedigree, although some of this information has been lost. The value of the various pieces was estimated by 19<sup>th</sup> century European researchers based on how they saw it being used in exchange – for instance a three span piece in return for fifty baskets of food, or a pig of a certain size, or a pearl shell of particular size, and during the early to mid 20<sup>th</sup> century numerous pieces were sold to museums around the world. Value to the people was related to the size of a piece, quality of carving and the effort expended in its carving and transport. Pieces transported easily on foreign ships were worth less than those transported by raft, which were valued much more highly, especially if the voyage had been difficult and someone had died during the expedition. There were some social restrictions on ownership in that according to a research report in 1903, low-caste people were not permitted to own raif of more than a specified size.

Most pieces are circular or oval in shape. Variations include discs with two perforations (offered by a defeated war party as a sign of truce); double discs (only two are known to exist, one in the village of Gachpar on Gagil and one in the village of Anif thought to be of great antiquity); and discs with stepped gradations from the centre towards the edge (reserved for chiefs who might use them as a reward for achievements such as an abundant fishing season).

An inventory by the Japanese administration in the 1930s counted 13,281 discs, but it was estimated by a later researcher that by 1965 this number had been reduced by half due to typhoons, flooding and their use for anchors, defensive walls and other general purposes during WWII.

The stone money is still considered valuable by the people and used as a medium of exchange. It represents wealth, status, power and prestige and has become a symbol of people national identity as representing a longstanding cultural tradition.

In people, the first archaeological excavations were carried out in 1959. The people State Preservation Act was enacted in 1997 to conserve, protect, and develop objects and places of historic and cultural interest and the Federated States of Micronesia developed the Historical Sites and Antiquities Code which provided an outline of procedures for reviewing undertakings that may potentially affect historically and culturally significant properties. In 2004 an archaeological survey of O'efe's Island for the purpose of collecting information necessary for placing the property on the National Register of Historic Places recorded numerous features related to O'efe's presence on the island in the late 1880s. The first archaeological survey of the Mangyol site in Makiy Village, Gagil Municipality, was undertaken in 2007.

In Palau, the Historical and Cultural Preservation Act was enacted in 1978 to create a National Register of

Historic Places and provide a means to preserve, protect and conserve culturally, historically and archaeologically significant sites. The Palau Bureau of Arts and Culture (BAC) began to take an inventory of such sites in the early 1990s including several stone money quarries in and around the Rock Islands adjacent to Oror and Babeldaob. Omis Cave, Metuker ra Bisech, Chelechol ra Orrak and Uet el Daob me a Uet el Chutem were placed on the National Register of Historic Places under protective legislation. Subsequent excavations in Palau at the sites of Metuker ra Bisech in 2000 and Chelechol ra Orrak in 2000, 2002, and 2007 provided the first subsurface evidence of stone money quarrying.

The World Heritage nomination proposal was developed in 2006-7 by stakeholders including the Belau National Museum, Palau Bureau of Arts and Culture, Airai State government, Palau Society of Historians, the Historical and Cultural Advisory Board, the Councils of Pilung and Tomil in people, the people Historic Preservation Office, the people Visitors Bureau and villagers from Makiy, working with a consultant.

### 3 Outstanding universal value integrity and authenticity

#### Comparative analysis

The States Parties have stated in the nomination dossier that features of Chelechol ra Orrak on Orrak Island are similar to those found at other quarry sites including two other locations north and south of the site, nearby Metuker ra Bisech and Omis Cave in Oror Island. In response to ICOMOS' query as to how the quarry sites on Palau were selected, the States Parties stated that the two nominated sites are two of the most important examples of stone money manufacture in the archipelago and are also the best documented, having been recorded and archaeologically investigated. These sites contain an important array of evidence attesting to the production sequence and engineering skills required to select suitable limestone deposits, carve these with traditional (and later, metal) tools, and transport them over the difficult karst terrain to watercraft for their trip back to people. There are no other sites in Palau that contain such well preserved and extensive evidence of stone money in various stages of completion, artefact assemblages, and associated stonework (platforms, pathways, walls, mounds).

ICOMOS notes that the States Parties could have provided a more detailed explanation of why the nominated quarry sites are more representative than Metuker ra Bisech and Omis Cave, which are the other sites mentioned as having been archaeologically investigated. But it appears that although extremely significant, impressive and easily accessible, these other two sites exhibit less evidence of the whole operation, perhaps have only the very large stone disc pieces associated with them and were not used over such a long period as the nominated sites, and have no cultivated garden.

Regarding the selection of the two sites in Palau, the States Parties responded that the nominated sites are arguably the most important manifestations of the evolution of stone money quarrying from beginning to end. O'lefe's Island contains abundant evidence of this most influential player in the exchange system. O'lefe's involvement enabled the faster transport of Lapese labour to Palau and stone money back to Palau, introducing European technologies and transforming the exchange system while allowing it to continue on and evolve as a continued centrepiece of Lapese life. While O'lefe's Island was the stage from which stone money production was altered from the late 1880s, the Mangyol stone money bank and dancing grounds is a supreme example of an intact location where stone money is exhibited and revered by the Lapese. The site is unique in its shape and is believed by the Lapese to be the location from which many traditional customs, skills and knowledge were handed down by the gods.

ICOMOS notes that the plan of Irrai/Airai Village, Palau opposite Orrak Island in W. N. Morgan (Prehistoric Architecture in Micronesia (1988) p.18) shows a crossway with three meeting house platforms in the south-east quadrant, oriented east-west as at Mangyol; the northern one supports the only remaining meeting house or bai the Bai-ra-Irrai which is similar to the traditional meeting houses found in Palau State, but with some particular differences. Crossroads represent a traditional form in Austronesian cosmology, known as a spiritual place, a crossroads in three dimensions, where the unseen vertical axis through the centre of the crossway connects the material world with the spiritual world. The plan of Bechiyal Village, at the north end of Maap Island in Palau State, reproduced in Morgan pp. 34-5, also shows a crossroads with the meeting house in the south-east quadrant, but there the house is oriented north-south. The traditional houses at Bechiyal Village pictured in Morgan p.37-57 are very similar to the one reconstructed at the edge of Makiy Village used for the State celebration of "Palau Day", and others found in other Palau municipalities. They differ from the Bai-ra-Irrai at Irrai/Airai Village in Palau in their hexagonal plan with central posts, an arrangement that may derive from earlier forms in Palau evidenced at Badrulchau at the northern end of Babeldaob. This suggests that Mangyol's crossway plan did indeed arrive with the first stone money from Palau, replicating the layout of Airai Village across the causeway from Orrak Island where the stone money was quarried.

The States Parties have compared the sites with other island sites on the World Heritage List or Tentative List within the geographical area where exotic/rare resources were important to societies and influenced their rise of social complexity due to the manufacturing and use of stone. These include Maunabo (Melanesia Solomon Islands), Batanes (Philippines), Paapa Nui (Polynesia Chile) and the Yuku archipelago (Gusuku Sites, Japan). The States Parties argue that the inhabitants of Palau and Palau are related ancestrally to Austronesian speakers who first settled the Pacific Islands and thus share a common ancestry with other native groups in the region who settled the Philippines,

Melanesia and Polynesia. While Paapa Nui is one of few exceptions in Oceania where peoples living on an island appear to have developed in near total isolation, many island communities were connected to other island societies as trade partners, allies and tributaries deriving from exchange relationships.

The States Parties argue that the effort made by the Lapese in carving and transporting the stone money can be compared with that of the people of the World Heritage listed Paapa Nui who from around AD 1200-1300 carved and moved the massive moai statues around the island also known as Easter Island in the far western Pacific. However the stone statues and the social system that related to them was confined within the island, whereas the Lapese stone discs were transported many kilometres over often treacherous seas, and were tied into an extensive exchange system that involved complex human interaction between different island societies.

The World Heritage listed Yuku stone castles represent the wide-ranging economic and cultural contacts of the Yuku Islands from the 12<sup>th</sup> to the 17<sup>th</sup> century, while the sacred sites testify to the rare survival of an ancient form of religion into the modern age. However the castles were not part of an exchange system involving moveable objects.

Maunabo in the Solomon Islands is included on the World Heritage List as a natural site under criterion (ix). It is a 'rock island' and presumably has limestone resources. However these have apparently not been exploited and are not described for comparison with those of Palau by the States Parties.

The Batanes protected landscapes and seascapes of the Philippines are included on the Tentative List as a cultural landscape. The site in the islands north of the Philippines between Luzon and Taiwan is the only area in the Philippines where the traditional architecture is built of stone. However it is not clear on what basis this comparison is made by the States Parties.

The States Parties also compare the stone money as a megalithic technological and engineering exercise in obtaining and transporting large pieces of stone, with Stonehenge and Avebury in Britain. There blocks weigh up to fifty metric tons as compared with a maximum of around nine metric tons for rai, however rai were transported not only across land but also across open ocean, and required a completely different set of skills.

ICOMOS considers that in terms of a cultural tradition these comparisons need to be augmented by others made with places not included on the World Heritage or Tentative lists, but which represent similar wide-ranging trading exchange systems involving rare items. These could include sites in the Santa Cruz group, settled as part of the same backtracking by Para-Polynesians from the south-eastern parts of Polynesia towards the Solomon Islands as arrived in Maunabo. Distinctive

currency called *teau* is made with rolls of red feathers from the *yzomela cardinalis* bird coiled like rope to make a flat quoit shape of around 36cm diameter. They are carried threaded onto a long pole. It is used in bridal transactions and for large expenditure. This appears to be a similar concept to the stone money discs, but using a different rare material.

In terms of stone-working technology, the stone discs could be considered in the context of the carved stone figures at Ngermelech and Melekeok villages on Babeldaob Island, Palau, to the north of Orrak Island, including the heads of Odalmelech and other gods, remnant platforms, docks and other stone structures. Rai production could also be considered in the context of other stone working cultures in Micronesia generally, such as the stone latte columns found on Guam and other islands of the Marianas, thought to have been the supports of chiefs' houses or meeting-houses; the stone palaces and tombs of Nan Madol on Temwen Island off Pophnei Island in the Federated States of Micronesia to the east of Yap with their enclosed system of artificial waterways which required over-water transportation of stone megaliths; the huge stone buildings of Lelu off Kosrae Island further to the east, in eastern Micronesia, and the Menke ruins in Utwe district of Kosrae Island. Many hundreds of kilometres to the south-east are the megalithic structures of Tonga. Stone structures at Angkor also involved over-water transport of stone megaliths. These places do not appear to have included stone valuables, although flat megaliths are found at several sites in French Polynesia, and basalt and limestone mortars (for grinding) have been found at Pogat on Guam.

ICOMOS considers that the comparative analysis is not complete and needs to be extended to include examples within the Pacific region and with other sites in Yap and Palau in order to justify the nomination of the Palau and Yap sites for the World Heritage List as exceptional testimony to a remarkable cultural tradition.

---

ICOMOS does not consider that the comparative analysis justifies consideration of this property for the World Heritage List at this stage.

---

Justification of Outstanding Universal Value  
 The nominated property is considered by the States Parties to be of Outstanding Universal Value as a cultural property for the following reasons:

- The production of the stone money and transport across open ocean represents an exceptional example of human technological and engineering achievement;
- The quarry sites on Palau and the sites on Yap which display the stone valuables have immense archaeological and historical value in contributing to an understanding of how traditional societies in the Pacific exploited 'exotic' resources;

- The manufacturing of stone money in Palau and its use in Yap over time represent an exceptional case of traditional island societies developing a cultural tradition in the past that still persists today (the exchange of stone valuables persists, not the quarrying);
- The involvement of Europeans, particularly David O'Keefe in the late 1800s, as well as distant coral atoll dwellers testifies to the importance the rai had in connecting different cultures for the purposes of exchange.

The serial nomination is justified by the fact that the four sites cover relevant aspects of the process of stone money production and use: two key production sites in Palau, and in Yap one site where the stone valuables were exchanged and stored, and one site representing late 19<sup>th</sup> century European involvement in transportation of the rai.

ICOMOS considers that the serial approach is appropriate because the sites represent relevant aspects of the stone money production and use by interlinked societies within the same historic-cultural area. But the selection of sites needs to be further justified by analysis of other comparable sites in Yap and Palau in order to demonstrate that they are the most representative and best ones in terms of value, integrity and authenticity.

This should include information on:

- why the nominated quarry sites are more representative than Metuker, Bisech and Omis Cave, and any other sites that have been archaeologically investigated;
- specific comparison with the other sites said to have been handed down by the spirits, or associated with the ancestors in other municipalities, and with Bechiyal village and its dancing ground;
- connections between Airai Village, Orrak Island and Makiy Village historically and today.

In addition, there is a lack of documentation of the traditions and rituals associated with the exchange of stone money, its placement around and connection with the dancing grounds. The association of the Mangyol dancing ground with the stone money is not clear, apart from the physical fact of discs being located there.

Integrity and authenticity

Integrity

According to the States Parties the integrity of the four sites is good as they all retain visible and relatively well-protected and maintained features. The States Parties claim that each site includes all elements necessary to express its outstanding universal value; is of adequate size to ensure the complete representation of features and processes which convey the property's significance, and does not suffer from adverse effects of development and/or neglect. However it is stated that the preservation

of the Palau sites and the Mangyol site is largely due to the low levels of visitation, whereas features associated with O' Keefe's residence on Taraang Island are easily accessed, have not been actively protected and are slowly succumbing to exposure.

The States Parties state that the four sites were chosen for their intimate relationship to stone money quarrying and transport and that each site contains vital sources of archaeological and historical information regarding the stone money processes. In particular the Mangyol site is considered to be the traditional place of ap's spiritual origin and the related stone valuable exchange system.

ICOMOS points out that the selection of sites did not derive from any formal overall survey of sites in either Palau or ap and there is no formal inventory. The selection was agreed between the States Parties in conjunction with the chiefs of the relevant areas. Bibliographical sources and investigation by ICOMOS indicate that there are at least nine other documented quarry sites on Palau and more than nine other villages with dancing grounds and associated stone money either documented or known from oral sources in ap. In so far as ICOMOS has investigated these sites, it is considered that the selection of sites may well be appropriate, but in order to demonstrate this, it is necessary that the States Parties deepen the comparisons with other sites in Palau and ap.

Even if the combination of sites is considered to provide the best representation of relevant aspects of stone money production and use, ICOMOS considers that there are issues about whether each site includes all elements necessary to express OUV. These are outlined below:

#### Palau

It is not possible to say whether the individual site boundaries of Chelechol ra Orrak and Uet el Daob me a Uet el Chutem on Orrak Island, Palau include all elements necessary to express OUV because a description of the boundaries of the nominated areas has not been provided, nor have adequate plans of the individual sites showing the extent of the quarries. On Orrak Island the cultivated garden sites near Chelechol ra Orrak and Uet el Daob me a Uet el Chutem from which the apese obtained food during their quarrying expeditions can be identified and should be included in the property. The overland transport track from Uet el Daob me a Uet el Chutem to the sea, parts of which can be seen near the quarry area, should also be included. It could further be argued that the Irrai/Airai Village in Palau opposite and within view of Orrak Island, and linked to it by a causeway now inaccessible, with whose former chiefs the apese agreed quarrying rights for Orrak Island, has an intangible functional connection to the quarry sites of Chelechol ra Orrak and Uet el Daob me a Uet el Chutem and should be part of the Palau property or at least the buffer zone, including the reconstructed traditional meeting house, the Bai-ra-Irrai.

#### ap

The landing place for stone discs coming to the Mangyol Stone Money Bank Site and their overland route to the site is not included within the boundary shown on the plan provided. It appears that vegetation around the dancing grounds that can be identified as having particular significance for pharmaceutical and sacred purposes is not included as part of the property. It can further be argued that since the Mangyol site is part of Makiy village, which is intangibly functionally connected to the use of the dancing ground and the exchange of the stone valuables, the whole of the village site including the reconstructed traditional meeting house and the area of the navigators should be part of the property, since they offer potential to contribute to the understanding of the values of the site as provided for in article 100 of the Operational Guidelines.

ICOMOS considers that the cultural tradition of the layout of the discs and the rituals associated with the money bank and dancing grounds are not well documented. These intangible aspects of the site are of integral significance to the property and need to be permanently documented and archived for the benefit of future generations.

ICOMOS notes that the property boundary for O'Keefe's (Taraang) Island includes the whole island but does not extend to the concrete bollard marking the furthest mooring point of the remains of O' Keefe's jetty. The jetty has been partly reconstructed behind the original place, probably as a result of WWII. The waters surrounding the jetty, which are likely to contain artefacts from the boats that delivered the stone money discs to ap, are not included within the property boundary. The Dugor Village, Welay municipality, whose former chief agreed O' Keefe's use of Taraang Island, and which still has obligations to the island could be included in the property on the basis of the intangible functional relationship argument, or at least within the buffer zone.

#### Authenticity

The States Parties state that the authenticity of the property is in accordance with the requirements of the Operational Guidelines in that the sites have remained largely unmodified since their original use and construction.

ICOMOS considers that this is the case for the Palau sites Chelechol ra Orrak and Uet el Daob me a Uet el Chutem, and also for the Mangyol Stone Money Bank, but that there is so little left of O' Keefe's occupation of Taraang Island that its 19<sup>th</sup> century use and construction are barely visible. However as an archaeological site, provided it is conserved and protected against further degradation, it can be interpreted to visitors, and testifies to an important phase of the history of stone money exchange. This is the second important marker of European contact in the story, the first being the introduction of metal tools in the late 18<sup>th</sup> century. It marks the stage when the production and transport of stone discs underwent a major change: the stone discs were able to be increased in size and many

more were produced because it was much easier to transport them over the ocean in O' eefe's ships, thus reducing their value considerably.

---

In conclusion, ICOMOS considers that the conditions of integrity have not been met at this stage because of the selection and boundary issues and authenticity only in part because O' eefe's Island is now a neglected archaeological site.

---

Criteria under which inscription is proposed

The property is nominated on the basis of cultural criteria (i), (ii), (iii) and (iv).

Criterion (i): represent a masterpiece of human creative genius;

This criterion is justified by the States Parties on the grounds that the difficulty in quarrying, carving and transporting apese limestone discs between islands in western Micronesia is a testament to human creative genius. These difficulties were compounded by the apese having to negotiate with a culturally and linguistically distinct group (Palauans) in order to have access to limestone deposits in the rock islands and in developing a stonework infrastructure such as platforms, walls and docks to facilitate the movement of rai across land and sea. Stone money discs are the largest known objects ever transported across the open ocean in the Pacific using traditional technologies.

ICOMOS considers that the navigation skills and technological skills involved, particularly in transporting the stone money over open ocean, represent an exceptional achievement. But the comparative analysis has not demonstrated that the transport of stones over open ocean did not happen at other places such as in the Marianas, and further east in Micronesia.

---

ICOMOS considers that this criterion has not been justified.

---

Criterion (ii): exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design;

This criterion is justified by the States Parties on the grounds that stone money was of paramount social and political importance to apese society and led to intense interaction with Palauans and coral atoll dwellers. The various technologies associated with quarrying and moving stone money (stone architecture, rafts or other watercraft), both in the past and during the historic period, are remnants of an exchange system that led to increasing social complexity within the island archipelago.

ICOMOS considers that there was development in the technology of stone money manufacture when metal tools were introduced and development in the transport

technology when O' eefe took over the transport of the stone discs, both of these developments being due to European contact. Getting to the stone source was no doubt made easier when the outer island navigators became involved. But while these were developments in the technologies used, they represent a one way change rather than an important interchange of human values on developments in technology. There may have been interchange between Palauans and apese on developments in the layout of sacred sites, and traditional architecture, as suggested by the changes at Mangyol, but this has not been explored in the nomination dossier. Further research would be needed to demonstrate this.

---

ICOMOS considers that this criterion has not been justified.

---

Criterion (iii): bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared;

This criterion is justified by the States Parties on the grounds that stone money is iconic and has been a source of national pride to the apese people for hundreds of years. These megaliths were manufactured according to principles developed by ancient navigators and stone carvers and are the result of thousands of hours of workmanship by a small-scale island society. The circular or ovoid limestone discs are unknown elsewhere in the world. The participation of Captain David Dean O' eefe in the transport of labourers and stone money to and from Yap in the late 1800s is also notable. As O' eefe's copra business thrived, he became extremely wealthy and helped to transform Yap from a little known stopover to a thriving trading outpost. His house on Taraang and other associated features bear witness to one of the most important and influential people in western Micronesia during the historic period. O' eefe's involvement changed certain aspects of stone money quarrying dynamics.

ICOMOS considers that the nominated sites bear exceptional testimony to the long term exchange system that developed in western Micronesia as part of stone money production and use. This is a cultural tradition that was transformed by European contact and has survived in part to the present, in that while the stone money is no longer manufactured, it is still in use both for exchange and as a cultural icon. However it has not been demonstrated that the proposed sites are the most exceptional and representative. The criterion could be justified if the comparative analysis is deepened and the selection of sites further justified.

---

ICOMOS does not consider that this criterion has been justified at this stage.

---

Criterion (iv): be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history;

This criterion is justified by the States Parties on the grounds that a rich collection of oral traditions, ethno-historical accounts, and detailed archaeological investigation of quarry sites, demonstrate the importance of stone money to the Palauan society and are a testament to the long term interactions that this activity has had on Palau, the Palauan and coral atoll peoples in Micronesia. Stone money is highly valued today and exchanged based on ancient traditions still practised by the Palauans.

ICOMOS considers that it has not been demonstrated that the proposed sites are the most exceptional and representative. The criterion could be justified if the comparative analysis is deepened and the selection of sites further justified as an outstanding example of a technological ensemble which illustrates one of the great inter-island exchange systems of Oceania.

---

ICOMOS does not consider that this criterion has been justified at this stage.

---

ICOMOS notes that criterion (vi) has not been considered by the States Parties.

Criterion (vi): be directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance;

ICOMOS considers that this criterion is relevant to the nomination and could be justified by the States Parties through documentation of the traditions and rituals associated with the exchange and location of the stone money discs at the dancing grounds in Palau. This could also help justification of the selection of sites.

---

ICOMOS considers that the serial approach is justified but the selection of sites is not justified at this stage.

---

---

ICOMOS does not consider that the criteria and Outstanding Universal Value have been demonstrated at this stage.

---

#### 4 Factors affecting the property

##### Development pressures

No development pressures from agriculture, mining or encroachment have been identified by the States Parties. Currently one family comprising 10 people resides semi-permanently on Orrak Island, Palau within the buffer zone of Chelechol ra Orrak and Uet el Daob me a Uet el Chutem sites. The population living within the buffer zone of the Angyol Stone Money Bank site in Palau is around 20, and there are no inhabitants of O'Keefe's Island.

##### Tourism pressures

Recent tourist numbers for Palau are not given but are believed to be increasing after a period of decline due to

the economic crisis. In 2000 Palau had 55,493 tourists mostly from the US, Japan and Taiwan. Palau had 4,223 tourists in 2005, also mostly from the US and Japan.

Palau is accessible by daily flights from Guam and weekly flights from the Philippines and Taiwan, with a fewer number to Palau. The dive industry is recognised as the biggest attraction for most visitors, who seek to explore Palau's coral reefs, and also WWII ship and plane wrecks that are scattered throughout the archipelago. They are being accommodated in an increasing number of large resorts and home-stays. Dive shops and guides also arrange kayaking, snorkelling and overnight camping trips to the rock islands, including sites of historical and archaeological interest. Kayaking tours occasionally visit sites with Palauan stone money, but these are usually places that have larger boat access to ferry tourists and their kayaks, such as the Metuker ra Bisech site, located on the southern coast of Airai state.

Orrak Island is close to Babeldaob and visitors can access the beach by boat during high tide at Chelechol ra Orrak and the path leading to Uet el Daob me a Uet el Chutem. There is evidence of WWII Japanese occupation of Chelechol ra Orrak. However it is not currently under pressure from visitors.

O'Keefe's Island is widely known as a place to picnic. Access is currently unrestricted and the site is not well-maintained.

The Angyol Stone Money Bank is currently not frequently visited by tourists.

General capital improvement projects such as the Compact Road on Babeldaob in Palau are allowing access to more remote parts of the archipelago, with consequent increase in options for lodging and entertainment.

ICOMOS recommends that attention be given to providing safe and secure access to the sites for visitors.

##### Environmental pressures

Traditionally the environment was managed by communal systems enforced by the chiefs. These have broken down with the advent of private ownership of land and resources and large-scale commercial and infrastructure development, resulting in over-harvesting of marine resources and a rapidly increasing tourist population. Currently this applies more to Palau than to Yap, which is much less developed in terms of tourist infrastructure and other facilities. The most critical environmental concern is the lack of solid waste management systems for visitors.

ICOMOS considers that natural erosion is also a threat on Orrak Island and O'Keefe's Island.

##### Natural disasters

Palau and Yap lie south of the main typhoon belt, rarely receive extensive storms or heavy winds, and do not have

a recent history of earthquake or volcanic activity. However they are just a few hundred kilometres east of the Philippines in a volcanically and tectonically active region of the world due to the meeting of the Eurasian, Philippine and Pacific plates. Natural disasters resulting from such activity, primarily tsunamis could have disastrous effects.

ICOMOS considers that Orrak Island and O'Keefe's Island could certainly be severely impacted in the event of a tsunami.

#### Impact of climate change

ICOMOS notes that the low-lying nature of Chelechol ra Orrak just off the beach of Orrak Island and of O'Keefe's Island itself, means that these two sites are susceptible to rising sea levels resulting from global warming. The effects of increased storm events and tidal action will also be of concern.

---

ICOMOS considers that the main threats to the property are storms, natural erosion, rising sea levels and tourism-related factors such as inadequately controlled access and waste-management.

---

## 5 Protection conservation and management

### Boundaries of the nominated property and buffer zone Palau

The two quarry sites on Orrak Island Chelechol ra Orrak and Uet el Daob me a Uet el Chutem are shown on the map provided by the States Parties as single points. There is no description of the boundaries of each property and the boundaries cannot be identified on site. Chelechol ra Orrak is said to cover 0.03ha and Uet el Daob me a Uet el Chutem to cover 0.02ha. However it is not possible to say where the boundaries enclosing these hectares lie.

The buffer zone for these two sites covers the whole island of Orrak and its surrounding waters to "several metres" offshore, a total area of 50ha. It does not include the ancient causeway linking the island to Babeldaob, nor the village of Irrai/Airai on Babeldaob opposite and within the view from Orrak Island.

ICOMOS considers that the boundaries of the nominated sites on Palau should be clarified and should include the cultivated garden sites near Chelechol ra Orrak and Uet el Daob me a Uet el Chutem from which the apese obtained food during their quarrying expeditions and the overland transport track from Uet el Daob me a Uet el Chutem to the sea. It is possible that the two sites should be combined as one. The boundary of the buffer zone should be clarified in terms of the number of metres offshore and amended to include the ancient causeway linking the island to Babeldaob, and Irrai/Airai Village.

### ap

The boundary of the angyol Stone money Bank site is restricted to the outside edges of stone platforms and pathways and does not appear to include significant vegetation. There is no description of the boundary of the buffer zone which is shown in indeterminate form on the plan and cannot be identified on site. It does not include the entire village of which the crossway dancing ground with its stone money discs forms part. The associated landing place for the stone discs, and their overland route to the site has apparently not yet been identified but oral tradition records the landing site and routes as being to the east of the site.

ICOMOS notes that the boundary of O'Keefe's ( araang) Island is shown as including the whole island but not any offshore elements such as the remains of O'Keefe's jetty and any submerged artefacts around it. The buffer zone extends over the surrounding waters to 50m offshore.

ICOMOS considers that the boundaries of the nominated sites in ap State should be modified for the angyol Stone money Bank site to include the identified significant vegetation and extended to include the whole of Makiy Village, and once identified, the landing site for the stone money and the overland route to the site. The buffer zone should then be extended beyond to an appropriate distance. The boundary of O'Keefe's ( araang) Island should be extended to include all the remains of O'Keefe's jetty and around it to cover any submerged artefacts identified by underwater survey. Ideally the buffer zone should cover the whole bay area likely to contain relics.

---

In conclusion, ICOMOS considers that the boundaries are not adequate.

---

### Ownership Palau

The Chelechol ra Orrak and Uet el Daob me a Uet el Chutem sites on Orrak Island are owned by the engarairai Chiefs, Ordomei hamlet, Airai State. Marine waters are open to the public under state law.

### ap

The angyol Stone money Bank site is owned by the estate of Tubthung in Makiy Village, Gagil municipality. However the four important pairs of stone money discs on the dancing ground belong to the four paramount chief estates in ap and their counterparts in Makiy Village. These pairs of discs symbolise the paramount estates' authorities over the dancing grounds, with each estate having its own rights and obligations to the grounds.

The major stakeholders of O'Keefe's ( araang) Island are the people of Dugor Village, Weloy municipality.



## Protection

### Legal Protection

#### Palau

The Chelechol ra Orrak and Uet el Daob me a Uet el Chutem sites on Orrak Island are protected under Title 19 of the Palau National Code, by inclusion in the Palau Register of Historic Places, administered by the Bureau of Cultural Affairs (also known as the Bureau of Arts and Culture - BAC). ICOMOS notes that the date of registration is not given.

The surrounding waters of the buffer zone are eligible for protection under the same law.

The sites are also protected by the law of Airai State through the Airai State Board of Historical and Cultural Conservation, which was established to review, assess and uphold the preservation of historically, culturally and archaeologically significant resources. In addition there are a number of other laws and processes that regulate potential impacts to the sites including earthmoving, and demolition or alterations to any historic property.

ICOMOS notes that rangers are employed by Airai State to patrol sensitive sites.

#### ap

Protection of the nominated sites in ap is enabled by the ap State Historic Preservation Act of 1989 in accordance with the Registration of Historic Properties Administrative Procedures Act of 2003. Once registered historic properties are preserved and protected with funding from both the Historic Preservation Office (HPO) and the US National Parks Service.

The Federated States of Micronesia Code, Title 26 (Historical Sites and Antiquities) covers procedures for reviewing undertakings that may potentially affect historically and culturally significant properties, including the protection of artefacts, and prescribes penalties for violation.

ICOMOS notes that it is not clear whether the sites in ap are in fact registered under this Code as protection of the sites is apparently the responsibility of the traditional owners (see below). The State Party of ap should be requested to confirm that the sites are registered.

### Traditional Protection

#### Palau

The Chelechol ra Orrak and Uet el Daob me a Uet el Chutem sites on Orrak Island are governed by the engarairai Chiefs, Ordomeh hamlet, Airai State.

#### ap

The Mangyol Stone Money Bank site is governed by the estate of Tubthung in Makiy Village and the four paramount chiefs' estates of Bilef'iy in Maa village, Tomil municipality; Pebinaw and Miryang both in Gachpar

village, Gagil municipality; Nimath in Teb village, Tomil municipality and their counterpart estates in Makiy village: Pagrwo, Bileblaw, Tabthung and Taflang respectively.

Archaeological research and other activities on O'Keefe's Island are overseen by the ap State Historic Preservation Office in consultation with the Council of Pilung and other traditional and government leaders.

#### Effectiveness of protection measures

It is stated in the nomination dossier that the preservation of the sites is largely due to their remote location and small visitor numbers, apart from O'Keefe's Island which has suffered degradation due to lack of controls on visitors.

ICOMOS concurs with this view and believes that the protection measures for O'Keefe's Island need to be improved. Memoranda of Understanding need to be put in place between the government agencies and traditional owners for each site, setting out each one's responsibilities in relation to protection measures.

---

In conclusion, ICOMOS considers that the legal protection in place is adequate but needs to be supplemented by appropriate Memoranda of Understanding with the traditional owners of each site. Registration of the sites in ap requires confirmation by the State Party.

---

### Conservation

#### Inventories, recording, research

Excavations at Chelechol ra Orrak and physical surveys at Uet el Daob me a Uet el Chutem on Orrak Island, Mangyol Stone Money Bank and O'Keefe's Island have documented and recorded these sites. Significant research has been carried out by BAC staff in Palau in conjunction with foreign researchers.

ICOMOS notes that inventories of sites and of the stone money discs themselves are not complete either in Palau or ap. A carefully documented inventory of the stone money discs at Mangyol, recording location, history, ownership and category in a typology of production from the use of shell and bone tools to the use of metal tools, based on observation of size, shape, tool markings and shape of the central hole has the potential to assist with dating of the pieces. This is yet to be done.

ICOMOS recommends that the inventories should be completed and used as a basis for the development of a conservation programme.

#### Present state of conservation

#### Palau

It is stated in the nomination dossier that fieldwork at Chelechol ra Orrak and Uet el Daob me a Uet el Chutem sites on Orrak Island from 1998-2007 and subsequent monitoring has assessed the current state of conservation

of these sites as good to excellent. Uet el Daob me a Uet el Chutem, located inland, can be accessed only with a guide or someone who has detailed knowledge of its location, and although "one of the most well known stone money quarry sites in Palau", with several unbroken discs and some in stages of production, it has suffered no obvious signs of vandalism or other damage.

ICOMOS notes that Uet el Daob me a Uet el Chutem is both difficult and dangerous for visitors to access due to the possibility of stone falls. There is no clearly defined, properly constructed path and erosion is evident. No specific attention appears to have been given to the site.

Chelechol ra Orrak, located on the beach, is susceptible to storm damage but according to the nomination dossier shows no obvious signs of degradation.

ICOMOS notes however that Chelechol ra Orrak is compromised in some respects by the presence of a local volunteer guard who has a camp made of light materials on the beach near the main rock shelter, and the construction of a new jetty by the local association formed by the traditional owners to protect the site. The jetty was intended to prevent natural erosion but has had an impact on the other beaches. The jetty is said to be on the site of a former jetty that existed during WWII. However it appears to be the reason for a build-up of sand over the remains of ramps constructed during the apese quarrying activities.

ap  
angyol Stone oney Bank site is not often visited by tourists. Overall the stone money discs and large architectural features such as the backrests and platforms are in good condition and remain largely intact, although there are several pieces of broken stone money and places where rocks have been displaced within the platforms.

O'Keefe's Island has been impacted over time from natural processes, the events of WWII, earlier conservation efforts and general neglect. The most obvious factors are uncontrolled vegetation growth, exposure to the elements and unrestricted access by visitors, with consequent damage to features and removal of artefacts.

#### Active Conservation measures

The Preservation and Management Plan objectives include ensuring that archaeological and architectural features at each site are protected to ensure the retention of their respective universal values. It is noted in the Conservation section that great care is required in conducting any sort of cleaning, analysis, or restoration procedures particularly in relation to the friable nature of the limestone from which the stone money is made. The proposed approach is primarily focused on maintenance. The approach is non-interventionist except where necessary to remedy damage due to vandalism or

negative impact, or to secure features or objects at risk of damage.

ICOMOS notes that the chiefs governing the angyol Stone oney Bank Site would like to reconstruct the former men's meeting house on its platform in the south-east quadrant of the crossways. Traditional skills are apparently still available as evidenced by the traditional meeting house constructed some years ago for ap Day' celebrations at the edge of Makiy Village. Nearby is the place established by the Association of ap Navigators for traditional boat building.

ICOMOS recommends that specific attention be given to this project and the ongoing use of traditional skills.

#### Maintenance

The States Parties state that "maintenance programs need to be devised to ensure the long term conservation of the property. These will be undertaken jointly by associated stakeholders, including local communities who have a vested interest in ensuring the beautification and safety of each respective property".

#### Effectiveness of conservation measures

ICOMOS considers that the effectiveness of the proposed approach to conservation will depend on the completeness of the inventory of features at the sites including the stone money discs and the adequacy of the proposed monitoring system.

---

ICOMOS considers that completion of inventories of sites and their features and of the stone money discs themselves in both Palau and ap should be a high priority for the States Parties.

---

#### Management

Management structures and processes, including traditional management processes

Management of the four component transboundary sites is agreed in a Memorandum of Understanding between the Palau and ap Historic Preservation Offices. ICOMOS notes that in fact what appears to be meant here is the Airai State Board of Historical and Cultural Conservation in Palau, not the Palauan Bureau of Arts and Culture. No date is given for the MoU.

This is intended to serve as a mechanism for interacting with each other and in helping to maintain and promote the sites. The management of the sites is the responsibility of the Palau and ap Historic Preservation Offices in conjunction with the traditional owners of the sites. The basic strategy for ensuring the proper preservation and management of the sites is:

- Specification of the elements that are found within each site;
- Demonstration of appropriate methods for preserving and managing each property's cultural resources;

- Developing procedures for coordinating stakeholders and agencies overseeing the preservation of each property's respective features;
- Consideration of additional conservation policies that may potentially affect each site;
- Implementation of appropriate measures for promoting and utilizing the sites while maintaining their integrity;
- Enforcement of laws and regulations to ensure the long-term preservation of each site.

The Bureau of Arts and Culture is responsible for preserving and protecting Palau's cultural properties and collects data and oral histories as part of a state-by-state inventory. They also issue permits for research and respond to requests from developers whose activities could potentially impact protected properties. The role of the Airai State Board of Historical and Cultural Conservation was said to be to review, assess and uphold the preservation of historically, culturally and archaeologically significant resources.

The ap State Historic Preservation Office is responsible for preserving and protecting ap's cultural and historical properties and collects data and oral histories as part of a State inventory. They also issue permits for research and respond to requests from developers whose activities could potentially impact protected properties.

A five-year Preservation and Management Plan dated January 2010 has been developed to cover all nominated components of the property for implementation following inclusion on the World Heritage List. This will be revised every ten years by the World Heritage Officer.

ICOMOS notes that the manner of appointment and role of the World Heritage Officer' in relation to the relevant government agencies has not been described, and that there is no joint management committee to oversee implementation of the management of the whole transboundary property in accordance with the Operational Guidelines paragraph 114 and paragraph 135.

Policy framework: management plans and arrangements, including visitor management and presentation

The States Parties state that the protection and preservation of tangible and intangible aspects of nature and culture is important to the Republic of Palau, ap State and the Federated States of Micronesia.

The stated goal of the 2020 Palau National Master Development Plan however is to identify social and economic development priorities and improve capital infrastructure. The Bureau of Arts and Culture in Palau operated under a historical and cultural preservation plan for 1998-2003 prepared by consultants and funded by the US Department of the Interior, Office of Insular Affairs together with the University of Oregon Micronesia and

South Pacific Program. This has been revised and updated to cover the period 2009-2015.

A national Protected Area Network' has been set up in Palau to cover primarily natural sites, but with a section devoted to cultural properties. This will enable States to receive national funding for protected sites.

There are currently no similar plans relating to the management or conservation of cultural sites in ap.

The five year Preservation and Management Plan was developed for the overall property by a consultant with the Historic Preservation Offices of Palau and ap involving community leaders and stakeholders, covering the four transboundary component sites. This sets out the objectives for management and covers the cultural, scientific and tourist use of the property together with management and maintenance programs, and a financial plan.

ICOMOS considers that the Management Plan is appropriate as a means for collating the management objectives and operations for the sites. It needs to be expanded to include the mechanisms for cooperation between the government authorities and the chiefs, particularly in relation to the Mangyol dancing ground in ap, and the engararairai chiefs in Palau for Orrak Island. It also needs to include a process for dealing with works identified as necessary through the monitoring program.

risk preparedness

Both Palau and ap have devised National Disaster Plans for the federal government down to state, local and traditional legislative offices.

Involvement of the local communities

The Management Plan provides for local communities and stakeholders to have access to training opportunities to develop and enhance their skills for managing, conserving and presenting the sites. It is proposed that all information collected at the sites will be shared among all stakeholders to ensure that everyone benefits equally and understands the importance of managing these resources effectively.

ICOMOS notes that in Palau, Airai State authorities and the traditional owners have set up local associations to provide volunteer guards for heritage sites. However these are mainly concerned with WWII and modern heritage.

ICOMOS also notes that in ap State, the traditional owners indicated that they had almost no involvement in compiling the nomination dossier for the sites.

ICOMOS recommends the encouragement of involvement of the traditional owners in consideration of the nomination dossier and in an overall transboundary joint management committee.

resources, including staffing levels, expertise and training

According to the nomination dossier the Historic Preservation Offices are funded primarily by the United States National Parks Service (NPS), while some BAC salaries are funded by the Palauan federal government. In addition, the NPS has funded contract worker positions for each respective office including archaeologists and ethnographers. Each agency can apply for funds through the NPS for special projects. The nomination dossier does not state whether the implementation of the Management Plan will be funded by this source. The HPOs are said to be staffed with well-trained technicians and professionals who are certified by the US National Park Service. There are a number of bodies that are sources of expertise for conserving and managing the sites.

In Palau these include the Society of Historians, a group of elders whose responsibilities include disseminating knowledge about traditions, customs and belief systems on Palau which are recorded by the HPO. The Historical and Cultural Advisory Board consists of members of each state who are appointed by the President of the Republic. The responsibility of the board is to represent the Palauan people in identifying cultural properties that are important within the Republic. The Belau National Museum established in 1955 promotes the development of contemporary material arts and intangible performing arts such as traditional chants, songs, dancing and wood carving. This is the repository for all field notes, artefacts, maps and other materials recovered through archaeological and ethnographic study in Palau.

In Yap expert bodies include the Council of Pilung and Council of Tomil, traditional leaders in Yap who perform functions concerning tradition and custom as stated in the constitution. The College of Micronesia is based in Pophnei and runs a Micronesian Studies Program accessible to Yap. The Micronesian Endowment for Historic Preservation is a non-profit organisation based in Washington DC whose purpose is to advance historic and culture preservation throughout Micronesia. The Micronesian Area Research Center at the University of Guam established in 1967 provides access to collections of archival maps, photographs, texts and cultural materials and conducts archaeological research.

Effectiveness of current management

Apart from the Angyol Stone Money Bank which is still in use and managed by the traditional owners in accordance with their needs, the current management of the sites could be said to be almost non-existent in terms of providing facilities for visitors, interpretation and signage. This is recognised in the Management Plan in a general sense, with a number of elements listed as requiring attention.

In conclusion, ICOMOS considers that arrangements need to be made for a joint management committee to oversee the management of the whole of the transboundary property. Also as part of the Management

Plan a Memorandum of Understanding between the government agencies and customary owners should be agreed for each site, setting out the responsibilities of each party in relation to the protection, conservation, maintenance and management of each site. A process whereby monitoring results will be considered and acted upon through the joint Management Committee needs to be included.

---

## 6 Monitoring

The Management Plan proposes that the Palau Bureau of Arts and Culture and Yap State Historic Preservation Office will be responsible for monitoring their respective sites. It is proposed that monitoring activities should occur twice a year, and that the 'World Heritage Officer' will be responsible for documenting the details and outcomes of assessment and for submission to the World Heritage Centre for review and possible action if necessary.

A table of indicators is set out with the responsible agency identified. These include increase in vegetation around stone features; increase in microbiological growth on features; movement of individual features; movement or removal of artefacts; visible presence of visitors/tourists and associated debris; stability and integrity of stone features; estimated encroachment from nearby settlements; estimated encroachment from sea level rise and effectiveness of the Management Plan.

ICOMOS notes that while the indicators do relate to attributes carrying the cultural values, they are not specifically identified as such.

ICOMOS also notes that it would not be appropriate to submit the monitoring results to the World Heritage Centre. Monitoring results should be considered and acted upon through the joint Management Committee.

---

ICOMOS considers that the proposed monitoring system is satisfactory but in order to be effective in relation to the stone money discs, it needs to be based on a fully documented inventory as described above. Identified works need to be considered by and implemented through the joint Management Committee.

---

## 7 Conclusions

ICOMOS considers that the serial approach is justified but the selection of sites is not justified. The comparative analysis is not complete and needs to be extended to include examples within the Pacific region and with other sites in Yap and Palau in order to justify the nomination of the Palau and Yap sites as exceptional testimony to a remarkable cultural tradition for the World Heritage List. The boundaries of the individual sites have not been adequately defined and would require further consideration by the States Parties in order to meet conditions of Integrity and Authenticity. The traditions

and rituals associated with the stone money exchange and location are an important component of the property's value but have not been documented.

Recommendations with respect to inscription  
ICOMOS recommends that the examination of the nomination of Yapese Stone Money Sites in Palau and Yap, Republic of Palau/Federated States of Micronesia, to the World Heritage List be deferred in order to allow the States Parties to:

- Further justify the selection of sites by deepening the comparative analysis with sites in Yap and Palau and consideration of criterion (vi);
- Further justify the Outstanding Universal Value of the property by deepening the comparative analysis to include similar sites in the Pacific region;
- Develop a common structure of management in accordance with paragraphs 114 and 135 of the Operational Guidelines for the Implementation of the World Heritage Convention;
- Develop Memoranda of Understanding between government agencies and traditional/customary owners on the protection, conservation and management of the nominated sites;
- Confirm registration of the Yap sites under The Federated States of Micronesia Code, Title 26 (Historical Sites and Antiquities) and on the Historic Properties Register of Yap State.

ICOMOS also recommends that the States Parties consider seeking international assistance with revision of the nomination in accordance with paragraph 235 (b) and paragraph 241 Preparatory Assistance (iii) of the Operational Guidelines for the Implementation of the World Heritage Convention.

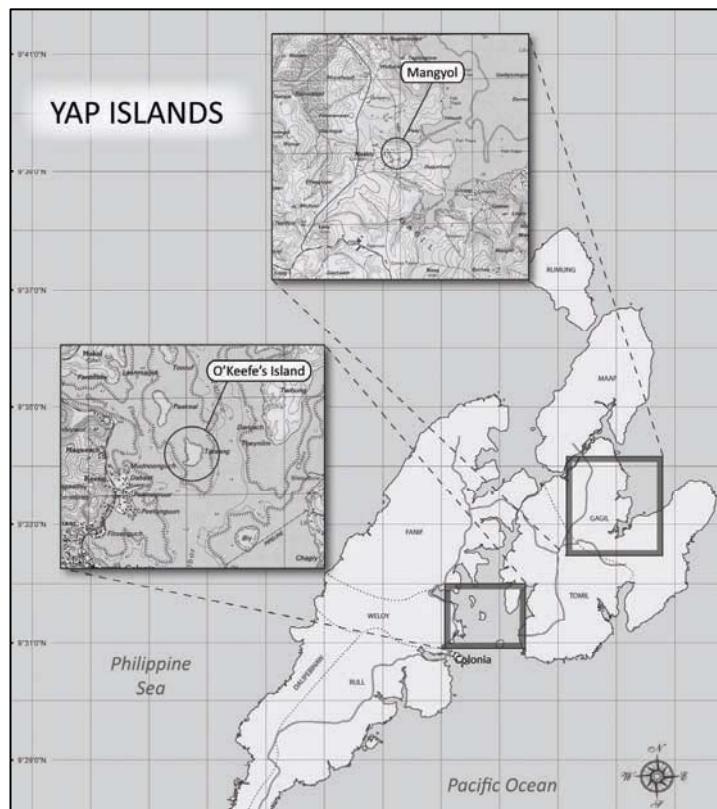
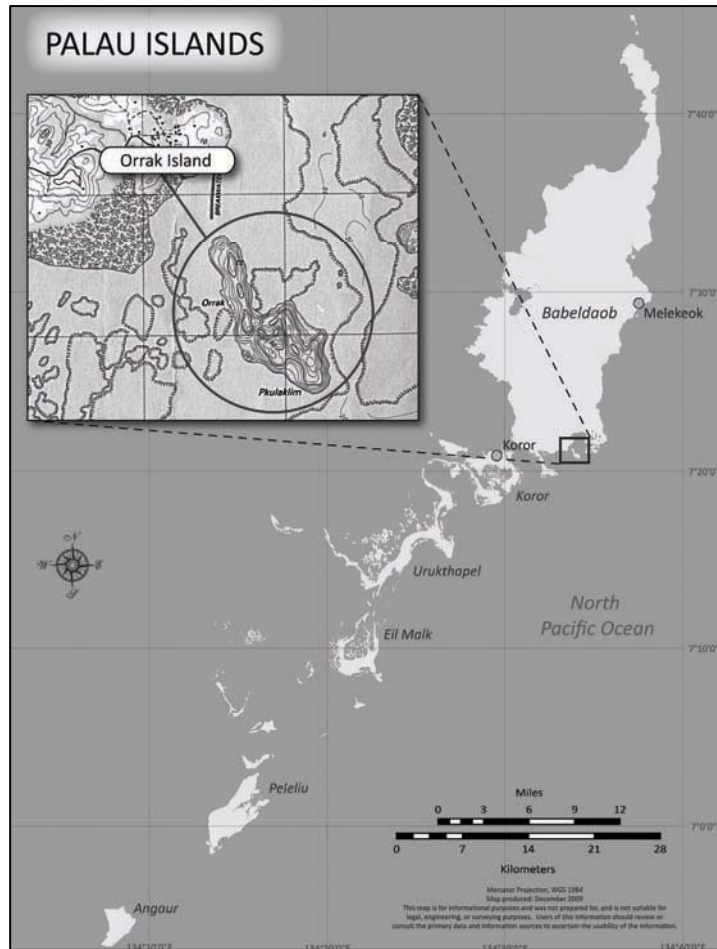
ICOMOS considers that any revised nomination would need to be considered by an expert mission to the site.

ICOMOS further recommends that the States Parties give consideration to the following:

- Complete the inventories of sites in both Palau and Yap as a high priority to provide a context for the nominated sites;
- Undertake an inventory and typology of the stone money discs that are part of the nominated sites as the basis for an adequate monitoring system, and to enable a chronology to be established;
- Undertake a survey and inventory of all attributes including traditional structures as a basis for research;
- Document and archive the cultural tradition of the layout of the discs and the rituals associated with the

money bank and dancing grounds for the benefit of future generations;

- Develop a risk preparedness and management strategy to deal with storm damage;
- Set-up a strategy to deal with tourism-related factors such as inadequately controlled and unsafe access, and waste-management ;
- Develop a process whereby monitoring results will be considered and acted upon through the joint Management Committee.



Maps showing the location of the nominated properties





Palau, the site of Chelechol ra Orrak



Palau, rock wall/alignment at Uet el Daob me a Uet el Chutem





ap, Mangyol Stone Money Bank



ap, Brick and stucco-faced outdoor staircase of O' eefe's home

---

# Petroglyphs of the Mongolian Altai

## Mongolia

### No 1382

---

Official name as proposed by the State Party  
Petroglyphic Complexes of the Mongolian Altai

Location  
Ulaankhus soum and Tsengel soum,  
Bayan-Ulgii province

#### Brief description

In sheltered areas of high valleys, carved out by Pleistocene glaciers in the remote western edge of the Altai Mountains, three rock art sites display large concentrations of petroglyphs and funerary monuments linked to the development of human culture over a period of some 12,000 years.

The earliest images reflect a time during the Middle Holocene (c. 11,000–6,000 years BP) period when the area was partly heavily forested and the valleys provided an ideal habitat for hunters of large wild game. Later images reflect the late middle Holocene (c. 6,000–4,000 years BP) period when the Altai landscape assumed its present mountain steppe character, and the herding of large and small animals emerged as a dominant economic way of life, with the high valleys used for summer pastures.

Finally, the most recent images show the transition to horse-dependent nomadism when significant populations grazed the high valleys in both summer and winter during the Early Nomadic Period (early 1<sup>st</sup> millennium BC), the Scythian Period (1<sup>st</sup> millennium BC), and the later Turkic Period (7<sup>th</sup>–8<sup>th</sup> c. C.), after which the record falls silent.

#### Category of property

In terms of categories of cultural property set out in Article I of the 1972 World Heritage Convention, this is a serial nomination of three *sites*.

In terms of the *Operational Guidelines for the Implementation of the World Heritage Convention* (January 2008) paragraph 47, it is also a serial nomination of three *cultural landscapes*.

## 1 Basic data

#### Included in the tentative List

The rock art site of Aral Tolgoi: 8 December 2009  
The Upper Tsagaan Gol Complex: 8 December 2009  
Tsagaan salaa rock painting: 1 August 1996

International Assistance from the World Heritage Fund for preparing the Nomination  
2007

Date received by the World Heritage Centre  
29 January 2010

#### Background

This is a new nomination.

#### Consultations

ICOMOS consulted its International Scientific Committees on Rock Art and on Cultural Landscapes and several independent experts.

Comments on the assessment of this cultural landscape were received from IUCN on 1st February 2011.

The information was carefully considered by ICOMOS in reaching its final decision and recommendation in March 2011. IUCN has also reviewed the presentation of its comments in this report.

#### Literature consulted selection

Allard, F., and Diimaajav, J., *hirigsuurs, ritual and mobility in the Iron Age of Mongolia*, *Antiquity* 79, 1-18, 2005.

Golden, P. B., The peoples of the southern Russian steppes, in *The Cambridge History of Early Inner Asia*, edited by Denis Sinor, 256-284, Cambridge: Cambridge University Press, 1990.

Jacobson, J., Kubarev V. D., and Tseveendorj D., *The Rock Art of Mongolia*, *The Silk Road* 4 (1): 5–12, 2006.

Kubarev, V. D., and Tseveendorj D., *Ancient Turkic Memorials in the Altai*, *Archaeology, Ethnology Anthropology of Eurasia* 1 (9): 76–95, 2002.

*Preservation of the Frozen Tombs of the Altai Mountains*, Paris: UNESCO/Flanders Funds in Trust, 2008.

#### Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the property from 23 October to 3 November 2010.

Additional information requested and received from the State Party

None

Date of ICOMOS approval of this report  
10 March 2011

## 2 The property

#### Description

The three sites are within the Tsagaan Salaa-Baga Oigor and Upper Tsagaan Gol valleys high up in the western ridge of the Altai Mountains that separates Mongolia from Russia to the north-west, and China to the west, at the intersection of Central and North Asia.

The area is some 1,700 kilometres west of Ulan Bator, and accessible by vehicle around 4 to 5 months of the year. Two sites are located in areas controlled by the military because of their proximity to the Chinese and Russian borders.

The raw materials for the rock art are sandstone outcrops and boulders, polished smooth and deeply etched by glaciers that carved out these valleys during the Pleistocene period. Over time, the boulders have acquired an almost glossy surface patination in a variety of colours from pink to mahogany brown to black.

The three properties are, from north to south:

- Tsagaan Salaa-Baga Oigor
- Upper Tsagaan Gol
- Aral Tolgoi

The distance between them is between 35 and 40km.

The three sites are said to include many thousands of engraved images as well as hundreds of burial mounds, and other structures of funerary significance, some in the buffer zone. However ICOMOS notes that images and surface remains are only described in general terms and precise details of numbers and locations are not provided, other than in plans that show locations of individual sites, without differentiating types, and groups of sites.

The three properties are described separately:

#### Tsagaan Salaa-Baga Oigor

The site covers 2,100ha and stretches some 15km along two valleys which descend from the high Altai ridge over which were ancient passes into present-day Russian Altai, thus explaining a similarity of the rock art with that of Russian Altai.

An estimated 5,000 sites', each containing between one and 160 images, are found on outcrops, cliff faces, and boulders. The quantity and quality of the rock images suggest that this large valley could have supported a significant population in the pre-Bronze Age, Bronze Age, and early Iron Age.

Of all three sites, this one is said to reflect the most extensive and continuous record of human cultures. Its images extend from the large hunted animals of the late Pleistocene, early and Middle Holocene periods, through the early Bronze Age when there appear the earliest images of heroic hunters with mushroom-shaped headdresses: frontal figures, armed with large cudgels or long bows and associated with large antlered or horned animals, to the late Bronze Age images of hunting, herding, family scenes, stylized stags of ibex, horses, and hunters, and finally to Turkic inscriptions. This valley offers the significant evidence for the transformation of early hunting societies into societies dependent on herding and transhumance and their subsequent

transformation into horse-dependent nomadism in the Late Bronze and early Iron Ages.

Ceremonial and funerary mounds, presumably from the Bronze Age and later, are located along the terraces over the valley floor and, occasionally, on terraces higher up the slopes. It is suggested that the locations of these remains reflect a *deep and ancient orientation to the river* and particularly to its eastward flow.

#### Upper Tsagaan Gol

The site, covering 9,000 ha, extends east-west for a distance of approximately 22km within the high valley of Tsagaan Gol and its principle tributaries, which rise in the glaciers of the Tavan Bogd peaks and flow along the north and south sides of the sacred mountain, Shiviit hairkhan, before joining to form Tsagaan Gol.

Approximately 5,000 sites' of between one and 100 images are found on glacier scraped and polished outcrops and on moraine boulders. The complex is particularly rich in images from the Bronze Age, the early Iron Age, and from the Turkic period. This material includes individual images but also elaborate compositions reflecting the hunting of large and small animals, the movement of people on foot, with yaks, in wheeled carts, and on horseback. There are even a few images from the post-Turkic Period that represent figures riding reindeer.

This site has a rich assemblage of surface monuments. In addition to the *khirigsuur*, mounds, circles, and standing stones from the Bronze Age, there are a large number of Turkic enclosures and image stones. This material is all oriented either to the east-flowing rivers or to Shiviit hairkhan, the sacred mountain at the centre of the complex.

The mountain is still considered sacred by local people. An Ovoo' or shrine has been built on a hill facing the mountains and it is still used today for ceremonies and votive offerings. The area is lived in by Tuva families who conduct ceremonies based on shamanism as well as morning Buddhist rites. An annual religious gathering of some 200 to 300 people takes place each year. The mountain is home to protected wild goats and argali sheep.

#### Aral Tolgoi

This site covers only 200ha and lies 40km south of the Upper Tsagaan Gol Complex. Some 300 rock art images are found to the south-east of a whale-shaped hill. Most prints are on the ground, on horizontal planes on which it is easy to walk. Many are said to have been lost on the deteriorated rock surfaces, the victims of a moist and severe climate. The rocks are under the snow for some 9 to 10 months of the year. The hill is very close to the border guards barracks.

The images have a 'static' quality and are seen to have the hallmarks of the Pleistocene period. The animals are

shown contoured or silhouetted with massive bodies, deeply rounded bellies, and legs that are reduced to two tapering cones, front and back. The types of animals - large, flightless birds that inhabited cold, dry climates, free of forest, and a rare image of a rhinoceros - are said to anchor this property to the Late Pleistocene. Only a few images are said to be dated to the Bronze Age or later.

Within the buffer zone are deer stones, burial mounds, and Turkic enclosures reflecting Turkic herders of the Late Bronze-early Iron Age, but these seem to have no relationship to the rock art.

#### History and development

Overall the three sites are considered to provide evidence of art from the following historic periods, and of funerary and other monuments from the Bronze Age and later. However the dating attributions have been done on stylistic grounds and have not been confirmed by any other evidence. It is suggested, on the basis of chance finds, that excavation of the terraces composing the buffer zone of Tsagaan Gol might reveal extensive artefacts of a Palaeolithic and Mesolithic date.

#### Late Pleistocene (11,000 BP)

This period is depicted by images of large animals such as mammoth, aurochs, horses, elk, argali and ostrich, in what is called a static profile style, that reflect nomadic societies hunting in high forests.

#### Early and Middle Holocene (c. 11,000 - 6,000 BP)

This period is characterized by the expansion of forests and by a relatively wetter, warmer climate. Animals that live between high forests and mountain steppe such as aurochs, elk, and ibex, are represented with a greater sense of power and grace than was visible in the earlier art, and images of human hunters appear.

#### Bronze Age (c. 4,000 - 2,800 BP) or the onset of the Late Holocene

This period saw the reestablishment of a relatively cold and dry climate, when the area assumed its present day appearance of mountain steppe. Herding and the gradual development of transhumance are depicted through images of hunting with bows, spears, and cudgels; wheeled vehicles, the use of domesticated yak for transport of goods and children, led by women in long dresses and with elaborately braided hair. Large compositions, perhaps carrying communal mythic narratives, appear within this period. Only one image appears to refer to the spirit realm: a faceless, horned being with a bell-shaped body, sometimes shown alone, sometimes with animals, and often bearing the signs of a birthing woman.

Surface monuments include burial mounds, 'virtual burials' in the form of dwellings outlined in stones; khiriguur (stone cairns surrounded by a square or circular fence of surface stones), with up to several hundred adjacent circular altars and small mounds;

massive standing stones. Large stone circles, usually set on high terraces, may also belong to this period.

#### Late Bronze Age (c. 3000 - 2800 years BP)

This was the period that saw the transition to horse-dependent nomadism. Images show well proportioned figures, often of powerful build, with details of weaponry and dress, herding animals, moving to new pastures, or riding Bactrian camels or horses. One of the most distinctive images is that of a highly stylized stag, represented individually, in pairs, or in groups, and characterized by antlers flowing like waves back over its body.

Surface remains continue what was constructed in the early Bronze Age and also include massive standing stones known as a deer stone as they are carved with images of deer or other animals that were often anthropomorphic.

#### Early Iron Age (1<sup>st</sup> millennium BC)

This period, which coincides with the Scythian Period, reflects the development of a completely horse-dependent, herding culture that dominated the steppes of Eurasia. The images are scenes of hunting and riding, with both animals and men represented with considerable stylization and detail. Over time, the images, particularly of stags, become conventionalized and emblem-like.

Surface remains include north-south rows of burial mounds with associated altars west and rows of small stones (*balbal*).

#### Turkic Period (7<sup>th</sup>-9<sup>th</sup> c. C)

The images of this period are centred on the warrior-horseman, shown hunting, in combat, or galloping at full speed, his falcon on his arm. Details of weaponry, horse trappings, armor and even the handling of human hair are vivid. In many cases, compositions appear to refer to epics. To this period, also, belong a number of runic inscriptions.

Surface remains include square altars, known as enclosures; rows of *balbal* and carved image stones.

It is stated that particular mountains, rivers, and the cardinal directions, particularly the eastern direction, had an *overwhelming importance* in terms of the siting of images and monument and their ritual associations, but ICOMOS notes that no evidence is provided to substantiate this claim.

### 3 Outstanding universal value integrity and authenticity

#### Comparative analysis

The analysis compares the nominated sites to others in the Altai, in Mongolia, in North Asia, Central Asia and then globally. Within the Altai and Mongolia, it is clear that there are many rock art sites, some with similar



profiles to the nominated sites but which are seen as different as they are not in high glaciated valleys. Many sites display distinctive hunt scenes and figures with mushroom-shaped headdresses, characteristic of the Altai region. However the stylized deer and caprids of the Late Bronze and early Iron Ages, in the nominated properties are rarely found elsewhere in the Altai.

relevant sites that are mentioned in Mongolia include

- Bichigtin am, Bayankhongor aimag
- Hargalant Uul, Huvsgul aimag

Within North and Central Asia there are some 80 significant sites of which only a few are mentioned and that offer comparable subject matter such as:

- The small mountain, Syryn-Chiureg: Iron Age and Turkic imagery;
- Rock faces at Bizhiktig-haya: bulls and early Nomadic figures;
- Rock faces at Alaga Mountain: stylized deer of the Late Bronze-early Iron Ages;
- Rock face at Ustiu-Sargol: panel of overlaid goats, early Scythian Period;
- Cliffs at Shalobolin and Oglakhty.

The global comparisons offered do not provide relevant comparators: ICOMOS considers that it is clear that this rock art does need to be understood in its geo-cultural context.

Overall ICOMOS considers that what the comparative analysis demonstrates is the wealth of rock art in North and Central Asia and in some instances the paucity of information on individual sites. Furthermore it is clear that there are, to a degree, more similarities between some sites than differences, particularly across the Altai ridge in Russian and Mongolian Altai.

IUCN notes that: *parts of the nominated property located in an area that has been suggested for transboundary cooperation in the Altai mountain range. There is an existing natural World Heritage Site in this region, the Golden Mountains of Altai, located in the Russian Federation. China has proposed another site in the Altai mountains on its tentative list.*

With information available from ICOMOS's new thematic study on Rock Art in Central Asia, ICOMOS considers that notwithstanding the links between the nominated sites and others in the Altai, the complex of three nominated sites can be seen as one of the largest, oldest and least damaged concentrations of rock art in North Asia. The quality of the Bronze Age imagery in two of the sites and the early images in the third site sets the complex apart from other in the Altai area.

---

ICOMOS considers that the comparative analysis justifies consideration of this property for the World Heritage List

---

Justification of Outstanding Universal Value  
The nominated property is considered by the State Party to be of Outstanding Universal Value as a cultural property for the following reasons:

- Tsagaan Salaa-Baga Oigor, Upper Tsagaan Gol, and Aral Tolgoi, represent a visual record of human prehistory and history in the heart of Eurasia, extending over a period of more than 12,000 years;
- Two of the properties (Tsagaan Salaa-Baga Oigor and Upper Tsagaan Gol) represent the most extensive such complexes yet recorded in North Asia and the third, Aral Tolgoi, is unquestionably the largest and best preserved concentration of open air rock art from the Late Pleistocene and early Holocene yet identified within North Asia;
- By virtue of its images of aurochs, horses, ostrich, and other animals adapted to a cold, dry steppe environment, the rock art of Aral Tolgoi evokes a cultural landscape earlier than that represented by the forests that surround it;
- By contrast, the persistent relationships created between rock art, surface monuments, and relatively unchanging physical elements – rivers, ridges, directionality – at Tsagaan Salaa-Baga Oigor and the Upper Tsagaan Gol create an immediate sense of the intense integration of human communities with their physical environment.

ICOMOS considers that this justification is appropriate. Further, ICOMOS considers that the serial approach is justified.

#### Integrity and authenticity

##### Integrity

ICOMOS considers that the boundaries of the three sites encompass all the key images. The three sites areas to a degree complementary with Aral Tolgoi presenting a unique array of early images and the other two sites reflecting the highpoint of Bronze Age cultures.

However some of the images are vulnerable to human interaction and some are suffering from the impact of grazing animals.

##### Authenticity

ICOMOS considers that there is no doubt over the authenticity of the rock art images and their ability to display their value.

---

ICOMOS considers that the conditions of integrity and authenticity have been met.

---

Criteria under which inscription is proposed  
The property is nominated on the basis of cultural criteria (i), (ii) and (iii).

*Criterion i represent a masterpiece of human creative genius*

This criterion is justified by the State Party on the grounds that the quality of the rock art, its extent, and its relatively un-impacted character are unsurpassed within known rock art sites of North Asia.

ICOMOS considers that to demonstrate this criterion it would be necessary to show how the images manifest particular creativity that is not normally associated with such images. ICOMOS considers that the images on the sites are of value more for what they convey of the communities that produced them rather than for their outstanding imagery.

---

ICOMOS considers that this criterion has not been justified.

---

*Criterion ii exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town planning or landscape design*

This criterion is justified by the State Party on the grounds that it applies to the Tsagaan Salaa-Baga Oigor and to the Upper Tsagaan Gol sites only for the following:

Imagery in both sites vividly describes the character of early hunting traditions; the appearance of herding, horse and camel riding in the Late Bronze Age and the exploitation of riding in hunting and herding activities; and the transition to full horse dependency in the early Iron Age. The impact of that cultural development ultimately the basis of the expansion of steppe empires after 400 BC is vividly reflected in Turkic imagery. An important and ubiquitous motif in both properties is that of the wheeled vehicle which seems to have come into North Asia from the west during the Bronze Age. The adoption of this vehicle, together with the domestication of yak as beasts of burden, profoundly affected the emergence of transhumance and herding dependency not only within the Altai Nuruu but also across the Eurasian steppe.

ICOMOS considers that this justification could apply to a number of properties identified in the Comparative analysis as hunting scenes and wheeled vehicles are found in many sites. Also the justification only applies to two of the sites not the whole property.

---

ICOMOS considers that this criterion has not been justified.

---

*Criterion iii bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared*

This criterion is justified by the State Party on the grounds that it applies specifically to Aral Tolgoi (AT) and Tsagaan Salaa-Baga Oigor (TS-BO).

While a few other sites in North Asia include imagery from a period considerably earlier than the Bronze Age, none have the number of images or the integrity of imagery to compare with these two sites. The images of mammoths (TS-BO), rhinoceros (AT), and ostriches (AT), refer to a geological period in the Late Pleistocene that has been identified with the "mammoth steppe": a period when North Asia was significantly colder, drier, covered by rough grasses and forbs rather than forest, when it supported a very different fauna. Archaic images of aurochs, ibex, horses, and argali may well belong to that period, also. At both sites, images of elk executed in a typically archaic style reflect the transition to a more forested environment in the early Holocene. This is the period that appears to be documented, also, in the earliest imagery of the Upper Tsagaan Gol.

ICOMOS considers that for this criterion to be justified it would need to apply to the whole property in terms of how as an ensemble the three sites contribute to our understanding of pre-historic communities in this area of Asia in an exceptional way. ICOMOS considers that in this way this criterion can be justified.

---

ICOMOS considers that this criterion has been justified.

---

ICOMOS considers that the serial approach is justified and that the selection of sites is appropriate.

---

ICOMOS considers that the nominated property meets criterion (iii) and conditions of authenticity and integrity and that Outstanding Universal Value has been demonstrated.

---

## 4 Factors affecting the property

### Development pressures

The main development pressures are roads and mining see below. ICOMOS notes that local authorities for the nominated sites have now agreed not to issue further mining licences or give approval for the development of roads within the nominated area. However, as unplanned roads are found throughout Mongolia, ICOMOS considers that this, rather than planned road building, should be considered as a major threat.

### Tourism pressures

Tourist number is currently tiny and most tourists come in organised groups. The difficulties of getting permits for this sensitive border area mitigate against a huge rise in numbers. Nevertheless ICOMOS considers that any

increase in numbers could be disastrous without more structures in place to manage access, as many rock images are carved on boulders small enough that they could be carried away by people who want to add to their private collections or to sell to museums.

#### Environmental pressures

Surface deterioration is caused by extreme changes in temperature and by erosion due to wind and snow over time and this makes the patinated surfaces prone to peeling. Cracks in the rocks host plants that contribute to this flaking.

#### Vegetation

Colonies of lichens are invading the decorated surfaces. The problem of controlling the vegetation as well as that of desertification has been much discussed in recent years, but no actions have been taken. The non-interventionist decision is wise, for now, because the protocols for actions in this area remain very unclear and need to be specially adapted to circumstances. Monitoring areas at high risk is desirable.

#### Graffiti

Graffiti is quite considerable where access is easy, such as adjacent to the road through *Tsagaan Salaa Aga Oigor*. They take the form of either painted or pitted images and are mostly in Cyrillic script (azakh or Mongolian). There is less graffiti inside the protected areas (national parks) and there is a move to increase the size of the parks, but this could impact on people's livelihoods.

#### Tracing and other means of copying images

It appears that copying involving rubbing a damp sheet of paper over the engraved surface, a technique widely used in the 1970s, is still in use, as well as the application of chalk, and both of these activities should be stopped.

#### Uncontrolled access

People and animals can cause damage when treading on the rocks. However the presence of local people in the area is a positive advantage. Nevertheless it was reported to the mission that more damage was done to images outside the national park than within. ICOMOS considers that awareness raising would appear to be necessary to allow understanding of the significance of the images and that some specific control is needed in Aral Tolgoi as the flocks of grazing animals all come from the nearby Border Guard Station.

#### Mining

Mining appears to be a real threat. The State issues operating licenses against a percentage of revenues and payment for damages to the environment. Since 2009, however, all mining licenses have apparently been withdrawn in the property as the environmental laws have become stricter.

There remains concern, however, as the area is known to hold sources of copper, coking coal, gold, silver, uranium, molybdenum and lithium and other rare metals and demand for them is likely to increase. Also mines represent 20.3% of the country GDP, 42.7% of its exports, and employ nearly 40,000 employees, as well as involving some 200 foreign companies.

There are sources of lithium pegmatites, not far from the proposed sites. They are linked to salt lakes. Since April 2010, mining activities should be subject to official approval. However, there seem to be several small private mining activities that employ people on a daily basis, even though it would appear that these activities are illegal.

ICOMOS notes that the Deputy Minister of Culture, Environment and Science is said to be committed to developing a specific document on the abolition of mining in the proposed sites and in the upstream areas of the rivers flowing through them. At the moment no such ban exists.

#### Natural disasters

Tsagaan Salaa-Baga Oigor, Upper Tsagaan Gol and Aral Tolgoi are located within active seismic and earthquake zones.

#### Impact of climate change

An increase in rainfall, which could increase vegetations, or a decrease that might threaten the livelihoods of farmers, could impact adversely on the property, first in terms of vegetation growing over the rock face and secondly as there would be no local communities to act as guardians of the sites. Currently an increase in temperature, and the decrease in permafrost is encouraging more herders to use the area in the spring and a substantial increase in grazing animals could be highly detrimental to the property.

---

ICOMOS considers that the main threats to the property are graffiti, uncontrolled access (for people and animals) and mining and that currently there are not sufficient measures in place to adequately deal with any of these threats although progress is being made at local level see below.

---

## 5 Protection conservation and management

### Boundaries of the nominated property and buffer zone

The boundaries are adequate to enclose each of the three main rock art sites. The sites are of enormous size and it will never be feasible to enclose or protect the boundaries.

All three sites are surrounded by large buffer zones that encompass the plains on which are many surface monuments. The boundaries of the buffer zones are unrelated to natural features and thus difficult to determine on the ground.

---

ICOMOS considers that the boundaries of the nominated property and of its buffer zone are adequate.

---

#### Ownership

The rock art site of the Tsagaan Salaa-Baga Oigor is owned by Ulaankhus soum (department), Bayan-Ulgii aimag (region). The rock art site of Upper Tsagaan Gol is owned by Tsengel soum, Bayan-Ulgii aimag. The rock art site of Aral Tolgoi is owned by Tsengel soum, Bayan-Ulgii aimag.

The three sites are located in areas traditionally used by herding communities; the herders have an interest in the sites.

#### Protection

##### Legal Protection

The three sites of Tsagaan Salaa-Baga Oigor of Ulaankhus soum and Upper Tsagaan Gol (rock arts of Shiveet mountain) and Aral Tolgoi of Tsengel soum of Bayan-Ulgii are included on the list of historical and cultural properties under state protection as listed in 2008 under the provisions of the Law on Protecting Cultural Heritage of Mongolia, 2001.

The territory of Mongolia is divided into 21 *aimags* (regions) with *soums* (departments), within which are smaller units known as *baghs*, bringing together families and represented by a manager. Management and protection can be applied at each level of government. However, the nominated sites are all under the protection of the state.

Under the Mongolian Law on Special Protected Areas, 1994, the whole of Aral Tolgoi and half of the Upper Tsagaan Gol Complex are included within the Altai Tavan Bogd National Park. This offers protection to the natural aspects of the area, including water sources, and controls the development of villages and the construction of facilities for camping sites to pasture cattle permanently. As stated above, it appears that the Park offers protection for the images and it would be desirable to extend the park to cover all of the nominated sites. This has been discussed but there is resistance from some local communities. The nomination dossier sets out the framework that will be put in place to implement the necessary protection, if the property is inscribed.

The Government of Mongolia shall create the relevant legal framework for safeguarding and maintaining nominated properties in compliance with the principles of World Heritage:

- Management of the safeguarding and maintaining of the nominated sites shall be regulated under applicable laws and regulations of Mongolia in line with the Convention of World Nature and Cultural Heritage;
- The Government of Mongolia shall pass and implement national policy, programmes and strategies for safeguarding and maintaining nominated sites and cooperate with and encourage initiatives and participation of governmental and non-governmental organizations, private entities, bilateral and international organizations and individuals;
- Under the supervision and guidance of the Ministry of Education, Culture and Science, the administration/ management office of rock art sites of TS-BO, Upper Tsagaan Gol and Aral Tolgoi in Bayan-Ulgii aimag shall implement the management plan;
- The Mongolian National Commission of World Heritage shall provide technical assistance and guidelines to the Management office.

However ICOMOS considers that it is clear that effective implementation of protection of the rock art will need to be carried out at local level. In some *soums* action is already being taken. The *soum* Ulaankhus has signed agreements with farmers to safeguard the engravings and archaeological sites, ensuring their protection from external hazards and in particular those related to tourism.

At *soum* Tsengel, a group of farmers has been organized for the protection of heritage plants. Vandalism has declined significantly. Inventories are updated with the help of local people and teachers are involved in curriculum development on heritage. This *soum* has organized a seminar for governors of the 21 Mongolian *aimags*, to show them how biodiversity and heritage is managed.

Archaeology is under state control, and excavation is subject to approval from the Ministry of Culture and an additional authorization is needed from the Ministry of Environment within the National Park.

##### Traditional Protection

This is crucial to the protection of the rock art. As set out above, the local authorities are now working with local farmers to engage them in heritage protection.

##### Effectiveness of protection measures

Although protected at a national level, this protection must be implemented on a day to day basis at local level and with the active participation of the local communities. This way of working is beginning to happen.

ICOMOS considers that protection will however need to be implemented at national level in relation to major development proposals, such as roads and mining, and



currently it is not clear whether the Law on Heritage can prevent road and mining development.

---

ICOMOS considers that the legal protection in place is adequate to deflect most threats but that its implementation needs to be strengthened (see below) to prevent illegal road building and small scale illegal mining. The protection does also appear to need strengthening to address large scale mining threats.

---

## Conservation

### Inventories, recording, research

There is no centralized management of the archaeological information at national level. The documentation for the three sites is thus scattered amongst archaeologists and between countries such as Russia and the United States.

The management plan sets out an aim to establish a comprehensive rock art site database. It is understood that there are plans to use as a model the work carried out in Tamgaly (Kazakhstan). However currently there are no computer database or management tools for this documentation.

ICOMOS considers that there is an urgent need to centralize all this information, even if the originals remain in the respective partner countries. Training and capacity building would be desirable in this area.

Currently the dating of the rock art is done on the grounds of style, themes and especially on the visual appearance of patinas. Research has not provided a clear chronological framework. Non-destructive methods of dating need to be considered such as lichen chronology.

### Present state of conservation

The current state of conservation appears variable with those images near roads or other access being disturbed in various ways.

### Active Conservation measures

There are currently no active conservation measures.

The Management Plan envisages an annual monitoring by local staff, if the property is inscribed. However there are currently no responsible bodies who could recommend any remedial action, and there are no people trained in restoration work. Also, given the huge size of the three areas, and the limited possibilities for intervention, there seems little chance of stabilising the images, and the best action will be to limit access of people and to try to limit certain grazing animals.

Many foreign expert teams have been working in this area for several decades but it appears that there research is not correlated necessarily to local needs and for the most part their records and data remain outside

the country. There is a need to ensure that the management authority assumes some responsibility for a research strategy.

## Maintenance

There is also little active maintenance of the rock art sites.

### Effectiveness of conservation measures

ICOMOS notes that there are currently no active measures being undertaken. There is also a lack of information about the images as no database has been established drawing together all available information. This is essential in order to prioritise activities across these three very large sites.

---

ICOMOS considers that conservation work needs to be underpinned by adequate documentation and a database urgently needs to be established.

---

## Management

Management structures and processes, including traditional management processes

The current management structure is minimal. Although levels of authority have been established, the main activities arise at local level. ICOMOS considers that there is an urgent need for management to be strengthened in order to raise awareness of the rock art resource, to optimise the support of local communities, to provide more education and training and better signage so that tourists are aware of the significance of the areas they are visiting.

There is currently no over-arching management structure for the three sites.

Policy framework: management plans and arrangements, including visitor management and presentation

A Management Plan for the conservation and preservation of the *Petroglyphic Complexes of the Mongolian Altai Rock Art and Cultural Landscape* was developed by the Ministry of Education, Culture and Science, the Mongolian National Commission for UNESCO, the Mongolian National Committee for World Heritage, and the Institute of Archaeology of the Mongolian Academy of Sciences. This draft Management Plan will be submitted for ratification to the Government in 2012.

The Management Plan includes specific mid-term objectives (2010-2012) and long-term objectives (2010-2015). One of the mid-term objectives is to establish a Management Authority to implement the Plan. A second is to develop the legislative and monitoring framework to enforce the regulations of Mongolia's *Law on Protecting Cultural Heritage*.

The aims of the Management Plan cover all the main areas including the need to look at the sustainability of the wider area. However, at the moment they remain aspirational. As the nomination dossier says: *Harshly saying, rock arts are left alone without any management in many respects.*

The best management would be one that takes into account the intangible cultural heritage of each site and in particular the associations with Shiveet hairkhan in order to sustain the sense of tradition and place. The balance between tangible and intangible heritage should be respected and form part of comprehensive offering for tourists.

The management system needs to address the issue of foreign expeditions to the area. Applications for study by foreign scientists should be subject to review by Mongolian archaeologists who could suggest appropriate conditions.

There is also a need to put in place appropriate management for the buffer zones that could hold archaeological information relevant to the sites. Various funerary monuments in the buffer zones have no historical ties to the rock art; rather they connect with the western territories in central Mongolia but are not more numerous or more dramatic in the aimag Bayan-Ulgii than in the rest of the territory. However ICOMOS considers that they need careful management.

risk preparedness

This has not been addressed in the dossier.

Involvement of the local communities

The local communities are increasingly involved see above.

IUCN notes that: *Some of the land has traditionally been used by herding communities. Grazing might be increasing in the coming years due to climatic impacts. There is a proposed management plan for this serial property, and IUC recommends ICOMOS confirm that there has been effective consultation with the herding communities in the process of its preparation.*

resources, including staffing levels, expertise and training

It is suggested that as the three sites are remote and unfenced they will need significantly fewer resources than in Tamgaly, Kazakhstan. It is suggested the resources will come from national and local government budgets, fees from tour operators running tourism businesses within the nominated areas, donations from international organizations and foreign countries, and from fees assessed from individuals wishing to study the rock art of the nominated properties.

ICOMOS notes that none of these sources is yet in place.

There are very few trained staff apart from cultural heritage inspectors of each soum. The need to train more people at all levels is acknowledged in the management plan. However given the paucity of resources, it is stated that the possibility of unpaid interns or peace corps volunteers will be explored.

effectiveness of current management

The current management is at the moment skeletal but there appears to be strong support at local level and a willingness to put in place structures to optimise the involvement of local communities. However adequate management will need resources to ensure adequate documentation and monitoring of the three sites.

---

ICOMOS considers that the aims of the Management Plan are satisfactory but resources are needed to implement them and it is essential that an overall management authority is put in place.

---

## 6 Monitoring

Some monitoring indicators have been suggested related to the fracturing of rocks, lichen growth, impact of tourists and the construction of gers. These however do not yet seem to be active. The indicators also include the construction of roads and mining activities and these are not valid as indicators. Very effort needs to be made to ensure that such projects are assessed before they are carried out.

Monitoring is one of the key tools for maintenance and conservation it should be preventative conservation. Trained observers are needed who could register on a regular basis the degradation of natural or manmade deterioration on some sort of general database. The model developed in Sweden for the Bohuslän on Tanum petroglyphs is a good example.

---

ICOMOS considers that the indicators suggested need to be edited to those that reflect conservation and monitoring of the indicators needs to be put into practice.

---

## 7 Conclusions

The three sites are undoubtedly spectacular in terms of their setting in dramatic valleys of the Altai Mountains and in terms of the number of their images. The rock art is part of an enormous corpus of work in North and Central Asia where over 70 significant sites have been identified at various times. The three nominated sites together are one of the largest, oldest and least damaged concentrations of rock art in North Asia.

The three sites nominated currently do not have a database of information drawing together the known research on the area, or identifying in overall terms what is being nominated. Considerable data has been

collected over many decades by foreign teams, and some of this assembled electronically, but for the most part this data is outside the country and fragmented. There is an urgent need to assemble this data and to put in place a database system within the property, building on the work that has already been accomplished within the region at Tamgaly, in order to allow staff at local level to have a full understanding of what rock art exists and its conservation needs.

The three sites are on an enormous scale and will only be managed with the effective participation of local communities who also need to have access to data.

Although one site, Aral Tolgoi, is put forward for its early images, there has been no work to substantiate the dates through for instance excavation of surrounding terraces, where chance finds have been noted, or through lichen analysis. There is a need to establish research priorities and to coordinate permission for visiting teams to address these research priorities.

Currently the Management Plan has not been put into practice and no overall management authority has been set up for the three sites. There are considerable threats to the sites from grazing animals, and from potential mining activities, and at the moment there appears to be no presumption against mining in the nominated property or its upstream hinterland, although verbal assurances have been given at a Ministry level that such a ban will be put in place.

Recommendations with respect to inscription  
ICOMOS recommends that the examination of the nomination of the Petroglyphic Complexes of the Mongolian Altai, Mongolia, to the World Heritage List be **deferred** in order to allow the State Party to:

- Put in place a database system for the property, and a timescale for populating this database through assembling the existing material for the sites, and for undertaking any further work that may be needed to gain an overview of the images clusters;
- Put in place a management authority for the three sites as a means of implementing the Management Plan; and ensure adequate resources for its implementation;
- Provide assurance that mining will be banned in the nominated areas and their upstream hinterland;
- Provide assurance that illegal road building activities will be stopped.

ICOMOS further recommends that the State Party consider the following:

- extend the Altai Tavan Bogd National Park to cover all of the three nominated sites.

ICOMOS considers that any revised nomination would need to be considered by an expert mission to the site.

ICOMOS further considers that it might be appropriate to consider submitting an international assistance request for support for the establishment of a database.

ICOMOS also suggests that the international community might offer cooperation to help with assembling the results of foreign research teams.



Map showing the location of the nominated properties





Tsagaan Salaa - Baga Oigor



Aral Tolgoi



Upper Tsagaan Gol



xamples of funerary monuments



---

# Citadel of the Ho Dynasty Vietnam No 1358

---

Official name as proposed by the State Party  
Citadel of the Ho Dynasty

## Location

Vinh Loc District, Thanh Hoa Province  
Socialist Republic of Vietnam

## Brief description

Located in accordance with feng shui principles in a river plain of scenic beauty formed by limestone mountains and lakes between the rivers Ma and Bui, the Inner Citadel of the Ho Dynasty is constructed of large limestone blocks, quarried from the surrounding hills, and surrounded by a moat. It is aligned with dominant mountains to the north-west and the imperial altar to heaven on Don Son hill to the south-east, all encircled by an outer earthen embankment. Within the landscape are caves and viewpoints imbued with legends of the Ho Dynasty, as well as numerous rural hamlets and villages connected to the period. The Citadel of the Ho Dynasty testifies to a flowering of neo-Confucianism in late 14<sup>th</sup> century Vietnam at a time when it was spreading throughout East Asia to become a major philosophical influence on government in the region.

## Category of property

In terms of categories of cultural property set out in Article I of the 1972 World Heritage Convention, this is a site.

## 1 Basic data

Included in the Tentative List  
21 June 2006

International Assistance from the World Heritage  
Fund for preparing the Nomination  
None

Date received by the World Heritage Centre  
28 January 2010

## Background

This is a new nomination.

## Consultations

ICOMOS has consulted its International Scientific Committee on Archaeological Heritage Management and several independent experts.

## Literature consulted selection

Brazier, Louis, Conception du plan des anciennes citadelles-capitales du Nord Vietnam, in *Journal Asiatique*, 140 (1952), pp. 185-95.

Huard, Pierre, and Durand, Maurice, *Vietnam Civilisation and Culture*, collection française d'extrême-Orient, Hanoi, nd.

Logan, William, Hanoi: Biography of a City, UNSW Press, Sydney, 2000.

Mawson, Philip, *The Art of Southeast Asia*, Thames and Hudson, London, 1967.

Shatzman Steinhardt, Nancy, *Chinese Imperial City Planning*, University of Hawaii Press, Honolulu, 1990.

Ung, Mai - Hung, Dao, Hue: Monuments of an Ancient Capital. The Gioi Publishers, Hanoi, 1993.

## Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the property from 27 to 30 September 2010.

## Additional information requested and received from the State Party

Additional information was requested from the State Party on 27 September 2010 regarding:

- the location of Nien Vua excavation area;
- clarification of reasons for the location of the property boundaries;
- clarification of the responsibility of the Ho Citadel Management Board in relation to the La Thanh outer wall.

A response was received on 8 November 2010 including a map showing the location of Nien Vua and other excavation areas; justification for the location of the property boundaries, and clarification regarding the status of the La Thanh outer wall. The completed Management Plan was also provided. The information is included under the relevant sections below.

Date of ICOMOS approval of this report  
10 March 2011

## 2 The property

### Description

The nominated property covers a total of 155.5 ha in three areas surrounded by a buffer zone of 5,078.5 ha. The citadel was sited in accordance with geomantic principles in a landscape of great scenic beauty. It is located on an axis joining a group of mountains (Tuong Son) to the north-west with Don Son mountain to the south-east, in a plain between the Ma and the Bui rivers, which converge south of Don Son mountain. The surrounding buffer zone includes all the area between the two rivers from where they meet south of Don Son mountain to a line north of the three front (southern) peaks of the northern group of mountains and then aligned outside and parallel to the



outer citadel embankment along the north-east to meet the Buoi river. The buffer zone comprises a cultural landscape with topographical features forming part of the feng shui context of the Citadel. It also includes lakes, caves and places of scenic beauty imbued with legends of the Ho Dynasty as well as numerous rural hamlets and villages strongly connected to the period of the Ho Dynasty containing nationally, provincially and locally listed heritage buildings such as traditional residences, pagodas, temples, communal houses and a church.

The property is nominated as three separate areas which are remnant parts of the total Ho Citadel site:

#### Inner Citadel

The Inner Citadel dating from 1397 is a square, stone-walled enclosure measuring approximately 880m each side, oriented on a north-west to south-east axis with barrel-vaulted, stone gateways located in the centre of each side, and the remains of an encircling moat. The southern gateway has three barrel-vaulted entrances; the other three each have one. Paved roads linking these gates can be traced across the interior of the enclosure, and a paved road, the Imperial Way, connected the South Gate to the Nam Giao (Heaven-worshipping) Altar on Don Son mountain 2.5km to the south-east. The nominated boundary for the Inner Citadel component of the property is located parallel to and 120m from the north-west citadel wall, parallel to and 164m from the north-east citadel wall, parallel to and 152m from the south-west citadel wall and parallel to and 156m from the south-east citadel wall. This component of the property covers 142.2ha.

The citadel wall is constructed in coursed masonry on a battered, solidly compacted earth and rubble core. The wall is up to 21.365m thick at ground level, tapering to 15m thick at the top. The stonework is made up of large, limestone blocks cut from the nearby mountains, shaped to provide a sloping face but horizontal joint and carefully fitted together. The average block size is 2.2m x 1.5m x 1.2m, but some blocks are as large as 5.1m x 1m x 1.2m and weigh up to 26.7 tons. Excavations at the South Gate revealed a paved area both inside and outside as well as the paved road leading to Nam Giao.

Remains of the moat can be traced on the north, east and south sides of the citadel, as well as the small channel that linked the moat to the Buoi river from the south-east corner of the citadel.

Literary sources indicate that the interior of the citadel included palaces for the king, his father and the queen; the temple for worshipping Ho ancestors on the east side; the temple for worshipping Tran ancestors (the king's maternal side) on the west side; and the Ancestral Altar for honouring the gods of land and grain. A network of stone-paved paths linked these together. By the beginning of the 20<sup>th</sup> century visitors noted that ancient wooden palaces and other structures had disappeared. A pair of stone dragons survives without their heads at the centre of the citadel. They belonged to a set of nine stone steps and are symbols of royal power. There are remains of four

lakes in the four quadrants of the citadel interior that are also described in early documents.

Archaeological excavations in the central area called Nen Vua (Foundation of the king) revealed brick tiled floors, pillar foundations, drains and a stone pillar base with lotus relief sculpture, together with a large amount of construction material and terra cotta, porcelain and metal objects. This material suggests that most structures can be dated to the end of the 14<sup>th</sup> century, but there is also evidence in the form of glazed pottery and stoneware dated to the 15<sup>th</sup> and 16<sup>th</sup>-17<sup>th</sup> centuries indicating reuse and reconstruction in the Le period.

#### La Thanh Outer Wall

La Thanh Outer Wall is the outer embankment about 10km long that encircled the citadel at a distance varying from one to three km. It was constructed in 1399 in compacted earth to connect naturally occurring hills and mounds around the eastern side to create a protective rampart linking Don Son mountain in the south with Tho Tuong Son (also known as Voi mountain) in the north, via Beo hill and Mo hill. The segment nominated as part of the Ho Citadel property is 2,051.9m long, about 5m high, 37m thick at its base and 9.2m thick at the top and covers 9ha. It is located 400m from Beo village towards Doi Mo village in the north-east. The nominated area is 9.0ha.

#### Nam Giao Altar

Historical sources record that the Nam Giao Altar was constructed in 1402. It is located on a high terrace between the two peaks of Don Son mountain, within the La Thanh wall and about 2.5km from the South Gate of the inner citadel. The site is nearly square; 120m along the east-west and 130m along the north-south. The nominated property boundary encloses 4.3ha. Excavations at the site have revealed a series of ascending terraces; the highest is 21.7m above sea level, polygonal in shape and paved with square and rectangular bricks. The terraces are varied in plan shape but centre on the same point at the rear of the altar base on the north-east side. The remains of a processional way 3.6m wide lead to the altar from the centre of the south-west side of the upper terrace. Excavated material included layers of broken stones, bricks and tiles, indicating that a wooden structure with a tiled roof may once have existed there. Limestone and schist were used for the embanking foundation, walls and lower terrace paving. The outer walls are constructed of limestone blocks and slope inwards towards the top. At the south-east corner at the lower level is a square well with steps, still full of water. It has been identified as the 'Jade Well' but is known to local people as the 'Well of the King'. Ceramic bowls, plates and pots and metal objects are among the artefacts found there.

#### History and development

In the late period of the Tran dynasty (14<sup>th</sup> century), the Dai Viet state was in crisis. Impoverished farmers revolted against the government, which was also being harassed by foreign invaders from both north and south who attacked and burnt the capital Thang Long (now Hanoi)

three times. Ho Quy Ly, a relative of the king on his mother's side, was appointed Prime Minister in 1395 and in an effort to improve the situation introduced a series of reforms, including limitation of Buddhist and Taoist influences, expanding the Confucian vision, setting a system of competitive examinations, limiting the amount of land owned by individuals, issuing paper currency and reinforcing the military forces. At the same time he relocated the capital city from Thang Long to Thanh Hoa district, his motherland. The capital was established at the present site of Ho Citadel in 1397. The location was less vulnerable militarily, suitable for land and river transport, and more centrally located for keeping control throughout the state from north to south. Creating a new capital city also enabled him to form and consolidate a centralised, bureaucratic monarchy monopolised by a group of Confucian scholars, in order to continue his reform agenda.

It is notable that the Ho Citadel continued traditions brought from Thang Long, including the bringing and reuse of materials from destroyed palaces and the reliance on earlier artistic traditions and building techniques, as well as in following the geomantic traditions of siting the citadel in the landscape, the construction of the Nam Giao Altar, the Ta Tac Altar to soils and grains, ancestors' temples, the positioning of the King-Father's (Ho Quy Ly's) palace in the west and the King's palace (for Ho Quy Ly's son) in the east. However scholars have detected in the recovered artefacts a new trend in art, seen in decorative motifs of dragons, human faces, and floral designs; and see this as a drive for innovation and cultural exchange which was interrupted by the fall of the Ho dynasty and re-emerged under the Le from 1427 onwards. In terms of the social and political reforms instigated by Ho Quy Ly, he can be seen as laying the groundwork for the next great Vietnamese dynasty, founded by the resistance leader Le Loi in 1428.

The Ho Citadel was the capital of the Tran dynasty from 1398-9 and of the Ho dynasty from 1400 when Ho Quy Ly put his son on the throne by marrying him to a Tran princess, until 1407. As well as instigating reforms, the Ho dynasty built roads and canals connecting the citadel with the rest of the state.

In 1407 the national army led by Ho Quy Ly was conquered by the Chinese Ming army who then occupied the citadel. Insurgent troops from nearby Lam Son retook the citadel in 1427 and independence was regained by the Le dynasty, who subsequently re-established their capital at Thang Long. Archaeological evidence testifies to the continued occupation of the Ho Citadel, which possibly became a political centre. Power struggles within the royal family at the capital Thang Long led to a member of the Le family using Ho Citadel as a base from which to attack the capital in 1516. From 1527 both the Ho Citadel and Thang Long were occupied by the Mac dynasty. The Le family set up in opposition from 1533 under Le Trung Hung and regained the Ho Citadel in 1543. The citadel became an important military seat of the Le Trung Hung dynasty for the next half century, to 1593, while the Mac dynasty was

based at Thang Long. Ho Citadel developed into the political and cultural centre of the Le Trung Hung. In 1591 the Le and Trinh families defeated the Mac dynasty and regained Thang Long citadel. Ho Citadel was then more or less abandoned. A late 18<sup>th</sup> century description recorded that the citadel was still in existence although there were many unoccupied spaces.

By the beginning of the 20<sup>th</sup> century the Ho Citadel was a subject of great interest for historians of the Nguyen dynastic period. The Nguyen dynasty was undertaking its own revival of Confucianism and built a new capital at Hue, following similar geomantic principles as at the Ho Citadel.

The Inner Citadel and its moat were classified as a National Monument Site in 1962. Excavations were undertaken in 2004 and 2008 at the Inner Citadel and the Nam Giao Altar. The Nam Giao Altar was protected and categorised as National Heritage in 2007. The Ho Citadel Management Board was set up in 2007 in order to strengthen management, protection and promotion of the nominated sites. The Management Board is currently finalising the nomination file on La Thanh Outer Wall for National Heritage in order to add it to the complex of the Citadel of the Ho Dynasty.

### 3 Outstanding universal value integrity and authenticity

#### Comparative analysis

The State Party has compared the Ho Citadel with other royal cities that appeared earlier and later in Vietnam, China and East Asia, noting that in this geo-cultural region they reflect a concept of royal power based on the adoption of Confucian philosophy within a predominantly Buddhist culture. Key features on which the comparison is based are:

- The plan of the Citadel and its relationship to the wider landscape;
- The use of feng shui and geomancy in setting out the plan;
- The use of the capital (citadel, wider city area and Nam Giao Altar) to demonstrate an enhanced concept of royal power based on the adoption of Confucianism within the predominantly Buddhist culture;
- The use of massive, well-executed masonry for the defences of the Citadel;
- The extent to which the evidence survives.

Key comparisons within Vietnam are Thang Long (1010-1802), the citadel of Hanoi which was inscribed on the World Heritage List this year (2010) and Hue Citadel (1802-1945), inscribed on the World Heritage List in 1993. Thang Long, as the administrative and ceremonial centre of imperial power in Vietnam during the four centuries prior to Ho Quy Ly's reign, was the essential model for the Ho Citadel as described above. The inscribed Thang Long property however, does not today retain its wider features.

The former Nam Giao altar located about 2km south-east of Thang Long is subsumed in modern Hanoi, its site is not part of the inscribed property, and only one gate and a small extent of citadel walls remain. The Hue Citadel, for which the Ho Citadel was in its turn the model, has been inscribed as the 'Complex of Hue Monuments' but the inscribed property does not include all the geomantic elements associated with the monuments. Its citadel had three walls, the inner one enclosing the royal palaces and the outer one adopting a defensive design derived from Vauban. The particular type of stone construction of the Ho Citadel walls distinguishes it from Thang long and Hue, and it represents a definite stage of development in Vietnamese city planning linking those two. Also the Ho Citadel contextual landscape of great scenic beauty still contains remnants of the wider city within the outer wall and together with the geomantic features is preserved in an easily readable form today, unlike the contexts of Thang Long and Hue.

Comparisons with earlier Chinese royal cities include Chang An (西安), Shanxi and Bianliang, 开封. The most immediate model for the Ho Citadel was probably Nanjing, the first capital of the Ming Dynasty from 1368, which received frequent visits from Vietnamese envoys. It was laid out according to feng shui principles in a mountainous area adjacent to waterways. But the citadel contained an inner walled palace, with altars of soil and grain and the ancestral temple located outside the south entrance to the palace either side of the imperial way leading southwards beyond the citadel wall. The whole was enclosed in an extensive outer wall connecting hilly surrounds in a similar manner to the La Thanh outer wall at Ho Citadel. It is suggested that the impressively solid stonework construction of the Ho Citadel wall is probably why there is no internal wall around the palace area there, making the Ho Citadel distinctive in this respect.

The World Heritage listed Forbidden City in Beijing (1406-1420) (1987, criteria (i), (ii), (iii) and (iv)) was constructed a few years after the Ho Citadel by the Yongle emperor of the Ming Dynasty involving Vietnamese artisans and engineers. It is noted that the city wall there tapers towards the top in a similar way to the Ho Citadel, but that the construction is rammed earth faced with three layers of mortared bricks, unlike the immense stonework of the Ho Citadel. The Heaven-worshipping altar (Temple of Heaven) can also be compared with the Ho Citadel's Nam Giao altar. It is located on an artificial mound to the south of the Forbidden City, but differs in layout and design.

Comparison is also made with Korean royal citadels including Shilla Wangeong in Gyeongju Historic Areas (2000, criteria (ii) and (iii)) of the 7<sup>th</sup>-10<sup>th</sup> centuries, now an archaeological site which appears to have derived elements from the Chinese capital at Chang An; the Changdeokgung Palace Complex (1997, criteria (ii), (iii) and (iv)) begun in 1405 by the first emperor of the Joseon dynasty, which exhibits similar stonework to the Ho Citadel but is a palace complex in a garden rather than a citadel; and with Gyeongju City, Democratic People's Republic of Korea. Gyeongju was the capital of the Joseon

dynasty (9<sup>th</sup>-14<sup>th</sup> centuries), which established the first unified state in the Korean peninsula. The outer wall was constructed 1009-1029 enclosing the whole city and following the topography of the valley and the surrounding ridges in a similar way to the La Thanh outer wall of the Ho Citadel. It was built partly in stone and partly in earth and clay. But there the similarity ends. The Inner Fort was constructed in stone 1391-1393 on a half moon plan shape, with one fortified gateway.

The property has also been compared with Angkor Thom (1181-1215) and the slightly later Angkor Wat in Cambodia (1992, criteria (i), (ii), (iii) and (iv)). Although constructed using similar stonework technology, these walled city/temple complexes are quite different in architecture and layout. As pointed out in the nomination dossier, Angkor Thom was the city of a Buddhist ruler and encloses the home of the divinity in a centrally located temple, whereas the neo-Confucian layout has the place of communication with the divinity, the Nam Giao altar, outside the Inner Citadel on axis to the south-east (but still within the outer wall). Angkor Wat is a Hindu temple complex, oriented east-west, with a very different religious function and layout.

The nomination dossier also discusses the Vat Phou and Associated Ancient Settlements within the Champasak Cultural Landscape (2001, criteria (iii), (iv) and (vi)) from the 11<sup>th</sup>-13<sup>th</sup> centuries in Laos, laid out on an east-west axis from river bank to mountain top with a geometric pattern of temples, shrines and waterworks extending over some 10km. The plan expresses the Hindu practice of kingly worship, which it is noted, often included a Devaraja ceremony on the holy mountain. There is similarity with the Ho Citadel in the use of heavy stone for construction.

The State Party concludes that the Citadel of the Ho Dynasty shares many common features with other imperial cities of Vietnam and East Asia in the geomantic selection of location and use of natural landscape to set out the plan in accordance with neo-Confucian principles. As such it derives from China and differs from the Hindu-based philosophy adopted by the Khmer elsewhere in South-east Asia. It is argued that the Ho Citadel demonstrates a specifically Vietnamese approach to the manifestation of royal power, which was later copied at Hue. The key difference with the Chinese, as argued in the nomination dossier, was a greater flexibility of approach, demonstrated by setting the axis north-west to south-east to fit with the existing topography, and the exploitation of local stone resources for construction. Unlike many other royal citadel sites in China, East Asia and Vietnam, Ho Citadel and its environs has not been overlain by later developments and the use of strong masonry has led to a greater level of preservation.

ICOMOS considers that a major factor distinguishing the Ho Citadel is that it can be easily read in the landscape, and retains numerous associated elements in addition to the Nam Giao altar in the surrounding landscape that together demonstrate the value of a neo-Confucian city of

the late 14<sup>th</sup> century. The neo-Confucian state centralisation and strengthening was a pre-requisite for creating the highly organised and disciplined workforce needed to construct a citadel of huge blocks of stone in such a short time, as well as building canals to link the citadel area to the sea. The use of large stone blocks was a response to the invention of gunpowder in China. The shift of the main axis away from the normal Chinese north-south alignment seems to have begun with the Ho Citadel. According to Louis Bazier, from the *cole française d' Extrême-Orient*, this shift in alignment did not occur in the earlier Co Loa Citadel but occurs in other Vietnamese citadels built later than the Ho Citadel. The comparative analysis shows that the citadel wall design, tapering towards the top on the exterior from a massively thick base to give an inwardly sloping face influenced the design of the Forbidden City walls in Beijing, although not in stone construction. No link has been proposed between the use of stone walls at the Ho Citadel and that at Angkor Wat. The influence of the design of the citadel on other citadels of the region could be further explored.

The comparative analysis has not been used to show whether the nominated property exhibits an important interchange of human values.

---

ICOMOS considers that the comparative analysis could be deepened to further explore the influence of the design of the citadel on other citadels of the region.

---

Justification of Outstanding Universal Value  
 The nominated property is considered by the State Party to be of Outstanding Universal Value as a cultural property for the following reasons:

- A symbol of royal power in the late 14<sup>th</sup> – early 15<sup>th</sup> centuries, exhibiting important interchanges in Sino-Vietnamese Confucianism.
- Represents new development in architectural technology and urban planning in an East Asian and South-east Asian context.
- Represents an example of a brief but seminal period of neo-Confucianism in Vietnam combined with the exceptional administrative and logistical skills of one man.
- Bears an exceptional testimony to a critical period in Vietnamese and South-east Asian history when traditional concepts of kingship and Buddhist values were giving way to new trends in technology, commerce and centralised administration.

ICOMOS considers that this justification is only partly appropriate. The Citadel of the Ho Dynasty represents the flowering of neo-Confucianism in Vietnam at a time when it was spreading throughout East Asia to become a major philosophical influence on government in the region. The geomantic layout of the city demonstrating the neo-Confucian city concept can be easily perceived today within the landscape. The state of preservation means that the property is capable of exemplifying the form of an East Asian imperial city. But the influence of

the city as a new development in architectural technology and urban planning could be further explored.

### Integrity and authenticity

#### Integrity

The State Party states that the integrity of the property is guaranteed by the nominated areas of the three major components which represent the characteristics of the Citadel of the Ho Dynasty: the Inner Citadel, the Nam Giao altar and part of La Thanh outer wall. These elements reflect the presence of a citadel that has remained almost intact, with massive stone walls within a landscape setting that is easily recognisable. As well, excavations have demonstrated a rich source of archaeological evidence preserved underground below the present rice and other crops within the nominated boundaries of the three components. The lack of development and the state of preservation of the property means there are no adverse effects on its cultural value.

ICOMOS considers that the three components demonstrate the most important planning values of the property as claimed. However ICOMOS notes that the Imperial Way from the Inner Citadel's south gate to the Don Son hill and Nam Giao altar, which still exists beneath the existing road, is not included within the property boundaries. The State Party responded to ICOMOS' request for clarification on this that while excavations at the South gate of the Inner Citadel have exposed part of the paved road, testifying to its existence some 0.5m-0.6m below the current surface, the road extends over 2 kilometres to Mount Don Son and since it has not been excavated comprehensively, the understanding of the road is currently incomplete and inadequate. 160metres of it near the south gate are within the property boundary of the Inner Citadel and the remainder is considered to be well protected below the existing road. The State Party's response stated that it would consider including the remaining section of the road as an expansion of the nominated area once archaeological excavation has been conducted and protective measures have been prepared.

ICOMOS also notes that the nomination dossier states that the nominated buffer zone includes all cultural elements that were part of a large imperial city during the late 14<sup>th</sup>-early 15<sup>th</sup> century, including religious monuments, traditional villages, common houses, ancient roads, markets, landing places and scenic beauty spots. Details are given in Annex III of the nomination dossier. Temples and other structures have been repaired and rebuilt many times, but their links to historical accounts are verified by the retention of their place names. For instance a partial map included in the nomination dossier (ill. 67, p.74) indicates the royal landing place (Ben Ngu) and the stone landing place (Ben Da) on the Ma River as preserved in existing place names. On the basis of the Operational Guidelines paragraph 100 therefore, ICOMOS does not consider

that all areas and attributes which are a direct tangible expression of the cultural value of the property are included within the nominated property boundary.

The State Party's response to ICOMOS' request for clarification expanded on the significance of the Tran hat Chan Temple and other places within the 14<sup>th</sup> century city boundary (ie. within the La Thanh outer wall) in relation to the Ho Dynasty but did not address why they are not included within the nominated property boundary. The response also expanded on archaeological discoveries related to the Dong Son culture within and adjacent to the buffer zone of the Citadel, and on research undertaken to date on historical sources covering the pre- and post-Ho dynasty occupation of the area, including the location of Ho uy Ly's tomb (which is currently thought to be near Nanjing). The additional information reinforces ICOMOS' view that all the area within the line of the La Thanh Outer Wall should be part of the nominated property.

#### Authenticity

The State Party states that the conditions of authenticity are met in terms of the geo-cultural location and landscape setting of the property, which are almost unchanged; the layout and architectural design and materials of the Inner Citadel walls, four gates, sections of moat, section of La Thanh outer wall and archaeological remains of Nam Giao altar are in good condition and continue to indicate their use and function, and the authenticity of the property is guaranteed by various sources of information including historical documents and archaeological findings.

ICOMOS considers that the Inner Citadel and four gates are well preserved. Some stones above the arches of the east and west gates have been removed in the past but the overall structure is such as to well convey the significance of the structure. Current archaeological excavation of the nominated section of the La Thanh outer wall indicates that it was constructed in the Ho Dynasty period. The excavations of the Nam Giao altar reveal a well-preserved structure contemporaneous with the Ho Dynasty.

---

ICOMOS considers that the conditions of integrity and authenticity have been met only in part because of the boundary issue.

---

#### Criteria under which inscription is proposed

The property is nominated on the basis of cultural criteria (ii), (iii) and (iv).

Criterion (ii): exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design;

This criterion is justified by the State Party on the grounds that the nominated property exhibits important interchanges of values in Chinese Confucianism influence

for a symbol of regal centralised power in the late 14<sup>th</sup> century-early 15<sup>th</sup> century. It represents new developments in architectural style with respect to technology and urban planning in an east Asian and South-east Asian context, makes full use of the natural surroundings and incorporated distinctly Vietnamese and east and South-east Asian elements in its monuments and landscape.

ICOMOS considers that this justification is over-stated in that the nominated property represents a re-statement and adaptation of pre-existing geomantic city planning principles already known from earlier Chinese-influenced and Chinese cities such as Thang Long and Nanjing, rather than new developments as such. The property is distinguished by the use of stone construction technology and shift in alignment, but an interchange of human values in relation to this has not been demonstrated. The city layout and orientation was apparently important in setting the Vietnamese pattern later developed at Hue, but the influence the architectural technology of the Ho Citadel exerted on other citadels in the region has not been fully explored.

---

ICOMOS considers that this criterion has not been demonstrated at this stage.

---

Criterion (iii): bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared;

This criterion is justified by the State Party on the grounds that the nominated property demonstrates and provides evidence of the determination to pursue the reformist programs to build an increasingly powerful state and create new cultural identities on the ground of traditional values in terms of art, architecture an urban design. It therefore bears an exceptional testimony to a period of strengthening traditional values and promoting new ideological movements in east Asia and South-east Asia.

ICOMOS considers that this statement is not applicable to the criterion. It does not justify the property in terms of a cultural tradition or a civilisation. The property could perhaps be justified in terms of bearing testimony to the neo-Confucian cultural tradition but that is better covered by criterion (iv) below.

---

ICOMOS considers that this criterion has not been justified.

---

Criterion (iv): be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history;

This criterion is justified by the State Party on the grounds that the nominated property outstandingly represents architectural construction type of a new style of south-east Asian imperial city with great achievements in engineering and in its use of stone material handcrafted with the

science and the technological conditions of Vietnam, East Asia and South-east Asia during the period of the late 14<sup>th</sup>-early 15<sup>th</sup> centuries.

ICOMOS considers that the justification is not well stated. The Ho Citadel is an outstanding example of an architectural ensemble in a landscape setting which illustrates a flowering of neo-Confucianism in late 14<sup>th</sup> century Vietnam at a time when it was spreading throughout East Asia to become a major philosophical influence on government in the region. The use of large blocks of stone testifies to the organisational power of the neo-Confucian state, and the shift in the main axis distinguishes the Citadel layout from the Chinese norm.

---

ICOMOS considers that this criterion could be justified if the property boundaries are expanded to include all the attributes carrying the Outstanding Universal Value of the property.

---

In conclusion, ICOMOS considers that the nominated property could meet criterion (iv) and meets conditions of authenticity and integrity in part, and that Outstanding Universal Value could be demonstrated if the property boundary was extended to include all the elements of the landscape setting which illustrate a flowering of neo-Confucianism in late 14<sup>th</sup> century Vietnam. Further work on the history and development of the city layout and architectural technology and its influence on other citadels in the region through deepening the comparative analysis could enable justification of criterion (ii).

---

## 4 actors affecting the property

### Development pressures

The total number of inhabitants in the area of the property and buffer zone in 2009 was 54,405 divided into 10 communes, with average population growth of 2.27%. The property has been vulnerable to the natural growth of the population leading to increasing household settlement in the proximity of the citadel walls. Small shops and restaurants have been opened beside the Inner Citadel. The construction of private houses has narrowed the moat. Agricultural activities have caused damage to the archaeological remains within the walls. Local people have re-used stone paving slabs from the roads and paths within the walls as well as bricks from former structures there in their own houses, and have collected other artefacts from the site over the years. Openings have been made through the Inner Citadel walls in order to gain easier access to fields and gardens within. The moat system has been largely filled in and levelled for rice cultivation. The outer embankment is vulnerable to agricultural development including construction of transport routes and dikes.

The State Party is dealing with these issues by resettlement of private households outside the nominated areas; attention to civil planning including enforcement of

regulations diverting traffic on highway No. 217 that passes through the Citadel to the new bypass road; relocation of productive activities to avoid damage and further transformation of the environment and landscape, and regulation of civil construction and people's livelihoods so as to limit the impacts of development on the preservation of the property.

The limestone mountains are still quarried for civil construction purposes. The State Party notes that it is necessary to control and prohibit this in order to protect the natural and cultural landscape of the property.

ICOMOS notes that a part of each village outside the East, West and South gate is included within the property boundary of the Inner Citadel. The relocation of people living in those parts within the property boundary is being considered by the authority. ICOMOS considers that the present village settlements and landscape are in harmony with the nominated property and that it is not necessary to relocate people while the present agricultural activity continues. The houses that were built adjacent to the Inner Citadel, narrowing the moat, were relocated in early 2010. The shops and restaurants are not adjacent to the citadel itself but along the road leading to the South gate from outside the Citadel.

ICOMOS notes that the local people have a good relationship with and cooperate with the local authority, and that their involvement in protection and management of the property should be encouraged.

### Tourism pressures

Tourism infrastructure for the area is limited and most tourists stay at Thanh Hoa city overnight. There were 19,000 tourists in 2008 and 20,000 in 2009. It is expected that tourist numbers will increase and Vinh Loc District is developing a comprehensive plan for the site. The town of Vinh Loc located about 1km south-east of the Citadel, straddling the Imperial Way, has four guesthouses and more than ten restaurants. Currently there are limited visitor/tourist facilities at the Inner Citadel South gate.

### Environmental pressures

Vinh Loc District is in a tropical and monsoonal zone with a temperature range of 41.5°C to 2°C, a rainy season up to six months with annual rainfall of 1,500mm -1,700mm. The area is also subject to the hot and dry south-west wind and long periods of drought. Past changes in the course of the rivers have washed away mounds and parts of the outer embankment. Flooding of the Buoi River is a possible threat to the most intact section of the outer embankment along the north-east of the site. The remains of the stone walls of the Citadel are vulnerable to damage from vegetation overgrowth and to lack of drainage around the foundations. The latter has caused instability of the south-west corner.

The Nam Giao site is vulnerable to collapse due to landslides caused by rains and flood.

Lack of sewerage and waste disposal systems have resulted in people living near the Inner Citadel pouring sewerage into the moat area.

ICOMOS considers a flood mitigation strategy is required.

ICOMOS also considers that attention is required to solid and liquid waste management.

#### Natural disasters

No earthquake has been recorded in the area over the past 600 years. Storms causing floods and lightning damage are mentioned in the historical records. A fire prevention and response plan will be developed as part of the future management of the property.

ICOMOS considers that a strategy is required to deal with possible landslides at the Nam Giao altar site in the case of storms and heavy rain.

#### Impact of climate change

The most likely impacts of climate change for northern Vietnam are increase in temperature and the number of tropical storms causing increased rain and floods.

ICOMOS recommends that the natural risk management plan should address precautions against erosion and collapse of vulnerable parts of the property.

ICOMOS considers that the main threats to the property are storms causing landslides at the Nam Giao altar site, floods affecting the La Thanh outer wall, and uncontrolled vegetation growth and the lack of waste management at the Inner Citadel. Urban development in Vinh Loc town could be a threat to the important visual axis between the Inner Citadel and Don Son mountain with the Nam Giao altar if height limits are not carefully controlled.

## 5 Protection conservation and management

### Boundaries of the nominated property and buffer zone

The boundaries of the three nominated areas are adequate to protect those elements. However, the Imperial Way from the Citadel's South gate to the Don Son hill and Nam Giao altar, which still exists in part beneath the existing road through Vinh Loc town, is not included as part of the nominated property. Also, the nomination dossier states that the nominated buffer zone includes all cultural elements that were part of a large imperial city during the late 14<sup>th</sup>- early 15<sup>th</sup> century, including religious monuments, traditional villages, common houses, ancient roads, markets, landing places, stone quarries etc. As elements integrally related to the Citadel of the Ho Dynasty these are attributes carrying the Outstanding Universal Value of the property.

ICOMOS therefore considers that the nominated property boundary is not adequate. It should include all these attributes. Ideally the property boundary should follow and include the line of the La Thanh outer wall as shown on the map III. 41, p.49 of the nomination dossier, and the buffer zone should be extended accordingly.

In conclusion, ICOMOS considers that the boundaries of the nominated property and of its buffer zone are not appropriate.

### Ownership

The property is in government ownership.

### Protection

#### Legal Protection

The Inner Citadel and Nam Giao Altar are designated since 1962 as national heritage by Decision of the Ministry of Culture of the Democratic Republic of Vietnam and protected under the Law on Cultural Heritage of 29/06/2001, approved by the National Assembly of the Socialist Republic of Vietnam. The nominated section of La Thanh Outer Wall is in the process of being similarly protected.

ICOMOS considers that the process of achieving national heritage protection for the La Thanh Outer Wall section should be completed as soon as possible.

Other Decisions cover the Master Plan to Preserve and Promote Cultural and Natural Heritage until 2020; the regulation and revitalisation of Cultural and Natural Heritage; and the establishment of the Management Board of the Citadel of the Ho Dynasty.

The property is specifically protected by the regulation on the Management, Protection and Promotion of the Values of the Ho Dynasty's Imperial Citadel Heritage and Adjoining Sites.

For the Inner Citadel, the regulation promulgated by Decision 2298/ Đ-UBND on 2 August 2007, article 4, Para. 1 and 2, "strictly prohibit any individual or agency from infringing the structure and the landscape of the area within the citadel, such as grounding, constructing ponds or mining". The area inside the Inner Citadel is to be "only used for short-term agricultural production. Ploughing should not be more than 0. m deep to protect the ground".

For the Nam Giao Altar, the regulation promulgated by Decision 11/2007/ Đ-BVHTTDL on 18 October 2007 (Annex I), Article 6, para. 2, strictly prohibits "burying, dumping industrial and agricultural wastes, constructing farming structures, digging ponds, wells, making roads, herding, or planting unregulated long-term trees that are harmful to the ground, the sanity and the landscape of the heritage site". It strictly prohibits "individuals and agencies



to excavate for artifacts or mineral resources without permission”.

For the La Thanh Outer Wall the regulation prohibits “leveling up the ground which may infringe the structure and authentic elements. Prohibition of grounding to build houses, cemeteries, digging ponds, wells. Prohibition of using the a hanh’s area for agricultural production, for dumping wastes, storing agricultural preservatives or industrial materials” (Article 6, para. 1).

The buffer zone including the mountains and their beauty spots, caves and lakes is protected by the Law on Environmental Protection of the Socialist Republic of Vietnam, number 52/2005/ H11, Chapter 4, Article 31 of 2005 and the Mineral Law, Article 14 which allows the government to announce areas where mining areas are prohibited. Quarrying has been specifically stopped in three areas of the buffer zone by Decision numbers 3045/ D-UBND, 3046/ D-UBND and 3047/ D-UBND dated 27 August 2010. The rivers and dykes associated with the property, including the vestiges of the La Thanh Outer Wall are protected by the Ordinance on Dykes, chapter III, Article 11.

In the buffer zone, all the land, except zones protected by the Law of Cultural Heritage, is managed by local government, according to the Law on Land of the Socialist Republic of Vietnam. The Management Plan has established borders for the protected zoning areas covering the three nominated property components.

#### Effectiveness of protection measures

ICOMOS considers that the legal protection regime is not yet satisfactory in relation to the nominated property components, since the La Thanh Outer Wall is not yet designated as National Heritage. The Management Plan covers future development within the nominated Buffer zone by establishing various zones (in addition to the Strictly Protected zone covering the nominated components), with principles for each zone. However it is not clear how these principles will be enforced under the protection regime as described above in the immediate term. ICOMOS recommends that regulation of future development be prioritised.

In conclusion, ICOMOS considers that the legal protection will be appropriate when La Thanh Outer Wall is designated as National Heritage, and requires augmentation to regulate development within the nominated buffer zone.

#### Conservation

##### Inventories, recording, research

The Management Board has collaborated with national and international bodies to undertake research and conservation. In 2004 the Nen Vua (Foundation of the King) area within the Inner Citadel was excavated by the Showa University of Japan and the Hanoi University of

Social Sciences and Humanities. The South gate area was excavated by the Vietnam Institute of Archaeology in 2008. The Nam Giao site was excavated 2004-2008 and a second program is being undertaken 2009-2011.

The walls of the Inner Citadel have been recorded in detail by drawings and photographs, and the site has been surveyed for relevant artefacts.

Inventories are being made of artefacts kept in local households.

A cooperative study program is being organised between the Showa University of Japan, the National Culture Heritage Conservation Institute of Japan and the Vietnam Cultural Exchange and Research Centre (currently the Institute of Vietnamese Studies and Development Sciences).

ICOMOS notes that the La Thanh outer wall is currently being excavated (2010). ICOMOS also notes that discussions are in progress about the excavation of a section of the Imperial Way connecting the South gate with Mount Don Son, which still exists beneath the existing road through Vinh Loc town. It is possible that some section may be excavated and conserved for presentation to visitors. However ICOMOS considers that it is most important to protect the line of the Imperial Way and to ensure there are no visual intrusions between the South Gate and Mount Don Son.

ICOMOS further considers that a strategic archaeological investigation program is required, directed at understanding drainage problems in the Inner Citadel and elements embodying the Outstanding Universal Value of the property together with a systematic survey and documentation of the temples, caves, villages and other places such as the royal landing place, stone landing place and imperial tombs and associated folklore within the nominated buffer zone that have connections with the Ho Dynasty. These also embody the Outstanding Universal Value of the Ho Citadel.

#### Present state of conservation

##### Inner Citadel

The stone walls and four stone gates are generally in good condition. Structures that were once located above the four gates have disappeared, but the locations of columns and balusters are marked by holes in the top ashlar blocks. The wing walls of the gateways have disappeared and only traces of stairways remain. There has been damage in some areas due to drainage problems and the breaking through in collapsed sections of access ways by the local people. The south-east and north-west wall corners are lost.

No standing structures remain inside the walls, but buildings are indicated by higher mounds among the rice fields on both sides of the central north-west to south-east axis. The underlying structures have been disrupted by

irrigation systems, division into fields and gardens, and levelling for cultivation. There are several extant lakes and ponds. The two main cross roads can still be traced.

#### La Thanh Outer Wall

The line of the La Thanh Outer Wall/embankment has been traced through historical records, but many sections do not exist today, possibly due largely to the effects of changing river currents in the vicinity of the Ma and Bui rivers. The most intact segment located to the north-east, which is nominated as one of the three components of the property, has a stable earth base and is covered by wild grass. This segment is away from residential zones so has not suffered encroachment. The outer wall embankment was formed by an earth rampart connecting with surrounding mountains, hills and mounds. These are largely unchanged.

#### Nam Giao

Excavations have exposed the stone platforms and layout of the Nam Giao Altar. The area is threatened by landslides due to rain and flood.

ICOMOS notes that research is required to understand the drainage system within and around the Inner Citadel in order to deal adequately with conservation problems.

#### Active Conservation measures

At the Inner Citadel, infringing structures are being cleared away and trees have been removed from the walls.

At the Nam Giao site, temporary protection measures have been taken to conserve the excavated remains. These include removal of adjacent trees; drainage of excavated areas; fencing the site; backfilling excavations with excavated soil, and removing artefacts to storage for study.

ICOMOS notes that a Conservation Centre for Ho Citadel has been established by the Management Board near the South gate. This manages the conservation program and documentation of excavated materials as well as planning excavations within the nominated area in co-ordination with the Vietnam Institute of Archaeology.

#### Maintenance

The Management Plan includes the establishment of maintenance programs for the nominated areas and the standing monument sites in the buffer zone.

ICOMOS recommends the implementation of a regular maintenance regime in conjunction with the monitoring program.

#### Effectiveness of conservation measures

ICOMOS notes that some damage has occurred to the northern wall of the Inner Citadel, but that this can be rectified. Conservation measures undertaken so far are not extensive.

---

In conclusion, ICOMOS considers that appropriate research is underway but notes that considerably more is required (as provided for in the Management Plan), including a strategic archaeological investigation program and a systematic survey and documentation of the temples, caves, villages and other places such as the royal landing place, stone landing place and imperial tombs and associated folklore within the nominated buffer zone that have connections with the Ho Dynasty and comprise attributes of the Outstanding Universal Value of the Ho Citadel.

---

#### Management

Management structures and processes, including traditional management processes

The property is directly managed by the People's Committees of the relevant communes for the particular component sites, under the Management Board of the Citadel of the Ho Dynasty established by Decision 2264/ D-UBND (30 July 2007).

The land within the Inner Citadel is assigned to farmers for agricultural production by means of short term crops. The Management Board is responsible for managing and preserving the technical aspects of the Inner Citadel. Regulations prohibit construction and mining and ploughing more than 0.3m deep.

The Nam Giao Altar site is the responsibility of the Management Board for management, preservation and study. Regulations prohibit the burying or dumping of waste, construction, planting inappropriate trees and any excavation without a permit.

La Thanh Outer Wall does not at present come under the Management Board, but the Board works closely with the People's Committees of the relevant communes to manage and protect the wall. Regulations prohibit levelling the ground, construction, excavation, agriculture, dumping waste or storing agricultural or industrial materials. In response to ICOMOS' request for clarification on this, the State party has advised that responsibility for management of the section nominated as a component of the World Heritage property will be legally transferred to the Management Board in 2011.

ICOMOS notes that an agreement between local government and private sector efforts is lacking.

Policy framework: management plans and arrangements, including visitor management and presentation

A comprehensive five year Management Plan for the property was submitted in November 2010. It was prepared for the property through a process involving government agencies and relevant commune administrations together with technical consultants, and covers land management; landscape management; artefact management; sustainable social and economic

development; preservation and promotion, financial resources; human resources; tourism and monitoring.

The stated vision of the Management Plan is to:

- conserve, enhance and present the Outstanding Universal Value of the property locally and internationally;
- balance the needs of conservation, access, and interest of the local community including the achievement of sustainable economic growth through tourism at the site and other site-compatible activities;
- to engage with and bring benefits to the local communities around the nominated property, to attract visitors to the area, to develop opportunities for education and learning, and to create the opportunities for the people to generate income that adds to the local economy which is partly reinvested in the running of the nominated property.

Capacities for tourism are currently being assessed in order to develop strategies to meet future tourism demands appropriate to the heritage property. At present there are five tourist guides and various leaflets and books. The property is part of the Thanh Hoa tourist route that takes in Sam Son beach, the Ho Citadel, Lam Vinh and the Cam Luong fish stream. A tourism management plan is proposed as part of the Management Plan.

The Management Plan divides the property and its buffer zone into five zones, each with its own set of principles:

- 1 strictly protected (the three nominated World Heritage components);
- 2 historical village and standing monument protected (the three villages at the east, west and south gates of the Inner Citadel, and individual monuments scattered throughout the nominated buffer zone which are protected at national, provincial or local levels);
- 3 mountainous landscape protected (the north-west and south-east mountains and the hills to the south-west and north-east of the Inner citadel);
- 4 eco-agricultural (the whole area within the nominated buffer zone boundary excluding the other zones);
- 5 urban development controlled (the area around Vinh Loc town which straddles the Imperial Way connecting the Inner Citadel with the Nam Giao altar).

Principles established in the Management Plan for each zone include height limits of 12m in zone 2 and 20m (Vinh Loc Town) and 15m (suburb area) in zone 5. Revision of regulations to accommodate such principles is scheduled to happen within five years (Action Plan section 4.4.1-3).

ICOMOS notes that apart from the three villages at the east, west and south gates of the Inner Citadel, the old villages containing the individually protected monuments do not appear to be protected as part of zone 2.

Clarification of this is required from the State Party.

ICOMOS considers that the key issue for implementation of the Management Plan is the future character of urban development near the Inner Citadel, in Vinh Loc town particularly along the axis between the Inner Citadel and Mount Don Son, and in the buffer zone generally, so as to protect all view lines along axes between topographical features, and views within the area enclosed by the line of the outer wall and the Ma and Buoi rivers. Failure to achieve full protection of the ability to read the layout of the Ho Dynasty city in the landscape would threaten the Outstanding Universal Value of the property as exemplifying the form of an East Asian imperial city. The relevant section of the Action Plan in relation to this as noted above should be implemented as the highest priority.

Risk preparedness

This is proposed to be developed as part of the Management Plan.

ICOMOS considers that a risk management strategy is required to deal with severe storm events and the possible repercussions of floods and landslides.

Involvement of the local communities

This is proposed to be developed as part of the Management Plan, which expects that the development of tourism will generate more job opportunities for local people, especially the development of local businesses, such as handicrafts, hotels and restaurants and farm produce. The Management Plan has still to go through a consultation process in order for the local people to understand the implications of World Heritage listing and consequent guidelines on development. It is expected that village patriarchs will contribute their experience and knowledge to the conservation of the property and that young people will be given incentives to pursue cultural studies and relevant jobs at the property. This will be organised through involving local associations such as the Association of the Elderly, the Women's Association, the Youth Union, the Avant-garde Pioneers, Buddhist Association, Catholic Parish and the Council of Teachers at secondary schools, and through co-ordinating with local festivals held on commemorative days.

ICOMOS considers that the local people should be encouraged to be actively involved in the protection and management of the property and this appears to be the strong intention of the Management Plan. There also appears to be a need for a negotiating framework between local government and the private sector regarding possible development initiatives.

Resources, including staffing levels, expertise and training

According to the Management Plan, funding for the management of the property will be primarily by an annual budgetary allocation from the Ministry of Culture, Sports

and Tourism (MOCST). This will cover the basic operating costs of the MP including staff, office expenses and the cost of maintenance and upkeep, development control and site monitoring. Funds for specific conservation projects will be sought from the MOCST as required, and also from external sources. No quantitative annual amount has been given, but government funding is expected to amount to 70% of the funds required for the period 2010-2020.

The Management Board comprises a Technical Office, a Security Unit and a Sanitation Unit. Resources include twelve qualified members of staff with degrees in archaeology (the Board Director has a PhD); history (4); museum studies (1); linguistics (2); classic Chinese and Vietnamese languages (1); cultural tourism (2) and accountancy (1).

The Management Board supports its staff to participate in national and international higher education programs, intensive training courses, and study tours on heritage management in China and Thailand.

#### Effectiveness of current management

ICOMOS considers the current management to be more-or-less effective as a regime with the proviso that local people should be involved in such a way as to encourage them to protect and preserve the property.

The Management Plan needs review in relation to clause 2, and implementation of regulations to protect view lines and control urban development.

---

In conclusion, ICOMOS considers that special attention is needed for development of a risk preparedness and management strategy and a strategy for involving local people in the protection and management of the property. A key issue is the future character of urban development near the Inner Citadel, in Vinh Loc town particularly along the axis between the Inner Citadel and Mount Don Son, and in the buffer zone generally, so as to protect all view lines along axes between topographical features, and views within the area enclosed by the line of the outer wall and the Ma and Bui rivers.

---

## 6 Monitoring

A monitoring program has been developed as part of the Management Plan, which will be used to assess the implementation of the action plan against key indicators. It will also assess the rate of erosion of the Inner Citadel walls and their stability, as well as the rate of erosion of the excavated areas.

The monitoring program will also cover the buffer zone and assess the number of monuments that need to be conserved; changes in the environment including changes of land use and stone quarrying in the mountains; numbers of new permitted construction of buildings and

infrastructure, and the number of buildings constructed without permission.

Responsibility for monitoring lies with the Department of Cultural Heritage under the Ministry of Culture, Sport and Tourism at the national level, and with the Thanh Hoa People's Committee, Thanh Hoa Department of Culture Sport and Tourism, Management Board of Cultural Sites and Beauty Spots at the local level. The Management Board of the Citadel of the Ho Dynasty Heritage has responsibility for direct management and supervision of the monitoring program. Other participating agencies include the Institute of Heritage Conservation and the Institute of Urban and Rural Architectural Planning within the Ministry of Construction.

Previous reporting exercises include a number of research study reports into the history and possible conservation methods for the Citadel, and geological and chemical analysis of materials.

---

ICOMOS considers that the monitoring system is adequate with the proviso that its effectiveness in the buffer zone will depend on the adequacy of the documentary research, survey and inventory of attributes in the nominated buffer zone.

---

## 7 Conclusions

Conditions of integrity and authenticity have been met only in part, because the property boundary needs to encompass attributes in the nominated buffer zone. If the property boundary is extended to encompass the landscape setting in which the Ho Citadel is located, including the Imperial Way from the South gate of the Inner Citadel to the Nam Giao altar on the axis from Tuong Son mountain to Mount Don Son, as well as traditional villages, religious monuments, ancient roads, markets, landing places, imperial tombs, caves and scenic view points within the line of and including the La Thanh outer wall, it is considered that the nominated property has the potential to meet criteria (ii) and (iv) and that Outstanding Universal Value would be demonstrated. The buffer zone would then need to be extended appropriately.

A key issue is the future character of urban development near the Inner Citadel, in Vinh Loc town particularly along the axis between the Inner Citadel and Mount Don Son, and in the surrounding landscape generally, so as to protect all view lines along axes between topographical features, and views within the area enclosed by the line of the La Thanh outer wall and the Ma and Bui rivers.

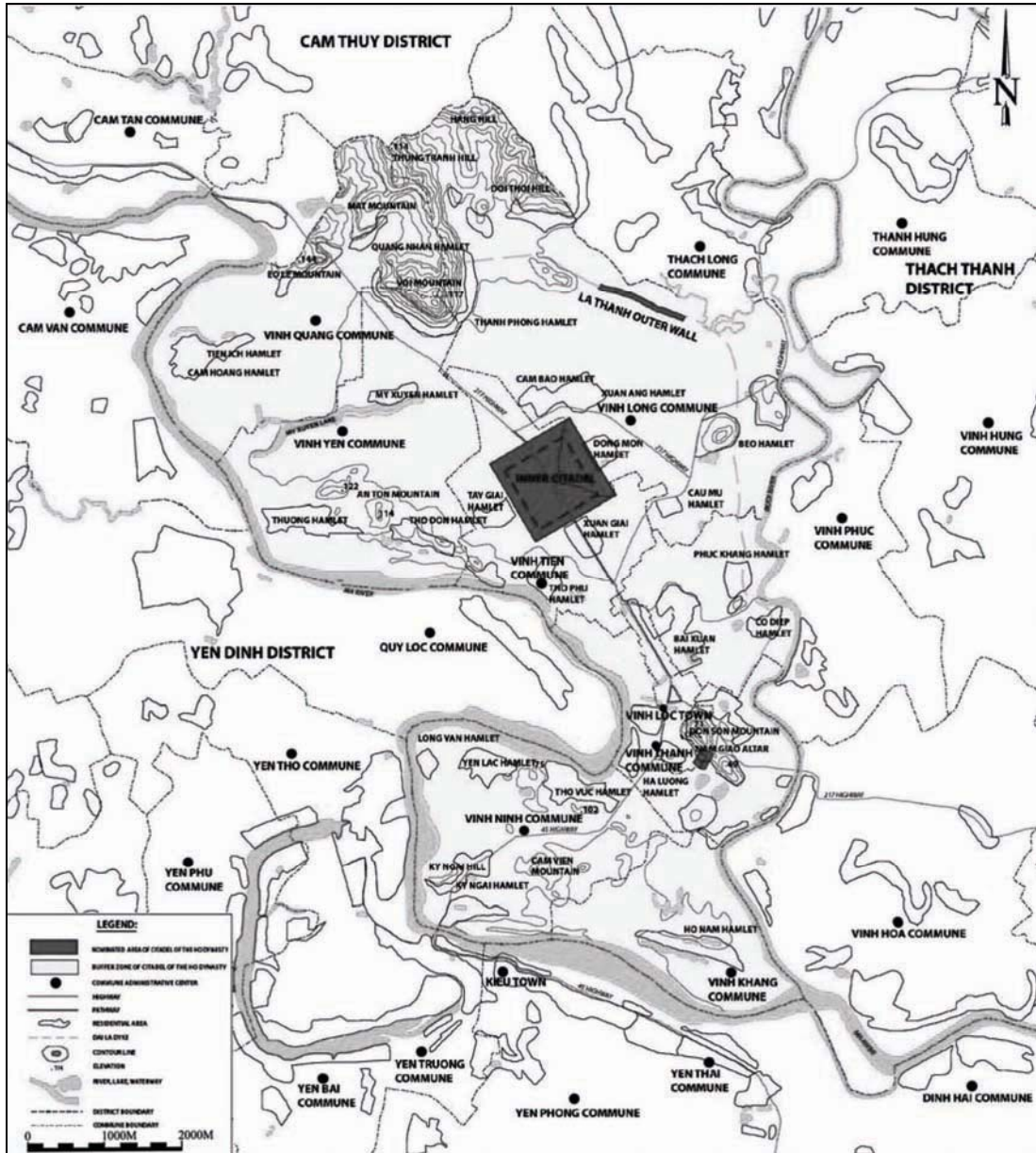
Recommendations with respect to inscription  
ICOMOS recommends that the examination of the nomination of the Citadel of the Ho Dynasty, Socialist Republic of Vietnam, to the World Heritage List be deferred in order to allow the State Party to:

- Further justify criterion (ii) through deepening the comparative analysis;
- extend the property boundary to encompass the landscape setting of the Ho Citadel, including the Imperial Way from the South gate of the Inner Citadel to the Nam Giao altar on the axis from Voi mountain to Don Son hill, as well as traditional villages religious monuments, ancient roads, markets, landing places, imperial tombs, caves and scenic view points within the line of the La Thanh outer wall;
- extend the buffer zone accordingly;
- Undertake a systematic inventory of the temples, caves, villages and other places such as the royal landing place, stone landing place and imperial tombs and associated folklore that have connections with the Ho Dynasty and comprise attributes of Outstanding Universal Value;
- Undertake a strategic archaeological investigation program directed at understanding drainage problems in the Inner Citadel and elements embodying the Outstanding Universal Value of the property, including validation of the line of the Imperial Way;
- Complete the designation of La Thanh Outer Wall as National Heritage;
- Clarify the composition of the Management Plan zone 2: Historical village and standing monument protected zone;
- Develop regulations to control the height and character of future urban development near the Inner Citadel, in Vinh Loc town particularly along the axis between the Inner Citadel and Mount Don Son, and in the surrounding landscape generally, so as to protect all view lines along axes between topographical features, and views within the area enclosed by the line of the La Thanh outer wall and the Ma and Bui rivers;
- review the Management Plan in relation to the expanded property boundary and amend accordingly.

ICOMOS considers that any revised nomination would need to be considered by an expert mission to the site.

ICOMOS further recommends that the State Party consider the following:

- Develop a risk preparedness and management strategy in the event of storms causing landslides at the Nam Giao altar site and floods affecting the La Thanh outer wall and other sites;
- Set up a waste management system at the Inner Citadel;
- encourage involvement of local people in the protection and management of the property.



Map showing the boundaries of the nominated property



The Inner Citadel, view of the South Gate



The Inner Citadel, external surface of the Northern Wall





Vestiges of the Nam Giao Altar



Eastern section of the La Thanh Outer Wall

Properties deferred or referred back by previous sessions of the World Heritage Committee

---

Hirai-umi  
Temples, Gardens and Archaeological  
Sites representing the Buddhist Pure Land

---

Official name as proposed by the State Party  
Hiraizumi Temples, Gardens and Archaeological  
Sites representing the Buddhist Pure Land

Location  
Iwate Prefecture  
Japan

**Brief description**  
Hiraizumi was the political and administrative centre of the northern realm of Japan in the 11<sup>th</sup> and 12<sup>th</sup> century and rivalled Kyoto, politically and commercially. Built by the Minamoto Fujiwara family, the northern branch of the ruling clan, its layout is seen as reflecting the cosmology of Pure Land Buddhism. This had been introduced to Japan from China and Korea in the 6<sup>th</sup> century and by the 12<sup>th</sup> century had developed into a strong, local distinctive doctrine. Much of the area was destroyed in 1189 when the city lost its political and administrative status. There were further fires in 13<sup>th</sup> and 14<sup>th</sup> centuries and the city never recovered its former glory. Six sites display elements of the once great centre: four temple complexes with Pure Land gardens, Mount Inkeisan, and the archaeological remains of administrative buildings.

**Category of property**  
In terms of categories of cultural property set out in Article I of the 1972 World Heritage Convention, this is a serial nomination of 6 sites.

## 1 Basic data

Included in the tentative List  
6 April 2001

International Assistance from the World Heritage  
Fund for preparing the Nomination  
None

Date received by the World Heritage Centre  
26 December 2006  
27 January 2010

**Background**  
This is a deferred nomination (32 COM, Quebec, 2008).

The World Heritage Committee adopted the following decision (Decision: 32 COM 8B.24):

The World Heritage Committee,

1. Having examined documents WHC 02.COM and WHC 02.COM I.F. 1,
  2. Defers the examination of the nomination of Hirai-umi Cultural Landscape Associated with Pure Land Buddhist Cosmology, Japan, to the World Heritage Committee in order to allow the State Party to
    - a provide further comparative analysis, particularly for the gardens, including comparators in China and Korea
    - b consider revising the boundary of the nominated property to include the elements of the landscape value
3. Recommends that any further nomination should need to be accompanied by a fully functioning management plan and an adequate suite of indicators, including those to monitor visual connections and knowledge of associations with the property
4. Considers that any revised nomination with revised boundaries, should need to be considered by a mission to the site.
5. Recommends that the World Heritage Centre assist by all means possible the State Party in the revision of the nominated property.

On 10 January 2010 the State Party submitted a revised nomination.

**Consultations**  
ICOMOS has consulted its International Scientific Committees on Cultural Landscapes, on Archaeological Heritage Management and several independent experts.

**Literature consulted selection**

Wongpruksawan, M., *Hirai-umi*, Harvard, 1998.

**Technical Evaluation Mission**  
An ICOMOS technical evaluation mission visited the property from 7 to 10 September 2010.

Additional information requested and received from the State Party  
ICOMOS has sent a letter to the State Party on 18 December 2007 on the following issues:

- How the nominated area as a whole specifically and tangibly reflects the precepts of Pure Land Buddhism;
- Details of the cultural traditions and philosophy that underpin and justify the recreation of gardens from archaeological evidence;
- How the Pure Land Gardens can meet the conditions of authenticity within their specific cultural context;
- How the layout of Kyoto, Nara and Yamakura differs from Hiraizumi in order to justify the specificity and thus the outstanding universal value of the Hiraizumi nominated areas.

The State Party responded on 28 February 2008 with supplementary information. This is included in this evaluation report.

Date of ICOMOS approval of this report  
10 March 2011

## 2 The property

### Description

The revised nomination submitted by the State Party has changed the name of the property from "Hiraizumi - Cultural Landscape Associated with Pure Land Buddhist Cosmology" to "Hiraizumi Temples, Gardens and Archaeological Sites representing the Buddhist Pure Land" and has reduced the serial nomination from 9 sites to 6, by excluding rural estates to the west of Hiraizumi and two archaeological sites in Hiraizumi.

Hiraizumi, the site of the political and administrative centre of the northern realm of Japan in the 11<sup>th</sup> and 12<sup>th</sup> centuries, is in the north-east of Japan's largest island Honshu. The Itakamigawa river curves north-south through the site as do major trunk roads and a railway. The present town, on a terrace to the east of the river, covers around one square kilometre of the narrow basin between Mount Tabashineyama to the east and the undulating hills which rise to the Ōu Mountains in the west. To the north and south are further rivers, the Ōromokawa and the Ōtagawa. Much of the higher slopes of the mountains are clothed in plantations of oak, cedar and red pine, while individually planted cedar trees punctuate the more open landscape within temple complexes, near houses and along streams.

Ancient Hiraizumi was mostly destroyed in the 12<sup>th</sup> century and there were fires in the 13<sup>th</sup> and 14<sup>th</sup> centuries. What remains are a few standing temples, the most important of which is the 12<sup>th</sup> century Chōson-ji Ōnjikidō (Golden Hall). Further sites have been revealed by excavation over the past fifty years.

The nominated property consists of six separate sites spread across the semi-urban landscape. They are surrounded by a buffer zone.

A combination of the standing buildings together with the excavated sites, some of which have been re-buried, and reconstructed gardens, are said to reflect aspects of Hiraizumi at the height of its power and influence in the 11<sup>th</sup> and 12<sup>th</sup> centuries.

A group of four Pure Land gardens' have been revealed by excavations - Chōson-ji Ikegaran Ato, Matsuzi Teien, Anjizai-in Teien and Muryōkū-in Ato. Their layout is seen to reflect the cosmology of Pure Land Buddhism - a vision of paradise translated into reality through the careful disposition of built structures in relation to natural land-forms.

The four gardens exhibit different stages in the development of Pure Land gardens during the 12<sup>th</sup> century and also include what is seen as the most highly developed example, Muryōkū-in Ato.

The plans of the gardens are characterized by the alignment of three elements on the same axis: the mountain symbolic of the Pure Land in the background, the site of a Buddha hall as a physical embodiment of the Pure Land, and a garden pond constructed in front of it in imitation of the celestial pond of the Pure Land. Sometimes there is also a river or a wetland in the foreground which symbolically separated this world from the other Pure Land world.

Matsuzi Teien (garden) and Anjizai-in Teien have been restored as gardens with trees and water. The other two gardens remain buried.

The nominated sites in total extend to 187.0ha; the buffer zone covers 5,998.0ha.

The property consists of the following:

- Chōson-ji - temple and buried garden remains
- Matsuzi Teien temple remains and reconstructed garden
- Anjizai-in Ato remains of temples and reconstructed garden
- Muryōkū-in Ato site of temple and buried garden
- Mount Inkeisan sacred mountain
- Anaginogosho Iseki site of government offices

These are considered in turn:

- Chōson-ji - temple and buried garden remains  
The first Buddhist temple, built in the first quarter of the 12<sup>th</sup> century by the founder of the Ōshū Fujiwara family, was the spiritual heart of the city as well as a control point for its northern entry. In its heyday, the temple had as many as 40 pagodas and 300 priests' residences. Most of the buildings were lost in a fire in 1337 except for two Buddha Halls (Chōson-ji Ōnjikidō and part of the Chōson-ji Yūzō), and two stone pagodas. In the early modern period 15 temples were reconstructed and the temple approaches laid out.

Sixty-nine excavations carried out since 1953 have revealed the remains of Buddha Halls and a pond garden called Ikegaran Ato, which is likely to be the "Chingo kokka daigaran ikku" (literally, a great temple complex for the pacification and protection of the nation) which is mentioned in *Chōson i ūy gammon*. The garden, now covered over, had a pond with a pebbled shore and central island to the east of the Buddha halls.

The main surviving 12<sup>th</sup> century building is the Chōson-ji Ōnjikidō (Golden Hall), a square wooden building with a one-storey pyramidal roof, the year 1124 engraved on the ridge pole. Within, the black lacquer structure is elaborately decorated with gold leaf and

mother of pearl and rosewood inlay, all combined in a floral Chinese arabesque style with forty-eight images of bodhisattvas. Originally built as a Pure Land Buddhist Amida hall, with a statue of the Amida Buddha in the centre of the altar, the building later became a mausoleum in which are the mummified remains of four lords of the Shōshō Fujiwara family in a gold-foiled coffin at the central altar. The mausoleum played a key religious role triggering and attracting worship in the process of the development of Hiraizumi as the political and administrative centre.

There are no records of other halls so completely covered in gold in the 11<sup>th</sup> and 12<sup>th</sup> centuries, making Onjikid unique. However underneath the gold, its construction of a square building with pyramidal roof was unremarkable.

Chōson-ji Onjikid is now encased within a concrete building for protection. Constructed in 1968 this replaced a 15<sup>th</sup> century protective 'sheath', Onjikid Id, which had a copper roof and open sides and is now reassembled nearby.

Nearby, Chōson-ji Yūzō was constructed in 1122 with the lower storey reconstructed in the 14<sup>th</sup> century. It has a roof of copper shingles and inside is fitted with shelves for the storage of sutras.

Ganjū-in Hōtō, and Shakuson-in Gorintō are two small stone pagodas, the latter with a date of 1169 inscribed on one side and the former believed to be of similar date.

- Mōtsū-ji - temple remains and reconstructed garden

This temple was originally constructed in the mid 12<sup>th</sup> century in a style similar to Hōshō-ji in Higashiyama, Kyoto, the Imperial family's temple. Mōtsū-ji temple controlled the southern entrance to the city and like the Chōson-ji temple was extensive with 40 halls, gardens and residential quarters for as many as 500 priests. The temple's splendour was reputed to be unmatched in Japan. The whole temple complex was orientated north-south, with Mount Tenjima forming the final backdrop to the north. The eastern end of the land divisions of Mōtsū-ji corresponds to an axis extending from the peak of Mount Inkeisan toward the south.

The layout of the temple was apparently highly unusual with the primary object of worship the Lotus Sutra and Amida in multiple representations.

In the 13<sup>th</sup> and 16<sup>th</sup> centuries all the buildings were lost to fires.

Subsequently some new temple buildings have been added. At the north-eastern shore of the garden pond is the Jōgyōdō temple, a small-scale Buddha hall reconstructed in the 18<sup>th</sup> century where religious rituals and folk performing arts directly associated with the

Buddhist Pure Land in the 12<sup>th</sup> century are still carried out today.

Excavations between 1930 and 1990 have revealed foundations of major buildings, a street, guardian shrines that protected Hiraizumi in its four orientations, and particularly the layout of two Pure Land gardens, Mōtsū-ji Teien and Anjizai-in Teien (see below).

Mōtsū-ji Teien and Anjizai-in Teien have been restored as gardens with trees and water.

Mōtsū-ji Teien has as a central feature a pond called Izumigaike, which extends to 190 metres by 60 metres. The pebbled shoreline has been restored as a result of excavations between 1980 and 1990. The whole layout contains a variety of elements such as an island, cove beach (*suhama*), cape (*deima*), vertical stone (*tateishi*) and a 4 metre high artificial hill (*tsukiyama*). On the northeast shore a garden stream flows in. Measuring approximately 80 metre in length and 1.5 metre in width, it is the longest example in Japan of a garden stream revealed through archaeology almost in its original condition; it was restored in 1988.

The way the layout of the garden respects and imitates nature follows closely the precepts of *Sakuteiki*, a late 11<sup>th</sup> century technical treatise on garden making.

- Anjizai-in Aoto remains of temples and reconstructed garden

To the east of Mōtsū-ji temple, excavations revealed the layout of Anjizai-in Aoto Temples and its Pure Land Garden.

There are the foundations of the main temple buildings such as the Dai-amidad (Larger Amida Hall) and the Shō-amidad (Smaller Amida Hall) in the northern quarters of the compound and the garden to the south. The garden consists of a simple large pond some 100 metres across with a central island, and around the west of the shore large stones assembled as a waterfall. To the north are the foundations of the two Amida halls and beyond in the background Mount Inkeisan. The garden has been restored.

The pond is called Maizurugaikē (literally, the pond of the dancing crane) and its shape is consistent with guidelines in the *Sakuteiki*, which state that *Ponds should be constructed in the shape of a tortoise or a crane*. In addition, the shape of the white shore along the shoreline of the pond, the arrangement of garden stones and the structure of the waterfall stonework near the centre of the west shore also correspond to the teachings of the *Sakuteiki*.

The garden originally started out as a private garden and was later converted into a garden for a temple. It is not aligned towards the east as other gardens are.

- Muryōkō-in Ato site of temple and buried garden  
This is the archaeological remains of a temple constructed in the late 12<sup>th</sup> century by the 3<sup>rd</sup> lord of the Minamoto Fujiwara family and burned down in the mid 13<sup>th</sup> century. The whole site was rectangular in shape and protected in part by earth mounds and moat. Within, was a highly developed Pure Land garden with a pond and two islands.

Currently the remains of the temple and garden are covered over by rice fields.

- Mount Inkeisan sacred mountain  
This small mountain, some 100 metres high, was a central reference point for the development of the city being directly to the north of Mitsunaga-ji and west of Muryōkō-in Ato. The Minamoto Fujiwara family were said to have buried sutras on its summit and nine such mounds have been identified.

- Anaginogosho Iseki site of government offices  
The Anaginogosho Iseki is the archaeological site of a residence-government office of the Minamoto Fujiwara clan constructed at the end of the 11<sup>th</sup> and early 12<sup>th</sup> centuries. Seventy excavations have been carried out on the site which is seen as the political and administrative centre of Hiraizumi. Part of the site was enclosed by a moat and within has been found remains of 12<sup>th</sup> century road-like structures, fences, building posts and a pond. Outside the moated area are remains of a road leading west to Chōson-ji Onjikidō with evidence for vassals' houses along each side.

All the excavations are to be preserved underground. The pond has been reconstructed on the surface of a protective mound to represent its original form. An overall presentation plan has been developed to be implemented over the next seven years.

A new bypass, bridges and various other development projects have recently been carried out near the site (see below).

Spatial layout of Pure Land gardens that reflects the cosmology of Pure Land Buddhism

Buddhism was born in India and introduced into Japan from China and Korea around the mid 6<sup>th</sup> century. It underwent fusion with traditional Shinto beliefs associated with nature and ancestor worship, particularly manifest in the Tendai sect of Buddhism. In the 8<sup>th</sup> century the Pure Land Buddhism spread to Japan, and by the 12<sup>th</sup> century had become a separate sect. The Pure Land was both Amida Buddha's Pure Land which people aspired to after death and peace of mind in this life. Faith in Amida Buddha's Pure Land in the west in particular, combined with the idea of the built landscape being in harmony with the environment and thus reflecting the Pure Land, spread rapidly in the capital city Kyoto and then throughout Japan.

Today Pure Land is, together with Chan (Zen), the dominant form of Buddhism in China, Korea, Japan, Taiwan, and Vietnam.

In the history of Japanese architecture, the period from the 11<sup>th</sup> century to the 12<sup>th</sup> century is characterized by the construction of many Amida (Amida halls) throughout Japan as these were seen as 'good deeds' that would help rebirth in the Pure Land in the West. In Hiraizumi, Chōson-ji Onjikidō is an Amida hall of particularly elaborate character.

Gardens were also developed and they in particular are seen to reflect the fusion between Pure Land Buddhism and Shintoism in respecting naturally occurring rocks, trees and mountains. Pure Land Gardens had ponds with curved rocky shores in contrast to the formal rectangular ponds of Buddhist temples in India, or those depicted in sutras or in the mural paintings of the Mogao grottoes, China.

In Hiraizumi the three main temples and gardens are positioned at key points of the city, and were linked to the sacred mountain, Mt Inkeisan, and Anaginogosho, the government offices, by axial planning in which directions and orientations had special significance.

There appears to be no contemporary documentary evidence for linking the gardens with Pure Land Buddhism; rather the design and layout of the gardens seems to mirror images in 11<sup>th</sup> and 12<sup>th</sup> century sutras from Hiraizumi, which depict the Pure Land of Ultimate Bliss.

Hiraizumi's temples and gardens served as a model for temples and gardens built elsewhere in Japan, including Fuku-ji in Amakura (1189-1405), Ganjō-ji in Shiramizu (built in 1160 and still extant, in Iwaki city, Fukushima Prefecture), and more.

#### History and development

Fujiwara no Iyohira, the founder of the Minamoto Fujiwara family, transferred his residence to Hiraizumi in the beginning of the 12<sup>th</sup> century and set about constructing a country based on Buddhism. The remains of the city reflect the idea of building in harmony with nature, while the gardens make more specific reference to the focal mountains around the plain and the alignment of water, buildings and the mountain peaks.

The city developed over a period of around 100 years, its prosperity based on wealth accumulated from gold production. A grid pattern system of streets was laid out, aligned north-south and east-west. A port was constructed on the river and guardian shrines placed at the four compass points around the city. In the centre the administration, the main temple and the main residential space were aligned east to west, with the backdrop of Mount Tabashineyama in the east enhanced with the planting of cherry trees.

presumably under the influence of Kyoto aristocrats. This 'spiritual axis' is said to be based on Pure Land Buddhism.

In 1189 the city was destroyed by the Minamoto Shogunate: the buildings were torched and the role of Hiraizumi as a political and economic centre came to an end. However temples that survived were revered and cared for. On the centenary of the passing of the Minamoto Fujiwara family, the Minamoto Shogunate constructed a shelter building for the Chonji-onjiki as a memorial to the souls of the family. Of those temples that remained, more were burnt in fires in 13<sup>th</sup> and 14<sup>th</sup> centuries. By the end of the 14<sup>th</sup> century, only two of the 12<sup>th</sup> century temples remained: Chonji-onjiki and part of the Chonji-yuzo, both of which still survive today.

Between the 14<sup>th</sup> and 16<sup>th</sup> centuries with the advent of the Nanbokuchō Period and the Muromachi Shogunate, the upkeep of the temples depended on feudal lords such as the Asai family and the generosity of pilgrims, who by that time were attracted in large numbers.

From 1603 when the Edo Shogunate was set up in Edo (now Tokyo) until 1869, Hiraizumi was put under the control of the Sendai governor (Han). In 1689 a prohibition was placed by the governor on removing stones from Buddhist temples and cedar trees planted in and around archaeological sites to aid their protection. Following a visit by the Meiji Emperor in 1876 preservation projects were started on Chonji-onjiki and Mitsunobu-ji.

Such was the spectacular rise and conspicuous wealth of Hiraizumi and its equally rapid and dramatic fall, that it became the source of inspiration for many poets. In 1689, Matsuo Bashō, perhaps the most famous Haiku poet, wrote: *Three generations of glory vanished in the space of a dream*.

Today the centre of Hiraizumi still attracts many pilgrims as well as tourists.

### 3 Outstanding universal value integrity and authenticity

#### Comparative analysis

The revised comparative analysis provided by the State Party, as requested by point 2.a of Decision 32 COM 8B.24, explores properties inscribed on the World Heritage List or on Tentative lists in Asia and the Pacific region associated with:

- 1) Buddhist properties where the component parts include architecture that enshrines Amida Buddha.
- 2) Buddhist properties where the component parts include gardens made for the purpose of representing a Buddhist Pure Land.

The property is compared with the following already inscribed properties in Japan: Buddhist Monuments in the Horyu-ji Area (1993, criteria (i), (ii), (iv) and (vi)), Historic Monuments of Ancient Kyoto (1994, criteria (ii) and (iv)), Historic Monuments of Ancient Nara (1998, criteria (ii), (iii), (iv) and (vi)), Shrines and Temples of Nikko (1999, criteria (i), (iv) and (vi)), Sacred Sites and Pilgrimage Routes in the Fushimi Inari Mountain Range (2004, criteria (ii), (iii), (iv) and (vi)) and with 3 sites on the Tentative List. From this analysis ICOMOS considers that it is clear that apart from some similarities with Horyu-ji Area, there are no inscribed properties that have a similar combination of value and attributes, and there are none on the Tentative List.

The property is further compared with other sites in Japan that are not on the Tentative List. This comparison is made first with buildings and then with gardens even though the nominated property is a combination of both, that reflect Pure Land Buddhism. Of these the most relevant comparisons are with the Pure Land Gardens of Ganjō-ji, Jurō-ji and Nijō-ji. It is said that the difference between these and those of Hiraizumi is in the direction of the framing mountains and the fact that there are not examples that can be linked in detail with the teachings of the *Sakuteiki*, the 11<sup>th</sup> century technical treatise on garden-making, as is the case with the gardens of Mitsunobu-ji and Anjizai-in. However the gardens described are ones that have survived rather than being reconstructed and the gardens of Hiraizumi cannot be linked directly to *Sakuteiki* but only through stylistic similarities.

The analysis also includes comparisons with 28 properties either inscribed or on Tentative Lists outside Japan. Some of these are not relevant as they do not have gardens or are not associated with Buddhism such as Taj Mahal, Preah Vihear, and Lhasa. The closest comparator is Bulguksa Temple, Korea. Yongbok, Korea is also mentioned but this is erroneously said to be associated with Buddhism whereas it is part of a royal palace of the Joseon Dynasty and has nothing to do with Buddhism.

Overall the analysis shows that for Hiraizumi to be considered as the exemplar of Pure Land Gardens, it needs to be accepted that the Pure Land Gardens are the only surviving examples of gardens oriented towards the west rather than to the north as is the case for some of the other surviving gardens and that they are associated with Halls that house statues of the Amida Buddha (although this is only true for one of the Hiraizumi gardens).

ICOMOS considers that there are other Pure Land Gardens that do convey the ideals to which the gardens were aspiring. However, ICOMOS further considers that what differentiates the Pure Land Gardens of Hiraizumi is their close association with the seat of political power and its wealth, and the fact that a group of four have survived as archaeological sites, one with a notable temple, Chonji-onjiki with its statue of



the Amida Buddha, and that three gardens aligned to Mount Inkeisan.

The comparative analysis has justified the selection of the four Pure Land gardens and Mount Inkeisan but not the relevance of Anaginogosho Iseki, the administrative area, as an attribute related to the pure land gardens.

---

ICOMOS considers that the comparative analysis justifies consideration of this property for inscription on the World Heritage List.

---

Justification of Outstanding Universal Value  
The nominated property is considered by the State Party to be of Outstanding Universal Value as a cultural property for the following reasons:

- Hiraizumi is the political and administrative centre of the northern realm of Japan that was established in the 12<sup>th</sup> century by the Minamoto Fujiwara family based upon Pure Land Buddhist cosmology.
- The temples that served as its spiritual cornerstone and the residence-government office that formed its political and administrative nexus, demonstrate a unique pattern of regional rule with a religious core.
- The vestiges of the major political and administrative facilities are preserved underground in perfect condition, whereas the existing temple architecture and gardens exhibit themselves as outstanding works of space design embodying the Pure Land world.
- The temples and gardens illustrate the process by which concepts, design, and techniques of temple construction adopted along with Buddhism fused with Japanese indigenous concepts, styles, and techniques, to give rise to unique concepts, design, and techniques of temple architecture and Pure Land garden construction that incorporated the surrounding natural landscape and topography into a spatial representation of the Buddhist Pure Land.
- The temples, gardens and archaeological sites of Hiraizumi are indicative of an interchange of human values attendant upon the transmission and spread of Buddhism and Buddhist Pure Land thought, which had a decisive impact on temple architecture and gardens. Not only the surviving above-ground elements, but also the archaeological remains are outstanding examples of an important stage of human history in the fields of design and techniques of architecture and gardens.
- Religious rituals and rites have been inherited up to the present, carrying on with them the quintessence of Pure Land cosmology.

ICOMOS considers that the four Pure Land Gardens do demonstrate the fusion between Buddhist and indigenous Japanese concepts relating to the relationship between gardens, water and the surrounding landscape. ICOMOS also considers that these are not the only gardens that reflect this fusion.

As the comparative analysis has shown, the four Hiraizumi gardens can be considered exceptional if they are seen as a group of four, with one having a surviving notable temple, three aligned on Mount Inkeisan, and all reflecting the wealth that characterised Hiraizumi as the seat of power in the 12<sup>th</sup> century. Hiraizumi influenced other cities, notably Amakura where one of the temples was based on Chon-ji.

ICOMOS also acknowledges that the resulting concept of planning and garden design was unique to Japan, and influenced gardens and temples in other cities, notably Amakura where one of the temples was based on Chon-ji.

ICOMOS does however not consider that the Anaginogosho Iseki administrative area can be considered as an attribute of outstanding universal value.

#### Integrity and authenticity

##### Integrity

The nominated areas of Chon-ji, Mutsuji, Anjizai-in Ato, Muryoko-in Ato, Mt Inkeisan and Anaginogosho Iseki encompass all the buildings, structures, archaeological sites and restored gardens.

In the original nomination the layout of Hiraizumi as a whole was also said to be influenced by Pure Land Buddhism. This link has not been stressed in the revised nomination where it is the links between the individual temple complexes, Mount Inkeisan and Pure Land Buddhism that are stressed.

Although the sites of Chon-ji, Mutsuji, Anjizai-in Ato and Mt Inkeisan conserve their visual links in a complete manner, at the Muryoko-in site, more than 20 houses, wire poles and other structures are sited along the east side of Sakashita Lane that runs cross the site while on the west part of the Anaginogosho Iseki site, over 40 houses constitute a negative influence on the visual integrity of the site.

In terms of the visual links between Anjizai-in Ato, Muryoko-in, Anaginogosho Iseki and Mt Inkeisan, wire poles and an iron tower between Anaginogosho Iseki and Mt Inkeisan have a negative influence on the visual integrity, although the visual links between the other two component parts, Anjizai-in Ato and Muryoko-in, and Mt Inkeisan are intact. The visual relationships of Chon-ji Temple and Mutsuji Temple within their respective surrounding mountains and forests are also intact.

In the more narrow sense of the individual sites (apart from Anaginogosho Iseki) and their links to Mount Inkeisan reflecting ideas of Pure Land Buddhism rather than the way the links between sites across the city reflect spatial and visual links related to Pure Land

Buddhism, ICOMOS considers that the integrity of the property can be seen to be satisfactory, although the visual links between the temples and Mount Inkeisan span areas outside the nominated property.

None of the individual sites is under threat.

#### Authenticity

The nominated property contains excavated sites, surviving buildings, and reconstructed gardens. These are considered separately.

There is no doubt of the authenticity of the excavated remains. Two of the gardens have been reconstructed and this work has been underpinned by rigorous analysis of the built and botanical evidence.

For the surviving structures, the main building Ch son-ji onjikid is a remarkable survival and has been conserved with great skill in a way that ensures its authenticity of materials and construction. It is however now surrounded by a concrete sheath building whose construction bears little relationship to the craftsmanship that characterized Hiraizumi. There is a tradition of protecting valued buildings with outer or sheath buildings, as Ch son-ji onjikid was in the 13<sup>th</sup> century and its sheath was repaired and reconstructed in the 16<sup>th</sup> century. The concrete building put up in 1968 serves well to protect the original structure but takes away from the relationship between the temple and its surroundings and tends to turn it into a museum object. The authenticity of the temple in its landscape has therefore to a certain extent been compromised.

A few houses still remain on some of the underground archaeological sites, and deliver a negative influence on the landscape of the property. For example, there are houses, roads and wire poles on the Mury ko-in and anaginogosho Iseki sites.

In order to mitigate the negative influence of a new raised National route on the landscape and setting of the anaginogosho Iseki site, a protection embankment has been built between the road and the site.

Authenticity relates to the ability of the property to convey its value. In the case of these four temple complexes (excluding anaginogosho Iseki), it is essential that they are able to convey in an inspiring way their association with the profound ideals of Pure Land Buddhism. Retaining authenticity means more than protecting just the built and architectural remains.

ICOMOS considers that the authenticity of the built, archaeological and reconstructed remains is satisfactory; that overall spatial integrity is slightly limited as the integrity of the spatial landscape relating to Pure Land cosmology extends beyond the nominated sites and some the visual links between

sites are compromised. Various houses and other constructions impact on the ability of Mury ko-in and anaginogosho Iseki to convey their value.

---

ICOMOS considers that the conditions of integrity and authenticity have been met although various structures impact adversely on the ability of the property to fully convey its value.

---

#### Criteria under which inscription is proposed

The property is nominated on the basis of cultural criteria (ii), (iv), and (vi).

*Criterion ii exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, to n planning or landscape design*

This is justified by the State Party on the grounds that the group of temples, Pure Land gardens, and archaeological sites is an outstanding example of an attempt to give spatial representation to an ideal Buddhist Pure Land on this earth. They reflect the way Buddhism, after its transmission to Japan from China and Korea beginning in the 6<sup>th</sup> century developed certain uniquely Japanese characteristics as it fused with an indigenous Japanese ethos of nature worship. They also reflect fusion of Chinese and Korean concepts of garden design with Japanese indigenous concepts, styles, and techniques developed in association with sacred sites located near bodies of water. These fusions occurred in Hiraizumi and were then transmitted in Japan. Thus, the nominated property exhibits an important interchange of human values in East Asia with regard to the conceptions, design and techniques of architecture and gardens.

ICOMOS considers that the layout of the temples and Pure Land gardens do demonstrate in a remarkable way how the concepts of garden construction introduced from Asia along with Buddhism evolved on the basis of Japan's ancient nature worship, Shintoism, and eventually developed into a concept of planning and garden design that was unique to Japan. The gardens and temples of Hiraizumi influenced those in other cities, notably Yamakura where one of the temples was based on Ch son-ji.

ICOMOS however considers that what has not been demonstrated is how the archaeological site of anaginogosho Iseki, contribute towards the justification.

---

ICOMOS considers that this criterion has been justified for the temple complexes with their Pure Land Gardens but not for the administrative site of anaginogosho Iseki.

---

*Criterion iv be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates a significant stage in human history*

This criterion is justified by the State Party on the grounds that 12<sup>th</sup> century Japan was a unique era in which it was believed, on the basis of Buddhist Pure Land thought, that it was possible to create a Buddhist Pure Land on this earth. Numerous artistic works of unified complexes of temples and gardens were constructed to achieve that goal. The complex of temples and gardens in Hiraizumi are a group of superb artistic works designed as symbolic manifestations of the Buddhist Pure Land on this earth. Along with their archaeological remains and associated artefacts, these serve as outstanding examples of architecture and garden design in 12<sup>th</sup> century Japan not seen elsewhere in the world, illustrating significant developments within these disciplines. Thus, the nominated property is an outstanding example of a type of architecture and garden design which illustrates a significant stage in human history in this field.

ICOMOS considers that the groups of Pure Land Gardens with their temples in Hiraizumi do reflect the idea of creating a pure land on earth but that this was also prevalent in area at around the same time. What is outstanding about the Pure Land Gardens in Japan is the way they demonstrate how Buddhist ideas were fused with local traditions and this cannot be considered as a significant period of human history.

---

ICOMOS considers that this criterion has not been justified.

---

*Criterion vi be directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance*

This criterion is justified by the State Party on the grounds that one of the most significant processes in constructing Hiraizumi was the unique development of Japanese Buddhism through its fusion with Japan's indigenous ethos of nature worship. This is especially true of the emergence of Japanese Buddhist Pure Land thought, centred on the worship of Amida's Pure Land of Utmost Bliss, and which arose in the context of the spread of the belief in the imminent arrival of mappō, "the latter period of the dharma," a degenerate age in which the Buddhist teachings themselves would be imperilled. These developments played a major role in shaping Japanese views of life and death in the 12<sup>th</sup> century. They were also directly reflected to the conceptual, stylistic, and formal properties of temples and gardens - seen nowhere else in the world - that gave spatial representation to Buddhist Pure Land, and have been reliably passed down to the present in some of the intangible aspects of the property such as religious rites and folk performing arts. Thus, the religious, philosophical, and other traditions tangibly

associated with aspects of Hiraizumi's temples, Pure Land gardens and archaeological sites can be said to possess outstanding universal significance.

ICOMOS considers that the Pure Land Gardens clearly reflect a specific fusion of Buddhism with Japanese nature worship. However to justify this criterion the gardens need to be seen as a reflection of a belief of outstanding universal significance. They thus need to be seen to be part of the diffusion of Buddhism over south-east Asia and thus reflections of a belief that is of wider importance than just in Japan that of Buddhist Pure Land thought.

---

ICOMOS considers that this criterion has been justified.

---

ICOMOS considers that the serial approach is justified but the selection of sites should be reduced to exclude anaginogosho Iseki.

---

ICOMOS considers that the property meets criteria (ii) and (vi) and conditions of authenticity and integrity with the exclusion of anaginogosho Iseki and that Outstanding Universal Value has been demonstrated.

---

#### Description of the attributes

The attributes of outstanding universal value are the standing and archaeological remains of temples and pure land gardens, Mount Inkeisan, the visual links between three of the gardens and Mount Inkeisan and the setting of the pure land gardens that allows them to convey in an inspiring way their association with the profound ideals of Pure Land Buddhism.

## 4 factors affecting the property

### Development pressures

The main sites are within the urban area of Hiraizumi through which run main roads and railways.

The following proposed road projects are mentioned in the nomination dossier:

- A road improvement is planned for the prefectural road "Hiraizumi Teishaj -Chonji Line", which runs through Muryok-in Ato. No details are provided but it is stated that the project aims to conserve the nominated component part of the property.
- A project to improve the crossroads of National route 4 and the Sakashita Line (town road) that run on the eastern edge of the Chonji's temple compound. No details are provided but it is stated that due consideration will be given to the visual integrity of the entrance area of Chonji.
- In the buffer zone there are plans for expanding the width of the "Town road anaginogosho Line" (provisional name) and the "National route 4

Hiraizumi Bypass", installing a connection road between the T hoku xpressway and the existing roads, and newly constructing a part of a main local road, the Hanamaki - oromogawa Line, and a part of a town road, the Ch gakk Line.

Overall it is stated that the design of these construction will harmonize the design and structure of these roads with the surrounding landscape.

Other aspects of development relate to smaller scale intrusions such as poles and pylons that impact on visual links between some of the properties and to houses near the temple complexes. It is understood that there are two houses planned for relocation within the anjizai -in Ato site, and that some residential houses, wire poles and an iron tower occupying the site within the Mury ko-in and anaginogosho Iseki sites will be removed. According to the provisions of the Management Plan, the buildings/structures that negatively influence property value will be relocated.

ICOMOS considers that there is a need to ensure that the visual links between the separate sites are respected and particularly the links between the gardens and Mount inkeisan.

Large commercial advertising boards impact adversely on the setting of the sites. Although there is also commitment to move these, there is no agreed timetable.

#### Tourism pressures

Visitors within the sites are subject to varying degrees of management but there is no overall management strategy that includes local authorities in the buffer zone. Hiraizumi city currently receives around one million visitors a year and an increase in visitors could impact adversely on the property unless stronger measures are put in place. ICOMOS considers that there is a need for research to identify the carrying capacity of the various sites and for a visitor management strategy to be developed and adopted to ensure capacities are respected.

#### Environmental pressures

There are no immediate environmental threats such as acid rain but there is a need to ensure that traffic that might impact on the property in terms of emissions or noise is minimised.

#### Natural disasters

Natural disasters that could impact on the nominated property include typhoons, heavy rain, earthquakes, floods and fires. As a fire prevention measure for buildings, automatic fire alarm systems, drenchers, fire extinguishers and water jets are installed and voluntary fire-fighting organizations are organized. For other threats, prompt response arrangements have been put in place.

#### Impact of climate change

Climate change could make the area more prone to floods. River banks are being strengthened as a flood protection measure.

---

ICOMOS considers that the main threats to the property are from urban development and particularly infrastructural development; current planned road projects will have an impact on the property and there will be a need to ensure that all projects are undertaken only after a satisfactory heritage impact assessment has been undertaken to consider the potential impact on the attributes of the Outstanding Universal Value, including the visual links between properties and Mount inkeisan and the setting of the sites.

---

## 5 Protection conservation and management

### Boundaries of the nominated property and buffer zone

Given that part of the justification of Outstanding Universal Value that is suggested for the property relates to the link between the temple complexes and their Pure Land Gardens and Mount inkeisan, ICOMOS considers that it would have been logical for the boundaries of the nominated property to have incorporated the spatial links between the temples and the mountain. What have been nominated are the individual sites and not the links with the mountain.

The large buffer zone encloses the six component sites. The whole property lies in the valley of the Itagamikawa river, flanked by mountains on the west and east sides and the boundaries of the buffer zone follow the ridge lines on the west and east sides. The northern boundary is about 5km away from the sites, while the southern boundary is some 3km away from the property area. The buffer zone covers the visual setting of the property and it is thus crucial that controls are in place within the buffer zone to protect the visual integrity of the property in terms of the visual links between the temples, gardens and Mount inkeisan and the setting of individual sites.

Within the Hiraizumi Town Landscape Plan, the buffer zone comprises three types: Historic Landscape Area, Vernacular Landscape Area and Ordinary Landscape Area, within which building heights are restricted to 10m, 13m and 15m respectively. ICOMOS considers that there is a need to ensure that the height control is related to the strong visual links between the individual sites.

If anaginogosho Iseki is excluded from the property, its site should be included in the buffer zone.

---

ICOMOS considers that the boundaries of the individual sites are adequate and the buffer zone provides protection for the whole visual setting, but it is essential that this protection is enforced in relation to the visual links between sites within the property.

---

#### Ownership

The nominated sites are owned variously by national and local governments, religious organizations and private owners.

#### Protection

##### Legal Protection

The nominated sites and the buffer zone are well protected through a range of designations - Historic Sites, Special Historic Sites, Places of Scenic Beauty or Special Places of Scenic Beauty. These are protected under 1950 Law for the Protection of Cultural Properties in which is embedded earlier laws such as the Ancient Shrines and Temples Preservation Law (1929), the Law for the Preservation of Historic Sites, Places of Scenic Beauty and Natural Monuments (1919) and the National Treasures Preservation Law (1929). Since first nomination further protection has been afforded to three of the sites: Mount Inkeisan, Mury ko-in and Anaginogosho Iseki.

Broadly the temples and standing buildings are protected as monuments, the restored gardens and archaeological sites as sites.

The buffer zone is protected through a range of landscape designations which protect the values of the area and restrict development. What are not protected are houses within the nominated area such as those for the 134 people living in Ch son-ji and smaller numbers elsewhere.

##### Traditional Protection

The routine management and conservation of Ch son-ji Temple and M ts -ji Temple are the responsibility of the religious organizations, with the assistance of Hiraizumi Town. Religious rites, folk performing arts and other intangible heritage representing Japan's Pure Land Buddhist thought are also inherited and protected by traditional religious organizations.

Effectiveness of protection measures

The property is under the highest-level legal protection.

According to relevant provisions, the protective measures implemented within the property area can guarantee that the value of the nominated property will not be subject to the negative influences from development.

The construction control measures in the buffer zone of the property have achieved a relatively good effect. In line with the Landscape Plan, large advertisement

boards affecting the landscape will be adjusted within three years. Currently negotiations with the owners of these advertisement boards are ongoing.

The construction licensing in the buffer zone is supervised by the government, so it is said that the management mechanism can guarantee that the value of the nominated property will not suffer negative influences from development.

The current laws and traditional protective measures are all compulsory.

---

ICOMOS considers that the legal protection in place is adequate to protect fabric. There are difficulties in protecting views and setting arising from the nature of the dispersed sites in a city and it will be crucial to ensure that the sites have the ability to demonstrate their relationship with the landscape in a meaningful way though allowing them to be oases of contemplation.

---

#### Conservation

##### Inventories, recording, research

The nominated areas are all extraordinarily well researched. The main temple and garden areas have been researched and excavated over the past 70 years, in total 198 excavations have been undertaken.

##### Present state of conservation

The revised nomination dossier presents in detail the conservation history of the standing structures and precisely what interventions have been made. This has included total dismantlement and rebuilding for some structures. All work has been meticulously documented and carried out by skilled craftsmen.

The evidence provided of the approach taken for reconstruction of the two Pure Land gardens and the way their forms have been created demonstrates that this work has been carried out with exceptional thoroughness.

ICOMOS considers that the state of conservation of all the temples and archaeological sites is good.

##### Active Conservation measures

The main temples, gardens and archaeological sites are all conserved or protected by either national or regional authorities and are all under good active management.

There are proposals to re-instate and restore the other two buried gardens. According to the Management Plan, the conservation and restoration of the Ikegaran Ato pond will start in 2012, and that of Mury ko-in Ato pond will start in 2013 and complete in 2016. No details of these projects have been provided. However the

nomination dossier includes an image for one of the gardens that includes a reconstructed temple.

ICOMOS considers that any proposal for further re-excavating and re-instating will need to be set out in the form of a reconstruction strategy, the evidence on which the proposals are based, and the reconstruction philosophy, and be submitted to the World Heritage Centre for evaluation by ICOMOS, and consideration by the World Heritage Committee, in line with paragraph 172 of *Operational Guidelines*.

ICOMOS also stresses the need to ensure that all buried archaeological resources are actively protected to ensure the protection of mineral and plant evidence.

---

ICOMOS considers that conservation is adequate, but that any further reconstruction proposals must be submitted to the World Heritage Centre for evaluation by ICOMOS, and consideration by the World Heritage Committee, in line with paragraph 172 of *Operational Guidelines*.

---

#### Management

Management structures and processes, including traditional management processes

Iwate Prefecture and the relevant municipal government have set up the Iwate Prefecture World Heritage Preservation and Utilization Promotion Council to facilitate communication and coordination with regard to the projects that are planned by the national government, Iwate Prefecture, relevant municipal governments, private companies, etc. within the nominated property or its vicinity. This provides the overall management framework for the property.

An advisory committee, the Instructing Committee for Research and Conservation of the Group of Archaeological Sites of Hiraizumi, has also been set up to allow university researchers and members of the ICOMOS National Committee of Japan to provide advice to the Council. It consists of researchers and experts from domestic universities and members of ICOMOS, and provides academic advice to the Promotion Council.

There are also specific prefectural, city and towns council committees which provide advice on the protection of cultural properties to their respective councils.

Policy framework: management plans and arrangements, including visitor management and presentation

In 2006, Iwate Prefecture prepared a comprehensive preservation and management plan for the nominated property's components designated as National Treasures, Important Cultural Properties, Historic Sites, Special Historic Sites, Places of Scenic Beauty or

Special Places of Scenic Beauty in coordination with the Agency for Cultural Affairs, owners and municipal governments that are custodial bodies of Historic Sites, etc.

The Comprehensive Preservation and Management Plan for Hiraizumi Temples, Gardens and Archaeological Sites representing the Buddhist Pure Land was completed and implemented in January 2007, and revised in January 2010. The monitoring indicators have been improved, thus making the plan more operable, as requested by point 3 of Decision 32 COM 8B.24.

It is acknowledged that although some visitor facilities and information boards are in place, the presentation of the site to visitor could be improved and will be addressed.

#### Risk preparedness

The key threats are fire, storms, floods and earthquakes. As a for fire prevention, automatic fire detection and sprinkler systems have been installed in the buildings and voluntary fire-fighters have been organized. Drainage systems and lightning conductors have been installed and forest conservation measures aim to minimize landslides that may result from heavy rain or earthquakes.

#### Involvement of the local communities

Local communities and many local groups have been fully involved in the preparation of the nomination.

The local government has signed an agreement with the local institutions in the site where the property is located, and invited the local community to patrol the nominated property regularly and irregularly and come up with opinions and suggestions regarding the protection, management and presentation of the property. Schools and local organizations in the property voluntarily participate in routine maintenance.

Resources, including staffing levels, expertise and training

For all designated monuments the government contributes 50-80% of the cost of repair except for minor repairs or special cases. Excavation work carried out by regional authorities is also subsidised up to 50%. Likewise research, repair or visual harmonisation work on cultural landscapes is supported by national funding up to 50%. On top of national subsidies, Iwate Prefecture further subsidises up to 50% of the remaining cost. The Prefecture has also established a fund for the protection of historic sites which collects support from local businesses in Iwate Prefecture.

The Iwate Prefectural Board of Education has created an organisation in charge of Cultural Properties and World Heritage, employing 11 officers. Hiraizumi

Town's Board of Education has created the World Heritage Promotion Section, in which 4 dedicated officers are working for the preservation and management of component parts; in addition, 5 officers are stationed at the Hiraizumi Cultural Heritage Centre to conduct on-site archaeological excavation. These organisations and systems are to be strengthened further in the future.

---

ICOMOS considers that the management arrangements are adequate.

---

## 6 Monitoring

Four main indicators have been identified for visual integrity, collaborations between component sites protection of buildings, gardens and archaeological sites, and the protection of the buffer zone, as requested by point 3 of Decision 32 COM 8B.24.

Responsibilities for their implementation are clearly set out.

---

ICOMOS considers that indicators in place and arrangements for their monitoring are adequate.

---

## 7 Conclusions

The revised nomination which considers the relationship between Pure Land Buddhism, the four temple complexes of Hiraizumi, of which many details have been recovered from excavations, and the sacred Mount Inkeisan, now makes a strong case for why this ensemble can be seen as an exemplar of the ways the ideals of Pure Land Buddhism were made manifest. The ensemble demonstrates a fusion between the Pure Land Buddhism that was transmitted from Korea and Japanese nature worship and traditions of garden design. And the only surviving temple, Chon-ji with its highly flamboyant gold decoration, makes a strong statement about the wealth of the Minamoto Fujiwara clan, their espousal of Pure Land Buddhism and the way this was linked with political power in the short lived city of Hiraizumi.

The one element of the nomination that does not contribute to this theme is *anaginogosho Iseki*, the site of government offices. This site does not have any attributes that contribute to an understanding of Pure Land Buddhism or its development and adoption in Hiraizumi. ICOMOS considers that this site should not be part of the serial nomination.

The remains of the four temple complexes and Mount Inkeisan are intertwined with the modern city of Hiraizumi and particularly with the road and rail network.

Given that these ensembles aimed to manifest an ideal world and one that invites contemplation, it is essential that the sites are kept as far as possible as oases within the city, sheltered from noise and diversion. Currently there is visual intrusion from wires, pylons and houses and potential threats from road development. ICOMOS considers that every effort should be made to ensure that the visual links between the properties and Mount Inkeisan are unobstructed, that the surroundings of the complexes are restored and that any road development is subjected to a Heritage Impact Assessment that considers impact on the attributes of Outstanding Universal Value and on the authenticity of the property that includes its ability to convey the ideals of Pure Land Buddhism.

There are proposals to restore Chon-ji and Murayama in Ato, the two Pure Land Gardens currently buried. ICOMOS considers that justification for any such proposals, including all the evidence on which they are based, would be needed to be submitted to the World Heritage Centre for evaluation by ICOMOS and consideration by the World Heritage Committee in line with paragraph 172 of the *Operational Guidelines*.

Recommendations with respect to inscription  
ICOMOS recommends that Hiraizumi Temples, Gardens and Archaeological Sites representing the Buddhist Pure Land, Japan, with the exception of anaginogosho Iseki, be inscribed on the World Heritage List on the basis of **criteria i, ii, iii, vi and x**

Recommended Statement of  
Outstanding Universal Value

Brief synthesis

The four Pure Land gardens of Hiraizumi, three focused on the sacred mountain Mount Inkeisan, exemplify a fusion between the ideals of Pure Land Buddhism and indigenous Japanese concepts relating to the relationship between gardens, water and the surrounding landscape.

Two gardens are reconstructed, with many details recovered from excavations, and two remain buried.

The short-lived city of Hiraizumi was the political and administrative centre of the northern realm of Japan in the 11<sup>th</sup> and 12<sup>th</sup> century and rivalled Kyoto, politically and commercially.

The four gardens were built by the Minamoto Fujiwara family, the northern branch of the ruling clan, as symbolic manifestations of the Buddhist Pure Land on this earth, a vision of paradise translated into reality through the careful disposition of temples in relation to ponds, trees and the peaks of Mount Inkeisan. The heavily gilded temple of Chon-ji – the only one remaining from the 12<sup>th</sup> century – reflects the great wealth of the ruling clan.



Much of the area was destroyed in 1189 when the city lost its political and administrative status. Such was the spectacular rise and conspicuous wealth of Hiraizumi and its equally rapid and dramatic fall, that it became the source of inspiration for many poets. In 1689, Matsuo Basho, the Haiku poet, wrote: *Three generations of glory vanished in the space of a dream* '.

The four temple complexes of this once great centre with their Pure Land gardens, a notable surviving 12<sup>th</sup> century temple, and their relationship with the sacred Mount Inkeisan are an exceptional group that reflect the wealth and power of Hiraizumi, and a unique concept of planning and garden design that influenced gardens and temples in other cities in Japan.

**Relevance** : The temples and Pure Land gardens of Hiraizumi demonstrate in a remarkable way how the concepts of garden construction introduced from Asia along with Buddhism evolved on the basis of Japan's ancient nature worship, Shintoism, and eventually developed into a concept of planning and garden design that was unique to Japan. The gardens and temples of Hiraizumi influenced those in other cities, notably Amakura where one of the temples was based on Chon-ji.

**Representative** : The Pure Land Gardens of Hiraizumi clearly reflect the diffusion of Buddhism over south-east Asia and the specific and unique fusion of Buddhism with Japan's indigenous ethos of nature worship and ideas of Amida's Pure Land of Utmost Bliss. The remains of the complex of temples and gardens in Hiraizumi are symbolic manifestations of the Buddhist Pure Land on this earth.

#### Integrity

The property encompasses the remains of the temple complexes with their Pure Land Gardens and the sacred mountain of Mount Inkeisan to which they are visually aligned.

Although the sites of Chon-ji, Mitsujiri, Anjizai-in Ato and Mount Inkeisan conserve their visual links in a complete manner, at the Muryoko-in site, houses and other structures have a negative influence.

The visual links between the temples and Mount Inkeisan span areas outside the nominated property in the buffer zone. To protect the spatial landscape relating to Pure Land cosmology, the spatial integrity of these links need to be sustained.

#### Authenticity

There is no doubt of the authenticity of the excavated remains. Two of the gardens have been reconstructed and this work has been underpinned by rigorous analysis of the built and botanical evidence.

For the surviving structures, the main building Chon-ji Onjikid is a remarkable survival and has been conserved with great skill in a way that ensures its authenticity of materials and construction. The authenticity of the temple in its landscape has to a certain extent been compromised by the concrete sheath building that now surrounds it.

To sustain the ability of the property to convey its value, it is essential that the four temples are able to convey in an inspiring way their association with the profound ideals of Pure Land Buddhism.

#### Management and protection requirements

The property and its buffer zone are well protected through a range of designations - Historic Sites, Special Historic Sites, Places of Scenic Beauty or Special Places of Scenic Beauty.

Protecting views between sites and protecting their setting will be crucial to ensure that the sites have the ability to demonstrate their relationship with the landscape in a meaningful way though allowing them to be oases of contemplation.

Iwate Prefecture and the relevant municipal government have set up the Iwate Prefecture World Heritage Preservation and Utilization Promotion Council to provide the overall management framework for the property. This Council receives expert advice from the Instructing Committee for research and Conservation of the Group of Archaeological Sites of Hiraizumi.

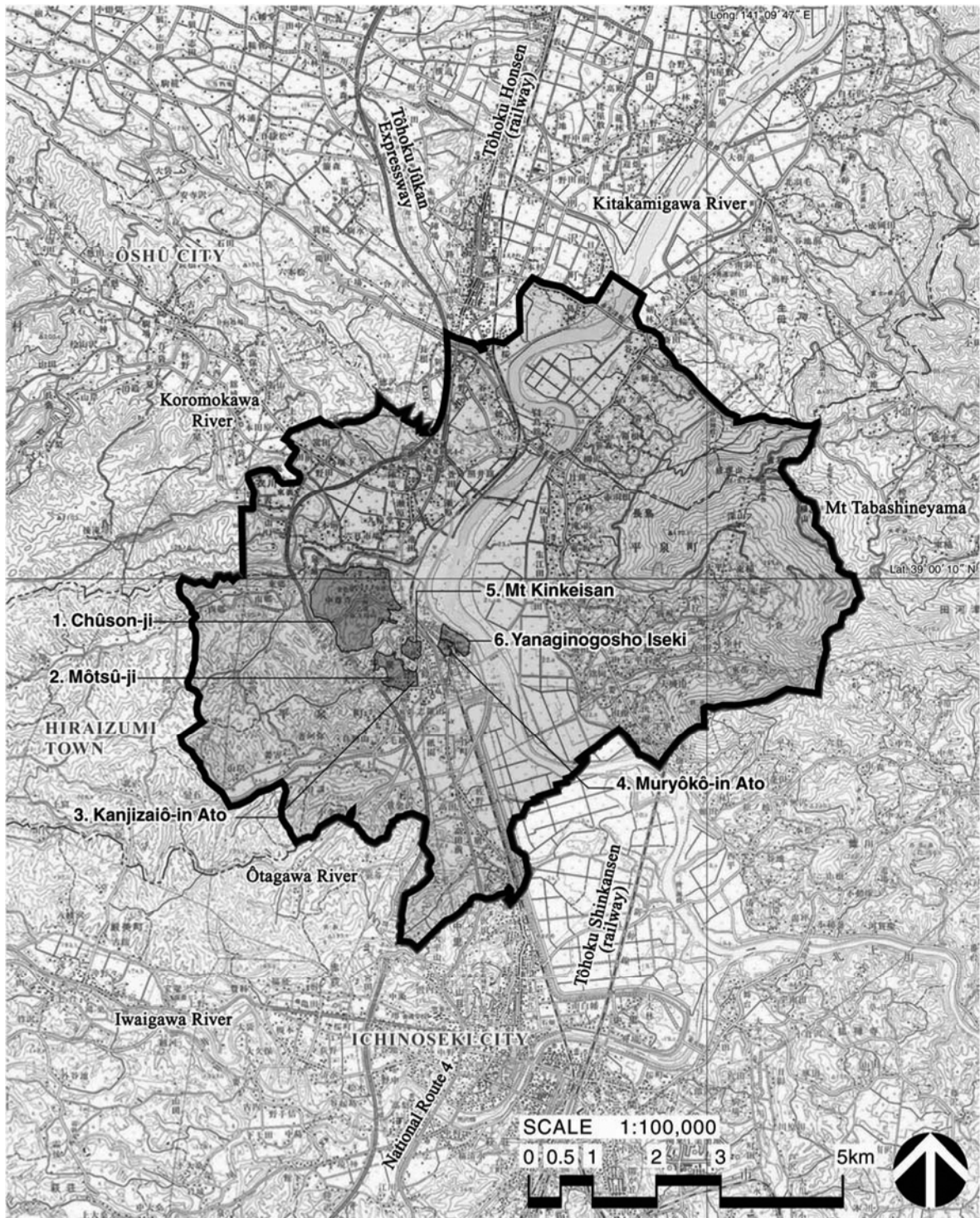
The Comprehensive Preservation and Management Plan was completed and implemented in January 2007, and revised in January 2010. Any projects to implement proposals in the plan to re-instate and restore the other two buried gardens will need to be submitted to the World Heritage Centre for evaluation by ICOMOS, and consideration by the World Heritage Committee, in line with paragraph 172 of *Operational Guidelines*.

The local government has signed an agreement with the local institutions and invited the local community to patrol the property and offer suggestions on protection, management and presentation.

ICOMOS further recommends that the State Party give consideration to the following:

- Change the name of the property to "Hiraizumi Temples and Gardens representing the Buddhist Pure Land";
- Keep unobstructed the visual links between Mount Inkeisan and the four ensembles;

- Subject any proposals for major road improvements to Heritage Impact Assessments for their impact on the attributes of outstanding universal value, including the visual surroundings of the individual sites;
- Submit any proposals for re-excavating and re-instating the two buried gardens at Ch son-ji and Mury k -in Ato to the World Heritage Centre for assessment by ICOMOS and consideration by the World Heritage Committee in line with paragraph 172 of the *Operational Guidelines*;
- Protect actively the buried archaeological resources;
- Put in place a visitor management strategy based on a detailed study of the carrying capacity of the various sites.



Map showing the boundaries of the nominated property



Distant view of Chûson-ji (Kanzankyûryô) from the north part of Koromokawa River



View of Môtsu-ji from the southeast



Kanjizaiô-in Ato from the south



Yanaginogoshi Iseki, aerial view of the archaeological remains

D Europe – North America

New Nominations

---

Fagus factory  
Germany  
No 1368

---

Official name as proposed by the State Party  
Fagus Factory

Location  
State of Lower Saxony  
Town of Alfeld an der Leine  
Germany

**Brief description**  
Designed from around 1910, the Fagus factory in Alfeld constitutes an extremely complete architectural complex heralding the Modernist movement in architecture. Built and extended by Walter Gropius, it features in particular the innovative use of curtain walls, vast glass panels which are independent of an attenuated load-bearing structure. It bears witness to a major break with the architectural and decorative values of the period, and a determined move towards functionalist industrial aesthetics. Through a scheme which includes the interior furnishings, it paves the way for the birth of industrial design and foreshadows the creation of the Bauhaus school.

**Category of property**  
In terms of categories of cultural property set out in Article I of the World Heritage Convention of 1972, this is a group of buildings.

## 1 Identification

Included in the tentative List  
29 September 1999

International Assistance from the World Heritage Fund for preparing the Nomination  
None

Date received by the World Heritage Centre  
28 January 2010

**Background**  
This is a new nomination.

**Consultations**  
ICOMOS consulted its International Scientific Committee on 20<sup>th</sup> Century Heritage and a large number of independent experts.

**Literature consulted** Selection

Argan, G. C., *Gropius und das Bauhaus*, Rowohlt, 1962.

Giedon, S., *Walter Gropius, l'homme et l'œuvre*, Paris, 1954.

Isaacs, J., *Walter Gropius. An Illustrated Biography of his Life and Work*, Boston-Toronto-London, 1991.

Wingler, H. M., *Das Bauhaus*, Cambridge Mass., 1980.

**Technical Evaluation Mission**  
An ICOMOS technical evaluation mission visited the property from 15 to 17 September 2010.

**Additional information requested and received from the State Party**  
ICOMOS requested additional information from the State Party on 30 September 2010 and 14 December 2010, with regard to the following points:

- Complete and extend the comparative analysis;
- Complete the presentation of the state of conservation of the property, and particularly of the works carried out between 1985 and 1999;
- Document the question of possible urban development in the buffer zone and beyond, in terms of possible visual impact on the property;
- Consider a possible extension of the buffer zone in the north-east of the property, and confirm the promulgation of the Alfeld urban development plan;
- Give details of the policy on vehicle parking;
- Give details of the staffing of the Exhibition Centre;
- Examine the consequences of rail traffic on the conservation of the curtain walls.

The State Party replied on 18 November 2010 and 17 February 2011. An analysis of the additional information provided is included in this evaluation.

Date of ICOMOS approval of this report  
10 March 2011

## 2 The property

**Description**  
The Fagus factory was designed, from 1911, to produce lasts used for the industrial manufacture of shoes. It consists of a homogeneous complex of buildings whose purpose is primarily to fulfil a technical function. The succession of buildings is organised to be conducive to the whole industrial process, from the raw materials stage to manufacture, storage, dispatching and offices.

The overall architectonic is based on a dialogue between strongly asserted parallelepiped volumes with large openings where light is required for work purposes. The buildings have large rectangular surfaces, which are given rhythm by the intersection of long horizontal and vertical lines. The use of yellow-ochre brickwork is coupled with vast rectangular glass panels. The main building is thus almost entirely glazed, with continuous curtain walls on three levels. Their function is purely to provide light, as they are independent of the concrete load-bearing structure, which is kept to the bare minimum. As well as



foreshadowing industrial functionalism and its architectural innovations, the complex has great visual unity, complemented by the quality of its sober interior aesthetics, which point the way forward to the principles of the Bauhaus.

Starting from the north-west of the property, and following the order of the industrial process, the successive buildings are:

1 *The sawmill*: This is a single-storied building, with large, regularly-spaced windows. It was here that trunks of beech wood (*fagus* in Latin) were cut to the appropriate dimensions for future use as workpieces. This was the first workshop of the factory, and was built in 1911. In order to cope with expanding market demand, the sawmill building was extended on two occasions, by Gropius himself in 1921 and then by one of his Bauhaus students in 1938, doubling the initial floor area. The extensions demonstrated total respect for the architectural style and the initial forms. The building later underwent several changes of use, but no alterations were made to its major architectural features.

2 *The storehouse*: Designed in 1911 and completed in 1913, the five-storied storehouse is imposing in its volume, and dominates the sawmill on one side, and the drying house and workshops on the other side. It was used for the natural drying of the sawn workpieces, which were stored for several years. Its massive appearance is reinforced by the vertical line of the smoke stack at its rear. Its technical function required great structural solidity and few openings, unlike most of the other buildings. Its flat facades are given rhythm by fine horizontal lines and cornices, expressing a specific architectural motif which is repeated many times in the other facades. This sober style recalls the function of the building, whilst reinforcing its architectural dialogue with the factory as a whole. From the outset, the storehouse was provided with a ventilation system, a solid brickwork stairway and an industrial lift.

*The drying house*: The natural drying process was continued by stove drying. The factory had thirty stoves, each 9 metres high. Dating back to the initial construction works of 1911-1913, this building with a single functional level occupies a vast rectangular surface area at the centre of the factory. Adjacent to the storehouse, it continues the latter's architectural style in a lower-height version. By the use of windows, it externally appears to have two levels. The terrace roof has 15 outlets for vapour from the stoves.

*The workroom*: This vast single-storied space is directly connected to the drying house. It is at the heart of the technical process, where the shoe lasts are made using various machines and machine-tools. Designed in 1911, the workroom was almost immediately extended to its present-day dimensions in 1914.

Close to square in shape, the workroom has five similar axes. It has large bay windows and partially-paned shed roofs. The wooden roof construction is supported on cast

iron columns. The south-west facade is a continuous wall of glass, giving an outstanding quality of light, well adapted to the requirements of the work. Above the glass wall is a large horizontal brickwork panel which conceals the inclined lines of the roof. In the basement of the workroom there are large annexes for the use of the personnel.

5 *The main building* runs round two sides of the workroom in an L-shape. It has three stories, assigned to the management and control of the industrial process, dispatch, the administrative departments and the senior management of the company.

The facades of the building are made entirely of glass panels. The regular succession of large glass panels is given rhythm by vertical and horizontal lines of brickwork, which conceal the load-bearing structures. The rhythmic regularity is completed by the fine orthogonal metal frames, which are grey in colour. Combined with entirely glazed corners, this confers an exceptional lightness to the building's overall appearance, whilst underlining its industrial functionality. These were structural and architectural innovations destined to be extremely important in the future.

The main building was constructed in two stages, represented by the two wings, but in the same style.

The design of the interior appointments is of very high quality, and many innovations are to be found in the structural and decorative details (lining, paint, flooring, staircase handrails, light fittings, doors, etc.). They foreshadow the aesthetic and social concerns of the Bauhaus.

*The cutting die workshop*: This is on the south-east boundary of the factory. Cutting die manufacture was a second line of business. The cutting dies were used for leather working. The workshop is single-storied, with two spans. It includes a forge and a smoke stack 20 metres high. Some features are in keeping with the general aesthetic of the factory, particularly the windows, but otherwise this is a conventional industrial building.

*The engine house*: It was decided that another engine house would be required in 1915. A new building behind the drying house was thus designed for this purpose by Walter Gropius. It adopts the vast glass-panel style of the neighbouring buildings, but its structure is entirely metallic. It is completed by a brickwork smoke stack and a water tank.

*The chip and coal bunker* is at the northern boundary of the factory site, near the railway line and the engine room. Set up in 1911, it was extended in 1923-24 by Gropius.

*The rail lifting rack rail car scales* is a small building next to the railway sidings, which houses scales for weighing railway cargoes. Built by Gropius in 1921, it reproduces the main stylistic themes of the main building.

10 The factory entrance comprises the gatekeeper's house, the iron factory gate and the boundary wall. They were constructed in the final building stage, in 1925. They repeat the stylistic features of the factory as a whole, with the use of brickwork and large glass panels.

#### History and development

Carl Benscheidt founded *Fagus Werk GmbH Alfeld* as an extension of previously existing activities on another nearby site (the Behrens/ Appe factory on the other side of the railway line). It was used for the industrial manufacture of shoe lasts and cutting dies used in leatherworking. It was Walter Gropius, a young architect who had worked with Peter Behrens on the A G factory in Berlin, who directed construction of the Fagus factory as it exists today. In 1911 Gropius took over the initial project of architect Eduard Werner who had established the ground plan and disposition of the buildings in accordance with their complementary industrial roles. Assisted by Adolf Meyer, Gropius reworked the volumes and the overall architectural style. The scheme also included interior arrangements and decoration, taken to an extremely high level of detail (as seen in the doors, lighting, etc.), reflecting a social and industrial idealism which the architect shared with Benscheidt.

Gropius had thus met a factory owner who believed in his modernist and social ideas. Their approach was closely linked to the *deutscher Werkbund* movement to foster innovation in the applied arts, and their execution in the industrial world. Together they sought to achieve architectural quality which would both rationalise manufacturing processes and focus on ensuring good working conditions in the factory.

Works on the factory took place in three main phases. The first phase (1911-1913) focused on the industrial production infrastructure. Two production lines were very rapidly set up for shoe lasts and cutting dies. The flourishing success of the business meant however that substantial extensions became necessary almost immediately. Gropius took advantage of the extensions to almost double the size of most of the workshops and offices, and also to improve the functional and architectural quality of the whole factory. The smoke stack and the engine house were rebuilt to the rear of the workroom and the drying room; a new entrance was added to the main building; and the workshops and store houses were extended. This was the second construction phase, which took place in 1914 and 1915, and gave the factory its finished form and aesthetic appearance.

Designed before and during the First World War, this industrial project was a manifesto for functionalist industrial architecture and a founding example of the modernist movement. Its complete success led its architect to launch, immediately after the 1914-1918 war, the Bauhaus school, whose influence was to be worldwide both in architecture and in the birth of industrial design.

A third phase followed in 1924-1925, still under the direction of Gropius and his assistants. It consisted of functional additions, with a coal bunker being added to the chip house, and an extension of the main administration building by a second wing of identical style to the rear of the workroom. A final set of works was carried out in 1938 by Ernst Neufert, who had previously worked with Gropius, principally to extend the sawmill and integrate it better within the overall style.

The property was not affected by bombing during World War Two. It was listed as a historic monument in 1946.

In the 1970s, the replacement of wood by plastic as the material used for shoe lasts led to a vast overhaul of the industrial process. The technical buildings were converted for other uses. For example, the drying house was converted into a workshop for the preparation of plastic workpieces, used from 1974 to 2003, and then into an electronic measurement and control workshop. The sawmill was damaged by a fire in 1985. It was rebuilt in the early 1990s, in accordance with the restoration directives of the Historic Monuments Department. It was then occupied by an engineering design office which is still there today. The main building underwent a series of functional reorganisations to adapt it to the changing activities of the company. During this long period of evolution in the uses of the buildings, the architectural and aesthetic basis forming the originality of the complex was generally well preserved by a succession of managers who were all aware of the cultural and historic importance of the Fagus factory, which is furthermore protected as a listed historic monument.

The factory, which is still in industrial operation, required substantial maintenance and repair work from the mid-1980s onwards. This work continued until recently and, in some cases, was accompanied by substantial conversions to new uses. A very significant phase of works was carried out in the 1990s. All the buildings were renovated and some were restored during this phase, respecting the forms, style and materials chosen by Gropius. For example, the store house was converted into a 6-storied 3000 sq. m. exhibition centre, in a spirit of respect for the industrial monument and its external appearance in particular. Since 2005, a large proportion of this exhibition area has been given over to the story of Gropius and the Fagus factory. The engine house and the cutting die workshop have also been converted into visitor areas. However, the initial industrial activities involved in the manufacture of shoe lasts remain in place, particularly in the workroom, the drying room and the main building.

### 3 Outstanding universal value integrity and authenticity

#### Comparative analysis

The State Party points out the importance given in Germany to the various movements, known collectively as *Neues Bauen*, which were instrumental in the development of modern architecture. This set of

movements is already recognised on the World Heritage List with properties such as Bauhaus and its sites in Weimar and Dessau (1996, criteria (ii), (iv) and (vi)) and Berlin Modernism Housing Estates (2008, criteria (ii) and (iv)). These properties are however characteristic of the inter-war period. The Fagus factory predates these properties and foreshadows them. From an international viewpoint, it is also an early and emblematic representative of the birth of functionalist modernism, a vast creative movement which aims for attunement with the values of rationalism and contemporary science. This movement developed not only in Germany, but also in the United States and in Europe (Czech Republic, Austria, the Netherlands, France, etc.). Its most significant achievements generally date from after the First World War, and were the work of remarkable architects who were familiar with the pioneering German achievements, such as the Fagus factory and the Bauhaus school. This is a vast international creative movement of which the Fagus factory was a very early and influential landmark.

In terms of examples, the nomination dossier examines Gropius' links with the A G turbine factory in Berlin, on which he worked under the direction of Peter Behrens. This structure inspired him, but at the same time the Fagus factory constituted a radical criticism of its approach, and a significant conceptual leap forward. Other plants and buildings of lesser importance in Germany are also considered. The State Party refers to the *United Shoe Machinery Corp.* factory in Massachusetts, with which the industrialist Carl Benscheidt had business relations.

In an additional document received on 18 November 2010, the State Party thoroughly examines the connections and differences of the Fagus factory in relation to the following properties, already inscribed on the List, which illustrate 20<sup>th</sup> century modernist architecture: Centennial Hall in Wrocław (Poland, 2008, criteria (i), (ii) and (iv)), Bauhaus and its sites in Weimar and Dessau (mentioned above), Piet Mondrian House (Netherlands, 2000, criteria (i) and (ii)), Berlin Modernism Housing Estates (mentioned above), White City of Tel-Aviv (Israel, 2003, criteria (ii) and (iv)), *Ciudad Universitaria* de Caracas (Venezuela, 2000, criteria (i) and (iv)), Central University City Campus of the *Universidad Nacional Autónoma de México* (UNAM) (Mexico, 2007, criteria (i), (ii) and (iv)), and Tugendhat Villa in Brno (Czech Republic, 2001, criteria (ii) and (iv)). Most of these properties postdate the Fagus factory, or are contemporary with it; in many cases, they have been influenced by the Fagus factory, and more generally by the Bauhaus movement.

The State Party's analysis is completed by a comparative study of the birth of architectural modernism in Brazil, Finland, France, Great Britain, Japan, Mexico, the Netherlands, Russia and the United States. It continues with an attempt to find direct influence exerted by the Fagus factory, in terms of types of construction or decoration, and in terms of examples.

It remains unquestionable that Walter Gropius, particularly through the early and innovative construction of the Fagus factory, is at the very beginnings of the modernist movement. The factory in particular demonstrates the birth of the "curtain wall" in architecture.

ICOMOS considers that the comparative analysis should, initially, examine the place of the Fagus factory in the transition between two aesthetic, architectural and social movements of the early 20<sup>th</sup> century: the *Deutscher Werkbund* of 1907-1910, and the *Bauhaus*, created by Walter Gropius immediately after the First World War. It is the role of the Fagus factory as an example and model which seems important. The comparison with the A G turbine factory in Berlin, built in 1910 by Peter Behrens, is particularly relevant from this viewpoint, in terms of the relationship with people that it demonstrates and the criticism of this implicit in the Fagus factory design of Gropius. The Fagus factory is both a continuation and a break with the A G factory, because of the technical separation between the load-bearing structure and the curtain wall of which the Fagus factory is one of the most important early examples, and more generally because of the break with classical references and the unreserved leap into rationalist modernity.

Seen in a European and international context, the Fagus factory project stems from the creative upsurge which led to rationalism in architecture and functional modernism. These experiments use new building materials brought in by the industrial revolution (glass, steel and concrete); they embody a search for new aesthetics and new building principles; they are in tune with the social movement which accompanies industrialisation; they also express the aim of reconciling humanism with technology. Other constructions and other contemporary architects took part in this movement, and several major constructions were influenced by the Fagus factory; they illustrate comparable values and architectural solutions. Examples which may be given include Albert Kahn and the construction of the first Ford factory in Detroit (1908-1913), Frank Lloyd Wright (United States, Tentative List), and the Hallidie Building in San Francisco by Willis Polk (1917-1918), which followed and took its inspiration from the Fagus factory; in Europe, mention should be made of the Van Nelle factory in Rotterdam (1920s, Tentative List of the Netherlands), and more generally the works of Le Corbusier (Tentative Lists of France, Switzerland, Germany, Belgium, Argentina, Japan and India).

---

ICOMOS considers that the comparative analysis justifies consideration of this property for the World Heritage List.

---

Justification of Outstanding Universal Value  
 The nominated property is considered by the State Party to be of Outstanding Universal Value as a cultural property for the following reasons:

- From 1911, Walter Gropius laid the foundations of modern architecture in his design for the Fagus

factory in Alfeld, particularly in the “curtain wall” combining vast glass panels with steel frames supported by an attenuated load-bearing structure. This is a clear break with earlier styles, and asserts new values with regard to the use of space and light.

- The Fagus factory is a particularly homogeneous and complete architectural ensemble. It bears testimony to the birth of modern functionalist architecture, which is closely related to the industrial world to which it is here dedicated, embodying its concepts regarding the functional analysis of objects. The scheme is at once architectural, aesthetic and social.
- The interior decorative and functional features are closely associated with the architecture and the social project. They form one of the very first manifestations of the industrial design movement, combining in an innovative way creative forces from different worlds.
- The Fagus factory expresses, in the field of architecture and the design of objects, the social revolution which stemmed from the industrialisation of the European and Western world. It bears witness to the determination to achieve humanistic mastery over one of the most radical changes in the human condition.
- The construction of the Fagus factory is one of the most complete early experiments of Walter Gropius, which led him to found the Bauhaus school of architecture and design. It remains the annunciatory symbol of the Bauhaus, and is acknowledged as such in teaching courses on architectural history and design history the world over.

ICOMOS considers that this justification is appropriate. Through the construction of the Fagus factory in Alfeld, Walter Gropius expresses, for the first time in such a complete way, the principles of a functionalist architecture whose values are resolutely modern. In addition to its architectural dimensions, the project was extended to include the interior functional and decorative features, forming one of the first examples of industrial design as formally expressed by Gropius shortly afterwards at the Bauhaus school. This is one of the most comprehensive, emblematic and consummate testimonies to the origins of this radical change in 20<sup>th</sup> century architectural and aesthetic values, pointing the way forward to functional modernism.

#### Integrity and authenticity

##### Integrity

The general structure of the buildings of the present-day Fagus factory is very close to that of the industrial site constructed by Walter Gropius, from 1911 to 1916. The supplementary works carried out by Gropius himself in 1925, and the final extension works of 1938 directed by one of Gropius' students, confirmed the earlier design options. The strong visual integration of the set of buildings has been conserved and indeed reinforced.

Since the origins of the factory, there has been no demolition or conversion affecting the layout of the premises. No new buildings have been added. The exterior visual appearance of the factory has been preserved. The rebuilding of the sawmill after its destruction by fire, the adaptations to new uses (drying house, workroom), and the restorations (main building, etc.) have not affected the original external architectural fabric, whose historic importance has always been kept clearly in sight, particularly during the works carried out from 1985 until 1999.

The factory is still in use, and still produces shoe lasts. The industrial process has however changed considerably, with the replacement of wood by plastics, which gave rise to alterations and conversions in the use of rooms (see History). These necessary works have generally been carried out with careful attention to the conservation of the decorative elements and furniture. The machines used for the initial industrial process have however disappeared, as a result of technical changes to the production process. The die cutting activity has been discontinued, and the room used for this purpose converted to another function.

ICOMOS, in light of the additional documentation provided in November 2010, considers that the major interventions on the buildings have consisted primarily of adapting the interiors to technical changes, without any notable impairment of their architectural qualities, while care has been taken to conserve particular stylistic features. The recent restoration works have consisted of reroofing, and restoration of the facades and curtain walls, with no alterations to volumes or surface textures. In terms of integrity, the interior conversion of the store house into an exhibition centre is the most significant change. The integrity of the buildings is therefore good, and has been reinforced by the fact that the initial industrial function is still present.

##### Authenticity

The maintenance and restoration works on the Fagus factory from 1985 to 1999 were carried out with careful attention to the architectural values of the buildings, in accordance with the conservation principles applied by the State of Lower Saxony. The replacement of the glass panels, for example, was carried out in accordance with the original factory construction plans, and was only carried out after a colloquium of architectural experts and historians had discussed the matter.

The volumes and exterior surfaces have retained their original appearances. The original materials were retained or restored to an identical condition (yellow-ochre brickwork, glass panels with painted steel frames, ironwork, etc...). The same applies to respect for the interior functional and decorative features (wall paint, floors, staircases, doors, lighting, etc.).

ICOMOS, in light of the additional documentation supplied in November 2010, considers that the changes resulting

from the industrial adaptation of the factory in the course of its history have had few effects on its architectural structure. Additional building and interior alterations affecting conditions of authenticity were of minor importance, and did not impair the value of the most significant individual components. The early recognition (in 1946) of the value of the buildings for the history of contemporary architecture meant that from the outset there has been great attention to detail and care in the conservation of the original forms and materials.

---

ICOMOS considers that the conditions of integrity and authenticity have been met.

---

Criteria under which inscription is proposed

The property is nominated on the basis of cultural criteria (i) and (ii).

*Criterion i represent a masterpiece of human creative genius*

This criterion is justified by the State Party on the grounds that the Fagus factory in Alfeld constitutes an outstanding and innovative architectural and decorative synthesis. Its rational combination of aesthetic, psychological, social and technical qualities makes it a masterpiece of human creative genius. On the threshold of a new era, this complex is the first manifestation of the theoretical bases for the development of 20<sup>th</sup> century architecture. The structural possibilities of steel and glass are used to embody an artistic project of a radical new conception. The outer wall of the main building is a flat surface made of glass and steel; it is continuous and totally transparent, even at the corners. It marks the invention of the curtain wall.

ICOMOS considers that the Fagus factory bears witness to an important moment in the history of construction, linked to architectural, aesthetic and social advances. However, a complex set of interactions and initiatives gradually gave rise to modernist rationalism in 20<sup>th</sup> century architecture. Furthermore, only part of the factory illustrates the radical innovation of the large-scale curtain wall; the other parts and the factory as a whole are important from the viewpoint of the history of architecture, but are of lesser significance. Finally, while the humanist values inherent in industrial architecture and the adoption of a new industrial aesthetic are concepts which are present in the property, this does not exclusively apply to the Fagus factory, and the property is not the first unquestionable expression of them. The qualities inherent in the property remain, but they are more clearly and precisely expressed by other criteria.

---

ICOMOS considers that this criterion has not been justified.

---

*Criterion ii exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or*

*technology, monumental arts, town planning or landscape design*

This criterion is justified by the State Party on the grounds that the construction of the buildings of the Fagus factory in Alfeld is based on a thorough functional analysis of each of its elements, which implies a reformist vision of the human and social aspects of industrial labour. It bears witness to a radical change in working conditions in industrial society, which implies both an analysis of the sequence of operational processes and attentiveness to the need to humanise the industrial world. The aesthetic and architectural quality of the constructions and their interior style are essential factors for improving the social conditions of work, which is at the heart of the Fagus factory project.

ICOMOS considers that the Fagus factory illustrates a moment of considerable interchange between different generations of German, European and North American architects, which gave rise to a rational and modernist architecture. It was a site of synthesis of these influences, which were technical, artistic and humanist; it influenced many subsequent architectural works; it was the starting point of the Bauhaus movement, which was founded by the property's creators Walter Gropius and Adolf Meyer.

---

ICOMOS considers that this criterion has been justified.

---

*Criterion iv be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates a significant stage in human history*

The State Party has not proposed this criterion.

ICOMOS considers that the arguments put forward by the State Party, particularly in its justification of criterion (i), are more relevant with regard to criterion (iv).

Acclaimed as a manifesto of modernity in architecture, the construction of the Fagus factory won Gropius an international reputation. The factory exemplifies the innovation of the curtain wall in steel and glass, separate from the load-bearing structure, optimising both luminosity and lightness. It is a concrete expression of the functionality of the industrial complex in the interest of productivity and the humanisation of the work environment. It incorporates in both the architecture and interior decoration concepts of industrial aesthetics and design.

---

ICOMOS considers that this criterion has been justified.

---

ICOMOS considers that the nominated property meets criteria (ii) and (iv) and conditions of authenticity and integrity and that Outstanding Universal Value has been demonstrated.

---

#### Description of the attributes

- The Fagus factory in Alfeld explicitly illustrates several of the most important founding principles of modern functionalist architecture in the 20<sup>th</sup> century, in particular the curtain wall combining vast glass panels with steel frames supported by a separate and attenuated load-bearing structure.
- It constitutes a homogeneous and rationally-built complex designed to serve an industrial project; each building expresses values associated with its technical function.
- The scheme is at once architectural, aesthetic and social, and bears witness to a determination to achieve humanist control of the social and aesthetic changes coming out of the industrial revolution.
- The interior decorative and functional elements are attuned with the architecture and the social project. They represent one of the first consummate manifestations of industrial design.
- The construction of the Fagus factory is one of the most complete founding experiments of Walter Gropius, which led him to found the Bauhaus school. It remains the annunciatory symbol of the Bauhaus, both in terms of architecture and the birth of industrial design.

#### 4 actors affecting the property

##### Development pressures

In the view of the State Party, the existence and the conditions of integrity of the Fagus factory are not threatened by economic development pressures. The factory's industrial evolution and the successive conversions have demonstrated the care taken from a conservation viewpoint, and the ability of the various players to mobilise the necessary funding and expertise.

The process of evolution of the industrial processes at the factory is still taking place, particularly with regard to advanced technology in physical measurements and industrial testing. But the impact on the property of the current developments, and probably of developments in the future, remains relatively slight. If extensions were to be considered, they would be located on plots outside the boundaries of the property, within the framework of urban development control in Alfeld, inside the buffer zone and subject to the local development plan.

Following ICOMOS' proposals with regard to better protection of the former Behrens/ Fagus factory site, located near the property on the other side of the railway line, the State Party proposed an extended buffer zone. This was ratified and included in the local development plan in a decision taken by the municipal authority on 8 February 2011.

##### Tourism pressures

The number of visitors to the Fagus factory has remained relatively constant since the 1990s, at around 10,000 a

year. When the World Exhibition Expo 2000 was held in Hanover, the site demonstrated its capacity to handle a doubling of visitor numbers, without any particular problems arising, and without any disruption of the industrial process, which is kept separate from the areas open to visitors. The property thus seems well equipped to cope with the probable increase in visitor numbers over the coming years.

Following a request by ICOMOS for clarification with regard to the parking zones, the State Party provided details in its reply of 17 February 2011: the number of parking spaces available is sufficient at present. If additional demand arises because of a sharp rise in visitor numbers, it will be possible to create additional parking spaces close to the property.

##### Environmental pressures

Damage to brickwork, roofing and glass panels, caused partly by industrial pollution in the past, have been remedied in the recent restorations. Today there is no specific environmental pressure linked to water or air pollution, beyond that normally accepted for a town which is today much less industrialised than it was in earlier times.

The main environmental issue was, over a long period, the close proximity of the railway line. The question of the vibrations generated in the glass panels has been dealt with during the recent restorations.

Notwithstanding the recent technical work on the new glass panels, ICOMOS asked the State Party in its letter dated 14 December 2010 to provide information about the impact of a possible increase in railway traffic and/or train speed on maintaining the conditions of integrity of the property, particularly with regard to the glass panels. The State Party provided the following details:

- There is no perceptible transmission of vibrations through the ground, due to the nature of the soil and because the glass panels are at a sufficient distance from the railway line.
- Since the first restoration of the glass panels in the 1990s, no glass panel breakage has been observed.
- The railway line was recently relaid, using welded steel rails complying with European standards which ensure that vibrations generated by railway traffic are kept at low levels.
- The railway line is used for local and intercity trains which operate at moderate speeds; a dedicated high-speed train line exists approximately ten kilometres away from the property.

##### Natural disasters

The main risk identified is that of fire. The river Leine could also be a threat to the property in the event of heavy flooding.

Impact of climate change

This point is not raised in the dossier. It seems that no impact on the property has been identified to date.

---

ICOMOS considers that there are no major threats to the property.

---

## 5 Protection conservation and management

Boundaries of the nominated property and buffer zone

The surface area of the property is 1.88 ha. The site is uninhabited.

In accordance with the suggestion made by ICOMOS, the buffer zone has been enlarged to include the railway annexes and the site of the former Behrens/Alfeld factory, following a decision by the municipal authority, and the inclusion of the enlarged buffer zone in the urban development plan, on 8 February 2011.

---

ICOMOS considers that the boundaries of the nominated property and of its buffer zone are adequate.

---

### Ownership

The factory belongs to a privately-owned company. It has always belonged to the same company, whose name today is *Fagus Grecon Greten GmbH Co. G*, whose registered office is located on the property's premises.

ICOMOS recommends that one or more scenarios should be considered, to allow for the possibility of a change of owner or a change in use.

### Protection

The property has been listed as a historic monument since 1946, which is a very early date for heritage protection of an industrial complex. It was thus protected against the sometimes overhasty process of rebuilding industrial facilities after the war.

### Legal Protection

The 1978 Lower Saxony Monuments and Historic Buildings Act redefined the factory's legal protection status. It applies to all the buildings and the land, defining the property both as a group of architectural structures and a cultural monument. Furthermore, each of the buildings is considered and listed as a historic monument in its own right. The Act defines the duties of protection and conservation.

The property must comply with the Lower Saxony Building Regulations, which means that a building permit is required for construction or alteration works.

The property must be protected and managed in accordance with the following regional and municipal plans:

- Regional Development Plan of Lower Saxony (2008);
- Regional development plan for the district of Hildesheim (2002);
- Land Utilisation Plan, Alfeld (1976);
- Urban Development Plan of the Town of Alfeld (in preparation).

Furthermore, the urban planning authorities have taken measures to ensure that any development projects inside or beyond the buffer zone should not have any effect on the visual perspectives of the Fagus factory from the outside.

In accordance with the request made by ICOMOS, the urban development plan of the Town of Alfeld, providing for the protection of the property and its buffer zone, was promulgated by a municipal authority decision of 8 February 2011.

### Effectiveness of protection measures

In the Federal Republic of Germany, the protection of historic monuments and cultural sites is the responsibility of the regional states.

The Lower Saxony Historic Monuments Preservation Department, under the control of the government, exercises public authority in protection matters. Because of the special significance of the property, all measures affecting it are taken in coordination with the Lower Saxony Science and Culture Ministry. All measures proposed by the regional state must be examined and approved by the Town of Alfeld.

The 1978 Act makes it compulsory for the owner to maintain, repair and, if necessary, restore the property. The owner can for its part request both technical and financial help from the Historic Monument Preservation Department. No interior or exterior alterations, and no change of use, may be carried out without the submission of a detailed technical dossier and the approval of the Historic Monuments Department. In view of the nature of the property, this protection is extended to include the interior architecture and its functional and decorative elements. If any proposed works are rejected by the Department, they are immediately suspended. If works have already been carried out, the owner is compelled to restore the building to its original condition. Representatives of the Historic Monuments Department are guaranteed permanent access to all the buildings in the property. Any failure to comply with legal obligations results in immediate legal action by the Lower Saxony authorities.

---

ICOMOS considers that the legal protection in place is adequate.

---



## Conservation

### Inventories, recording, research

The Fagus company has its own archives, which include detailed information about the property's architecture and technical history. The archives thus provide a basis for the ongoing compilation of records of maintenance and restoration works as they are carried out.

The Fagus company maintains scientific cooperation links with the archives of the Bauhaus in Berlin.

The many collaborative projects with universities, and the preparation of exhibitions and the production of documents (about the Fagus factory, Walter Gropius and his students, the Bauhaus and more generally the history of modern architecture and industrial design) are conducive to continuing research in the academic field and in conservation, and for enhancement of the experience for the general public.

### Present state of conservation

Sawmill: The reconstruction in 1985, and the subsequent adaptation works, preserved the original layout of the three-axis hall, and the external appearance was carefully restored.

The storehouse was refurbished and renovated in 1998-99 (load-bearing structure, roof, light- fixtures, etc.). A new concrete interior staircase was added to comply with current standards for areas open to the public.

Drying house: Its roof and brickwork were restored in 1997. The exterior forms of the lamella openings through which vapour escaped from the former stoves were maintained. In 2007, the introduction of new machines required the transformation of part of this building and new openings. They were carried out in accordance with the original style.

The workroom was restored in accordance with historic data, between 1989 to 1993. In particular, work was carried out on the roof, the wooden truss frame, the glass panels and the parapet brickwork. The workroom is still used for its initial purpose of making shoe lasts.

The main building underwent substantial exterior and interior restoration programmes from 1985 to 1996. The vast glass panels forming the curtain walls were replaced, with careful attention to conditions of authenticity. The roof was also restored and stiffened to reduce the structural fragility of the building, which was partly responsible for the deterioration of the condition of the glass panels. The entrance staircases were restored, followed by the entrance as a whole. The lighting was modified and brought into conformity with the original boxlights.

The roof and brickwork of the cutting die department were restored from 1995 to 1997, in accordance with the original forms and materials.

The boilers were removed from the engine house in 1994, so that this building could be converted into a cafe and store house, whilst conserving its external forms and appearance. The 50-metre high smoke stack has been conserved, following restoration in 1987-1988.

The chip and coal bunker was refurbished in 1997.

The rail-lifting jack and rail-car scales underwent maintenance works in 1991-1992.

Gatekeeper's house: The roof of the gatekeeper's house was repaired in 1997, and the boundary wall in the approach area was renovated in the same year. eplicas of Bauhaus boxlights were installed. The metal gate system and the door of the gatekeeper's house were also renovated.

In conclusion, the general state of conservation of the property is considered to be good.

### Active Conservation measures

Conservation of the property is the responsibility of its owner, with assistance from the Historic Monuments Preservation Department and the property's Steering Committee. This has led to regular maintenance and a series of concerted programmes for the conservation of the property, particularly during the 1990s.

ICOMOS considers that it would be useful to establish a medium-term conservation programme, which should stipulate the need for the participation of professionals specialising in conservation of 20<sup>th</sup> century architectural heritage.

### Maintenance

outine maintenance of the property is carried out by the owner, *Fagus Grecon Greten GmbH Co. G*.

### ffectiveness of current management

The conservation measures implemented, particularly in the 1990s ahead of the World xhibition xpo 2000 in Hanover, have been effective.

ICOMOS considers that the property is in a satisfactory state of conservation, thanks in particular to the very substantial renovation and restoration programmes implemented from 1985 to 2001. However, a medium- and long-term vision of conservation needs to be established, in the form of a multiannual property conservation plan. The hypothetical possibility that the existing owner could pull out, and the possible consequences this would have on the future of the property, need to be considered.

ICOMOS considers that the conservation of the property is satisfactory. However, a medium- to long-term vision of conservation should be established, which will involve the setting up of a multiannual conservation plan, the participation of specialists in the conservation of 20<sup>th</sup> century architecture, and reflection about the

hypothetical possibility that the existing owner could pull out.

## Management

Management structures and processes, including traditional management processes

Management is carried out by the company which owns the property. In this task it is assisted by the regional monument conservation authorities (Lower Saxony and the Town of Alfeld), by experts, and by specialist companies and craftsmen, depending on the programmes to be carried out. Management is an ongoing process, which is guided and controlled by the property's Steering Committee.

In addition to the owner and the regional monument conservation authorities, the Steering Committee includes representatives of the various local and regional political bodies (regional state, district, municipality of Alfeld), and administrative officials. The Committee meets regularly. Depending on the issues raised, architects, planners, and historic monument restoration specialists may be involved.

Policy framework: management plans and arrangements, including visitor management and presentation

In the context of the Steering Committee, the owner is responsible for research, and the drawing-up of sectorial conservation programmes and development projects relating to the property. The owner is assisted by the relevant regional authorities. It calls on experts and advisors as necessary. All the programmes and development projects combined form the management plan, which is regularly updated and completed. It is validated simultaneously by the Steering Committee and by the historic monument conservation authorities.

The Fagus-Gropius Cultural Centre has been installed inside the factory, in the vast five-storied building previously used for the storage of wood (2). Together with the visitor reception building (6) and the cafeteria (7), this group of buildings forms an effective set of facilities for visitor reception, and for interpreting the property's significance and demonstrating its value. The cultural centre has drawn up and is implementing a "Living Monument" plan. The other main buildings are used for industrial activities.

The management of the Fagus factory undertakes public relations activities, in order to raise awareness of the property in a number of tourism, cultural and economic development programmes. The public relations department takes charge of cultural partnership arrangements, such as temporary exhibitions.

### Fire preparedness

The fire prevention system complies with the standards in force in Germany and Lower Saxony for industrial and public buildings. The premises are equipped with an alarm system and automatic fire extinguishers. If a fire occurs,

protection of the property forms part of the local firefighting plan.

The river Leine, which is liable to flood, is embanked, and extensive flood-water retention areas have been created upstream of the town and the property.

### Involvement of the local communities

The Municipality of Alfeld is a permanent member of the Steering Committee. Its technical departments are regularly consulted (planning and construction, culture, etc.).

Resources, including staffing levels, expertise and training

The owner provides most of the financing for maintenance and conservation of the property.

Provided that it manages the property effectively, the owner may apply for public funding from the regional state of Lower Saxony, the district and the Town of Alfeld, to top up its own funding. If a major programme is planned, funds from the Federal Republic of Germany and European funds may also be solicited.

For example, for the period of major works from 1985 to 2001, total expenditure amounted to 6.65 million euros, of which just under half was paid for by the owner, with the rest being funded by the federal government and by Lower Saxony.

The monument conservation authorities can call on a set of specialists in different fields of building conservation and restoration, and on historians.

Fagus regularly uses the services of an architect specialising in the restoration of 20<sup>th</sup> century architecture. Within the company, there is a group of skilled workers with experience of the normal maintenance and repair tasks.

In addition, Fagus can call on a large number of external specialists and tradesmen at both local and regional level. The company also has partnership agreements with specialist university departments (Hamburg, Hildesheim, Göttingen), and the regional Chamber of Architects.

The Fagus-Gropius Cultural Centre has full-time staff: four guides, and four other staff who guard the exhibitions during opening hours. It is possible to bring in additional guides on an occasional basis, and to hire additional personnel if there is a large increase in visitor numbers. The personnel receive training to familiarise them with the values of the property and the history of contemporary architecture. Training initiatives and broader partnership arrangements have been set up with the Bauhaus Archives in Berlin, particularly for the international exhibitions organised at the property since 2000. The Centre is also equipped with multilingual audio-headsets.

effectiveness of current management

ICOMOS considers that the current management of the property is effective and satisfactory.

---

ICOMOS considers that the management system for the property is adequate.

---

## 6 Monitoring

Monitoring of the property's conservation and management is carried out by the Steering Committee. The Committee is overseen by the Historic Monument Conservation Department of Lower Saxony.

Very general indicators have been established, and are applied once a year. They constitute a technical, social and financial appraisal of the management and conservation of the property. The appraisal includes the updating of the Management Plan.

ICOMOS considers that more precise technical indicators must be established, particularly for the monitoring of the conservation of the exterior architecture, the load-bearing structures and the roofs, and the interior architecture and its decorative and functional elements.

---

ICOMOS considers that the monitoring of the property consists of an annual activity appraisal and the updating of the Management Plan of the property, which is satisfactory. However, it would be advisable to establish more precise technical indicators to be monitored on a regular basis.

---

## 7 Conclusions

ICOMOS recognises the Outstanding Universal Value of the Fagus factory in Alfeld, Germany, as an early and influential testimony to modern functionalist architecture and industrial aesthetics at the very beginning of the 20<sup>th</sup> century.

Recommendations with respect to inscription  
ICOMOS recommends that the Fagus Factory, Germany, be inscribed on the World Heritage List on the basis of **criteria i, ii, iii, iv, vi and x**.

Recommended Statement of  
Outstanding Universal Value

Brief synthesis

Designed in around 1910, the Fagus factory in Alfeld constitutes an architectural complex which foreshadows the modernist movement in architecture. Built by Walter Gropius, it is notable for the innovative use of walls of vast glass panels combined with an attenuated load-bearing structure. It bears testimony to a major break with the existing architectural and decorative values of the period,

and represents a determined move towards a functionalist industrial aesthetic.

The Fagus factory in Alfeld establishes several major fundamental aspects of modern functionalist architecture of the 20<sup>th</sup> century, in particular the curtain wall. It constitutes a homogeneous, territorial and built complex, rationally and completely designed to serve an industrial project. It expresses great architectural unity. The scheme is at once architectural, aesthetic and social, and bears witness to a determination to achieve humanist control of the social and aesthetic changes linked to industrialisation. The interior decorative and functional elements are attuned with the architecture and the social project. They represent one of the first consummate manifestations of industrial design.

**Criterion i** The Fagus factory in Alfeld illustrates a moment of considerable interchange between different generations of German, European and North American architects, which gave rise to a rational and modernist architecture. It was a site of synthesis of these influences, which were technical, artistic and humanistic; it went on to influence many other architectural works; it was the starting point of the Bauhaus movement.

**Criterion ii** A manifesto of modernity in architecture, the Fagus factory won its designer, Walter Gropius, an international reputation. It exemplifies the innovation of the curtain wall, which optimises both luminosity and lightness. It is a concrete expression of the functionality of the industrial complex in the interest of productivity and the humanisation of the working environment. It incorporates into the scheme the concepts of industrial aesthetics and design.

Integrity

All ten buildings constituting the Fagus factory have been conserved in their entirety, in their initial ground plans and architectural forms. The factory corresponds with the programme set out by its designers around 1910. No buildings have been added or demolished. The conditions of integrity in terms of layout and exterior architecture have been preserved.

Authenticity

Major repairs and restorations were carried out from 1985 to 2001. They were carried out with great respect for the property with regard to its outstanding testimony to 20<sup>th</sup> century industrial architecture, which has contributed to the preservation of the conditions of authenticity both as regards architecture and decoration.

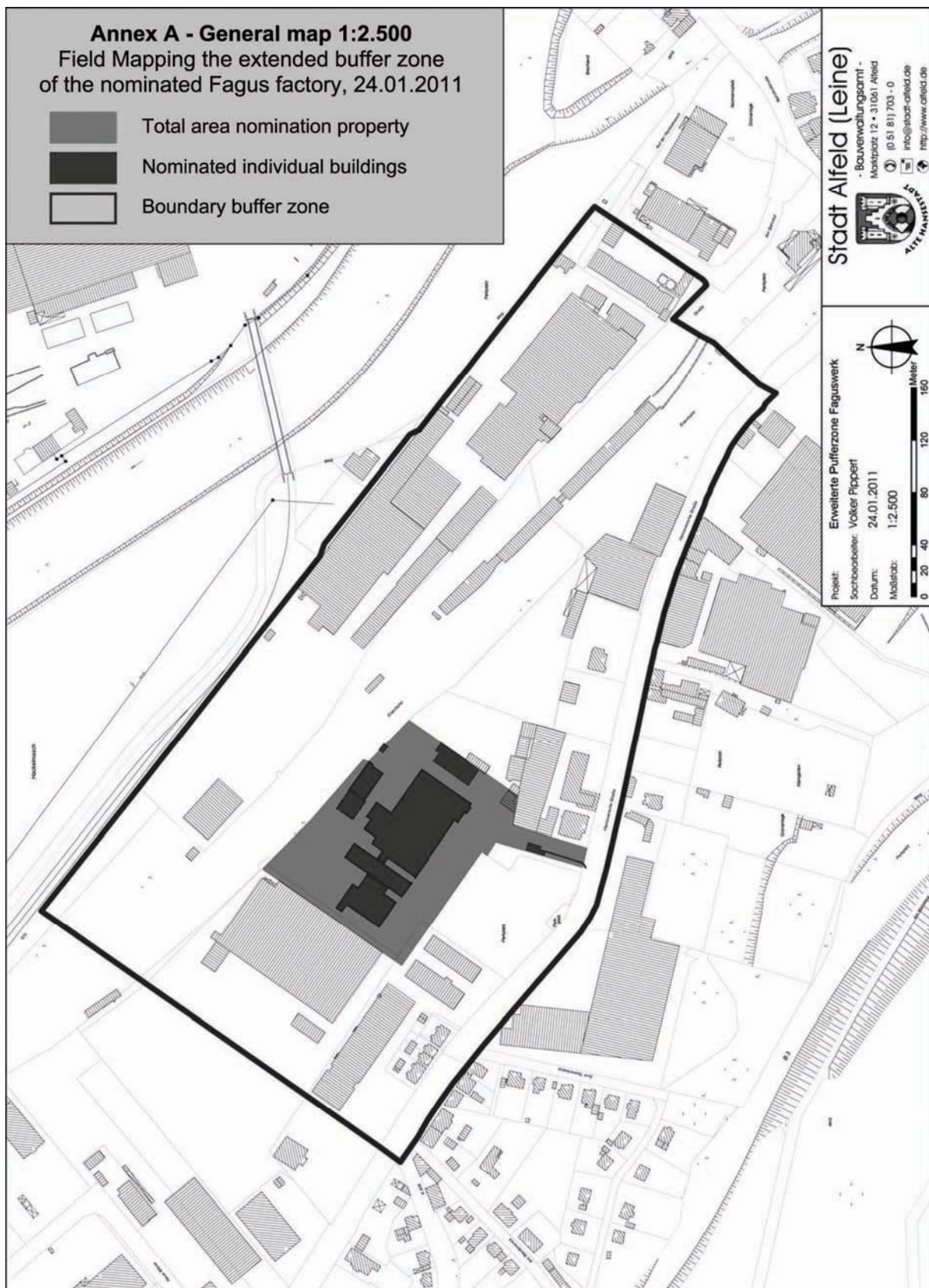
Management and protection requirements

The property has been listed as a historic monument since 1946, which is a very early date for an industrial complex. The 1978 Act of the Regional State of Lower Saxony on Historic Monuments and Buildings redefined the terms of its legal protection.

The property is managed under the responsibility of its owner, *Fagus Grecon Greten GmbH Co. G.* The owner acts in concert with the regional and local historic monument conservation authorities, via the property's Steering Committee, which exercises authority with regard to project control and coordination between the various partners involved. The management system consists of a set of maintenance and conservation measures which is regularly updated by the Steering Committee. If major works are required, joint funding is set up between the private sector owner and the regional and national public authorities.

ICOMOS recommends that the State Party give consideration to the following:

- Consider one or more possible scenarios which could be implemented in the event of a change of owner and/or a change in use of the buildings;
- Set out a medium-term conservation programme, including the participation of professionals specialising in the conservation of 20<sup>th</sup> century architecture;
- Consider establishing more precise technical indicators for the monitoring of conservation.



Map showing the revised boundaries of the nominated property

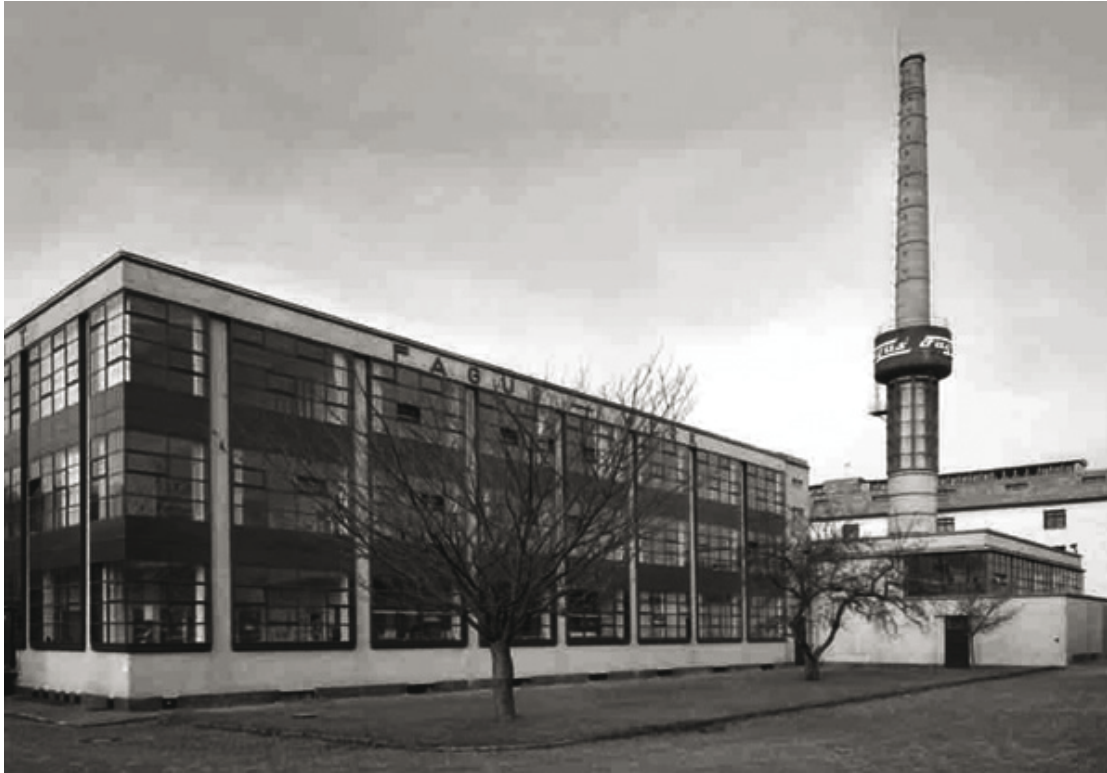




Aerial view of the nominated property



South-western view of the main building



General south-eastern view



Main building foyer, staircase



---

# Land of Caves and Hiding in the Judean Lowlands

## Israel

### No 137

---

Official name as proposed by the State Party  
Land of Caves and Hiding in the Judean Lowlands,  
Maresha, Bet-Guvrin and Adulam

#### Location

Region of Lower Judea,  
Districts of Mateh Ashuda, Be'er Sheva and Lachish,  
Israel

#### Brief description

The numerous man-made caves in Lower Judea bear witness to a succession of human settlements representing different civilisations over a period of some 2,000 years. The presence of a thick and homogenous layer of soft chalk / marl rock enabled the cutting of the caves. They are located below dwellings and villages, which the subterranean complexes were organised to serve. The caves have many uses, ranging from quarries to burial areas, places for cult activities to hideaways, and from water storage to various economic functions, the most notable being subterranean columbaria (dovecotes) and oil presses.

#### Category of property

In terms of categories of cultural property set out in Article I of the World Heritage Convention of 1972, the nominated property is a site.

Under the terms of the Operational Guidelines for the Implementation of the World Heritage Convention (January 2008), paragraph 47, the property is also nominated as a cultural landscape, in the organically evolved landscape category and the relict landscape subcategory.

## 1 Basic data

Included in the tentative List  
30 June 2000

International Assistance from the World Heritage Fund for preparing the Nomination  
None

Date received by the World Heritage Centre  
28 January 2010

#### Background

This is a new nomination.

#### Consultations

ICOMOS has consulted its International Scientific Committees on cultural landscapes and archaeological heritage management, and a large number of independent experts.

Comments on the assessment of this cultural landscape were received from IUCN on 1<sup>st</sup> February 2011.

This information was carefully considered by ICOMOS in reaching its final decision and recommendation in March 2011; IUCN also reviewed the presentation of its comments, as included in this report by ICOMOS.

#### Literature consulted selection

Yonker, A., "Beth Guvrin", "Mareshah", in Stern, N., et al (eds.) *The New Encyclopedia of Archeological Excavations in the Holy Land*, 1, Jerusalem - Washington, 1993.

Yonker, A., Givon, B., "Judean hiding complexes", in Stern, N., et al (eds.) *The New Encyclopedia of Archeological Excavations in the Holy Land*, 5, Jerusalem - Washington, 2008.

Rowley, H., *Atlas de la Bible, histoire, géographie, chronologie*, Paris 1969.

#### Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the property from 4 to 8 October 2010.

Additional information requested and received from the State Party

ICOMOS asked the State Party on 28 October for further information concerning the following points:

- the ownership status of the property;
- the management structure and coordination between the different entities of the property.

The State Party replied in a letter dated 5 November 2010, and sent additional documentation on 13 February 2011, which has been taken into account in this evaluation.

Date of ICOMOS approval of this report  
10 March 2011

## 2 The property

#### Description

The property consists of a set of man-made caves and subterranean complexes, related to the settlements established on the surface. The property bears witness to human settlement in Lower Judea during successive historical eras from the protohistoric period to the first Islamic period (see History). It shows the relations established by man with the subsurface of his settled territory, in a given geological context. It bears witness to man's technical and social evolution. In the State Party's view, it constitutes a characteristic, organically evolved relict landscape.

To the east of the region of Lower Judea is the mountainous area of Central Judea, and to the west an alluvial coastal plain. Lower Judea is characterised by a strongly eroded limestone plateau of low altitude, inclined towards the coast. Its climate is of the semi-arid Mediterranean type, with low annual precipitation. The region has groundwater reserves which can be accessed through deep wells.

The lowlands in which the property and its surrounding area are located is made up of limestone or chalk marl, dating from the Eocene period. This is a compact, homogeneous but soft rock, which is relatively conducive to the hewing of caves. The main subterranean layer (Maresha) is between 30 and 100 metres thick. Near the surface, the original chalk has been transformed by climatic and hydrological conditions into a harder chalk (Nari), between 1 metre and 3 metres deep. This crust is effective at forming the ceilings of the caves, and it has also enabled the formation and retention of arable soils rich in humus, particularly at the foot of the hills and in the lower valleys. Elsewhere, the soils are poorer, with vegetation consisting of scrub or Mediterranean woodlands.

Lower Judea is a land of very early human farming settlements. The chalky subsurface has enabled the quarrying of materials for constructions on the surface. The quarries have also become caves and subterranean complexes for the farms and villages, used in a wide variety of ways. Developed and used over almost two millennia, these man-made subterranean complexes came to form extremely dense networks. They are located beneath the former built parts of the property, which today take the form of tells or a few rare monumental remains which are still visible. The extent of the caves and their number diminish the further one gets away from the property itself (buffer zone and beyond). The property comprises a vast region of more than 5000 hectares, which is protected and managed as an archaeological park and a nature park. The natural Mediterranean areas associated with the tells and the archaeological remains constitute the relict landscapes of the property. The two main entities of the property are:

1) At the heart of the property, the Bet-Guvrin Maresha National Park comprises the archaeological remains of two twin cities whose successive settlements gave the park its name. It is located in the south of the property. Its remains encompass all the periods of the history of the property, and show the main types of human excavations, both in terms of creation and use. They are complemented by a series of secondary sites in the Archaeological Park which show the extent and widespread use of the process of hewing out the caves and using them for economic purposes, and adaptations of the process in a variety of historical contexts. 169 subterranean complexes have been recorded, forming a total of some 5,000 caves and tunnels. The main archaeological elements of the Park are as follows:

1.1 Maresha is an urban archaeological site close to what today is the small urban area of Bet-Guvrin. Its initial settlement dates back to the Iron Age, when it was a fortified promontory. It was occupied for about 800 years, and is repeatedly mentioned in Biblical texts (Tel Sandahanna). A lower city developed around it at a later stage, and it reached its zenith during the Hellenistic period. It was destroyed in the 2<sup>nd</sup> century BC, and was definitively abandoned in the following century. Various surface remains are still visible today, particularly of the fortifications.

Right from the city's origin, materials from the subsurface were used for construction. The resulting subterranean system bears witness to a wide range of uses over the period from the 5<sup>th</sup> to the 2<sup>nd</sup> century BC.

The subterranean complexes were entered through openings made in the floor of the houses, and by stairways hewn out of the chalk rock. They played a major economic role, but weren't used as cave dwellings, and this is generally the case for the whole of the property.

The man-made caves were used in particular as workshops for the pressing and storage of olive oil (22 sites recorded) and, in fact, Maresha was one of the important olive oil centres of the Hellenistic era, exporting oil to Egypt. Tanks and presses cut into the chalk rock still remain. The caves have also been used for raising pigeons (85 sites recorded), which was an extremely flourishing means of food production. Nesting places were hollowed out of the cave walls, and their subterranean location provided good protection against predators. Subsequently, the subterranean quarries were often reused as cisterns, sometimes with settling tanks, rainwater drainage systems and systems for drawing water. Others were used as subterranean baths. Others again were used as stables for animals or for the storage of foodstuffs and merchandise (particularly cereals). Some remains show the role played by caves in the textile industry, in support of activities carried out on the surface.

Subterranean chambers were also used for religious/cult purposes, the exact function not yet fully determined. On the edge of the city, the caves were used for burial purposes. Three necropolises have been discovered, bearing witness to the Hellenistic period, and in particular a richly decorated Sidonian necropolis. The inscriptions and wall paintings in the tombs indicate the multicultural and cosmopolitan dimension of the city at this period.

Many excavations remained as quarries, due to the ongoing need for construction and repair in the city.

1.2 Bet-Guvrin (Eleutheropolis) is an urban site which was developed from the 2<sup>nd</sup> century BC close to, and following on from, Maresha. It was the seat of a Roman governorate in the 2<sup>nd</sup> and 3<sup>rd</sup> centuries AD, and was at that time one of the most important cities of Roman Palestine and a crossroads of trade. It had large-scale facilities, including two aqueducts, public baths, and a theatre. Its population was replenished in the 3<sup>rd</sup> and 4<sup>th</sup>

centuries with the arrival of a large Jewish community, and it became a cultural centre for the Jews. Its prosperity continued during the Byzantine period. This was a period of cohabitation between the Jewish and Christian communities. The town was the seat of a bishopric, and was protected by a surrounding wall. A certain number of Jewish and Christian archaeological remains attest to the size of the two communities. The cemeteries are located near to the city, in hollowed-out necropolises leading from entrances on the hillsides. The use of these burial caves decreases as the city's influence declines, in the 7<sup>th</sup>-8<sup>th</sup> centuries, and then comes to an end.

During the Islamic period, the development of vast vertical subterranean caves in the shape of a bell (using a type of quarrying first appearing at the end of the Byzantine period) intensified, supplying building material which was sold at distant markets.

1.3 The rest of the National Archaeological Park covers the Guvrin Stream basin. This is a zone consisting of hills with natural vegetation, and plains used for traditional agriculture. The Park is intended to highlight and ensure the conservation of this essential part of the property, both for its archaeological remains and the preservation of cultural and natural landscapes claimed to be similar to those of the past. In addition to Maresha and Bet-Guvrin, the park contains many other remains hewn out of the rock, such as sets of bell caves, and a large water tunnel.

2) Adulam Grove Nature Reserve and Adulam Caves Park group together the main sites of the central and north-eastern parts of the property. 56 main man-made subterranean systems have been identified here. The reserve is situated inside the Park, and has its own specific management body. The Park in fact extends well beyond the boundaries of the property (and indeed its buffer zone), but no explanation for this is given in the nomination dossier.

Adulam Grove Nature Reserve contains the following sites:

2.1 Midras Ruins consist of the remains of a large farming settlement which existed continuously for hundreds of years, beginning in the Hellenistic period. Its subterranean remains include dozens of caves used as columbaria (dovecotes), workshops, cisterns and burial caves. During the Bar Kokhba revolt (see History), the caves that already existed were connected by a sophisticated network of burrows and hiding places. The site also includes a particularly opulent Jewish burial cave, from the end of the Roman period, and a burial cave at the summit of a hill, topped by a pyramid. During the Byzantine period, the site was occupied by a Christian community. Recent archaeological finds at Hirbet Midras, referred to in documentation sent by the State Party on 13 February 2011, have brought to light the vestiges of a large church from the Byzantine period. The church has a remarkable mosaic floor. The excavation site has revealed the presence of an earlier vast public complex, dating from the Judaic period of 1<sup>st</sup>-2<sup>nd</sup> centuries C . More generally, this

archaeological site clearly shows the succession of human settlements, from 1<sup>st</sup> century BC to 8<sup>th</sup> century C .

2.2 Rafia Ruins are in the south of the reserve, not far from the present-day urban centre of Bet-Guvrin. This was a large Jewish village, from the Hellenistic period to the end of the Roman period. The ruins consist of the remains of houses with caves. In the highest part of the site, there is a complete subterranean complex which is representative of the activities and social life of the period: olive oil, columbaria, cisterns, burial caves, etc. Quite a large number of archaeological finds have been made here, and decorative elements have also been found.

The main archaeological sites inside the Adulam Caves Park but outside the reserve are as follows:

2.3 Burgin Ruins are situated on a hill. They correspond to a site occupied from the Iron Age II period, and later to a large village. The site is surrounded by burial and other caves hollowed out of the hillside. Its zenith came in the 2<sup>nd</sup> century C when many caves were used for agricultural purposes, for water, and as hiding places. The site reveals a variety of stylistic influences. It also includes a vast bell cave, later converted into a columbarium, and a tunnel.

2.4 Etri Ruins are at the summit of a hill, in a natural defensive site. Potsherds have been found from the Persian period. A village was later developed and fortified by a Jewish community. The caves first appear in the Hellenistic period, and include caves for cisterns and ritual baths. The zenith of this site, which was accompanied by a planned restructuring of the dwellings, coincided with the start of the Roman period. The village was involved in the first revolt of the Jews against Rome, in the 1<sup>st</sup> century C , and a network of subterranean hiding places dates from this period. The network was added to and used again during the second revolt, at the end of which the village was destroyed. On the surface, the site includes the remains of a large rectangular public building, used between the two revolts, which provides access to a subterranean network which was probably used collectively.

2.5 Adulam Caves Park also has several sites of lesser importance with subterranean complexes: Shua with hiding places and a collection of quarrying tools, Avnin Ruins and Kanim Ruins.

3) Other ancient sites of moderate importance, with and without subterranean systems, exist outside the boundaries of the Archaeological Park and outside the Adulam Caves Park, particularly in the centre and north-west of the nominated property: Abak Ruins, with bell caves and a very large subterranean hiding place, Resek Ruins, Elevation 270 which is an extensive settlement site with a network of caves, and Kidon Ruins.

4) Finally, several similar sites, considered to be of lesser importance according to the present state of research,

exist inside the property, also in the buffer zone and beyond. The property also includes, at several places, remains of underground drainage and water collection systems for the inhabitants, which are found in other regions of the Middle East and the Mediterranean.

ICOMOS considers that while the description of the caves is quite well documented, this is not the case for the surface remains. They include some monuments, in particular a Roman theatre, a Byzantine church and a pyramidal mausoleum. The remains of human settlements are usually in the form of tells. Some of the tells have been excavated, unearthing dwellings and cave entrances.

ICOMOS considers that an inventory of these surface archaeological elements, and appropriate maps, are essential for the understanding of this part of the property. The same applies to the relict landscapes, which are insufficiently analysed.

IUCN considers that: "The nomination focuses on the values of the property as an example of traditional human settlement that utilized the specific natural characteristics of the land and built artificial caves in the soft sediments of the area. The natural features of this ancient landscape, ridges, hilltops and streambeds, have changed very little in recent times. The nominated property is in a region characterized by traditional land use, mostly agriculture."

#### History and development

The individual historical aspects of the sites are discussed in the course of their description. They represent a wide variety of protohistoric, ancient and Medieval periods. The overall timescale can be roughly sketched in for the area inside the property boundaries, over a period of some two millennia.

Lower Judea is close to the ancient route linking Mesopotamia to Egypt; this is a very ancient region of agricultural settlement which gave birth to the Jewish people, but which also saw the flourishing of other cultures. The property and its region had a complex history, as a point of interchange and meeting between the interests of the major empires of the East (Mesopotamia, Persia), the Mediterranean (Hellenistic, Roman, Byzantine) and Egypt, and finally the region was one of the first areas of expansion of the Muslim world.

Israelite period, Iron Age II (8<sup>th</sup>-6<sup>th</sup> centuries BCE): Like most of the settlements in Judea, the region in which the property is situated was occupied by the tribe of Judah, at the end of the 2<sup>nd</sup> millennium. An Israeli kingdom was formed, controlling the local populations. The use of subterranean excavations as quarries and annexes for dwellings and villages began in the 8<sup>th</sup> century BC.

Persian period (6<sup>th</sup>-4<sup>th</sup> century BCE): In the early 6<sup>th</sup> century, Judea was controlled by the Babylonian empire, and then by the Persians (539 BC). The Idumean population at that time constituted the majority in the territories covered by the property, which took on their name (as Idumea), and Maresha became a flourishing

town, systematically making use of its subsurface first for quarrying and then as a space for economic development.

Hellenistic period (4<sup>th</sup>-1<sup>st</sup> century BCE): Persian influence waned in the 4<sup>th</sup> century BC, and was replaced by a Phoenician and Greek presence which changed the social composition of the villages and introduced Hellenistic culture. In the 2<sup>nd</sup> century BC, the political domination of the Seleucids weakened, and Judea regained its independence. This marked a first zenith in terms of the territorial extent of the use of the subterranean complexes. The subterranean networks were numerous and were systematically utilised. So-called Maresha architectural and utilitarian typologies were by then in place. They reflected the accumulation of knowhow over a long period: the excavations extend horizontally beneath the hard layer, the spaces are rectangular for olive oil plants, cruciform for the columbaria, and cylindrical for the cisterns, etc.

Roman period (1<sup>st</sup> century BCE- 4<sup>th</sup> century CE): Judea was conquered by the Roman general Pompey in 63 BC. Although their religion was recognised, the Jews rebelled against the Romans in 66 CE, and then again in 132-135. Lower Judea was directly involved in the second revolt, known as the Bar Kokhba revolt. From time immemorial, the man-made caves of the region had been used as hiding places during troubled periods. However, networks of subterranean hideouts dedicated exclusively to this purpose then appeared in number, during the Bar Kokhba revolt. With the beginnings of Christianity, a complex cultural and religious situation marked the end of the Roman period, to which the burial caves and subterranean cult rooms bear witness.

Byzantine period (4<sup>th</sup>-7<sup>th</sup> centuries): The partition of the empire (end of the 4<sup>th</sup> century) meant that Lower Judea became part of the Eastern empire, and then of the Byzantine empire. The Jewish community of the Talmudic period was large and active; it flourished alongside a Christian community which was also numerous and on the increase. The period was marked by the digging of necropolises in the slopes of the hills, and by considerable use of the caves for agricultural purposes. At the end of the Byzantine period, the quarrying resumed, but using a different method. The caves were quarried downward, beginning from a hole in the hard layer, in the shape of a bell. It was thus possible to enlarge the volume at the base while maintaining the stability of the vault.

First Arabo-Muslim period (7<sup>th</sup>-11<sup>th</sup> centuries): After a troubled period of clashes between the Byzantines and the Persians in the early 6<sup>th</sup> century, the region was occupied by Islamic armies arriving from the south (634-640). There was a gradual process of Arabisation and Islamisation of Palestine, as Bet-Guvrin and the surrounding region fell into decline. Underground quarrying using bell caves resumed, but for the benefit of coastal towns which were then expanding greatly. Quarrying continued until the beginnings of the 11<sup>th</sup> century, when the first Crusades profoundly changed the regional socio-economic situation. It seems probable that

the caves were used at later periods, but the configuration of the subterranean complexes remained unchanged after this period.

The archaeological remains of the cities of Maresha and Bet-Guvrin were discovered in 1838 by Robinson, who was the first to describe the hewn cave phenomenon. The Lower Judea region then became a focus for a large number of archaeological surveys, particularly of the subterranean complexes and their decorations. Around ten archaeological campaigns were then carried out up until the beginning of World War One.

Archaeological research into the caves and the associated villages resumed in the early 1950s, and has been actively continued since then, on 25 main sites. The Israeli institutions began drawing up systematic inventories in the 1980s. This was carried out in particular by the Israeli archaeological service, today known as the Israel Antiquities Authority (IAA). This work continued alongside the opening of the Bet-Guvrin Maresha National Archaeological Park (1986-87). A number of large-scale excavations were carried out in the Park from 1989 to 1996.

### 3 Outstanding universal value integrity and authenticity

#### Comparative analysis

The State Party provides a theme-based comparative analysis, based on the recorded uses of the caves and subterranean complexes of the property. It is compared with other sites, many of which are already inscribed on the World Heritage List. These are mainly situated in the Mediterranean area and in the Middle East, but there are also some in India and China.

The ritual and religious uses are compared with the Indian properties of Ajanta Caves (1983, criteria (i), (ii), (iii) and (vi)) and Elephanta Caves (1987, criteria (i) and (iii)), Mogao Caves (1987, criteria (i), (ii), (iii), (iv), (v) and (vi), China), and the subterranean churches of Cappadocia (Göreme National Park and the Rock Sites of Cappadocia, 1985, criteria (i), (iii), (v) and (vii), Turkey). The phenomenon of subterranean cult and ritual places is furthermore quite widespread in Persia and around the Mediterranean. The originality of the property is that it contains subterranean ritual sites for different religions: Judaic, Christian and Islamic.

The burial caves are compared with the catacombs of Rome and the burial caves of Petra (1985, criteria (i), (iii) and (iv), Jordan). The peculiarity of the property is that it presents pagan, Jewish and Christian tombs located close to each other. The burial caves are either grouped together in necropolises, or are isolated; they systematically accompanied the establishment of the villages.

The water tunnels, subterranean water supply systems and cisterns are initially compared to properties in the

same region: the Biblical Tels - Megiddo, Hazor, Beer Sheba (2005, criteria (ii), (iii), (iv) and (vi), Israel), the Old City of Jerusalem (1981, criteria (ii), (iii) and (vi), nominated by Jordan). Systems to collect water underground are present in many parts of the world where the climate is arid.

The only other place where subterranean columbaria are found is Cappadocia, but there they have openings in the rock faces. Inside the property, such columbaria are very numerous, and they have been used over very long periods.

Olive presses are exclusive to the nominated property. They are also numerous, and represent (as in the case of the columbaria) a major economic activity.

The only other place where subterranean stables for horses, mules and donkeys are found is Cappadocia, at later periods. This is another peculiarity of the nominated property.

The subterranean quarries are very large complexes, particularly at Maresha. They are initially compared to Solomon's Quarries in Jerusalem. Subterranean quarries offer a large number of advantages and are relatively frequent in many civilisations. What is peculiar to the property is their quite systematic evolution to become spaces with economic or social functions in a second stage. The bell caves were hewn out between the 7<sup>th</sup> and 10<sup>th</sup> centuries. They are very numerous (about 800) and particularly vast. Bell caves are very rare, and are found elsewhere only in Tunisia, but in fewer numbers and smaller sizes.

The subterranean hiding places form complex systems. They were for the most part created at the time of the Bar Kokhba revolt. This is a relatively recent research subject. Only the Cappadocia complex seems to contain subterranean hiding complexes of similar extent. The designs are however different in the two cases.

Unlike other places such as Matmata in Tunisia (Tentative List), and The Sassi and the Park of the Tropean Churches of Matera in Italy (1993, criteria (iii), (iv) and (v)), the property does not include any troglodyte villages. The caves in the property are used for specific and clearly determined purposes, and are complementary to the urban dwellings or farms constructed above ground. This configuration is original.

To sum up, in the State Party's view, the nominated property constitutes a unique phenomenon for the following reasons: the number and size of the man-made caves, the synergy between the above-ground settlement and the subterranean complex, and the very great variety of socio-economic uses of the caves.

ICOMOS notes that the comparative study refers to various properties which are already inscribed on the World Heritage List, in particular the subterranean complexes of Cappadocia which have considerable

similarities with the nominated property. Other troglodyte sites in the Mediterranean basin are also referred to, but only briefly and to highlight the characteristics of the nominated property.

Many other regional properties could have been considered in order to better assess the precise value of the property: Monastery of Geghard and the Upper Azat Valley (2000, criterion (ii), Armenia), several troglodyte sites in Georgia including Uplistsikhe, Vardzia- hertvisi and David Gareji (Tentative List), the catacombs complex of Malta (Tentative List), and the subterranean elements of Alexandria in Egypt. The more specific matter of subterranean hideouts is for example clearly present at Agongointo- oungoudo (Tentative List, Benin), but it is also quite a widespread phenomenon, from prehistory to the wars of decolonialisation of the 20<sup>th</sup> century. The subterranean hydraulic elements should be compared with major sites such as the Afla Irrigation Systems of Oman (2006, criterion (v)), or Syracuse and the Etruscan Necropolis of Pantalica (2005, criteria (ii), (iii), (iv) and (vi)).

ICOMOS considers it necessary for the definition of the property to analyse similar subterranean sites in the immediate vicinity of the property, and at national and regional level. ICOMOS also notes the lack of any comparison for the archaeological elements above ground and for the associated cultural landscapes.

---

ICOMOS considers that the comparative analysis does not justify consideration of this property for the World Heritage List at this stage.

---

Justification of Outstanding Universal Value  
The nominated property is considered by the State Party to be of Outstanding Universal Value as a cultural property for the following reasons:

- The caves and tunnels of Lower Judea constitute a phenomenon of extraordinary extent and density, throughout a region which is delimited by the special nature of its geology.
- The architectural and functional relationship between the subterranean complexes and the human settlements at the surface is unique. In the context of its well conserved natural environment, it exhibits an authentic cultural landscape.
- The variety of types and social and economic uses of the caves is unique, as is the dynamic nature of their adaptation to successive historic contexts.
- The site attests to an exceptionally high degree of technological prowess in the management of the subsurface.
- The length of the period over which the caves were hewn, dug and used is exceptional, extending from the 8<sup>th</sup> century BC to the 11<sup>th</sup> century C .

ICOMOS considers that this justification is essentially based on its subterranean elements. These elements are indeed very numerous, have a diverse range of

socioeconomic uses, and are in some cases original or rare (e.g. oil presses, columbaria, and Sidonian burial caves). They belong however to a great number of historic periods and cultural circumstances, and while the State Party emphasises the long continuity of use and knowhow, it may also be argued that the nominated property is excessively disparate.

Furthermore, the justification cannot be considered to be satisfactory for the archaeological remains above ground, even allowing for recent discoveries at one of the sites (Hirbet Midras), and for cultural landscapes whose components have not been properly presented, and whose exceptional value has not been demonstrated.

In conclusion, ICOMOS considers that this is not a cultural landscape, and that Outstanding Universal Value has not been demonstrated.

#### Integrity and authenticity

##### Integrity

In the State Party's view, the nominated property "Land of Caves and Hiding" has all the necessary characteristics to express the value of the property in terms of diversity, number and representativity. The vast territorial scope of the property means that the characteristics can be represented in a sufficiently integrated way, in all their typological and historic diversity. This is a complete set of complexes representing a very high number of caves, constituting a regional phenomenon extending over a long time-period.

The caves and subterranean systems, which are sometimes extremely extensive, are very well preserved in terms of structure, architecture and decoration. Functions are clearly identifiable, and can be described as presenting complete integrity. However, some of the caves closest to the surface have had their ceiling collapse as a result of erosion, which is an irreversible natural phenomenon.

Set in a natural framework of great integrity, which is well preserved, the archaeological remains above ground form a remarkable relict landscape. It expresses the different dimensions of past human settlements, at the time of the caves and subterranean systems. Landscape integrity is guaranteed by the parks.

ICOMOS considers that while the caves and subterranean systems of the nominated property seem to be sufficiently extensive to express typological diversity, it is however necessary to provide an insight into similar subterranean complexes, in nearby zones and with the same geological structure, in order to fully justify this aspect of integrity.

The monumental and archaeological remains above ground bear witness to the great diversity of historical periods of which the property has been a part ; but in the absence of an inventory with explanations and maps, the

remains would seem to be a disparate testimony for which "integrity" cannot be defined.

#### Authenticity

In the State Party's view, the subterranean structure of the property demonstrates great authenticity. When the hewing of caves ended in the 11<sup>th</sup> century, a small proportion of the caves probably continued to be used, in an agricultural context, but without any significant structural alterations, while the great majority of caves were abandoned. The abandoned caves have gradually become filled with sediment and mineral dust. Apart from the collapse of the ceiling of certain caves close to the surface, this situation has fully preserved their authenticity. A certain number of caves however have been affected by natural water infiltration phenomena which have required specific conservation work. Some caves have moreover been restored, but in a way which shows respect for the original elements, thanks to the use of detailed documentation and reversible interventions. For example, the wall paintings in the great Sidonian burial cave have been reconstituted on moveable panels, using as reference records made before their destruction, without any intervention on the present condition of the walls and vaults.

Those above-ground remains which have been unearthed have been promptly restored, in order to make comprehensible the relationship between the above-ground dwellings and the subterranean complexes. When partial reconstructions have been carried out for this reason, they are of limited extent and are clearly indicated as such.

ICOMOS considers that the conditions of authenticity of the subterranean complexes and of the archaeological remains of the tels are generally satisfactory. However, restoration and consolidation, sometimes on a considerable scale, have been necessary in some of the caves open to the public, and facsimiles of walls or decorative panels have been made in some cases (see Conservation).

The dwellings uncovered at the surface have been reconstructed for didactic and touristic reasons. The reconstructions seem to be acceptable, but this approach should not continue if adverse impact on the authenticity of the sites is to be prevented.

However, an analysis of the authenticity of the remaining monuments must be carried out, in particular by means of an inventory. The authenticity of the relict cultural landscapes has not been demonstrated.

---

ICOMOS considers that the conditions of integrity have not been met at this stage, and that the conditions of authenticity have been partially met.

---

#### Criteria under which inscription is proposed

The property is nominated on the basis of cultural criteria (iii), (iv) and (v).

Criterion (iii): bear a unique or at least exceptional testimony to a cultural tradition or to a civilisation which is living or which has disappeared;

This criterion is justified by the State Party on the grounds that through its particular geographic situation the Land of Caves and Hiding of Lower Judea has enabled the development of an original and long-lasting cultural tradition of land use. The many caves hewn out of the subsurface are fully integrated with the human settlements above ground, fulfilling a large number of diversified functions. This was a living and evolving tradition from the 8<sup>th</sup> century BC until the 11<sup>th</sup> century C , complying with the definition of a relict landscape.

ICOMOS considers that the arguments advanced for the numerous man-made subterranean systems and their socio-economic functions over a long period provide an important testimony to a traditional use of a chalk subsurface which is conducive to excavation. This very long-lasting tradition is evolutionary from a technical viewpoint, reflecting diversified and variable socio-economic functions at different periods; from a religious and funereal viewpoint, these traditions are different and are often unrelated to each other. Furthermore, neither the importance of the archaeological remains and the monuments above ground, nor the authenticity of the cultural relict landscapes, have been fully demonstrated.

---

ICOMOS considers that this criterion has not been justified.

---

Criterion (iv): be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history;

This criterion is justified by the State Party on the grounds that the nominated property bears witness to a very long history, covering several different population settlements and several historic periods. The different civilisations transmitted to each other a knowhow gained over a long period concerning the exploitation and use of the chalk rock. This has resulted in a set of outstanding subterranean architectural elements and networks of caves. The architectural and technical forms are numerous and specific, and reflect diversified uses: burial caves and religious/cult activity, economic functions such as oil presses, columbaria and stables, hiding places during troubled periods, bell cave quarries, water tunnels, etc.

ICOMOS considers that the subterranean complexes of the property constitute an interesting example of human settlement of a territory with a chalk subsurface, which reflects diversified socio-economic activities. Their forms and their uses have evolved in the course of different periods and different cultures, providing original subterranean testimony of oil presses, columbaria, large bell cave quarries, etc. However, these material manifestations do not present a type of construction, or technical-architectural complexes, or landscapes, which



fully illustrate one or several precise, significant periods of human history. The arguments put forward are more closely related to criterion (v), reflecting the interaction of man with his environment through the development over a long period of a favourable subsurface, in the course of a succession of historic periods.

---

ICOMOS considers that this criterion has not been justified.

---

Criterion (v): be an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment, especially when it has become vulnerable under the impact of irreversible change;

This criterion is justified by the State Party on the grounds that the vast complex of caves and hiding places in the Judean Lowlands constitutes a very special integrated system of traditional human settlement. It expresses a profound complementarity between the urban and rural structures above ground and the subterranean complexes. The symbiosis between subterranean resources and architectural possibilities is an expression of a cultural tradition which was transmitted and renewed over a period of some 2,000 years. The archaeological remains above ground and the relict landscapes complete the testimony to the traditional use of the land and its subsurface over a long period.

ICOMOS considers that the nominated property does indeed constitute an important example of the use of the subterranean part of a territory. It bears witness to highly developed knowhow and its transmission between different human groups, over a long succession of historic periods. A more thorough comparative analysis is however necessary to demonstrate the ways in which it is outstanding.

Furthermore, the criterion has not been justified either for the archaeological remains above ground or for the relict cultural landscapes, which seem only to be of secondary interest.

---

ICOMOS considers that this criterion has not been justified at this stage.

---

---

ICOMOS does not consider that the criteria and Outstanding Universal Value have been demonstrated at this stage.

---

#### 4 actors affecting the property

##### Development pressures

An army base and a firing zone are located within the boundaries of Bet Guvrin Maresha National Park. Road 35 divides the park into two parts. A plan has been

prepared to move the road, bypassing the park and restoring its unity.

ibbutz Bet-Guvrin encroaches on the buffer zone; to date however, it has no plans to expand inside the buffer zone.

In Adulam Caves Park and the Adulam Grove Nature reserve, there are only small rural communities, and a drug addiction rehabilitation centre. Future expansion is possible. The property also includes a military base.

More generally, the property is protected on the basis of its natural values, which strictly limits the possibility of development projects.

ICOMOS considers that a threat could arise from agricultural development close to the property, in the Bet-Guvrin region where the buffer zone is very limited in its extent.

##### Tourism pressures

The number of visitors to the parts of the property which are open to the public has been steadily increasing since the mid-2000s. It currently stands at about 160,000 to 170,000 annual visitors to Bet-Guvrin Maresha National Park, which is the most popular site. Only the most important sites are open to the public, and some have only recently been opened.

Carrying capacities are sufficient, and may be significantly increased without posing a particular threat to the component parts of the property or its environmental quality. Receiving visitors on the sites does however give rise to certain specific constraints, such as the safety of visitors inside caves, and strict compliance with the prescribed routes. Irresponsible behaviour can also cause danger (fire risk in summer) or deterioration (graffiti).

##### Environmental pressures

Forest and brush fires are a significant threat in dry periods.

Natural phenomena of water infiltration and erosion are a threat to certain caves. Some of the vaults are fragile and could collapse without warning.

##### Natural disasters

The State Party considers there is no particular risk of natural disasters, or of extreme natural conditions, within the boundaries of the property.

##### Impact of climate change

Climate change has had no measurable impact on the property.

IUCN considers that: " Threats to the property include fires and development. Tourism mostly concentrates on a specific touring route that leads tourists to specifically chosen excavated and developed caves."

---

ICOMOS considers that there is no major threat to the property. However, details must be given of the impact on the property from military activities and from the rehabilitation centre, and from possible agricultural development projects in the vicinity of the property.

---

## 5 Protection conservation and management

Boundaries of the nominated property and buffer zone

The property has a surface area of 5,043 ha; its population varies between 60 and 80 people (drug addiction rehabilitation centre).

The buffer zone has a surface area of 7,169 ha; its population is approximately 130 people.

ICOMOS considers that the boundaries of the property should be redrawn, while the definition of the property and the analysis of its values should be reconsidered.

ICOMOS considers that the proposed buffer zone consists solely of protected natural zones. The agricultural zones of Afirim and Bet-Guvrin - which are adjacent to a large proportion of the property and have no particular protection - have not been taken into consideration. A specific buffer zone must be added in this respect, which means introducing appropriate protection measures.

IUCN considers that: "Most of the archeological sites are located in two protected areas: the Bet Guvrin National Park and the Adulam Grove Nature Reserve. It is not clear to IUCN why only part of the National Park is included in the proposed property, the other half being in the buffer zone, as this adds to management complexity."

---

ICOMOS considers that the current boundaries of the property are not fully justified in the light of its potential values. Furthermore, the buffer zone immediately next to the Archaeological Park, must be extended into the agricultural zones of Afirim and Bet-Guvrin.

---

### Ownership

The State Party of Israel is stated to be the sole owner of the property, as regards both its above-ground and subterranean parts. The use of the ground by administrations, local authorities, associations and private individuals is contractual in nature, and is subject to territorial laws and heritage protection laws, and various development plans.

### Protection

The most important archaeological sites included in the property are protected by their official legal status as "antiquity sites". In addition, there is wider territorial protection for zones with "national park" or "nature reserve" status, and zones protected under national master plans. Inside the property, the parts concerned are:

- Bet-Guvrin - Maresha National Park, including the "antiquity sites" of Maresha and Bet-Guvrin (1989); a large proportion of the Bet-Guvrin and Maresha National Park is also a nature reserve (1994);
- Adulam Nature Reserve, including the "antiquity sites" of Midras and Afia;
- the other important archaeological components of the property with "antiquity site" status are: Burgin, Tri,levation 270, Shua, Tabak, Anim, Lavnin and Idon;
- the territorial spaces which have not been granted the statuses indicated above are protected by National Master Plan 22.

### Legal protection

The laws and regulations which apply for the protection of the property are:

- the Israel Lands Administration Law (1960), completed by the Convention of November 1961 with the Jewish National Fund (L-JNF);
- the Planning and Building Law (1965);
- the Antiquities Law (1978, revised in 1989);
- the National Parks, Nature Reserves, National Sites and Memorial Sites Law (1998), completed by the National Master Plan no. 8; it governs the role of the Israel Nature and Parks Authority (INPA);
- the Planning and Building Law (1965), and its various amendments, in particular the plan for site conservation (1991); this law governs the action of the regional councils and local planning commissions which grant building permits;
- National Master Plan 22 on protected territorial areas, (1995);
- National Master Plan 35 on building, development and conservation (1995); it applies to the whole of the property and its buffer zone.

Various regional and local plans, compatible with the national master plans, provide specific protection for the buffer zone. Land use in the buffer zone is reserved for forest, open spaces and agriculture. Building permits limit the height of new agricultural buildings and their floor area.

ICOMOS considers that the status of "antiquities site" which is protected by the IAA, must be confirmed for all the important subterranean and archaeological sites inside the property.

### Effectiveness of protection measures

ICOMOS considers that despite the complex territorial and administrative compartmentalisation which divides up the protection of the property, the existing measures seem to be effective.

---

ICOMOS considers that the legal protection in place is adequate. However, it must be confirmed that all the important subterranean and archaeological sites inside the property have been granted the status of "antiquity

sites" and are thus protected by the Israeli Antiquities Authority.

## Conservation

### Inventories, recording, research

A substantial amount of archaeological research has been carried out or is under way, particularly for subterranean parts of the property. This has given rise to a large amount of documentation, consisting of reports, inventories and scientific publications. The research is carried out under the coordination and control of the Israeli Antiquities Authority (IAA); research is usually associated with tourist development projects.

The documents are compiled in the various national departments in charge of the property, particularly the IAA and INPA, in Jerusalem, and the L-JNF in the central district. The scientific studies are also available in the libraries of the universities and scientific foundations involved in the research work. Locally, the services in charge of the conservation and management of the property are provided with the scientific and administrative documents necessary for maintenance work.

### Present state of conservation

Considerable work was necessary to clear the entrances to the caves and subterranean complexes, so as to enable access. The condition of some of the original accesses has deteriorated, and they have had to be restored, together with the surface architectural elements in their vicinity. A certain number of ancient dwellings have been reconstructed, particularly at Bet-Guvrin and Maresha. These initiatives were taken for didactic purposes, with a distinction being drawn between authentic structures and restorations/reconstructions.

rosion and the infiltration of water have affected the ceiling of some caves, and some ceilings have collapsed or are threatening to collapse, but most of the cave structures are in a good state of conservation.

In the Archaeological Park of Bet-Guvrin - Maresha, restorations have been carried out in the caves open to the public and their entrances, together with works to ensure visitor safety. The underground quarries in the shape of bells have required substantial consolidation. The ceilings of a significant proportion of the subterranean columbaria have collapsed, underneath the Nari layer; in the parts open to visitors, they have been replaced by reversible structures to ensure the protection of visitors. The technical elements of the oil presses accessible to visitors are restorations.

The painted decorations of the Sidonian burial caves have been restored, as have the load-bearing walls, as a result of vandalism in the contemporary period. The works were carried out in accordance with the observations and records made in 1905.

In Adulam Caves Park, Midras uins also underwent restoration works from 2007, under the responsibility of the IAA. Cleaning and drainage work is still to be carried out.

### Active Conservation measures

The conservation programmes are specific to the various management entities and their different territorial responsibilities; a substantial part of all the programmes is devoted to the preservation of the natural environment.

#### 1) Bet-Guvrin Maresha National Park:

Its cultural elements are covered by a conservation plan, under the responsibility of the park manager, the INPA. The plan has three sector programmes aimed at extending public access and completing the interpretation of the values of the property:

- the first concerns the bell caves, which are being cleaned, restored and made safe, and the clearing of access to three nearby tombs;
- the second concerns the columbaria, the oil presses, the cisterns and three other caves;
- the third concerns "Complex 61".

A conservation programme is also under way for the Sidonian burial caves.

The most important remains in the park are fenced.

#### 2) Adulam Grove Nature Reserve and Adulam Caves Park:

Phase 1 of the conservation works at Midras uins is under the responsibility of the IAA, while phase 2 of the restoration will be carried out by the INPA. The possibility of a conservation project for afia uins, under the control of the IAA, is currently being examined.

The other sites covered by National Master Plan 22 are under the responsibility of their managing body, the L-JNF, in cooperation with the IAA. The conservation programmes are linked with tourism development projects. This is the case for tri uins, where for the time being the phases implemented are the excavations and the clearance of access points to the subterranean systems.

A substantial conservation programme is also under way at Burgin uins, linked to the development of the site for tourism. The programme is currently under way, and includes works to make the property accessible and safe. The programme is particularly focused on the conservation of the wall surfaces and on drainage. The second phase will cover the caves below the dwellings, the installation of stairs for access to caves opened for visits, and the creation of a tourist route.

The other sites not covered by the access development programmes are protected and kept under surveillance in order to prevent thefts and vandalism.

All the adaptations carried out for tourism purposes are designed to have minimal impact and be reversible.

#### Maintenance

The Bet Guvrin-Maresha National Park conservation plan includes a section on the maintenance of caves open to visitors, and their access. Similar arrangements exist for the other sites.

#### Effectiveness of conservation measures

ICOMOS considers that wherever the active conservation measures are implemented, substantial resources are being brought to bear; the preparation of their implementation and its scientific monitoring are carried out by competent organisations in satisfactory conditions.

The measures taken are, however, directly linked to tourism development projects, and they are concerned with not only providing access and ensuring safety, but also the restoration and, in some cases, the reconstruction of heritage elements. While fully understanding practical necessities, ICOMOS would point out that priority should be given to the conservation of the property. Very great care must be taken with regard to external reconstructions which could affect authenticity from an archaeological viewpoint. It would seem that there is now a sufficient number of such reconstructions for didactic purposes, and this approach should not be taken any further.

For the great majority of the caves, conservation measures are passive, and are solely intended to ensure the caves are not accessible.

ICOMOS considers that the conservation of the property can be divided into two separate parts. A large proportion of the caves are conserved in the state in which they were discovered, and are simply protected against unauthorised visits. When active conservation measures are taken, they are associated with a tourism development plan. Reconstructions carried out for didactic reasons must be limited to the absolute minimum required for the understanding of the property.

---

ICOMOS considers that the conservation measures are satisfactory, but recommends that reconstructions carried out for didactic reasons should be reduced to the bare minimum required for an understanding of the property.

---

#### Management

Management structures and processes, including traditional management processes

The bodies directly involved in the management and protection of the property are:

- The Israel Nature and Parks Authority (INPA) manages the Bet-Guvrin Maresha National Archaeological Park through an appropriate on-site structure. It also manages the Adulam Nature Reserve through its regional office. The INPA is an administration which already has experience of managing properties inscribed on the World Heritage List.
- The L-JNF (Keren Kayemeth leIsrael Jewish National Fund) is responsible for the management of the other cultural sites inside the property, in particular Bet-Guvrin and the Adulam Caves Park, which surrounds the Nature Reserve of the same name. It is a public body in charge of land use management, and in this case land use linked to forest conservation.
- The Israel Antiquities Authority (IAA) is responsible for scientific intervention on the archaeological and architectural components of the property having "antiquity site" status. It assists L-JNF for the cultural properties under its responsibility.

The management of the property also involves:

- the Ministry of Environmental Protection,
- the Ministry of Culture,
- the Ministry of the Interior,
- the Ministry of Agriculture,
- the Israel Defence Forces and the Border Police,
- the three regional districts of Mateh Ashdod, Be'er Sheva and Lachish,
- the ILA, the governmental land use agency,
- the Lachish-Sorek Drainage Authority,
- the Jewish Agency,
- the universities and research organisations working on the property,
- various tourism agencies.

In its letter dated 5 November 2010, the State Party indicates that an agreement has been reached between the two authorities which manage the site (INPA and L-JNF) to regulate their relationship and establish cooperation. In the event of inscription on the List, management activities for the whole of the property would be unified, particularly by the holding of regular common meetings. Overarching coordination would thus be established, under the auspices of the INPA.

ICOMOS notes that to date there is no permanent overarching authority, nor even a structure enabling consultation between the various institutions which are in some way responsible for managing the property and its buffer zone (INPA, L-JNF, IAA, the councils of the three regions, local communities, etc.). The nomination dossier has been prepared by the INPA on its own, which seems in practice to have a dominant position in decision-making, due to its experience of managing sites which are already inscribed on the List. Its coordination role has been announced, but has not been instituted or defined.

Policy framework: management plans and arrangements, including visitor management and presentation

The INPA has developed a general framework for the management of the properties under its responsibility, at State Party level. Bet-Guvrin - Maresha National Archaeological Park has a specific pilot document (as in the case of each INPA sector): the Regional Management and Conservation Portfolio. It was updated in 2008. It is applied via an annual Site Conservation and Management programme which covers several theme-based programmes (see Conservation). This plan complies with National Master Plans no. 8 and no. 35, and Regional Master Plan 4/14.

Adulam Nature Reserve has a Site Conservation and Management Programme (2004). It complies with Regional Plans M /200 and M /939, and National Master Plans no. 8 and no. 35.

L-JNF is in charge of the implementation of National Master Plan no. 22, which covers the parts of the property other than the part directly under the management responsibility of the INPA.

Adulam Caves Park, which is under the responsibility of L-JNF, is covered by National Master Plan 22 and complies with regional plan M /981.

Various visitor facilities have been constructed or are under construction, such as an access road and a campsite project in Bet-Guvrin Maresha National Park, a car park and picnic area at Midras, and walking trails at most of the sites. The works are carried out with due respect for the archaeological and natural environment of each site. Tourist access is controlled, and the surface facilities for the reception of tourists are discreet, so as to preserve the environment and the landscapes. A proactive policy is implemented for educational programmes, special visits for groups, and for communication and marketing. There is a considerable amount of signage, particularly in the National Archaeological Park, and it is increasing rapidly in the other parts of the property.

The Lower Judean biosphere programme applies to the National Archaeological Park and the Nature Reserve.

#### Risk preparedness

The State Party states that an organisational structure, with substantial technical resources and staffing, has been set up to deal with fire risk by each of the site managers, in terms of alert systems, evacuation and protection of persons, and fire fighting equipment. Fire safety and risk prevention directives for visitors are kept up to date; signage and information is provided for the public, and regular fire evacuation drills are carried out.

There are also directives for personnel and visitors relating to other potential risks: respect for monuments, the upkeep of undergrowth and scrub, free grazing of animals, respect for flora and fauna, etc.

Involvement of the local communities

The few inhabitants inside the boundaries of the property or in the immediate vicinity are not directly involved in the management of the property. L-JNF states that it intends to hold forums with people living in its sector, so as to make the property management and conservation policy more effective.

Resources, including staffing levels, expertise and training

The Archaeological Park and the Nature Reserve have an annual operating budget allocated by the INPA. The Park's budget is between USD500,000 and USD600,000, and that of the Reserve around USD20,000. Furthermore, the Archaeological Park obtains a significant proportion of its revenue from entrance charges and from renting out the site for activities such as festivals, films etc. Various foundations also contribute to the running of the property.

The Park departments have a permanent INPA team of 16 people, including one director and three conservation specialists. Where necessary, INPA archaeologists and monument conservation architects are called in, and in some cases external specialists.

L-JNF has a contract with the government of the State Party for the territorial management and conservation of natural protected spaces, particularly with regard to forested areas. L-JNF guarantees the investment necessary for excavations, conservation, the upkeep of the vegetation and site development, for its sector. The IAA provides added support for archaeological programmes and conservation. For 2010, a total budget of USD1.2 million has been guaranteed.

The information about human resources only indicates directors and departmental heads, all of whom are apparently professionals with a background in forest and territorial management. The IAA seems to essentially intervene at an upstream level, and to advise on excavation and restoration programmes carried out by professionals who are external to the L-JNF.

Effectiveness of current management

ICOMOS considers that the management of each of the bodies in charge of different parts of the property is effective, in its field of competence.

However, it seems to be necessary to set up an overarching organisation which ensures coordination between the two management bodies, the IAA and the various territorial authorities. In addition, it is necessary to indicate how the L-JNF copes with everyday practical conservation issues relating to a highly specialised archaeological property, which is totally outside its principal expertise in the territorial management of natural areas, and what specialists it has available for this purpose on a permanent basis on the site.

IUCN considers that: " here are a range of different organizations responsible for the property, and with a range of management plans. It is not made fully clear in the nomination how governance and coordination of overall management system for the property will be provided and assured."

---

ICOMOS considers that there is a management system for the property, but that it is compartmentalised and that there is no coordination between entities which are very different in nature. The credentials in terms of competence in cultural heritage conservation management of the Jewish National Fund ( JNF) need to be established.

---

## 6 Monitoring

Continuous monitoring of the property, which is fragile and vulnerable (particularly as regards the cave ceilings and water infiltration) is essential, both for satisfactory conservation and for the presentation of the property without danger to the public. Each of the two organisations managing the property has its own monitoring policy.

For the INPA, monitoring is a task which is included in the maintenance of the different caves and archaeological sites. Systematic monitoring is carried out on a quarterly basis, but regular maintenance tasks enable very rapid recognition of any anomaly, followed by intervention. The monitoring is carried out by INPA's own experts, who apply strict procedures based on indicators which are specific to each site.

The two main archaeological sites under the management of JNF have recently been excavated and then opened to the public. The tasks of conservation and restoration have been entrusted to the IAA. Monitoring by IAA personnel is planned and should now be in place, in accordance with IAA standards, particularly as regards the photographic monitoring of archaeological elements.

ICOMOS considers that the monitoring of the property is split up between entities with greatly varying degrees of competence, and whose efforts are uncoordinated.

---

ICOMOS recommends that the monitoring of the property should be based on a general methodological approach for the whole property, in the framework of an overarching management authority, and paying due attention to the property's very specific problems.

---

## 7 Conclusions

ICOMOS considers that the "Land of Caves and Hiding in the Judean Lowlands, Maresha, Bet-Guvrin and Adulam" constitutes an important example of the adaptation and use of a chalk subsurface which has been carved out by man, during a long succession of human settlements by different cultures.

However, the property as it is currently presented does not exhibit outstanding universal value. If this criterion may be considered for certain subterranean aspects, provided that a better comparative analysis is carried out, neither the archaeological and monumental remains on the surface, nor the types of cultural landscapes encountered seem to meet this criterion.

In addition, the fragmented and uncoordinated organisation of the proposed management is not conducive either to meeting expectations concerning the concerted management of conservation, or homogeneous monitoring fully adapted to the highly specific situation of an essentially subterranean heritage.

Finally, the title given to the property must be reconsidered, as it associates a multimillennial phenomenon of hewn-out caves with diversified uses in the subsurface of Lower Judea with a precise event: the hiding places of the second revolt of the Jews against Rome in the years around 130 C .

Recommendations with respect to inscription  
ICOMOS recommends that the examination of the nomination of the Land of Caves and Hiding in the Judean Lowlands, Maresha, Bet-Guvrin and Adulam, Israel, to the World Heritage List be **deferred** in order to allow the State Party to:

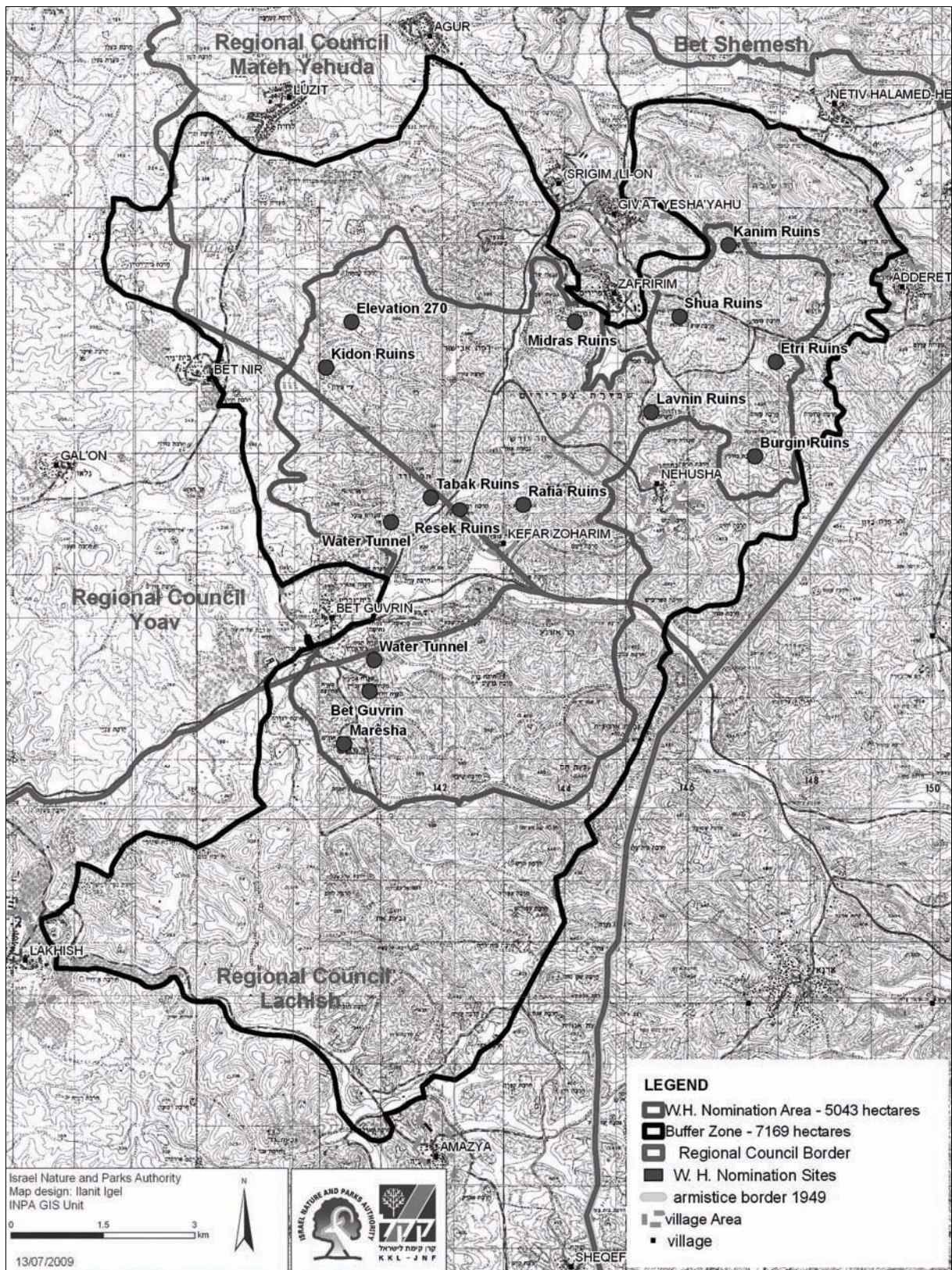
- Draw up a justified inventory and maps, of the caves, the monuments and surface archaeological remains of the property, so as to establish the contribution of each to the value of the property;
- Reconsider the definition of the property itself and its boundaries;
- Carry out a comparative analysis with similar properties in areas with the same geological characteristics, at nationwide and regional level;
- Confirm that all the important subterranean and archaeological sites included in the property have "antiquity site" status and are thus protected by the Israel Antiquities Authority;
- Confirm the competencies within the Jewish National Fund organisation ( JNF) in the management and conservation of the cultural heritage placed under its responsibility;
- Establish and implement an overarching authority to coordinate the various parties involved in the management and conservation of the property and its buffer zone;
- Set up a general methodology for monitoring conservation which is common to the whole of the property, under the responsibility of the overarching management authority.

ICOMOS considers that any revised nomination would need to be considered by an expert mission to the site.

ICOMOS also recommends that the State Party should give consideration to the following:

- Document the possible impact of military activities and of the drug addiction rehabilitation centre on the property and its landscapes;
- Adopt a very cautious approach with regard to external reconstructions which could adversely affect the authenticity of the property in archaeological terms;
- Reconsider the title of the property, which links together time scales and historic periods which are unrelated to each other.





Plan showing the boundaries of the nominated property





xcavated cave entrance



Maresha: olive oil press and store



Bet-Guvrin: tomb cave



Midras uins: columbarium



---

# The Longobards in Italy

## Italy

### No 1318

---

Official name as proposed by the State Party  
The Longobards in Italy. Places of the power (568-774 A.D.)

Location  
Cividale del Friuli (Friuli Venezia Giulia, Province of Udine);  
Brescia (Lombardy, Province of Brescia);  
Castelseprio-Torba (Lombardy, Province of Varese)  
Spoleto (Umbria, Province of Perugia);  
Campello sul Clitunno (Umbria, Province of Perugia);  
Benevento (Campanie, Province of Benevento);  
Monte Sant'Angelo (Apulia, Province of Foggia)  
Italy

**Brief description**  
The Lombard elite ruled a vast territory on the Italian peninsula from the end of the 6<sup>th</sup> century to the 8<sup>th</sup> century. They had prestigious buildings erected to assert their authority and power, both civilian and religious. Influenced by many cultures, starting with the Roman heritage in Italy, they created an original architectural synthesis and style, at the birth of the European medieval world. The seven sites selected form a series including the most significant and best preserved monuments and remains from this period. They are in Cividale del Friuli, Brescia and Castelseprio-Torba in the north of modern Italy, Spoleto and Campello sul Clitunno in the centre, and Benevento and Monte Sant'Angelo in the south.

**Category of property**  
In terms of categories of cultural property set out in Article I of the 1972 World Heritage Convention, this is a serial nomination of seven *groups of buildings*.

#### 1 Basic data

Included in the tentative List  
1 June 2006

International Assistance from the World Heritage Fund for preparing the Nomination  
None

Date received by the World Heritage Centre  
31 January 2008  
18 January 2010

**Background**  
The property was submitted for examination by the 33<sup>rd</sup> session of the World Heritage Committee (Seville, 2009). ICOMOS had adopted the following recommendation:

ICOMOS recommends that the examination of the nomination of Italia Longobardorum. Places of power and worship A.D. 568-774, Italy, to the World Heritage list be deferred in order to allow the State Party to

- Review the series justification of the nominated properties, the rationale linking them, and possibly the list of the properties themselves. The composition of the series must be made in the light of European and not just Italian historiography. It must take into account potential disagreements between specialists on dating and artistic influence
- Present a comparative study in relation to the proposed value in order to define the serial property and take into account international archaeological and historiography documentation
- If, following the above two points, the property is to be retained in its current configuration, the proposed title is not suitable and it should be revised
- Review the boundaries of the following properties

*Brescia, here the one nominated for inscription should be extended eastwards to include the archaeological park near the Roman Capitol and theatre*

*Benevento, here the modern building to the north east of Santa Sofia should be excluded from the one nominated for inscription.*

- Extend the buffer zones at Campello sul Clitunno and Spoleto
- Provide additional documentation regarding economic and urban development and its control in the nominated properties and in the buffer zones
- Confirm the human and material resources of the Management Council overarching structure.

The State Party had withdrawn the nomination prior to its examination by the 33<sup>rd</sup> session of the World Heritage Committee.

#### Consultations

ICOMOS consulted numerous independent experts.

#### Literature consulted selection

Diacono, P., *Storia dei Longobardi*, Capo, L. (ed.), Vicenza, 1992.

Jeffers, B., *Merovingian Mortuary Archaeology and making the Early Middle Age*, Berkeley, 2003.

Gasparri S. (ed.) *Il regno dei Longobardi in Italia. Archeologia, società, istituzioni*, Spoleto, 2004.

Gasparri, S. (ed.) *Archeologia dei Longobardi in Italia*, Spoleto, 2004.

Menis, G.C., Izzì, A. (dir.), *Friuli lebt. 2000 Jahre Kultur im Herzen Europas*, Vienne / Fribourg / Basel, Herder, 1978, p. 53-58.

#### Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the property from 13 to 18 September 2010.

Additional information requested and received from the State Party

A letter was sent to the State Party on 30 September 2010 requesting it provide a single document summarising the management measures taken for the entire property and the schedule for the implementation of the management plans.

The State Party supplied additional documentation on 8 November 2010, the analysis of which is included in the present evaluation.

ICOMOS sent a second letter on 13 December 2010 regarding specific questions concerning the boundaries, parking areas and fire protection system for Spoleto.

The State Party supplied additional documentation on 8 November 2010, and again on 23 February 2011, the analysis of which is included in this evaluation.

Date of ICOMOS approval of this report  
10 March 2011

## 2 The property

### Description

Originating from the Germanic-Barbarian world, the Lombards developed a specific culture when they settled permanently in Italy at the end of the Roman Empire. Their civilisation particularly expressed itself in a synthesis of many architectural and decorative influences, contributing to the creation of a new era: the European Middle Ages.

Given the diversity of these influences and the many innovations of the Lombard world, the selection of the nominated sites is not a stylistically or structurally homogeneous series. The sites selected are the most significant and most accomplished artistically, and the best preserved from the period of the Lombards. Each has its own morphology and specific functions, demonstrating a relatively broad cultural variety, but able to provide a good expression of artistic and architectural creativity in the early Middle Ages on the Italian peninsula. The seven sites selected present varied testimonies: urban, religious, defensive, etc. They correspond to the reign and affirmation of power by the Lombard kings and princes.

*Cividale del Friuli* testifies to an urban culture specific to the Lombards.

The city walls correspond to the extent of the medieval town. The Oratory of Santa Maria in Valle, the so-called Tempio Longobardo, is a square building with a single

nave, covered by a cross-vault. It is extended by a barrel-vaulted choir from which it is separated by an architrave supported by two columns. The ensemble is richly decorated with stucco reliefs, frescoes, and mosaics. Its construction is attributed to the royal couple Aistulf (749-56) and Giseltrude.

The episcopal complex includes the San Giovanni Baptistery (structures discovered in an archaeological excavation), the Church of Santa Maria, and the Palace. The Tegurio, a small octagonal aedicule that surrounded the finely sculpted baptismal font, the only Lombard sculptures based on religious themes, is now in the Duomo Museum. The remains of the episcopal palace were built over in the 16<sup>th</sup> century by Andrea Palladio's Palazzo dei Provveditori Veneti (the current National Museum of Archaeology).

*Rescia* testifies to a Lombard monastic complex.

The Convent of San Salvatore Santa Giulia is an architectural palimpsest that includes the women's convent built by Duke Desiderius and his wife, Ansa, in 753. The Church of San Salvatore has three naves and a transept with three apses. The naves are separated by arcades supported by columns, some of which were salvaged from Byzantine monuments. Stucco reliefs and paintings covered the ensemble and the crypt, some elements of which remain. Marble tiling covers several tombs of the elite, including that of Ansa. Three additional cloisters were erected in the 15<sup>th</sup> and 16<sup>th</sup> centuries, in addition to the Romanesque church of Santa Maria in Solario, the 15<sup>th</sup> century choir, and the Church of Santa Giulia in the 16<sup>th</sup> century. The convent will eventually house the town's museum.

*Castelseprio Torba* testifies to a Lombard military settlement.

The fortified height dating from the end of the Roman Empire, built to protect against the Germanic invaders, was reused by the Lombards. Totally destroyed in 1287 by the Visconti, the *castrum* has not been occupied since. The Torba Tower, located on the summit of the site, is used as a women's convent. On its first and second levels, it has mural paintings that evoke the iconographic themes of the stuccowork in the Cividale Tempio.

The Church of Santa Maria is a private aristocratic building decorated with paintings representing Christ's childhood. Other symbolic elements are painted in a style inherited from Hellenistic art. The choir's triple apse is paved with marble.

The Wideramn epitaph is the best example of the written funerary culture of the Lombards.

*Spoleto* testifies to an urban basilica for the Lombard elite. The Basilica of San Salvatore was no doubt originally a funerary church; it has a triple-nave basilical floor plan with a tripartite presbytery. The semi-circular central apse is separated from the nave by a chancel and flanked by two apses with cross-vaults. The central bay preceding the choir is covered with an octagonal vault. Doric columns in

the nave and Corinthian in the presbytery support a richly decorated entablature. The painted and stucco decoration has been lost. The facade, punctuated by pillars and divided into two registers by a cornice, still retains three portals decorated with classical motifs.

*Campello sul Clitunno* testifies to a temple of classical inspiration within the culture of the Lombard elite.

The Temple of Campello sul Clitunno is of Classical Roman type and has sculpted ornamentation copied from ancient buildings in a synthesis such as that reprised by Palladio. It is a small *sacellum* in the form of a tetrastyle Corinthian temple with two porticos *in antis*. It is one of the rare examples of an epigraphic monument of the early Middle Ages. The inscription in Roman capitals is a dedication to God. The interior painted decoration is remarkable and can be compared to the frescoes of Santa Maria Antiqua in Rome.

*Benevento* has a popular sanctuary of the Lombards and a monastic ensemble.

The Church of Santa Sofia was erected by the Duke Arechi II of Benevento around 760 as a personal chapel and national sanctuary. The building refers explicitly to the Cathedral of Santa Sophia in Constantinople. With a complex central plan, it combines a central hexagon surrounded by a colonnade, the elements of which are recycled from ancient monuments, and a concentric decagon ending in a presbytery with three apses. The two smaller apses partially retain paintings representing the life of Christ.

Annexed to the church is a women's convent in Roman style that reuses numerous elements from the original Lombard cloister. Today it houses the Museo del Sannio.

*Monte Sant'Angelo* is a Lombard national sanctuary and the origin of a pilgrimage dedicated to Saint Michael.

A national sanctuary of the Lombards as early as the 7<sup>th</sup> century, it is still the most important site of the cult of the Archangel Michael in the West. It lies on the route to the Holy Land, which coincided with the *via Traiana* in southern Italy that later acquired the name of *via Sacra angobardorum*. The Lombards rebuilt and enlarged the sanctuary above the sacred grotto. After the Lombard dynasty, the Normans, Swabians, and the House of Anjou adopted the worship of Saint Michael and transformed the upper parts of the original sanctuary buildings with new decoration, whilst retaining the Lombard lower levels.

It should be added that in the buffer zones of Cividale del Friuli, Brescia, and Benevento there are several *in situ* archaeological remains of buildings dating from the Lombard period, a detailed description of which is contained in the nomination dossier, and that objects from the same period are displayed in the local museums.

#### History and development

Of Germanic origin, the Lombards migrated from northern Europe to the Danube region of central Europe from the end of the 5<sup>th</sup> century onwards. Coming into contact with

other peoples from the Steppes (Avars and Huns), in 568 they undertook to conquer northern Italy where they settled, then spread to the centre and south of Italy, in the last third of the 6<sup>th</sup> century. By that time, they were in control of some thirty duchies and principalities under the supervision of a king. They settled at the very end of the 6<sup>th</sup> century in Monza and Milan, and then in Pavia in the 7<sup>th</sup> century. They came up against the presence of the Byzantine Empire, which retained control over part of central and Adriatic Italy under the regional supervision of Ravenna, which kept the Lombard presence split into two zones of influence, one in the north and one in the south of the peninsula.

In the 7<sup>th</sup> century the Lombard presence in Italy stabilised. Nonetheless, the society remained for a long time divided between the indigenous population of Latin culture and an exclusively Lombard political and military aristocracy. Thanks in particular to the Lombards' adoption of Christianity, the society began to unify, despite the issue of Arianism delaying and limiting the integration process for some time.

According to the rare written documents, it would seem that the Lombard elite in Italy had prestigious buildings erected upon their arrival: palaces, residences, churches, and basilicas. Following in the footsteps of their Roman predecessors, they asserted their position and their authority. Having adopted Christianity in the 7<sup>th</sup> and 8<sup>th</sup> centuries, they concentrated more especially on the establishment of churches and monasteries. These last are the archetypal foundations of the Lombard period. They served to guarantee the power of the Lombards, and also as a refuge for noble families. This was the peak of Lombard culture in Italy.

After 650, the Lombards of Benevento incorporated into their territory the Duchy of Gargano, where the worship of the Archangel Michael had taken hold in the 4<sup>th</sup> century in memory of the close relations between the Greco-Byzantine world and Apulia. Having converted to Christianity, the Lombards placed particular importance on the worship of this saint in whom they found certain characteristic attributes of the pagan god Wotan, considered by the Germanic peoples as their supreme god; the god of war, psychopomp, and protector of heroes and warriors.

The Lombards took Ravenna in the 8<sup>th</sup> century and dominated almost the entire peninsula, excluding the Papal States and Naples. The social life of the duchies was at that time dominated by a Lombard aristocracy that had become Latinised and Christianised. This existed side by side with an indigenous civilian and religious society that cooperated with the established order. Some authors refer to a Romano-Lombard society.

Even so, the Lombards, masters of most of the peninsula, remained in conflict with the Papal power. Rome was under almost permanent siege and threat. Summoned by the Pope, the Carolingians took control of the northern territories of Italy in 774 and 776, but the Lombard duchies

of Benevento and Salerno in the south remained independent until the Norman Conquest in the 11<sup>th</sup> century.

Sources testify to the construction of great architectural ensembles, with the workers being organised into powerful specialised corporations. Without any specific artistic tradition of their own, the Lombards used the skills of local craftsmen, which explains the composite nature of their artistic style across the peninsula. In Lombardy the Merovingian influence is noticeable, while Byzantine and Syriac influences dominate in Friuli. However, despite these differences, the common origin of the Lombard princes and elite facilitated inter-regional exchanges and the expression of shared cultural traits.

The iron crown of Lombardy was worn by the emperors until Charles V, and thereafter by Napoleon I, as it symbolises sovereignty over Italy.

The State Party also provides detailed history, in particular of the architecture and art, of the seven nominated sites placing it within the contexts before and after the specific Lombard period.

### 3 Outstanding universal value integrity and authenticity

#### Comparative analysis

The State Party provides, in the revised dossier, a comparative analysis based on the criteria requested, then continues with a detailed justification of the choice of the seven chosen sites compared with other sites from the Lombard period in Italy.

Firstly, this involved taking into account recent historical and archaeological reassessments of the High Middle Ages, in Europe and more particularly in Italy at the time of the Lombards. This was a period of interpenetration of various civilisations resulting in transition and profound transformations that were at the very heart of the beginnings and development of European societies. The Lombards played an essential role, along with the Visigoths and the Franks.

The analysis of this process is split into three successive phases: 1) migrations in Europe, 2) acculturation, assimilation and integration phenomena, and 3) elements following cultural diffusion and influence.

In terms of migration, the situation of the Lombards is different to that of the Franks, the Goths and the Burgundians, because they settled in the heart of the former Roman Empire, the living seat of Christianity and in direct opposition to the Byzantine world. This is a unique historic and geographic situation.

Next, the phase of acculturation, integration and assimilation produced a particularly creative period for the Lombards, starting from the middle of the 7<sup>th</sup> century through to its apogee in the middle of the 8<sup>th</sup> century.

Finally, in religious terms, the Lombards were the first to develop pilgrimages with the worship of Saint Michael. A series of places of worship are examined in Italy and in Europe.

The process of acculturation and integration was complete in the case of the Lombards. It may be compared to other great phases of transition marking the end of Antiquity and the flowering of the medieval world: in Europe the Franks who sparked off the Carolingian Empire, in Asia the Mongols and the Chinese Empire, in the Middle East the development of Islam and the Umayyad Empire.

The series has been chosen on the basis of strict criteria so that each site selected testifies to a typology of Lombard monument and/or art with the best possible level of meaning, integrity and authenticity. All the representative elements of the culture, religion and social system are present in the series in order to show the bases of the power established by the Lombards and all its diverse forms of expression. A description of these qualities for each of the sites is then provided, followed by a comparison with 23 other Lombard monuments and sites excluded from the series, in Pordenone, Verona, Modena, Brescia, Pavia, Isernia, Milan, Monza, Piacenza, Spoleto, and others. In many cases, these monuments have been either destroyed, reconstructed or modified.

Knowledge of many of these structures exists essentially only in archival form, hence their exclusion from the nominated series. This is particularly the case with the ancient capitals of Monza, Milan and Pavia.

In its international comparisons, the State Party evokes the similarities with Norman architecture in Great Britain and Sicily. Because of its typological variety, the nominated serial property is not really similar to properties or series already inscribed on the World Heritage List. The State Party examines, in particular, the Monuments of Oviedo and the Kingdom of Asturias (Spain, 1985, criteria (i), (ii) and (iv)), the Collegiate Church, Castle and Old Town of Tuedlinburg (Germany, 1994, criteria (iv)), the Monastic Island of Reichenau (Germany, 2000, criteria (iii), (iv) and (vi)), the Abbey and Altenmünster of Lorsch (Germany, 1991, criteria (iii) and (iv)), the Benedictine Convent of St John at Muri (Switzerland, 1983, criteria (iii)), Mont-Saint-Michel and its Bay (France, 1979, criteria (i), (iii) and (vi)). But there is no similar process of cultural assimilation as important in terms of its architectural and artistic synthesis as that developed by the Lombards. They were the direct inheritors of the Roman world, borrowing its themes within a society based on profoundly remodelled civil and religious values. They were directly imbued with other cultural influences from the Mediterranean world.

ICOMOS considers that the State Party has reworked and expanded the comparative analysis for the property compared with the nomination dossier examined in 2009, taking into consideration the recommendations made by ICOMOS. This refers in particular to placing the property's architectural, artistic and cultural history into the broad perspective of the European and Mediterranean contexts



of the time. Furthermore, a detailed and reasoned justification for the establishment of the series has been given through a systematic study of the Lombard vestiges in Italy. Nevertheless, it is possible to explain and compare more thoroughly the architectural typologies, such as the church with a single nave and three apses, and its exchanges with the Carolingian version of this type, notably in Switzerland. More broadly, the artistic relations with the Carolingians are an important factor in the establishment of the culture of the European High Middle Ages. In Italy itself, a comparison could be made with the former church of St. Maria delle Pertiche in Pavia. Furthermore, nuances need to be added: the *castrum* of Castelseprio predates the Lombards who reused and restored it. Torba Tower was, for example, converted into a monastery.

---

ICOMOS considers that the comparative analysis justifies consideration of this serial property for the World Heritage List.

---

Justification of Outstanding Universal Value  
The nominated property is considered by the State Party to be of Outstanding Universal Value as a cultural property for the following reasons:

- The serial property provides a unique and exceptional testimony to the civilisation of the Lombards (6<sup>th</sup> to 8<sup>th</sup> centuries) which was at the very origin of the Kingdom of Italy.
- An immigrant people of Germanic origin, the Lombards settled in Italy and adopted Christianity. In the presence of an imposing Roman heritage and in contact with Byzantine and Mediterranean influences, they developed their own unique cultural, architectural and artistic synthesis.
- Through its urban culture, religious and military monuments and decorative arts, the civilisation of the Lombards forms a decisive transition between antiquity and the birth of the European Middle Ages.
- The Lombards played a central role in developing and propagating a set of cultural and spiritual values for a nascent European world. They paved the way for and heralded the *renovatio* of the Carolingians. They spread the practice of pilgrimage and the worship of St Michael in the West.

The nominated series is a selection of the most representative, the most significant and best preserved sites reflecting the various facets of the monumental and artistic culture of the Lombards in Italy.

ICOMOS considers that this revised justification is appropriate. A people of Germanic origin who settled and adopted Christianity, the Lombards assimilated the material and cultural values left to them by a fading Roman world. Also in contact with Byzantine, Hellenistic and Mediterranean influences, they achieved a unique cultural, architectural and artistic synthesis of which the series bears testimony through its diversity of monuments and styles and its various civil and religious

uses. This is indeed one of the major roots of the European medieval world.

#### Integrity and authenticity

##### Integrity

The Tempietto Longobardo, the monastery of San Giovanni, the cathedral, and the old patriarchal palace in Cividale del Friuli are testimonies to the foundations of the Lombard period, built on Late Roman ruins. The Tempietto is the best preserved 8<sup>th</sup> century building. The neighbouring buildings show various modern alterations, but the Lombard structures are easily identifiable from an architectural and functional point of view.

The Monastery of San Salvatore Santa Giulia in Brescia has Lombard foundations on Roman remains. The church, which is very well preserved, probably dates from the 8<sup>th</sup> century; the crypt is from a later period. The Baroque additions were removed in the 1950s to reveal the medieval structures.

In Castelseprio the Church of Santa Maria, parts of the ruined Church of San Giovanni, and paintings in the Torba Tower have been preserved in excellent condition.

The 7<sup>th</sup> century structures of the Tempietto del Clitunno are well preserved.

The Church of San Salvatore in Spoleto dates from the 7<sup>th</sup> century.

In Benevento, the Church of Santa Sofia dates from the 8<sup>th</sup> century. It was enlarged in the 12<sup>th</sup> century, and again after an earthquake in 1668. In 1951-57 the modern elements were demolished and the 8<sup>th</sup> century structures reconstructed on the bases of elements discovered in an archaeological excavation. The 1950s additions are clearly visible. A glass and steel structure was added in the 1990s to the 12<sup>th</sup> century cloister to house the museum.

Only the entrance to the underground sanctuary of Monte Sant'Angelo has been preserved from the Lombard period, as the church was rebuilt in the 13<sup>th</sup> century.

Funerary furniture is an important aspect of Lombard culture of the 6<sup>th</sup> and 7<sup>th</sup> centuries. It has been preserved and is displayed in museums at the properties (Cividale del Friuli, Brescia, and Benevento), or located in the immediate vicinity (Spoleto).

The seven sites forming the series have been selected on the basis of two complementary requirements. The first is to represent in a significant way one or more of the dimensions specific to the architectural and artistic culture of the Lombards: urbanism, military installations, monasteries, religious architecture for the elite, and popular places of worship and pilgrimage. The second requirement derives from a thorough and critical

comparative analysis with the other places which bear cultural testimony to the Lombards in Italy.

ICOMOS considers that the property meets the conditions of integrity, in particular for the series justification. The application of rigorous selection criteria has led the State Party not to include the oldest Lombard royal capitals. The series does, however, include the elements needed to express its values in a satisfactory state of conservation and integrity.

Nonetheless, ICOMOS considers that the series could be extended to include Pavia, which would significantly contribute to the value of the series, in particular to justify fully the expression "places of the power" in the title and for full demonstration of criterion (vi). This possible extension aside, ICOMOS considers that the series is complete.

As ICOMOS recommended in 2009, the title of the nominated property has been changed.

#### Authenticity

The Lombard elements conserved or revealed archaeologically and presented as such are authentic. However, most of the monuments forming the series have been in use over the ensuing centuries, such as the Tempietto Longobardo and the episcopal ensemble in Cividale del Friuli, the monastic ensemble in Brescia, the Basilica in Spoleto, the Temple of Campello sul Clitunno, Benevento Church and the sanctuary in Monte Sant'Angelo. These monuments have often undergone internal transformations, restoration work and urban changes at various periods. Nonetheless, in the nominated series, the authentic Lombard elements have been preserved. They are visible and correctly-identified elements. Other places have been preserved by a long period of abandonment, such as the Torba fortifications in Castelseprio, or by their location away from medieval and modern urban growth, such as the Basilica in Spoleto and the Temple of Campello sul Clitunno.

An important aspect of authenticity is provided by the historical topography: in Cividale del Friuli, Brescia and Benevento, the Lombard elements form the core of the towns and they are clearly visible in the urban layout.

The choice of the Lombard elements forming the series was preceded by an in-depth study of the sites, conservation and restoration operations based on strict scientific and professional criteria, and lastly by as precise as possible a definition of the boundaries of the sites as a function of their contribution to the value of the series.

ICOMOS considers that the conditions of authenticity of the monumental, decorative and epigraphic elements presented are satisfactory. Each is accompanied by detailed architectural, artistic and historic documentation that has led the State Party to a voluntarily restrictive definition of the boundaries of each of the sites, in order to take account of the changes in their environment. Finally,

the authenticity is guaranteed by a very good conservation policy.

---

ICOMOS considers that the conditions of integrity and authenticity have been met.

---

Criteria under which inscription is proposed

The property is nominated on the basis of cultural criteria (ii), (iii) and (vi). Criterion (iv), proposed in the nomination dossier examined in 2009, has been withdrawn.

*Criterion ii exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town planning or landscape design*

This criterion is justified by the State Party on the grounds that the serial nomination is a crucial example for understanding the cultural and artistic exchanges central to the formation of the European medieval world. It bears testimony to the assimilation and synthesis made by the Lombards between the Roman heritage, Christian spirituality, Byzantine influence and their own values from the Germanic world. They paved the way for and heralded the flowering of Carolingian culture and art; they spread the worship of St Michael in the West and they contributed to the birth of pilgrimage in Europe, an essential factor of exchange.

ICOMOS considers that the Lombard monuments are an exemplary testimony to the cultural synthesis that occurred in the 6<sup>th</sup> to the 8<sup>th</sup> centuries between the ancient world and the Christian world. They influenced Carolingian and medieval architecture.

ICOMOS considers that the expansion made by the new comparative analysis appropriately explains and justifies the values associated with this criterion.

---

ICOMOS considers that this criterion has been justified.

---

*Criterion iii bear a unique or at least exceptional testimony to a cultural tradition or to a civilisation which is living or which has disappeared*

This criterion is justified by the State Party on the grounds that the architectural complexes nominated for inscription represent a unique testimony to the extinct civilisation of the Lombards. They express new forms of monumental architecture by integrating the local tradition and developing an original synthesis that gave rise to a specific culture of the High Middle Ages. This resulted in numerous projects within a diverse set of duchies. The result, fully represented by the serial property, forms a clearly identified cultural ensemble but with multiple languages and objectives through which the Lombard elite asserted their power.

ICOMOS considers that the nominated sites represent the quintessence of what remains of the built heritage of

Lombard Italy. They form a diversified series providing exceptional testimony to the Lombards' urban culture, military architecture, and their religious culture, through the monasteries, temples for the elite and popular places of worship and pilgrimage.

ICOMOS considers that the justification for the series enables the application of this criterion.

---

ICOMOS considers that this criterion has been justified.

---

*Criterion vi be directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance*

This criterion is justified by the State Party on the grounds that the Lombards made a major contribution to European culture through the foundation of large monasteries and the reconstruction of extant monasteries, such as Bobbio, Montecassino, and Farfa. They also encouraged the transcription and thereby the survival of ancient literary, artistic, and scientific texts. Lombard culture survives today in the toponymy, language, and the on-going importance of their churches, as testified by the pilgrimage to the grotto of St Michael. This led to the birth of the *via Sacra angobardorum*. Belief in the Archangel Michael was transformed and reinforced by the Lombards resulting in the construction of numerous churches dedicated to him across Europe. The history of the Lombards also generated many major literary works including the *Historia angobardorum* by Paul the Deacon in the 8<sup>th</sup> century, *Adelchi* by Alessandro Manzoni and even an opera by Handel.

ICOMOS considers that the place of the Lombards in the spiritual and cultural development of medieval European Christianity is very important. They considerably bolstered the monastic movement and contributed to the creation of the precursor of the great pilgrimages, at Monte Sant'Angelo, and spread the worship of St Michael. They also played an important role in the transmission of literary, architectural, scientific, historical and legal works from Antiquity to the nascent European world. The Lombard myths and traditions in Italy, the language and artistic and literary sources testify to this day to the force of their cultural heritage in Italy and Europe.

---

ICOMOS considers that this criterion has been justified.

---

ICOMOS considers that the serial approach is justified and ICOMOS considers that the selection of sites is appropriate.

---

ICOMOS considers that the nominated property meets criteria (ii), (iii) and (vi) and conditions of authenticity and integrity and that Outstanding Universal Value has been demonstrated.

---

Description of the attributes

- The Lombards' urban culture is represented by the ensemble of Cividale del Friuli, especially its episcopal Palace; this is also equally well-presented in Brescia.
- The Lombards' military set-up is illustrated by the remains of the Castelseprio-Torba fortified site.
- The convent ensembles in Brescia, Benevento and Castelseprio are testimony to early and extensive monastic development.
- Religious architecture for the elite is omnipresent in Lombard culture; it is illustrated by the Tempietto Longobardo in Cividale del Friuli, the Santa Maria Church in Castelseprio, the Spoleto Basilica, and the Temple in Campello sul Clitunno. It borrows and adapts Greco-Latin concepts.
- The Lombards' decorative art is illustrated by mural painting, statuary and refined stucco work. Present at most of the sites, it is testimony to considerable wealth and the original and unique integration of numerous influences, notably Roman, Hellenistic and Byzantine.
- The religious culture is represented by the San Giovanni Baptistery in Cividale del Friuli and the funerary epitaphs in Castelseprio.
- The popular places of worship and pilgrimage are illustrated by the Benevento sanctuaries, the architecture of which refers-back explicitly to Constantinople, and Monte Sant'Angelo, dedicated to the worship of St Michael.

#### 4 Factors affecting the property

Development pressures

In accordance with the ICOMOS recommendation in 2009, a detailed and justified response has been made to the issue of pressure from urban growth. All the sites are located within protected urban centres. The risk of alteration to the sites and their buffer zones by inappropriate construction would seem minimal.

Tourism pressures

The number of visitors is high in some cases, for example, at Brescia and pilgrims to Monte Sant'Angelo, whereas many of the elements contributing to the property's value are fragile and may be vulnerable to excessive human presence. If the property is inscribed on the World Heritage List, the number of visitors may increase significantly. In various places, notably in Cividale del Friuli, Castelseprio, Campello sul Clitunno and Monte Sant'Angelo, the conservation of mural paintings, and certain decorative or epigraphic elements could be threatened by excessive or poorly controlled tourism. The risk of vandalism is minor.

Further to the request sent by ICOMOS for information about the parking areas in Spoleto, the State Party sent detailed documentation concerning reorganisation and current projects. The former parking area in Salmi Square,

adjacent to the Basilica, must be removed to allow room for a pedestrian area. Two other areas have been identified for vehicles, one with limited access, in the olive grove below the cemetery surrounding the western flank of the Basilica, the other, lower down, below the hillside road. There are also plans to build a pedestrian access path through the olive grove and the cemetery. These projects would have no direct visual impact on the site.

#### Environmental pressures

As industrial sites are sufficiently distant from the properties, this risk is insignificant. Motor traffic passes well away from the monuments. There are no identified threats to the components of the property.

#### Natural disasters

The risk of earthquakes is very high (level 1) in Spoleto, Campello sul Clitunno, and Benevento, and high (level 2) in Cividale del Friuli and Monte Sant'Angelo. Past seismic events have not caused total destruction.

There is a hydrogeological risk in Cividale del Friuli against which measures have been taken to reduce the danger of erosion near the Natisone river.

#### Impact of climate change

There is at the present moment no identified risk for the components of the property.

ICOMOS considers that the main threats to the property are seismic risks, erosion by the Natisone river in Cividale del Friuli, and pressure from the growth of tourism affecting the components of the property that are most susceptible to human presence.

## 5 Protection conservation and management

#### Boundaries of the nominated property and buffer zone

The surface areas and number of inhabitants of the property components and their associated buffer zones are as follows:

Site:	Site surface areas (ha)	Buffer zone surface area (ha)	Site number of inhabitants	Buffer zone number of inhabitants
Cividale del Friuli	1.09	20.83	0	1,067
Brescia	3.75	84.13	5	6,250
Castelseprio Torba	8.50	38.75	2	0
Spoleto	0.08	66.85	0	3,163
Campello sul	0.01	51.28	0	98

Clitunno				
Benevento	0.34	27.56	1	1,711
Monte Sant'Angelo	0.31	16.82	13	1,596
Totals	14.08	306.22	21	14,321

The nominated sites are limited to the Lombard buildings and associated museums. The public areas in front of the conserved buildings are excluded from the nominated zone (Cathedral Square in Cividale del Friuli and Santa Sofia in Benevento).

As recommended by ICOMOS in 2009:

- In Brescia, the nominated site has been extended westwards to include the archaeological park;
- In Benevento, the modern building northeast of Santa Sofia has been withdrawn from the property;
- In Spoleto, the buffer zone has been extended well beyond the river to the old town, to the south and southwest. Further to the request made by ICOMOS, the southeast section has been kept within the boundaries of the original 2008-2009 proposal;
- In Campello sul Clitunno, the buffer zone has been extended along the river.

ICOMOS considers that the boundaries of the nominated properties and of their buffer zones are adequate.

#### Ownership

The various properties almost all come under public law, belonging either to the municipalities or the regions. There are several exceptions:

- In Cividale del Friuli, the parish of Santa Maria Assunta owns the Cathedral and its associated buildings;
- In Castelseprio Torba, the monastery is owned by the Italian Environment Fund, a not-for-profit foundation incorporated under private law; several parcels of forest along the site boundary belong to private owners;
- The Monte Sant'Angelo Sanctuary belongs to the religious Order of St Michael.

Most of the buffer zones are privately owned.

#### Protection

##### Legal protection

At the State level, the legal protection is determined by the Legislative Decree No 42 of 22 January 2004 (*Codice dei beni culturali e del paesaggio*). All the nominated properties benefit from this highest level of legal protection.

If inscription on the World heritage List is accepted, the monuments will be protected by a law ratified on 20 February 2006 (Convention 77, "Special protective and

promotion measures for sites of cultural, landscape and environmental interest, including World Heritage“).

At the provincial and regional levels, additional regulations are in place regarding landscape and natural protection (especially for Cividale del Friuli, Castelseprio, Campello sul Clitunno, Spoleto and Monte Sant'Angelo).

At the local level, the properties are protected by general development plans. Only restoration and conservation measures are permitted. This protection also includes the buffer zones, except in Spoleto. Furthermore, there are special regulation plans for the development of the private parts of the property sites: in Cividale del Friuli (1998 and 2007 regulation plans), Brescia (2004), Castelseprio (2003, amended in 2010), Spoleto (2007), Campello sul Clitunno (2007), Benevento (1985), and Monte Sant'Angelo (1986).

#### Effectiveness of protection measures

ICOMOS considers that the protection measures are sufficient and they appear to be effective.

---

ICOMOS considers that the legal protection in place is adequate.

---

#### Conservation

##### Inventories, recording, research

The revised nomination dossier presents detailed scientific documentation for each site in the series, detailing its history, inventory and state of conservation. Archives, scientific publications and research and conservation reports have been compiled by numerous scientific institutions, universities and administrative bodies of the State Party, at national, regional and local levels. The archaeology and history of the High Middle Ages are particularly well developed in Italy, notably in connection with several of the property's sites and the *Italia angobardorum* network that promotes trans-regional research.

Research at the sites and the inventories are led either by the State through the *Soprintendenza* or by universities. Archaeological investigations are in progress in Brescia and Cividale del Friuli. In early 2009, 25 scientific programmes were in progress or pending.

Advanced documentation and management tools are in use, such as the Map of risks for Italy's cultural heritage and the SICa database at national level for restoration work, and the SI BeC database for Lombardy. The Ministry of Culture and the *Italia angobardorum* websites publish the research and restoration results for the property sites.

##### Present state of conservation

The State Party considers that the state of conservation of the nominated properties is good. There is no situation of

concern requiring particular attention or emergency measures.

In Cividale del Friuli, the most recent restoration campaign for the buildings took place after the 1976 earthquake. Work was carried out on the wooden stalls in 1998-99. Since the 1920s efflorescence caused by humidity had been attacking the east and north walls; remedial action was taken in 2001. The church and monastery of San Giovanni are in good condition and after restoration became part of the museum. The sculpted decoration in the Cathedral of Santa Maria Assunta will be restored in the near future. The Palazzo dei Provveditori (National Archaeological Museum) was restored from 1970 to the 1990s.

In Brescia, a gradual restoration campaign was implemented from 1979 to 2005. The restoration of the south facade of the museum is now in progress, the facades of the Roman Capitol and frescoes in the neighbouring Sanctuary are scheduled for 2012.

Castelseprio Torba, the church of Santa Maria *foris portas* underwent restoration at the end of the 1990s. The ruins of the churches of San Paolo and San Giovanni, the chapter houses, the bridge, and the baptistery have been restored. The protective roof over the baptistery was replaced in 2009. A programme to consolidate the castle buttresses is now under way. A global, multi-year project has just begun in the Torba zone.

The church in Spoleto was restored in the 1980-90s. The convent facade and buildings are currently the subject of a programme.

In Campello sul Clitunno the Tempietto underwent restoration in the 1980-90s.

In Benevento careful restoration of the interior of the church of Santa Sofia was completed in 2008. The monastery was the subject of a works campaign in 1999.

In Monte Sant'Angelo, a series of conservation programmes took place in the 1980-90s. The bronze door is currently undergoing work.

##### Active Conservation measures

The monuments and archaeological elements of the sites are under the protection of the National Decree of 2004, which implies permanent conservation management by highly qualified staff. Consequently, maintenance work is regularly undertaken under the control of the regional offices of the Ministry for Culture (*Soprintendenza*). This approach ensures uniform methods are used and the maintaining of a satisfactory general state of conservation for all the components that make up the serial property. Individual maintenance and restoration programmes are coordinated and financially consolidated as a function of this overall view of the property, forming the "Preservation and Conservation Plan" of the current Management Plan.

## Maintenance

veryday maintenance is provided by the technical staff of the management department of each site. Specialised maintenance of the heritage components, when required, is included in the conservation plan as a specific operation under the control of the relevant professionals.

### Effectiveness of conservation measures

ICOMOS considers that this is a complex property with many major components being intrinsically fragile and delicate, such as the archaeological remains, paintings and stucco. Nonetheless, the conservation measures implemented have been fully explained by the State Party; they are scientifically justified and their implementation is effective. In early 2009, 40 conservation programmes were in progress or pending for the sites that make up the property.

---

ICOMOS considers that conservation is at a good level for all the sites that make up the series. The fragility of the painted elements and stucco does, however, require a greater level of vigilance.

---

## Management

Management structures and processes, including traditional management processes

The management process relies on several types of stakeholders, with complementary involvement and responsibilities that can vary from one site to another: the local entities responsible for the management of each of the sites (see below); the Ministry of Culture and representatives of the region (*Soprintenden a*; the municipalities (8) and regional (5) or provincial (6) entities. Depending on the programmes in progress or pending for each of the properties, other partners may be called in: external specialists and experts, universities, foundations, etc.

In *Cividale del Friuli*, the responsible authorities are the municipality, the parish of Santa Maria Assunta, and the National Museum of Archaeology.

In *rescia*, the municipality manages the property and the Brescia Musei foundation administers it. The Province of Brescia and the CAB Foundation support the museum.

In *Castelseprio*, the property is managed by the State *Soprintenden a*, the province of Varese, and the FAI foundation.

In *Spoleto*, the Municipality manages the church with the assistance of the *Soprintenden a*.

In *Campello sul Clitunno*, the *Soprintenden a* is in charge of management.

In *enevento*, the Province and the curia of Benevento share the management, with the Municipality's participation.

In *Monte Sant Angelo*, the Order of St Michael manages the property. The Municipality coordinates measures with the *Soprintenden a* and support from Bari University.

All the management partners are now grouped together in an associative network called *Italia angobardorum*, with the direct support of the Ministry of Culture. Its main missions are to coordinate and regularly update the Management Plan, oversee all conservation, scientific coordination, control of common financial resources, enhancement and promotion of the property as a series, and international relations. The network above all operated as a working group, at the time of the first dossier (2007-2008), then as a fully-fledged coordination and management institution of the serial property (2009). Today, it has a presidency, scientific committee and executive management committee; it also takes care of technical-scientific coordination for conservation and socio-economic development, along with four working groups. Its decisions are submitted to the general assembly of members and its proposals for the Management Plan must be ratified by the member public institutions (Ministry, regions and municipalities).

ICOMOS considers that the institutionalisation and implementation of the *Italia angobardorum* associative structure provides an overall authority in charge of the coordination and management of the serial property. The present situation meets the recommendations of the 2009 evaluation.

Policy framework: management plans and arrangements, including visitor management and presentation

The Management Plan for the serial property was written in 2007. It entered into effect on 1 January 2008. It is based on two reference documents. The first is a general framework and a set of directives for the management methods, for the scientific objectives and guidelines for the conservation projects, monitoring and data management (vol. 1). The second lists the 190 objectives specific to each of the sites and the 463 projects planned to achieve them in the areas of knowledge, protection and conservation, enhancement, education, promotion and economic and social development (vol. 2).

Even if several general measures for protection, conservation or risk management have been planned from its inception through to 2015, the Management Plan is designed to be a dynamic and cumulative tool that is regularly extended and updated. The Management Plan applies to the sites and their buffer zones, along with a broader notion of territory focused on the sites. Each of the sites has its own implementation schedule and updates are planned. The first took place at the end of two years (December 2009, vol. 3), notably to take into account the ICOMOS recommendations.

After a little less than three years (September 2010), the estimated progress made with the 2007 Management Plan is around 34 of the projects completed and 36 in

progress; the others are to happen within various timeframes.

The 2009 update of the Management Plan (vol. 3) added 60 additional projects; it established 7 sector plan schedules and a planning schedule per site for a six-year period (2010-2015).

The sites are regularly open to the public and generally have appropriate signage. Several of the sites have exhibition spaces and information-interpretation centres. In several cases, museums are included in or near to the sites (Cividale del Friuli, Brescia and Benevento); their themes directly reflect the values expressed by the property. Annual visitor numbers range from several thousand (Spoleto and Campello sul Clitunno) to several tens of thousands (Castelseprio-Torba, Benevento, Mont'Angelo and Cividale del Friuli). Around 300,000 people visit the Brescia site each year.

ICOMOS considers that while the large number of projects announced (more than 500) are certainly a manifestation of the dynamism of the property's forward management, especially at the local level, this apparent abundance is not without the need to raise some questions. Many of these projects have no direct link with the property's conservation and management. The conservation projects need to be better identified within this vast ensemble, prioritised, financially consolidated and guaranteed as regards the long-term management of the property.

In Spoleto, the State Party specified in its February 2011 reply that Salmi Square, immediately adjacent to the Basilica, is to become a pedestrian area, with paving in harmony with the style of the Basilica. It is also planned to restrict automobile traffic along the southern side of the Basilica.

#### Disaster preparedness

Given the fragile nature of some of the painted decoration and stucco, and their vulnerability in the presence of the public, notably in Cividale del Friuli, Castelseprio, Campello sul Clitunno and Monte Sant'Angelo, provisions for restricting the number of visitors and/or protective railings are in place. These measures can be adapted depending on the monitoring of the conservation, which is reinforced for the most sensitive areas.

In general, surveillance systems are in place and no acts of vandalism have been reported in recent years.

The monuments are periodically checked for seismic effects.

The risk of fire at the sites is limited by the general absence of flammable material. In those instances where such a risk might exist (Monte Sant'Angelo and Spoleto Basilica) monitoring and response measures are or will soon be in place. They concern both monitoring and response systems. In its February 2011 reply, the State Party specified the measures taken in Spoleto.

ICOMOS considers that as a general rule the risks are well identified by the State Party and that they are monitored and managed satisfactorily. The database and potential risk mapping system is regularly updated to detect risks sufficiently early and plan the appropriate measures.

#### Involvement of the local communities

The local communities are involved through the extensive participation of the municipalities in the *Italia angobardorum* management entity and their direct involvement in the management of several sites.

Resources, including staffing levels, expertise and training

The financial resources are mainly guaranteed by the municipalities, regional and provincial authorities, and the Ministry of Culture when it participates directly in the management of a site (Cividale del Friuli and Campello sul Clitunno). Italian government and European Union funds can consolidate certain projects. The sites and museums have their own income from entry fees and their activities. The religious institutions participate in restoration expenses when they are the owners (Cividale del Friuli, Benevento and Monte Sant'Angelo). Other institutions or foundations (FAI) contribute to certain projects.

Permanent site personnel include specialists and professionals (architects and town planners specialising in the conservation of historic monuments, archaeologists, art historians, museum curators, etc.), people engaged in tourism promotion (museum staff, guides, guards, etc.), technical maintenance and restoration personnel, management and secretarial personnel. Employment is generally provided by the municipalities or the Ministry of Culture or religious institutions. The total employee numbers are: Cividale del Friuli: 87; Brescia: 224; Castelseprio-Torba: 57; Spoleto: 10; Campello sul Clitunno: 9; Benevento: 34; and Monte Sant'Angelo: 82.

The positions of the *Italia angobardorum* association personnel are guaranteed by the municipalities and the Ministry of Culture, but their number and expertise are not specified.

Several national institutes, sponsored or recognised by the Ministry of Culture, are able to provide experts and training in conservation and management techniques. These include, particularly, the *Istituto Centrale per il Restauro* (ICR), *Opificio delle Pietre Dure*, Central Institute of Documentation (ICCD) and the new *laboratorio nazionale per la diagnostica e la conservazione delle opere d'arte* (LND).

Each of the sites also has access to the services of regional or local institutions, especially the Ministry's regional offices (*Soprintendenza*), museums associated with the sites, specialist research institutions and universities.

ICOMOS considers that the serial property benefits from the presence of numerous competent specialists and



professionals onsite and within the property's national, regional and local environment. The permanent staff of the *Italia angobardorum* association needs to be specified and possibly increased.

Effectiveness of current management

ICOMOS considers there is also good individual management of the sites. There is an over-arching management authority and a management plan for the property that was recently updated (2010-2015). An effective management structure is therefore in place. Nonetheless, within a vast ensemble of general or site-specific projects, prioritisation and sustainable financial consolidation must be provided to maintain site conservation as a priority.

---

ICOMOS considers that the property's management system is adequate and that it has a detailed management plan. Nonetheless, conservation project prioritisation and sustainable financial consolidation must be provided; the permanent staff of the *Italia angobardorum* association needs to be specified and possibly increased. The landscaped areas immediately surrounding the sites require urgent action in some cases, such as in the case of the parking area alongside the church in Spoleto.

---

## 6 Monitoring

The state of conservation of the monuments, the decorative work, and archaeological sites forming the core of the property's various components is generally good. Most of the remedial work was completed in past years (see Conservation). The State Party went on to establish standardised monitoring for the various components of the property set against a generally high standard of conservation, in order to have a coherent and permanent view of its condition. For this, it relies on the working document of the Central Institute of Restoration (ICR), in Rome, the Italian Cultural Heritage Risk Map (1990). This document is used to identify in detail the various risks for each element of the property, to establish periodic monitoring indicators, and to diagnose rapidly the appropriate preventive measures. The results of the observations and measures associated with each indicator are used to compile a detailed monitoring file for each element of the property, by type of risk. The body of information forms a map at any given point in time of the relevant element of the property, while the separate maps taken together form the database for monitoring the property. The basic monitoring sheets are standardised by the ICR, thereby making possible comparisons, cross-referencing, statistical approaches, and bringing each of the sites spread across Italy into line with one another if necessary.

In its update of the Management Plan (December 2009), the State Party provided details for the annual monitoring and conservation programmes for the 2010-2015 period.

---

ICOMOS considers that the property's monitoring is satisfactory.

---

## 7 Conclusions

ICOMOS recognises the Outstanding Universal Value of the serial property, The Longobards in Italy. Places of the power (568-774 A.D.), as a unique and exceptional testimony to the transition between antiquity and the European Middle Ages.

ICOMOS considers that the series could be extended to include Pavia, which would significantly contribute to the Outstanding Universal Value of the series, in particular to fully justify the expression "places of the power" in the title and to reinforce the demonstration of criterion (vi). Furthermore, with the exception of the above possibility, ICOMOS considers that the series is closed.

Recommendations with respect to inscription  
ICOMOS recommends that the Longobards in Italy. Places of the power (568-774 A.D.), Italy, be inscribed on the World Heritage List on the basis of criterion (vi).

Recommended Statement of  
Outstanding Universal Value

Brief synthesis

The serial property represents the quintessence of the remaining built and artistic heritage of the Lombards in Italy today. A people of Germanic origin, having settled and converted to Christianity, the Lombards assimilated the material and cultural values inherited from the end of the Roman world. Also in contact with Byzantine, Hellenistic and Mediterranean influences, the Lombards achieved a cultural, architectural and artistic synthesis, unique in terms of its monumental and stylistic diversity and the various secular and religious uses. It is one of the main roots of the beginnings of the medieval European world and the establishment of Western Christianity.

Criterion (vi) The Lombard monuments are an exemplary testimony to the cultural and artistic synthesis that occurred in Italy in the 6<sup>th</sup> to the 8<sup>th</sup> centuries, between the Roman heritage, Christian spirituality, Byzantine influence and the values derived from the Germanic world. They paved the way for and heralded the flowering of Carolingian culture and artistry.

Criterion (vi) The Lombard places of the power express remarkable new artistic and monumental forms, testifying to a Lombard culture characteristic of the European High Middle Ages. It takes the form of a clearly identifiable and unique cultural ensemble, the many languages and objectives of which express the power of the Lombard elite.

er The place of the Lombards and their heritage in the spiritual and cultural structures of medieval European Christianity is very important. They considerably reinforced the monastic movement and contributed to the establishment of a forerunner venue for the great pilgrimages, in Monte Sant'Angelo, with the spread of the worship of St Michael. They also played an important role in the transmission of literary, technical, architectural, scientific, historical and legal works from Antiquity to the nascent European world.

#### Integrity

The sites meet the conditions of integrity, in particular as regards the serial justification. The application of rigorous selection criteria has led to the exclusion of the ancient Lombard royal capitals and the imposition of strict boundaries. Nonetheless, the sites include all the elements required to express the series' Outstanding Universal Value, notably through the adequate state of conservation of its components.

#### Authenticity

The conditions of authenticity of the monumental, decorative and epigraphic elements presented are adequate. They are accompanied by detailed architectural, artistic, archaeological and historical documentation that justifies both their selection and their authenticity.

#### Management and protection requirements

All the nominated sites benefit from the highest level of legal protection, established by the Legislative Decree No 42 of 22 January 2004 (*Codice dei beni culturali e del paesaggio*).

It is a complex property with many of its important components being intrinsically fragile and delicate to conserve, such as the archaeological remains, paintings and stucco. Nonetheless, adequate conservation measures are implemented by the State Party.

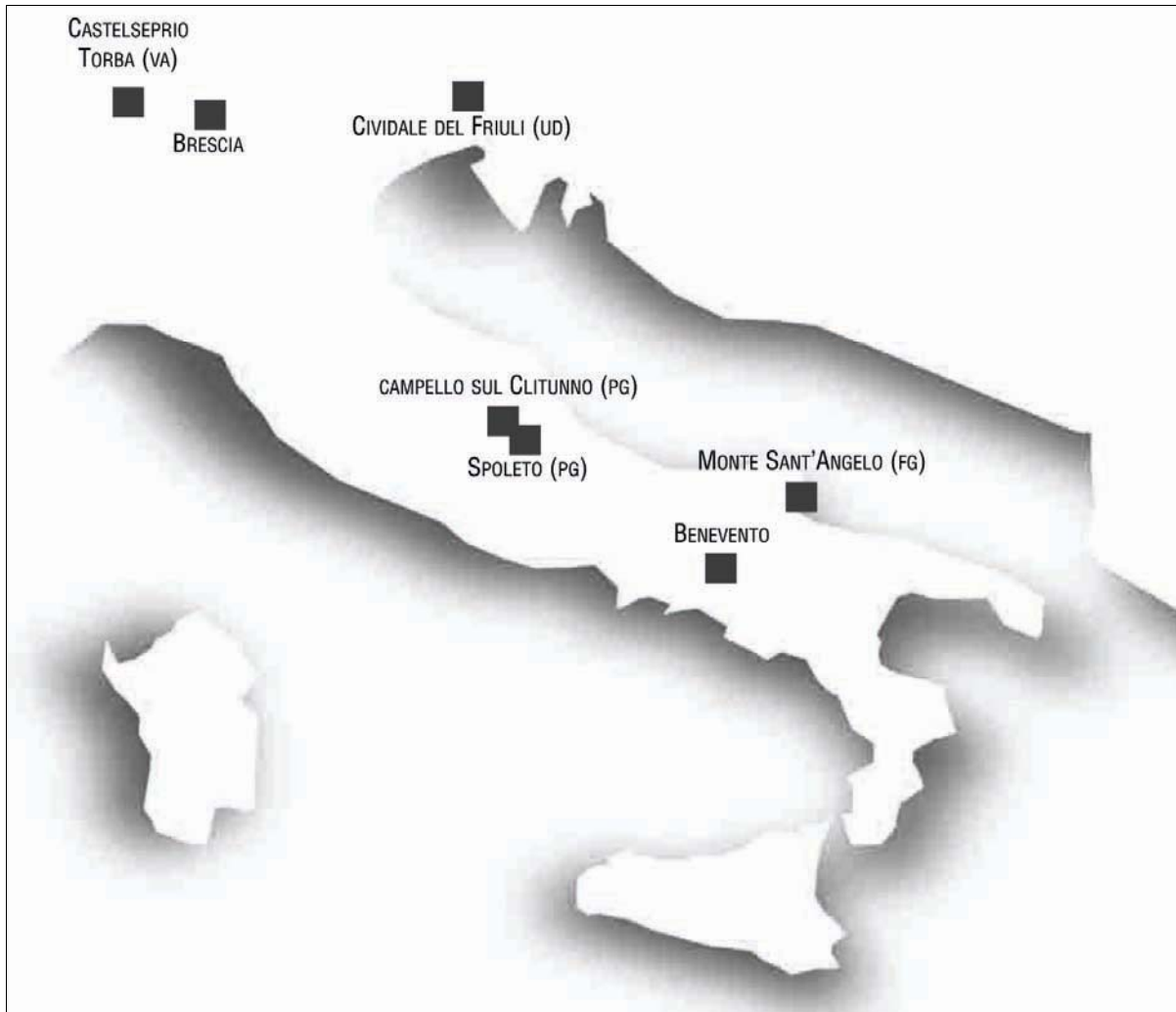
There is a specific management system for each of the seven properties, in relation to their ownership, comprising many and varied stakeholders. The *Italia angobardorum* association network has become a over-arching authority able to harmonise and monitor the series.

The Management Plan includes a very comprehensive range of projects. Nonetheless, they need to be prioritised in terms of the lasting conservation of the properties and the environmental expression of their outstanding value.

In addition to the natural seismic and river erosion risks present at certain sites, tourism development pressure could threaten those components of the property most susceptible to human presence.

ICOMOS recommends that the State Party give consideration to the following:

- Pay particular attention to the conservation of the most fragile mural paintings and stucco decorative elements that may be threatened by excessive or poorly controlled tourism;
- Identify, prioritise, financially consolidate and guarantee for the long term the conservation projects included in the Management Plan;
- Specify and possibly increase the number of permanent staff of the *Italia angobardorum* association;
- Examine the possibility of extending the series to include the Lombard remains in Pavia.



Map showing the location of the nominated properties



Cividale del Friuli, aerial view of the episcopal ensemble



Brescia, convent of San Salvatore - Santa Giulia





Castelseprio Torba, Torba tower and Santa Maria Church



Spoletto, Basilica of San Salvatore





Campello sul Clitunno, Tempio del Clitunno



Benevento, Santa Sofia ensemble

---

## Serra de Tramuntana (Spain) No 1371

---

### Official name as proposed by the State Party

Cultural Landscape of the Serra de Tramuntana

### Location

Self-Governing region of the Balearic Islands, Island of Mallorca  
Spain

### Brief description

The cultural landscape of the Serra de Tramuntana exemplifies the Mediterranean mountainous agricultural landscape, which, after centuries-long transformations of the terrain morphology to exploit the scarce available resources and thanks to the specific orogenic, climatic and vegetation conditions, has been made productive and well adapted to human settlement. The system of terraces, common to many Mediterranean landscapes is combined with an articulated network of devices for the management of water, revolving around farming units of feudal origins.

### Category of property

In terms of categories of cultural property set out in Article I of the 1972 World Heritage Convention, this is a *site*.

In terms of the *Operational Guidelines for the Implementation of the World Heritage Convention* (January 2008), paragraph 47, this is also a *cultural landscape*.

## 1 Basic data

### Included in the Tentative List

16 July 1996

### International Assistance from the World Heritage Fund for preparing the Nomination

None

### Date received by the World Heritage Centre

28 January 2010

### Background

This is a new nomination.

### Consultations

ICOMOS has consulted its International Scientific Committee on Cultural Landscapes and several independent experts.

### Literature consulted (selection)

Grove, A.T., Rackham, O., *The Nature of Mediterranean Europe. An ecological history*, New Haven, London, 2001.

Luginbuhl, J., *On the Traces of the Mediterranean Landscapes*, Jena, Stuttgart, New York, 1995, p. 289-294.

### Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the property from 12 to 15 October 2010.

### Additional information requested and received from the State Party

Additional information was requested from the State Party on 5 October 2010 regarding:

- Integration of the information provided in the cartography;
- The expansion and deepening of the comparative analysis;
- The legal framework at the basis of the Management Plan, its nature and functioning, the expected deadline for its approval and implementation;
- The expected deadline for the enforcement of the management body.

A response was received on 8 November 2010 and the information is included under the relevant sections below.

### Date of ICOMOS approval of this report

10 March 2011

## 2 The property

### Description

The Serra de Tramuntana is a sheer-sided mountain range running parallel to the north-western coast of Mallorca Island. Within the range, three different physiographic units may be distinguished: in the centre the highest peaks may be found, in the north the rugged relieves are interrupted by a sequence of short and narrow valleys, while the southern sector exhibits a less precipitous aspect and wider valleys.

The Tramuntana landscape is the result of a profound and continuous human action that has adapted the rugged topography to human life by the use of terracing to shore up land for agricultural purposes and the construction of a ramified network of structures to collect, distribute and store water, the scarcest and most important resource necessary to allow permanent settlement in the area.

The nominated property owes its actual aspect to natural and manmade features as well as intangible elements that, combined, are held to make up the character of the nominated property.

These have been examined separately in the nomination dossier.



### Natural features

The most relevant factors in the shaping of the cultural landscape of Tramuntana are: the geomorphology, the climate, the vegetation and ecosystems.

- Geomorphology of the Tramuntana area

The mountain range is constituted of sedimentary rocks, mainly limestone, with a modest amount of clay and calcarenites. The carbonate lithotype has undergone a succession of modelling processes that may be grouped according to four prevalent typologies: the torrential, the facial, the coastal and the karstic systems. Each of them is responsible for different physiographic features: the network of *torrents*, narrow valleys and small canyons (*estrets*), the succession of steep and short water streams cross-cutting the coastal strip of abrupt reliefs or the widespread presence of accumulations of boulders and small coves with beaches covered in pebbles, brought there by seasonal water streams. However, the most interesting surface features are those related to the karstic nature of the area. These may be divided into exokarstic forms (sink holes, karren fields, canyons) or endokarstic elements, mainly chasms or *avencs*, that is vertical cavities or interconnected caves.

- Climate

The Tramuntana Mountains are characterised by a marked mountainous climate, with a high level of atmospheric humidity, high rainfall, and winter snow, which ensure a rich amount of underground water. Winter rainfalls often occur in the form of downpours. Temperatures in the Tramuntana area are lower than in the extant part of the island, because of the altitude, the mountainous character and the solar incidence.

- Vegetation

Climatic, orographic and geological factors make the Tramuntana Mountains a genetic reservoir. In the mountain range four plant communities have been identified: Balearic holm-oak woods, which would be the prevalent group in the absence of human intervention; wild olive scrubland, typical of warm regions, may be found in the lowest areas of the Tramuntana region; calcicole shrubland (rosemary and Mediterranean heather), less diffuse than the olive scrubland, may be found on the coastal as well as the mountainous areas, jointly with other species that vary according to exposure, soil and altitude; the fourth group is found close to mountainous peaks, and consists of compact bushes of thorny plants, with discontinuous and limited cover.

- Ecosystems

The ecosystems and habitats of Tramuntana have resulted from the impact of human occupation on the previously undisturbed evolution of the area. Five different ecosystems have been identified: marine coastal ecosystem, mainly represented by *Posidonia* sea-grass meadows but enriched by submarine cave biocenosis; coastal land ecosystem, mainly with rocky substrata and associated endemic communities; macchia and garrigues ecosystem, including wild-olive macchia, non-dunal savine and Juniper bushes, euphorbia and low garrigue scrubs;

forest ecosystem, comprising holm-oak woods, riverine forest, transitional pine groves and tamarind woods in proximity to torrents and gullies; and special ecosystem, represented by caves, freshwater wetlands, rupicolous areas, elevated areas.

### Manmade components

The long human occupation has left several traces in the area, some are now almost reduced to archaeological remains but many continue to be used and play an active role in the socio-economic life of the nominated property. The description provided in the nomination dossier has identified the following components: the hydrological landscape', the dry-stone structures, the rural estates, the towns and villages, the religious centres and the maritime defensive system. However, the agricultural landscape with its structure, pattern of use and mosaic of cultivated crops has not been examined in detail, but only indirectly with reference to the history and development of the area.

- The hydrological landscape

To overcome the scarcity of water, which is a common problem across the Mediterranean region, a complex system of territorial arrangements, drainage and service structures has been created in the area to collect, harvest, transport, distribute and store water. The tangible components of this manmade hydrological system include:

- devices and structures to collect surface or underground water, i.e. springs, sources, dams, reservoirs, underground channels or *qanats*, wells, noria-type waterwheels;
- elements for the distribution of water, i.e. irrigation channels and other types of conduit worthy of mention is the *Canaleta de Massanella* which stands out for its length (6750m) and the engineering components required for its construction;
- soil-erosion control systems, i.e. the terraces, the walls crossing the channels of the terraced system, the artificial network of conduits intercepting surface waters, the boundary walls between properties;
- storage structures, i.e. natural or artificial tanks, open air cisterns, ponds, troughs;
- structures driven by water power, i.e. water mills, some of them protected as Items of cultural interest (BIC);
- structures to store snow and make ice.

- The dry-stone structures

The most common structures in the nominated property that make use of this building technique are the walls supporting the hillside terraces created to obtain cultivable fields. However, many other elements of the rural landscape of the nominated property have been built by means of this technique, namely most of the waterworks mentioned in the section above, the boundary walls of land properties, the network of pathways, the olive grove and the farm shelters, the charcoal ovens and charcoal makers' huts, the lime kilns as well as other structures

typical to the Tramuntana area, e.g. piles of stones scattered across the landscape, or structures used by hunters. The dry stone walls supporting the terraces may have differences in complexity, according to the size of the terrace, the type of crop and the steepness of the terrain. Other, more recent, dry-stone elements are the platforms built at viewing points, or *miradores*.

- The rural estates or *possessions*

The *possessió* consists of a rural property formed by agricultural land and a group of buildings that is the productive unit of the farm. The estates date back to the land subdivision carried out after the feudal system was introduced in the island. These farms were varied in size and could employ from ten to almost one hundred workers. Until the 1950s, the entire island of Mallorca was structured and subdivided into *possessions*. This organisation of the territory partially still co-exists with the administrative structure of municipalities. Some of the largest *possessions* are still production centres. In contrast to valley estates, mountain *possessions* contained large tracts of woodland and smaller tracts of farmland. The estates located between Valldemossa and Dei were among the most important farm units and many of them (Son Ferrandell, Son Galceran, S' staca, Font Figuera, Can Costa, Son Moragues, Casa de Miramar, Sa Torre de Can Costa, Sa Pedrissa, Son Morroig, Son Gallard) were bought by Archduke Ludwig Salvator of Austria during his visits to Mallorca, throughout the second half of the 19<sup>th</sup> century, and brought back to production. Today many of them have been transformed into hotels.

In the farm complexes the most important buildings were the *casa dels senyors* and the *casa dels amos* (the landowners' and farm managers' houses respectively). The residential and service buildings of the farms were organised around a courtyard (*clastrà*) that was used both for work and distribution. The farms were also production units, therefore oil presses, flour mills, and cellars were also included in the complexes. The oil mills are the most important elements of the farms: they included the *graners*, where olives were stored before being pressed, the *trull*, for the first pressing; a *fornal* (fire) with a *caldera* (boiler) providing the warm water necessary for the second pressing and the decanting process. Mills could contain from two to four presses or *bigues* and were generally powered by water, but there are examples of mills driven by animal power. The structures were completed by the *sala de piques i safareig*, where oil was stored.

The largest farms might have chapels, defensive structures and, above all, gardens featuring water jets, ponds, fountains, cascades. The most interesting examples of gardens are found at Aixà, Alfabia (Bunyola), Massanella (Mancor), Galatz (Calvi), Canet and Sa Granja (Sporles), and Torre del Moro - Miramar.

- The towns and the villages

The occupation pattern comprises a variety of settlements from small towns to villages and hamlets. Their street patterns follow the orography, resulting in winding, narrow

streets. The average height of the buildings is three storeys and, in contrast to the other parts of the island, the houses exhibit narrow fronts. S'Iller and Bunyola stand out from the other villages as they contain a variety of architectural styles, from gothic and renaissance to modernist examples, attesting to the richer and more educated society that lived and shaped these centres.

- The religious centres

The religious heritage in the Tramuntana area relates almost exclusively to Christianity, from the 13<sup>th</sup> century onward, as no traces of religious structures from the palaeo-Christian, the Byzantine or the Islamic periods remain.

The physical relics of religious activities in the Tramuntana area consist of parish and rural churches, monasteries and convents often enriched by valuable furnishings and works of art oratories, shrines and chapels, which punctuate the built landscape. Some of these buildings possess historical and artistic significance in their own right, i.e. the Oratory of Sant Calvari in Pollença or the church of Sant Pere in Escorca. Other religious relics on a smaller scale are the boundary crosses and the 'Via Crucis'. Among the religious built heritage two complexes stand out for their associative and historical values: the Lluc shrine and the Miramar ensemble.

- The maritime heritage

The northern coast of Mallorca exhibits several structures for the defence of the coastline: watchtowers, lighthouses, seashore dry docks and places associated with smuggling. The network of watchtowers dates back to the 16<sup>th</sup> century, a period particularly insecure for navigation, due to the widespread presence of pirates in the Mediterranean. Lighthouses were built mainly in the mid 19<sup>th</sup> century on the basis of the provisions of the General Plan for maritime lighting developed in 1847 for the Spanish coasts. The plan also foresaw technological advancements in lighting both in terms of better use of fuel and the amount of light provided.

#### *The intangible heritage*

Intangible cultural expressions and traditions are still alive in the Tramuntana area, bearing witness to its multilayered past. Traditional lifestyles, technical knowledge, religious ideas and beliefs, customs and traditions, toponyms and legends: all contribute to the understanding of this region. The popularity of this region among artists and writers has added another layer of meaning associated with artistic expression to the nominated property.

#### **History and development**

The first documented traces of human occupation in the Tramuntana area date back to 2500 BC (ceramics and traces of use of metals, agricultural activity), although it is believed that human settlers arrived in the Balearic Islands around 5000 BC.

The late Bronze Age (1300-900 BC) witnessed the appearance of the Talayotic civilisation on the island, a

megalithic culture, who also occupied other Mediterranean islands and whose probable provenance is the eastern Mediterranean. The Greeks and Phoenicians traded with these islands but did not settle there. The Romans occupied the island from the 2<sup>nd</sup> century BC, but Talayotic culture survived, hybridised with Roman customs. Of these periods, only a few isolated traces remain. After the end of the Roman domination, marked by the Vandals' sacking of the island in 454 AD, the Tramuntana area was sporadically settled until 903 when the Balearic Islands came under Muslim domination, which lasted until the feudal Christian conquest of 1229.

During the period of Islamic the territorial organisation of the island was based on two types of farm, the *al-Garya* and the *rahal*, the first larger and more complex, the latter much smaller. The State Party reports that there are no systematic records of irrigated crops during the Islamic epoch, although documentation attests to the existence of mills and artificially watered fields for the cultivation of irrigated crops (fruits, vegetables, cotton, linen, vines, rice in the wetlands). The Islamic period was in any case one of expansion for agricultural activity, during which time the terraced layout was imposed on the landscape, water resources were exploited and the cultivation of olive trees developed. The use of the same springs and terrains was shared by various groups and agreements were set up to ensure an acceptable management of the water resources. Written sources also document livestock farming in the area during the Muslim presence.

The Christian conquest introduced the feudal system into the island and brought to an end the system of small farm holdings, which was substituted by the concentration of control of the land in the hands of large estates: the *possessions*. The new rulers promoted the colonisation of the island by issuing regulations that ensured sufficient cultivable and grazing land for new settlers to make a living. The farm holders subdivided their properties into smaller farming units and let them *in usufruct* to estate managers. On this basis, the Tramuntana area witnessed an increase in population in the 14<sup>th</sup> century. Watchtowers and castles were built and fortified to protect the island, which was isolated and not far from territories under Muslim rule. The change in the territorial control and in the economic base, from small farming units, with the same tribal origins, revolving around an irrigation network and common resources, to a feudal system, based on extensive, non irrigated crops, primarily wheat, olives and vines, modified the aspect of the landscape. Olive cultivation spread throughout the Tramuntana area and had its boom in the 16<sup>th</sup> century, when oil production became the primary source of wealth for the estate owners of the area. Extensive livestock farming decreased to the advantage of olive cultivation which reached higher altitudes. From the 17<sup>th</sup> to the 19<sup>th</sup> century, oil production played a key role in the economy of the island. Grain and olives were joined by vines, first to produce raisins under Muslim rule and then for wine making. Further products included oranges and lemons.

The second half of the 19<sup>th</sup> century brought to an end the isolation of the island and partly that of the Tramuntana area after its inclusion into Spanish trade networks. The technical advancement which followed triggered the economic growth of the island and expanded its base from agriculture, which further increased and developed in scope to include manufacturing.

During the 19<sup>th</sup> century, the fame of the beauty of Mallorca's landscape spread among European aristocracy and intelligentsia and attracted distinguished visitors who often resided for long periods on the island and in Tramuntana especially. One of the most famous personages who greatly appreciated the region was Archduke Ludwig Salvator of Austria, who acquired some 16 large farm estates, restoring them to production and for the enjoyment of the landscape. The second half of the 19<sup>th</sup> century also saw the first significant changes in the Tramuntana region, due to the opening of roads and the adaptation of ports as a consequence of the end of the isolation of the island.

The first quarter of the 20<sup>th</sup> century saw the second modernisation of the area: electricity supplies and telephone lines began to be introduced in the island and in the more reachable areas of Tramuntana, where a textile industry flourished (Soller and Esporles). This was also the period in which tourism began in the mountainous region and the first network of paths and belvederes was created.

Mass tourism commenced in the 1960s and caused an accelerated abandonment of agricultural activities and of the rural areas in general, and substantial building development in urban areas. Despite these changes, a great part of Tramuntana has conserved its traditional character and, in recent decades, awareness of the importance of environmental values has grown along with the effort to preserve this landscape, as attested by the numerous provisions issued for the protection of the area.

### **3 Outstanding Universal Value, integrity and authenticity**

#### **Comparative analysis**

The State Party has carried out the comparative analysis on the grounds of the two main features that characterise the nominated property: the artificial water supply and irrigation network and the dry-stone terrace system.

The State Party has selected properties inscribed or not on the World Heritage List considered relevant with reference to the aforementioned benchmarks identified as useful for comparison.

Among the properties already inscribed on the World Heritage List, the State Party has chosen the following: Bam and its Cultural Landscape, Iran (2004, (ii), (iii), (iv), (v)), Costiera Amalfitana, Italy (1997, (ii), (iv), (v)), Portovenere, Cinque Terre and the Islands, Italy (1997,

(ii), (iv), (v)), Alto Douro Wine region, Portugal (2001, (iii), (iv), (v)), Lavaux, Vineyard Terraces, Switzerland (2007, (iii), (iv), (v)), whilst two properties have been examined among those included in the Tentative List of the State Parties: the Western Sand Sea (Algeria) and the rural settlement of Fikardou (Cyprus). As a first consideration, the State Party underlines that the nominated property is the largest in size among those already inscribed on the World Heritage List. Secondly, the State Party, having identified a further eight relevant qualities of the nominated property – namely the engineering waterworks for the ingenious exploitation of water resources, the dry-stone building technique, the agricultural hillside terraced system, the variety of dry-stone structures erected for different purposes, the urban heritage, the old tradition of olive-grove cultivation, the material traces of the different layers of history, the early recognition of the values of the region – has developed its comparison by building eight matrices with specific indicators for each quality considered. The assessment has been made by considering the relevance of each indicator/value for each property.

The additional information received by ICOMOS on 8 November 2010 contained an expanded comparative analysis that includes the World Heritage Sites of Wachau, Austria (2000, (ii), (iv)) and Stari Grad Plain, Croatia (2008, (ii), (iii), (v)), and the following sites selected among those on the Tentative Lists of the States Parties: the dry-stone construction of Higerela, north of Castell n Alto Maestrazgo and, in general, the Valencia region (Spain), the vineyards of Primo ten and orčula (Croatia), and Jabal Bura ( emen). Further properties considered in the comparative analysis are the rural architecture of Conca de Barber , the dry-stone shelters of Mont-roig del Camp and Subirats, Pedra Tosca dry-stone agricultural park at Olot and the shelters and huts of Somontano, all in Spain.

According to the State Party, the Serra de Tramuntana stands out in respect to the examples selected for comparison for its larger size, the longer time span of its development and the larger variety of dry-stone structures and the hydraulic network.

The State Party underlines the fact that the nominated property has been exposed to several cultural influences and shaped by the interchanges among subsequent civilisations, whilst in comparison, other properties, e.g. Cinque Terre-Portovenere or the Amalfi Coast were exposed to the influences of a more limited number of cultural groups.

Additionally, in the nominated property over 5,000ha of land are still cultivated, with several high quality products (oil, oranges, wine), and is therefore only surpassed by Alto Douro.

Finally, according to the State Party, the nominated property not only comprises a highly developed dry-stone terrace system with related rural constructions and productive units, which may be common also to other

areas, but also a wide variety of architectural features and technical structures for water management purposes.

ICOMOS firstly observes that the State Party, although having expanded its comparison, has limited its analysis to a small number of relevant properties already inscribed on the World Heritage List or on the Tentative Lists of the States Parties. Within the same geo-cultural region, consideration should have been given to the World Heritage sites of Palmeral of lche, Spain (2000, (ii), (v)), Pyr n es - Mont Perdu, Spain/France (1997, (iii), (iv), (v), (vii), (viii)), Landscape of the Pico Island Vineyard Culture, Portugal (2004, (iii), (v)), Madriu-Perafita-Claror Valley (Andorra, 2004, (v)). As well, it would have been useful to also compare the peculiarities of the nominated property against Plasencia - Monfrag e - Trujillo: Paysage m diterran en, added to the Tentative List of Spain in 2009, or to the Wine Grape landscapes of Langhe, oero, Monferrato on the Tentative List of Italy.

ICOMOS further considers that the management of water and the hillside terraces are artificial expedients that have been used globally to make mountainous areas productive and liveable and can be seen in several regions well beyond the Mediterranean. Therefore, ICOMOS observes that properties from other geo-cultural regions, inscribed or not on the World Heritage List, should have been included in the comparison, e.g. Vi ales Valley, Cuba (1999, (iv)), ice Terraces of the Philippine Cordilleras, Philippines (1995, (iii), (iv), (v)), Sukur Cultural Landscape, Nigeria (1999, (iii), (v), (vi)), *Aflaj* Irrigation System of Oman, Oman (2006, (v)), or properties on the Tentative List of the States Parties, e.g. Hani Terraces (China), the Cape Winelands Cultural Landscape (South Africa), the anats of Gonabad (Iran), the Paysage culturel rizicole et hydraulique de Betafo (Madagascar). Additionally, the comparison should have included properties nominated on the World Heritage List and not inscribed by the Committee, such as the Wine Village Terraces, Cyprus (nominated in 2004), or the ivage m diterran en des Pyr n es (France/Spain), nominated in 2007 and then withdrawn by the States Parties.

ICOMOS also observes that the expanded comparative analysis elaborated by the State Party and received by ICOMOS on 8 November 2010 does not develop adequately the comparison with the selected examples, of which a short synthesis of their values is provided but have not been directly compared with the nominated property (except for Cinque Terre and the Amalfi Coast), as required by ICOMOS, nor has the State Party applied the matrices that have been used for the first examples to the additional selected cases.

In this regard, ICOMOS further considers that the systematic type of analysis elaborated by the State Party should have better and more precisely explained how the indicators proposed in the matrices have been used - it is not possible to understand how a particular grading

(low, medium or high) has been assigned to the qualities of the other properties used for comparison - and also what were the reference data to establish the grading. The matrices would have benefited from an explanation of the indicators selected for each quality, i.e. by identifying the cultures that have contributed to shape the relevant selected examples, describing the types of terraces encountered, enumerating the crops cultivated there and the related traditional products (especially the famous ones), providing quantitative data on the percentage of surviving terraces and waterworks within the properties and the percentage of land still cultivated with traditional crops, giving explicit account of the length and continuity of the occupation of each selected example.

ICOMOS considers that some of the properties selected for comparison exhibit a remarkable antiquity and continuity of occupation in comparison with the nominated property, supported by specific material evidence, i.e. Stari Grad Plain, as well as the Costiera Amalfitana or the Cinque Terre. The analysis carried out by the State Party has not compared explicitly the periods of occupation in the nominated property against those selected for the analysis. The only examples for which this comparison has been explicitly made are Cinque Terre, Portovenere and the Islands and the Amalfi Coast which, however, bear witness to a remarkable continuity of occupation and exposure to influences of subsequent civilisations.

Additionally, the various periods of occupation in Tramuntana have not been systematically associated with specific tangible evidences. This is particularly true for the Islamic period, for which its association with the hydraulic system is described in general terms, more associated with the know-how than to specific items, and to the intangible dimensions such as words and toponyms.

ICOMOS observes that *“The comparative analysis shall explain the importance of the nominated property in its national and international context”* (Operational Guidelines Para. 132.3).

ICOMOS considers that the comparative analysis has not been carried out with a sufficient level of detail to demonstrate how and to what extent the specific values and related attributes of the nominated property enrich the spectrum of agricultural landscapes already inscribed on the World Heritage List or that may be nominated in the future.

Finally ICOMOS considers that the comparative analysis was only incompletely elaborated at the regional level and was not truly international, as this case would have required.

---

ICOMOS does not consider that the comparative analysis justifies consideration of this property for the World Heritage List at this stage.

---

### **Justification of Outstanding Universal Value**

The nominated property is considered by the State Party to be of Outstanding Universal Value as a cultural property for the following reasons:

- In the Cultural Landscape of Tramuntana the traditional network for water supply and irrigation of Islamic origin combines with the terrace system and the cultivation of olive groves to create an exceptional example of a Mediterranean agricultural landscape, profoundly shaped by human activity.
- The intense and continuous human activity has modelled the environment by making use almost exclusively of dry-stone building techniques to construct the water supply and irrigation systems and the hillside terraces to obtain cultivable plots in an area characterised by steep slopes, scarcity of water and isolation.
- The nominated property reflects, in its tangible cultural legacies, the isolation of the region and, at the same time, its being at the border of two different worlds, subject to invasion from both north and south, and therefore exposed to major cultural interchanges, testified to by the diverse material evidences that survive within its boundaries.
- The environmental and orographic conditions, combined with continuous human intervention down the centuries, have left a profound imprint on the area, in which the physical aspect is intertwined with the intangible dimension represented by toponyms, traditional knowledge and skills, religious practices and legends. The visual singularity of the nominated property has attracted artists, travellers, writers and philosophers who have added a layer of significance through their artistic work.

ICOMOS considers that the combination of the waterworks network for the rational exploitation of surface and underground water resources with the dry stone terrace system may be found also in other areas, both arid or semi-arid and humid, but may still be considered a peculiar feature of the Serra de Tramuntana Cultural Landscape.

However, ICOMOS observes that the cultural interchange is not a specific trait of the nominated property, in that almost all Mediterranean cultural landscapes have been exposed to the influence of different cultures, and certainly of Islamic civilisation, e.g. on the coasts of Spain, of southern Italy, and Turkey.

ICOMOS further considers that the management of a steep and rugged territory through terracing to allow cultivation is widely used in the Mediterranean basin and also in other regions of the world, i.e. Africa, Asia, and Arab countries. Also, the dry-stone building technique is widespread in all stony and arid or semi-arid climates and has given rise to some exceptional results, as partly reflected by the comparative analysis.

With regard to the intangible heritage associated with the nominated property, ICOMOS observes that most

landscapes that have been inhabited and domesticated for an extended and continuous span of time are covered with multiple layers of meanings, legends, stories, and intertwined with traditions, social and religious rites, orally transmitted forms of knowledge, etc., and those documented for the Tramuntana area do not appear to stand out in respect to those associated with other properties inscribed or not on the World Heritage List. Similarly, the popularity acquired by the nominated property among aristocrats, artists and intellectuals since the early 19<sup>th</sup> century enriches the multifaceted significance of Tramuntana but does not represent an exceptional factor in its own right, since many other traditional rural areas have also witnessed a similar phenomenon.

Therefore, ICOMOS considers that the arguments put forward by the State Party to sustain the proposed Outstanding Universal Value are only partly appropriate.

### **Integrity and authenticity**

#### **Integrity**

The State Party holds that the nominated property is characterised by a high level of uniformity, in which the defining elements are the terraced land arrangements, the olive groves, the spatial organisation in rural estates and the water supply network. The nominated property is exemplary of the historical processes that have taken place in the Tramuntana area and have shaped its actual aspect. The nominated property has received formal protection since 1973 as a "picturesque landscape of the Island of Mallorca" and this has contributed to preserve its values and physical features. The legal and planning instruments in place recognise the value of the cultural landscape of Serra de Tramuntana and contribute to its preservation, despite the pressures on the surrounding areas.

ICOMOS observes that the key elements that characterise the nominated property – the terraces, the hydraulic systems, the religious structures, the rural estates, the defence system and the belvederes, the trails and the roads – appear to retain their integrity to a considerable extent. The size of the nominated property is considerable, however, it seems that areas containing attributes that would contribute to convey the significance of the place, in particular related to the hydrological heritage, have not been included within the boundaries of the nominated property.

It should be further noted that oil and wine production no longer represent the most important factors in the economy of the area and the major part of the rural estates today are used as second houses. The relationship between the terraced agricultural plots and the economy of the villages and towns is no longer the same: in most cases, agriculture has been replaced by tourism-related activities, although some oil and wine producers strive to continue their activities, which need subsidies to be kept alive.

ICOMOS also notes that the property has suffered in the recent past from development pressures but this has left its signs in well defined areas, close to the major centres, that have been excluded from the nominated property. Today, it does not seem to suffer from immediate development pressure, although the highly populated buffer zone may pose threats to the nominated property and these should be carefully monitored over time. On the other hand, the mountainous environment requires continual maintenance.

The visual integrity of the nominated property seems to have been largely maintained.

#### **Authenticity**

The State Party holds that the nominated property is the authentic product of the continuous human action that different cultures have imprinted on the natural environment, gradually shaping the landscape by erecting the dry-stone walls, clearing the plots of stones, creating the water supply network and thus transforming it into a productive area. The physical aspect of the nominated property bears witness to a socio-economic process that has survived until the present day. Additionally, a wealth of scientific research and publications support the material evidence.

The tangible dimension is enriched by intangible expressions that sustain and enrich the significance of the nominated property: technical skills are still alive and contribute to maintaining the main features of this manmade landscape, many festivals and local traditions survive, as well as the rich toponymy. The presence and work of artists and writers amplify the evocative and associative value of the nominated property.

ICOMOS considers that the nominated property bears credible witness to the ingenious combination of an articulated water management system with the terrace arrangements in a steep area, although the dynamic processes that have shaped the face of the Tramuntana area are declining and others are taking over, e.g. nature and cultural tourism-related activities. Therefore, the use and original function of many structures and of the territory at large have only been partly retained.

ICOMOS also observes that further investigation, with specific regard to land uses in different historical periods, in order to understand the modifications of the agrarian landscape in terms of the grain and structure of its mosaic, land uses, quality and architecture of cultivation plots (e.g. density and structure of olive groves), would contribute to better articulate the conditions of authenticity for the nominated property.

The materials and techniques used to repair and restore the traditional structures are the same as in the past, and this ensures the retention of traditional skills. These have been consciously maintained through the establishment of a school for dry-stone wallers, to counter the problems brought by social and economic change.

ICOMOS considers that the setting exhibits a strong continuity with past layouts and the aesthetic qualities of this landscape have been appreciated by well-known artists and intellectuals, who have resided in the area and, through their work, have contributed to the understanding of this region.

---

ICOMOS considers that the conditions of integrity may be considered met if all relevant hydrological features are to be included within the boundaries of the nominated property, whilst the conditions of authenticity are only partly met, in particular when considering the nominated property as the reflection of the adaptation of the soil and its geomorphology through terracing and the creation of structures for hydraulic management.

---

#### **Criteria under which inscription is proposed**

The property is nominated on the basis of cultural criteria (ii), (iv), (v) and (vi).

*Criterion (ii): exhibit an important interchange of human values over a span of time or within a cultural area of the world on developments in architecture or technology, monumental arts, town-planning or landscape design;*

This criterion is justified by the State Party on the grounds that the nominated property bears witness in its physical organisation and features to the interchange that occurred when the Muslim settlers arrived, who introduced in the region their system for water supply and irrigation which, combined with the creation of hillside terraces, allowed the Arab settlers to generate wealth from a harsh environment. Subsequently, after the Christian conquest of Spain and the island, the feudal system was brought into the area and the territorial organisation was changed with the establishment of large rural estates, the expansion of the terraced system to the upper parts of the hillsides, the introduction of olive cultivation and the adaptation to the new conditions of the Arab water systems.

ICOMOS considers that the combination of the network of structures to collect, supply and distribute surface and underground water with the dry-stone terrace system and the territorial organisation of *possessions* reflect a more complex and less direct cultural interchange between the legacy of the Islamic civilisation and the feudal system of Christian origin. In particular, ICOMOS notes that the "History and Development" section of the nomination dossier does not provide specific references to the evidence of the influence of the Islamic culture, even in relation to the hydraulic system. On the contrary, explicit mention is made of the role played by livestock farming in the economy of the area during the Muslim period. The nomination dossier admits that no direct or written testimonies bear witness to the widespread use of irrigated crops during the period of Muslim occupation.

ICOMOS therefore considers that the existence of the water management network in the area cannot be directly associated to the period of the Islamic conquest since the nomination dossier does not mention material

evidence from that period nor documentary or written sources that can provide specific reference to support that claim.

---

ICOMOS considers that this criterion has not been demonstrated.

---

*Criterion (iv): be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history;*

This criterion is justified by the State Party on the grounds that the nominated property tangibly illustrates the ingenious combination of a building technique based on the use of dry-stone walls and of traditional knowledge in the field of hydraulic engineering. The methods used to collect and distribute underground water are completed by a careful drainage system for surface water that was channelled to prevent erosion and replenish underground aquifers. Together with the existing hydrological, geological and orographic conditions, these structures have contributed to create a highly artificial landscape in which the structures for water supply, drainage, storage and distribution are interconnected with the terraced system.

ICOMOS considers that the interconnected system of waterworks and dry-stone terraces constitutes a peculiar feature of the nominated property.

However, ICOMOS observes that hillside terraces always require a functioning drainage system and this is usually integrated into the terraced structures.

As for the hydraulic engineering network of Islamic origins, outstanding examples of waterworks and hydraulic technologies exist throughout the world, in particular in the geo-cultural regions characterised by arid climates and an Islamic presence.

ICOMOS considers that only an expanded and deepened comparative analysis, which examines the Serra de Tramuntana and other relevant properties with specific and explicit reference to the numerosness, complexity and state of conservation of the material outcomes deriving from the integration of water management system and land-use arrangements at the national, regional and global level, may demonstrate whether the nominated property has the potential to justify this criterion.

---

ICOMOS considers that this criterion has not been justified at this stage.

---

*Criterion (v): be an outstanding example of traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change;*



This criterion is justified by the State Party on the grounds that the settlement pattern in the nominated property illustrates different stages of human occupation of the area and the evolutionary processes that have accompanied the subsequent civilisations that settled in the nominated property. A featured component of the spatial organisation of the area is the rural estate or *possessió* that dates back to the Christian conquest and is a structure linked to the feudal system. The *possession* comprised plots of land dedicated to different crops and with differing morphologies and levels of productivity: rocky outcrops at the top of the hills, woodland areas, terraced hillsides with olive trees and intensively-grown crops, areas of extensive grazing and fields on more level land. The centres of these productive units were the farmhouses or *cases de possessió* which were organised around a courtyard or *clastra* and included residential and service buildings.

The villages and towns still reflect their medieval origins in the irregular urban fabric. They are also marked by the presence of structures related to the management of water such as ditches, watermills, public wash places, irrigation networks for the orchards and water tanks. Religious and defensive structures dotting the landscape further illustrate its pattern of evolution.

ICOMOS considers that the settlement pattern and the related spatial and economic organisation of many cultural landscapes are based on productive agricultural units, therefore their presence cannot be claimed as a component specific to this property, although the complexity of several farming units is remarkable if examined in relation to the extreme orographic conditions of the area.

ICOMOS observes that the nominated property is a good example of human adaptation to difficult environmental conditions and of traditional knowledge developed to carry out farming with limited resources, both in terms of land and water. But ICOMOS nevertheless notes that in the nomination dossier there is much detailed information on some of the material elements of this agrarian cultural landscape, but reduced attention has been paid to the features of the agrarian landscape in terms of the grain and the structure of the landscape mosaic, land uses, and the quality and architecture of agrarian cultivations (e.g. density and structure of olive groves). This would require a deepening of the investigation, with specific regard to land uses in different historical periods, which may shed light on the pattern of evolution of the area.

ICOMOS further considers that the existence of structures and arrangements related to the intelligent exploitation of water in shaping this landscape better justifies criterion (iv) than this criterion.

ICOMOS finally considers that the nomination dossier has not clarified the role played by the villages, the religious and defensive heritage in the development of the nominated property, and the historical, economical

and social reasons that have brought about their existence appear rather disconnected from those supporting the formation of the agricultural and territorial structure of the Tramuntana area.

ICOMOS finally observes that many of the claims that would support the demonstration of this criterion have also been used to support criteria (ii) and (iv).

---

ICOMOS considers that this criterion has not been demonstrated at this stage.

---

*Criterion (vi): be directly or tangibly associated with events or living traditions, with ideas or with beliefs, with artistic and literary works of outstanding universal significance;*

This criterion is justified by the State Party on the grounds that several illustrious visitors have appreciated the aesthetic values of the Serra de Tramuntana and have spent part of their lives in the area, enhancing and promoting its scenic values, such as Archduke Ludwig Salvator of Austria, or conceiving some of their works while sojourning in the nominated property. Even today several prominent intellectuals and artists have elected as their second home the Serra de Tramuntana.

Other intangible elements bearing witness to the long and complex history of the region are the toponyms, many of which relate to water, whilst others recall the Islamic presence in the island, the religious and traditional festivities, dances, or pilgrimages to the Lluç Shrine.

ICOMOS considers that the intangible components exhibited by the nominated property are common to several other cultural landscapes within the same geo-cultural region, although they certainly contribute to enrich the significance of the nominated property.

In respect to the association with works of art, although several artists have spent part of their lives in the area only a few have conceived their artistic works whilst there, and none of these works is closely intertwined with or widely recognised as directly associated with the nominated property. Additionally, none of the described traditions appear to have indelibly marked the local communities, nor have any of these intangible expressions been the core element of the social identity of the inhabitants of the nominated property.

---

ICOMOS considers that this criterion has not been demonstrated.

---

---

ICOMOS does not consider that the criteria and Outstanding Universal Value have been justified at this stage.

---

## 4 Factors affecting the property

### Development pressures

The State Party recognises that the nominated property is subject to global economic trends that see the primary sector largely declining to the advantage of the tertiary, which in the area is represented by the tourism industry. This causes urban and infrastructural pressures to satisfy the needs of mobility and accommodation of a larger number of visitors. Over the last 50 years, most of the coastal towns have expanded their built stock for tourism purposes. The active construction sector is also responsible for other activities detrimental to the environment and the landscape, i.e. the quarrying of stone to produce building material and the related transportation network.

Development pressures is still a threat to the nominated property, although appropriate legal and planning provisions have been established, due to the lack of economic prospects and the low income that characterises most of the Tramuntana area.

In other parts, the abandonment of agricultural activities has caused the accelerated deterioration of several rural structures no longer in use, and, above all, of the terraces and hydraulic systems. This, in turn, has increased the rate of soil erosion.

ICOMOS observes that some 8,000 people live in the nominated property, but the buffer zone is much more populous (128,000 inhabitants) compared to its size, which is less than two times the dimension of the nominated property, therefore it is likely that pressures on the latter may derive from activities carried out in the buffer zone.

### Tourism pressures

The fame of Mallorca and of the Tramuntana area for its aesthetic value commenced in the early 19<sup>th</sup> century, after which it became a famous destination for intellectuals and artists. In the 20<sup>th</sup> century the island witnessed three major cycles of tourism development, the first of which, dating back to the 1960s, was accompanied also by considerable urban development. The tourism industry has spared Tramuntana since the late 1990s, when rural, nature and residential tourism spread in the area. The increased presence of visitors has caused congestion, disturbance of flora and fauna, dumping of rubbish, illegal fishing and hunting, which, however, should be considered minor compared to the problems of soil instability induced by the lack of maintenance of traditional agricultural infrastructures.

### Environmental pressures

The major environmental pressures are related to the increased number of users in the tourism season and to poor waste-management. The karstic nature of the area and its orography make the aquifers particularly vulnerable to pollution and overexploitation. The retention

of the natural and manmade network of surface and underground waters is particularly important for the delicate environmental balance of the Tramuntana region and the survival of the animal and plant species living in restricted areas.

Fire, both accidental and intentional, threatens the vegetation cover of the nominated property.

Deforestation, coupled with the abandonment of agriculture on large areas of hill slopes, induces processes of accelerated soil erosion.

### Natural disasters

The orographic, geomorphologic and climatic conditions make the Tramuntana area prone to landslides, rock falls, and torrential floods in steep areas, and inundations in flat land or valleys. The lack of maintenance of the terraces and of the drainage system, together with the misuse of the natural resources, exacerbates the consequences of the natural hazards. Repeated natural and man-made disasters have occurred in the region since the end of the 19<sup>th</sup> century, most especially over the last fifty years.

### Impact of climate change

ICOMOS considers that the consequences of climate change in the region and, specifically in the nominated property, may result in an increase of unpredictable and extreme weather events, which alternate with periods of drought.

---

ICOMOS considers that the main threats to the property are the consequences of the lack of maintenance and abandonment of agricultural activities, e.g. soil instability, increase of landslides and torrential floods, tourism-related urban and infrastructure development as well as the increasing tourism pressure in the area.

---

## 5 Protection, conservation and management

### Boundaries of the nominated property and buffer zone

The boundaries of the nominated property (30,745ha) have been determined on the basis of an accurate analysis of the distribution and density of landscape and heritage features. These have been identified and subsequently mapped through bibliographic survey as well as field work. The following resources have been considered relevant in the determination of the boundaries of the nominated property: hillside terraces, traditional water supply and soil-erosion preventive engineering systems, oil presses, ice-storage and salt structures, holm-oak woods, publicly owned estates, public footpaths or tracks, archaeological sites, historic defensive structures, historical gardens, rural buildings. The areas with the highest density of such resources have been the first ones deemed worthy to be included in the nominated property, the final delimitation of which has been defined

by also taking into account geographical features, administrative limits and legal designations for the protection of areas within.

The boundaries of the buffer zone (52,760ha terrestrial buffer zone and 25,857ha marine buffer zone) coincide with the physical delimitations of the Tramuntana district, which also correspond to protective designations. These include: Natural Areas of Special Interest (AN I), rural Areas of Scenic Interest (A IP) and Settlement Areas in a Landscape of Interest (AAPi), designated on the basis of the Balearic Act governing Natural Spaces (*Lei Espaces Naturales* - L N, 1991). The buffer zone is completed by a protected area covering a marine strip parallel to the coastal edge of the nominated property.

Not all the areas included in nationally designated areas have been included in the nominated property or in the buffer zone, due to their weaker integrity, as in the case of towns and larger villages. They remain, however, under the protection of Spanish and Balearic law but are not nominated for the World Heritage List nor as part of the buffer zone of the nominated property.

On the basis of the additional cartography provided by the State Party on 8 November 2010, ICOMOS observes that areas containing items of heritage value related to the proposed Outstanding Universal Value, i.e. structures related to the hydrological heritage, seem not to have been included within the boundaries of the nominated property.

ICOMOS observes that the boundaries of the nominated property could be reconsidered in the light of the additional information provided by the State Party, whilst its buffer zone is adequate.

### **Ownership**

The major part of the land and estates included in the nominated property is privately owned; in fact only 21 of the property is publicly owned.

### **Protection**

#### Legal Protection

The entire nominated property is included in the Picturesque Site that has been under formal legal protection via a decree since 1972 (Decree 984/1972). Following the approval of the Spanish Historic Heritage Act (1985) and of the Balearic Historic Heritage Act (1998), the Site has been declared an Item of Cultural Interest (BIC in the Spanish acronym) as an historic site.

Additional levels of protection are ensured by other legal tools on the basis of which several areas have been delimited and protected for their natural and cultural values. Two cultural routes are recognised by the European route Network: the Dry Stone route and the Art - Lluc route. Several sites, ensembles and individual properties have been declared Items of Cultural Interest (BIC) for their historical, archaeological, ethnological and

technological value, although some ensembles of particular relevance are not protected yet, e.g. the towns of Pollença and Soller, or the settlements of Biniraix, Ullar and Galilea in the vicinity of the Monastery of Valldermossa.

The Balearic Act (1991) governing natural spaces and urban planning regulations provides for the identification of areas to be protected for their ecological, geological and landscape values. The Act also foresees that planning regulations be established for areas protected under its provisions.

Other relevant legal instruments include several Acts concerning urban and spatial planning, the conservation of nature, flora and fauna, and the management of rural land and of the environment.

The pivotal instrument for spatial planning is the Mallorca Spatial Plan (2004). This plan provides for regulations concerning the human settlement, land-use on the basis of features, values and vocations of different areas, activities and protection of the environment. The Plan acknowledges the cultural and natural values of the Tramuntana Area and identifies seven areas with differing land-use regimes: Natural Areas with High Level of Protection (AANP) Natural Areas of Special Interest (AN I), rural Areas of Scenic Interest (A IP), rural Areas of Scenic Interest Woodlands (A IP-B), Areas of Agricultural Interest Olive Groves, Settlement Areas in Landscape of Interest (AAPi) and Areas of urban or developable land. Almost 99 of the area of the nominated property is classified within the most protected categories (AANP, AN I, A IP, A IP-B), in which new construction is almost completely prohibited. The last two categories allow new building activity but this is strictly controlled under protective regulations established for historic heritage.

For natural resources specific regulations are in place, whilst at the urban level, apart from the Mallorca Spatial Plan, each municipality is covered by urban planning provisions.

Further plans related to specific areas are: the Plan for the regulation of the Tramuntana Area's Natural resources (2007) and the Special Plans for: the Protection of the Historic Site of Archduke Ludwig Salvator's state (2002), for the Dry-Stone route (2008), for the Protection of Art - Lluc route (not approved yet), for the Historic Artistic Architectural, Geological and Scenic Value of the Municipality of Deià, for the protection of the Village of Escorca and of the Historic Centre of Pollença.

#### Effectiveness of protection measures

The nominated property is covered by different protective layers that ensure the safeguarding of the historical, artistic and cultural heritage, the protection of the environment and the compliance with urban and spatial

planning regulations. These refer to different competent bodies and related control procedures.

Municipalities are responsible in matters essentially concerning compliance with urban planning regulations and issuing building permits.

The Consell de Mallorca is responsible for: safeguarding the historic heritage, controlling compliance with the spatial planning regulations. These tasks are pursued through the Mallorca Committee for Spatial and Urban Planning, the Directorate for Historic Heritage and the Directorate for Urban and Coastal Planning. Relevant activities imply: reporting on special protection plans, declaring properties Items of Cultural Interest, supervising projects in protected areas, issuing authorisation for archaeological excavations surveillance of protected cultural items, supervising urban plans and regulations, and relevant projects in sensitive areas.

Additional responsibilities concern the supply of emergency aid in case of fire (Mallorca Fire Service), and the protection of environmental features (Mallorca Ministry of Environment).

ICOMOS considers that the protective measures for the property are, overall, well-established but recommends that the steps undertaken to declare the ensembles of Biniaraix, Ullar and Galilea as Items of Cultural Interest (BIC) be continued to make fully effective their protection under the legal framework in force.

ICOMOS further recommends that the spatial plans for the protection of places with cultural values that have been conceived but not yet enforced, be finalised, approved and implemented without delay.

ICOMOS finally recommends that specific plans for the protection and management of the water supply systems that have been formally protected as BIC be developed and enforced.

---

ICOMOS considers that the legal protection in place will be adequate when the steps undertaken to declare the ensembles of Biniaraix, Ullar and Galilea as Items of Cultural Interest are finalised.

ICOMOS considers that the protective measures in place will be adequate when the spatial plans for the protection of places with cultural values under development are finalised and enforced. Additionally, ICOMOS recommends that specific plans for the protection and management of the protected water supply systems be developed and enforced.

---

## Conservation

Inventories, recording, research

The nomination dossier mentions that the Consell de Mallorca has initiated an inventory of the structures that constitute the water management system.

ICOMOS recommends that this inventory be carried out on a systematic basis and completed as soon as possible. Additionally, ICOMOS recommends that the following resources be inventoried on the basis of previous research: the extension, organisation and sizes of currently cultivated plots and related crops, as well as of the past pattern of cultivation as attested to by historic maps, cadastral data and other records, the hydrological heritage, and the built heritage, especially the small rural structures scattered in the landscape.

## Present state of conservation

Due to the abandonment of agricultural activities and the decline of the permanent population, the nominated property, especially in the most remote parts, has suffered from neglect and disrepair, that have affected the territorial system of hillside terraces and the hydraulic network. On the other hand, the isolation of Tramuntana has preserved it from the substantial transformations that have occurred in other areas of the island as a consequence of mass tourism.

The natural environment of the nominated property is in a relatively healthy condition, although some resources, such as underground water, require measures to prevent their endangerment.

The terraced landscape survives in good condition to an extent of almost 48%, while some 46% is in a poor state of conservation and 5% is in a ruinous state; however, ICOMOS considers that there is a trend in abandoning the agricultural activity that should be counteracted for the effective conservation of this manmade landscape. The structures and items related to the hydraulic heritage are generally in a deficient state: the norias are in a bad condition, whilst wells are in a good state and often still in use, and the underground galleries are in a variable state: those located in functioning areas are still used and maintained but the other ones are in disrepair and difficult to restore. The water tanks and pools are generally in a bad condition due to neglect. Small built features such as ice-stores, charcoal huts, limekilns etc. are generally in poor condition due to neglect and their fragility. Otherwise, those buildings that have undergone adaptation for residential purposes have been substantially altered.

## Active Conservation measures

The Consell of Mallorca has undertaken special projects for the conservation of certain ethnological features, such as the mills and the water mills, the dry-stone routes, and the paths.

ICOMOS believes that systematic conservation measures could be realistically implemented only if these structures continue to be used. Therefore, it is unlikely that the built elements that have lost their original function and are out of use today will be systematically maintained.

## Maintenance

At present, maintenance concerns are included in conservation measures.

### Effectiveness of conservation measures

Apart from programmes for conservation of cultural resources, the Consell de Mallorca has studied the possibility of a tourist tax that is added to tourist-related activities, the revenue of which should be reverted to agricultural activity and help sustain the agricultural landscape.

ICOMOS observes that the effectiveness of conservation in the area can only be achieved through programmes that promote the agricultural activities in the area and sustain the permanent human, productive presence in the territory, and, subsequently, the continual use and maintenance of the most important components of this cultural landscape. However, the measures developed by the State Party to ensure the conservation of at least some categories of cultural items in the nominated property are effective, and those conceived to generate revenue from tourism, to be used to sustain agriculture, are going in the right direction.

---

ICOMOS considers that the present condition of the nominated property is, overall, acceptable, although threatened by abandonment of agriculture, and observes that, to ensure the retention in the long term of the complex system of features that make up the nominated property, active policies to sustain the agricultural activities and the continual use and maintenance of the territory should be undertaken.

---

## Management

Management structures and processes, including traditional management processes

The existing administrative structures that are responsible for the implementation of protective and planning measures can be considered part of the management framework established for the nominated property.

However, the Consell de Mallorca had been working to establish an appropriate management body for the nominated property and an agreement was approved in 2009 to promote its creation.

The additional information received by ICOMOS on 8 November 2010 made clear that the constitution of the Consortium "Serra de Tramuntana Patrimoni Mundial" and the articles of association were approved by the relevant authorities in September 2010. Therefore, the Consortium is planned to be operational from 2011, after the period of public consultations and observations has been closed and final approval confirmed. At the moment, the Consortium is formed by the Consell Insular de Mallorca and by the Regional Government of the Balearic Islands, but, after its final approval, more local authorities will be invited to join the Consortium. Its structure includes a

chairman, a managing director, a governing board, a participatory committee and a Committee of experts. The Consortium is headed by the Consell Insular de Mallorca and the chairman of the consortium will be the chairman of the Consell. The activities of the Consortium cover both the nominated property and the buffer zone and, within this area, the Consortium holds responsibilities and powers related to the approval and implementation of the Management Plan, through yearly and triennial plans, as well as other matters pertaining to the World Heritage declaration.

Policy framework: management plans and arrangements, including visitor management and presentation

The Management Plan for the nominated property has been developed as an alternative to other existing plans and programmes for the area. It has been conceived by the Spatial Planning Department of Mallorca and is thought to coordinate all initiatives in progress in the area in order to ensure that the values of the property are not adversely affected by any planned activity.

The Management plan intends to establish a framework for strategies, objectives and programmes in five main areas: Landscape and urban planning, Cultural heritage protection, Agriculture and rural development, Environment and biodiversity, and Commerce and Tourism.

A thorough description of the different sectors of the plan and related objectives is also provided. Where necessary, reference to European Union programmes and any legal and planning tools already in place is made.

The additional information received by ICOMOS on 8 November 2010 explained that the Management Plan for the nominated property has its legal foundations in the Mallorca Spatial Plan (2004). This plan grants a special regime to the nominated property which has been identified as a Spatial Conversion Area and also provides for specific plans for the preservation of the heritage values of certain areas (see Protection Section).

The Management Plan is expected to be approved in the second quarter of 2011, by the Consortium "Serra de Tramuntana Patrimoni Mundial", which will be the body responsible for the approval and implementation of the Plan.

ICOMOS recommends that the Management Plan include strategies to sustain the surviving agricultural activities within the nominated property and its buffer zone and to control the impact that tourism related activities may have on the values of the nominated properties.

### Risk preparedness

A flood Risk Map has been developed within the Mallorca Special Plan and emergency plans are in place under the Civil Protection Authority. Remote sensing detection via satellite monitors, which registers the movement of rocks

to identify risky areas. Fire-prone areas have been identified on land plans. The regional environmental Agency ensures forest maintenance and cleaning.

#### Involvement of the local communities

The Management Plan contains a specific heading on this subject. The responsible authorities are aware of the importance of public participation and have set up a strategy for citizens' involvement in different phases, to achieve awareness among the local population and consensus on the management system among stakeholders and other bodies. Additionally, the creation of a Tramuntana Forum is envisioned as a permanent arena for discussion and awareness-raising among the population at large.

ICOMOS considers that involvement of local communities and the building of awareness and consensus among the local population on the nomination process is fundamental to ensure the effectiveness of the protection and management of the nominated property.

resources, including staffing levels, expertise and training

The funds needed to implement the Management Plan and ensure effective protection and management derive from a variety of sources, namely the budgets of the authorities included in the management body, the European Development Programmes, a sponsorship plan to channel financial contributions from public institutions, private companies, organisations and banks, and the revenue from the sale of local products or services.

The authorities responsible for the protection of natural and cultural heritage and for spatial planning are all equipped with technical staff of adequate level.

Training programmes in a variety of occupations have been activated in the area and among them the most relevant are the *Escuela de Margers*, where the dry-stone building technique is taught, and the vocational training programmes in agricultural and related activities.

#### Effectiveness of current management

ICOMOS considers that the administrative structure in place in Mallorca and in the Tramuntana Area, the legal and planning protective framework, the envisioned management plan and the approval of the establishment of the management body should ensure that management will be effective.

---

ICOMOS considers that the management system for the property appears adequate. ICOMOS, however, recommends that the management body be established and the Management Plan approved and enforced according to the schedule envisioned by the State Party.

---

## 6 Monitoring

The monitoring strategy identifies indicators to be measured for each of the main thematic areas of the Management Plan. To ensure the implementation of the monitoring process, an agreement between the Consortium and the University of the Balearic Islands will be signed to establish a scientific advisory committee that will be charged with responsibilities concerning monitoring. The research, inventory and conservation activities carried out in past years may be considered as a solid foundation of baseline data for future monitoring.

ICOMOS considers that the monitoring system requires that a clear periodicity for the measurement of the selected indicators be established. In addition, it is necessary to identify the bodies that will carry out the monitoring at the operational level and where data will be stored.

---

ICOMOS considers that the monitoring process needs to be further developed to clarify the periodicity of indicator measurement and identify the operational bodies that will carry out the monitoring activity.

---

## 7 Conclusions

The Cultural Landscape of the Serra de Tramuntana exemplifies the Mediterranean mountainous agricultural landscape, which, after centuries-long transformations of the terrain morphology to exploit the scarce available resources, and thanks to the specific orogenetic, climatic and vegetation conditions, has been made productive and adapted to human settlement.

ICOMOS considers that the property is a good, although common-place, example of human adaptation to difficult environmental conditions, and of traditional knowledge developed to carry out farming with limited resources, both in terms of land and water. However, while a thorough description is provided of the hydraulic arrangements and other component structures, reduced attention has been paid to the features of the agrarian landscape in terms of the grain and pattern of the landscape mosaic, land uses, and the quality and architecture of agrarian cultivations. This would require a deepening of the investigation, with specific regard to land uses in different historical periods, which may shed light on the pattern of the evolution of the area. This would also help a better assessment of the nomination dossier since the notion of "cultural landscape" cannot be restricted to "sites", included in a landscape, but to the whole landscape in relation to its functioning.

Additionally, the demonstration of the cultural interchange between the Islamic and the Christian civilisations within the Serra de Tramuntana remains generic and has not been substantiated by specific material evidence and robust historical and scientific references.

Finally, ICOMOS considers that the nomination dossier has not clarified the role played by the villages and the religious and defensive heritage in the development of the nominated property. The historical, economical and social reasons that have brought about their existence appear rather disconnected from those supporting the formation of the agricultural and territorial structure of the Tramuntana area.

Therefore, in summary, ICOMOS considers that the nomination dossier does not provide an adequate description of a number of key aspects, and of their interrelation, of the nominated property to sustain the proposed Outstanding Universal Value.

Recommendations with respect to inscription

ICOMOS recommends that the examination of the nomination of the Cultural Landscape of the Serra de Tramuntana, Spain, to the World Heritage List be **deferred** in order to allow the State party to:

- research and document the features of the agrarian landscape in terms of the grain and pattern of the landscape mosaic, land uses, and quality and architecture of agrarian cultivations over time to allow the assessment of the property and reinforce its justification as a cultural landscape;
- Deepen the comparative analysis to include agricultural terraced landscapes at regional and International level with specific reference to the proposed values and the attributes supporting these values in order to justify the Outstanding Universal Value of the property;
- Clarify the role played by the villages and the religious and defensive heritage in the development of the nominated property, with particular reference to its proposed Outstanding Universal Value;
- establish and enforce the "Consortium Serra de Tramuntana Patrimoni Mundial" as the management body of the nominated property;
- Finalise, approve and enforce the Management Plan for the nominated property;
- Continue and finalise the process to declare the ensembles of Biniraix, Ullar and Galilea as Items of Cultural Interest (BIC) to make fully effective their protection under the legal framework in force;
- Finalise, approve and implement without delay the spatial plans for the protection of places with cultural values that have been conceived but not yet enforced;
- Develop and enforce specific plans for the protection and management of the water supply systems that have been formally protected as BIC.

ICOMOS considers that any revised nomination would need to be considered by an expert mission to the site.

ICOMOS further recommends that the State Party give consideration to the following:

- Develop a systematic inventory of the following: the current and past pattern of cultivations, the structures and arrangements for the management of surface and underground water, and the vernacular built heritage, in order to improve the level and quality of knowledge of this complex landscape and to make available baseline data for monitoring purposes.







Aerial view of the north coast of the Tramuntana area



The terraced landscape





Miramar, bridges and dry-stone walls



ural estate in Dei

---

Pile Dwellings around the Alps  
Switzerland Austria France  
Germany Italy Slovenia  
No 1363

---

Official name as proposed by the States Parties  
Prehistoric Pile Dwellings around the Alps

Location

Switzerland

Cantons of Aargau (AG), Berne (B ), Fribourg (F ), Geneva (G ), Lucerne (LU), Neuchâtel (N ), Nidwalden (NW), Schaffhausen (SH), Schwyz (S ), Solothurn (SO), St. Gall (SG), Thurgau (TG), Vaud (VD), Valais (V ), Zurich (ZH).

Austria

Federal state of Carinthia (Kärnten, T): administrative district of Sankt Gallen-Land;  
Federal state of Upper Austria (Oberösterreich, O ): administrative district of Vöcklabruck.

France

Region of Rhône-Alpes: Departements of Savoie (73), Haute-Savoie (74);  
Region of Franche-Comté: Departement of Jura (39).

Germany

Federal state of Baden-Württemberg (BW): administrative districts of Alb-Donau-Kreis (UL), Biberach (BC), Bodenseekreis (FN), Konstanz (N), Ravensburg (V);  
Free State of Bavaria (B ): administrative districts of Landsberg am Lech (LL); Starnberg (STA).

Italy

Region of Friuli Venezia Giulia (FV): Province of Pordenone (PN);  
Region of Lombardy (LM): Provinces of Varese (VA), Brescia (BS), Mantua (MN), Cremona (C );  
Region of Piedmont (PM): Provinces of Biella (BI), Novara (NO); Torino (TO);  
Trentino-South Tyrol / Autonomous Province of Trento (TN);  
Region of Veneto (VN): Provinces of Verona (V ), Padua (PD).

Slovenia

Municipality of Ig

Brief description

The serial property encompasses the remains of prehistoric pile-dwelling settlements in and around the Alps dating from around 5,000 to around 500 BC. These pile dwellings, or stilt houses, were constructed on wooden piles at the edges of lakes, rivers or wetlands. The land on which they were built was later inundated,

leaving their remains underwater and in ideal conditions for the conservation of organic material, such as wood, textiles, plants and discarded foodstuffs.

The settlements have yielded substantial evidence for the layout and subsistence practices of early agrarian societies and the way they developed over several millennia in the Alpine and sub-Alpine regions of Europe during the Neolithic, Bronze Age and early Iron Age periods. 111 sites have been nominated out of 937 so far identified. They appear to reflect the settlements of some thirty different cultural groups.

Category of property

In terms of categories of cultural property set out in Article I of the 1972 World Heritage Convention, this is a serial nomination of 111 *sites*.

1 Basic data

Included in the Tentative List

Austria: 28 January 2009

France: 5 November 2009

Germany: 6 October 2009

Italy: 28 January 2009

Slovenia: 12 January 2010

Switzerland: 28 December 2004

International Assistance from the World Heritage Fund for preparing the Nomination  
None

Date received by the World Heritage Centre  
26 January 2010

Background

This is a new nomination.

Consultations

ICOMOS consulted its International Scientific Committees on Archaeological Heritage Management and Underwater Heritage and several independent experts.

Literature consulted selection

*Autour du lac du Bourget actes du colloque pluridisciplinaire, le Bourget du lac*, 2008.

Bellwood, J., *First Farmers The Origins of Agricultural Societies*, 2006.

Della Casa, P., Trachsel, M., (eds.), *Wetland Economies and Societies proceedings of the international conference, Zurich*, 2004.

*Le peuplement de l'Arc alpin, 1<sup>er</sup> Congrès national des sociétés historiques et scientifiques, Grenoble*, 2006.

In Situ Preservation of Submerged Prehistoric Settlements in Lakes of the Alpine Region. Anti-erosion Measures at Sites in Lake Bièvre, Suisse, *Preserving archaeological remains in situ Proceedings of the 1<sup>st</sup> conference, 1<sup>st</sup> December 2008*.

Hafner, A., Schlichtherle, H., Neolithic and Bronze Age lakeside settlements in the Alpine region, Threatened archaeological heritage under water and possible protection measures – examples from Suisse and Southern Germany, ICOMOS World Report *Heritage at Risk 2002-2003*.

Menotti, Francesco, (ed.), *Living on the Lake in Prehistoric Europe*, 2004.

#### Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the property from 28 September to 4 October 2010 and 12 to 18 October 2010.

Additional information requested and received from the States Parties

By letter of 14 December 2010, ICOMOS requested the States Parties to consider whether the Outstanding Universal Value of the property could be conveyed by a smaller number of nationally protected sites that reflect the known geographical spread of pile dwellings and can be seen as exemplars in terms of conservation and setting, to provide clarification on the contribution of the individual sites to the Outstanding Universal Value proposed, and to provide further details on resources for monitoring and management in Austria. The States Parties responded on 28 February 2011 with a revised nomination of 111 sites and details from their response are included in this report. The States Parties also submitted a revised Management Plan.

Date of ICOMOS approval of this report  
10 March 2011

## 2 The property

### Description

The concentration of remains of pre-historic pile (or stilt) dwellings underwater around the edges of lakes, rivers and wetlands in the Alpine and sub Alpine regions appears to be unique in Europe perhaps reflecting the ideal conditions for their survival.

The nominated sites are the archaeological remains of prehistoric settlements from the period between around 5,000 and 500 BC. The visible elements mainly consist of architectural components of houses, access paths, and palisades. The submerged locations provide the ideal conditions for the survival of organic material which does not survive in the dry conditions of land based remains. Where the archaeological layers of the sites that have been excavated (these are only a small number), the waterlogged remains have provided substantial evidence of tools, vessels, other utensils, textiles, and food, that together have provided a detailed insight into everyday life in prehistoric times and into the development of farming communities during the Neolithic and Bronze Age periods in Alpine Europe.

937 sites have so far been identified and these can be grouped into several clusters, with the densest concentration of sites being in the first two clusters:

### Northern Alps:

- Lakes Biemles, Morat and Neuchâtel, Western Switzerland, and Lakes Zurich and Zug, Central Switzerland;
- Lake Constance, Eastern Switzerland and Southern Germany, and the lower lands of Lake Federsee, the foothills of the Swabian Jura, and the Bavarian pre-Alpine lakes and wetlands, Germany.

### Western Alps:

- Lakes of the Jura Mountains and valleys of the Savoy Alps, France.

### Eastern Alps:

- Lakes of the Salzkammergut Alpine foothills, Upper Austria;
- Lake Wörthersee, Austria.

### Southern Alps:

- Lake Garda, Italy;
- Areas in Lombardy, Veneto and Trentino-South Tyrol, Italy.

### South-east of the Alps:

- Low lying wetlands of Ljubljansko barje, Slovenia; this cluster is seen as a closed group unrelated to those in or near the Alps.

The original nomination covered 156 sites. The revised nomination submitted in February 2011, in response to observations by ICOMOS, covers a smaller number of 111 sites. These are distributed as follows:

Switzerland	56
Austria	5
France	11
Germany	18
Italy	19
Slovenia	2

The selection of the smaller number of sites was undertaken to avoid duplication of sites with similar values. This new selection was also aimed at selecting sites that contribute to the overall Outstanding Universal Value in a substantial, scientific and readily defined and discernible way and ensuring that the Outstanding Universal Value of the whole property is easily understood and communicated. The States Parties also stated that adequate protection/management of each component part is now emphasised, and, where necessary, the enhancement of protection measures, together with the management system and management plan already implemented, should ensure the overall manageability and coherence of the property.

The nominated sites are mostly small between 0.08 and 15.00ha; the exception is a site in France of 50.65ha. 37 of sites are underwater at depths between 0.5 and 10.00 metres; 33 are either on dry land or in bogs; while 30 are partly submerged and partly on dry land. The nominated areas mostly cover the archaeological remains and do not extend to their lake shore contexts.

The pile dwellings are seen to belong to three location types. The most numerous are lakeside settlements,

followed by bog settlements, with the least numerous being sites in the flood plains of rivers.

The areas chosen for settlements were the inundation zones of lakeshores or rivers, peninsulas or islands. Settlements built on steep shorelines are very rare. Rising water levels in pre-historic times led to the abandonment of settlements which were then covered by lake and river sediments. When the water levels decreased, some settlements were then later re-occupied creating new archaeological layers, which in some sites are several metres deep.

The occupation of the waterside sites seems to have come to a sudden end around 800 BC coinciding with the emergence of iron technology and new iron-age societies.

The pile dwellings do not represent a uniform or homogenous culture rather they can be seen to reflect the settlements of some thirty different cultural groups, as identified from pottery and other artefacts that appear to reflect contacts with settlements in the neighbouring plains as well as trade routes across the Alps.

Analysis of the archaeological deposits has provided evidence for the following aspects of pre-historic Neolithic, Bronze Age and early Iron Age societies:

- emergence of agricultural societies through evidence of wheat, barley and millet, the bones of domesticated animals, cattle, pigs, goats and sheep, the use of wild deer, boar and game, and wild berries, birds' eggs, fish and honey;

- The development of technological progress through tools, such as axes, from the use of stone to copper or bronze and then (in a few sites) to iron over a period of some 4,000 years;

- The earliest metallurgical evidence in south-eastern Europe from 4<sup>th</sup> millennium sites in Lake Constance, Austrian Salzkammergut, and Slovenian sites whose dating to around 2,200 BC has shed light on the development of bronze-working techniques in Europe;

- Trade routes for flint, shells, gold, amber, and pottery across the Alps and within the plains;

- Transport evidence from dugout canoes (some 30 have been found), and wooden wheels, some complete with axles for two wheeled carts dating from around 3,400BC some of the earliest preserved in the world;

- evidence of construction techniques, such as pile foundations, sill beams, foot-plate constructions, wattle and daub, round or split timber walls, roof shingles, bark floor insulation, and tongue groove joints from the Bronze Age onwards, and of settlement planning such as rows of houses, ribbon developments, street settlements and clustered villages;

- Dating of remains by dendro-chronology of 300,000 wood samples during the last 25 years, of which firm dates can be provided for some 50,000 samples, that have given a great precision to the Neolithic and Bronze Age in Europe;

- Survival of organic materials such as bark used for boxes, arrow cases and pottery decoration; tar from birch trees for glue; oak and lime bast used in fabric for capes, hats, shoes and nets; the oldest textiles in Europe dating to 3,000 BC come from the pile dwellings.

This cumulative, detailed evidence has allowed an understanding of the evolution of the many settlements over time, which has revealed changing patterns. The earliest settlements were used only for around 5 to 20 years before re-building or re-location. By the Late Stone Age, longer lasting settlements appeared, and by the Late Bronze Age some villages persisted for between 50 to 100 years.

The evidence has also revealed social stratigraphy in terms of differing possessions and diet within single settlements. In terms of domestication of animals, the earliest settlements, around 4,000 BC, relied on feeding their animals in the summer on wood pastures and in the winter on dried leaves and as a result they maintained small herds. Only when grasslands were extended around 3,000 BC did the herd size increase. The evidence has also revealed the way societies responded to adverse climatic change in terms of increasing food storage and hunting as the potential to grow crops declined.

Highly developed dendro-chronological studies have provided unusual definition on the nature and sequences of construction, duration of occupation and building technologies. They have also defined the anthropological effects on the ambient character of woodlands and have provided significant definition on the nature of wood and woodland management. However, the chronologies established by several notable institutions (e.g. the Latium museum; the dendro laboratory at the facility on Lake Bienna; Dendrodata, Verona; and Archaeology Branchoffice Hemmenhofen) have yet to be linked securely to a European master chronology.

The nominated sites have been chosen according to the following criteria and sub criteria:

1 Great increase in knowledge about early agricultural societies and people's everyday lives:

- Typical example
- Important reference assemblages
- Evidence of long-distance trade contacts
- Rarely found period
- Important technical innovations
- Special geographical situation
- Several settlement phases
- Contemporaneous sites: as identified by dendrochronology

- Other aspects specific value

2 Important examples of the development of architecture, construction and habitat:

- Architecture elements
- reconstructable village ground plans (or parts thereof)
- Settlements in unusual locations or with special functions
- Settlement dynamics within a micro-region

3 Excellent dating possibilities (dendrochronology):

- Good-quality dating possibilities
- Easy-to-understand pile field

4 Extremely rich and broad scientific data:

- Unusually thick cultural layers
- Evidence pointing to manufacturing techniques
- Very short settlement phase (1-2 decades)

5 Outstanding opportunities for natural sciences or rich organic finds:

- Excellent archive for archaeobotany, archaeozoology, palaeolimnology, climate and landscape history, etc
- Excellent conservation of organic finds (wooden artefacts, textiles, etc)

A detailed table is provided in the nomination dossier listing all the 937 sites and showing how the nominated ones have been chosen. There are detailed descriptions provided of each nominated site, giving details of the investigations that have been undertaken, the need for protection, etc.

The sites selected have not been substantially excavated. Generally, the largely excavated sites which provide the understanding of the content and cultural context for the chosen sites are listed as associated sites'. This point for example is well illustrated at Grand Lac de Clairvaux (F -39-01) and Lac de Chalain (F -39-02) where one site out of a total of 19 and 20 sites at each site respectively has been selected for the nomination with the remaining sites are located within the buffer zone.

There is a great diversity of challenging modern and sometimes vulnerable contexts in which the sites are located. A large percentage of the sites are located under shallow water, or lakes shores, or have their relict structures and deposits sealed beneath lake marls or similar natural deposits. Many were formerly sealed beneath peat and are now located beneath intensively cultivated (albeit hydrologically managed) agricultural environments. Few sites have any easily identified surface expression for the non specialist. Those that do have surface expression that are often composed of fragile, eroded, wooden pile fields' in shallow lake water, or may be identified by their particular morphological presentation in a topographical context (as preeminent elements of shoreline on lakes) but this is very rare.

Very few sites, therefore, can be overtly or securely presented and displayed in any meaningful way in situ.

History and development

The nomination dossier provides an over-view of the development of the Alpine lacustrine landscape that allowed the pile dwellings to flourish. A detailed history of some 4,000 years that were associated with the pile dwellings has not been attempted. Instead a table has been produced indicating the pre-historic periods reflected in the finds from the twenty-two specific areas or clusters of sites. The nomination dossier also puts forward dates ascertained for the earliest evidence of Neolithic, Bronze Age and Iron Age settlements in various countries and the date when pile dwelling settlement ended.

Evidence is also set out on a country by country basis for the evolution of settlements from the Neolithic period through to the Iron Age or equivalent in Slovenia.

And details are provided on the various changes in lake levels and lake environments in historic times, on the discovery of the pile dwellings in the 19<sup>th</sup> century, as well as on the history of research into these dwellings, of underwater survey work since the 1930s, and of underwater excavations since the 1950s, when scuba diving techniques made work possible at greater depths.

### 3 Outstanding universal value integrity and authenticity

Comparative analysis

A very detailed comparative analysis has been provided that compares the value and attributes of the nominated property with other sites that show similar typological, chronological and thematic features within the framework of early agrarian societies.

The property is compared with 20 properties on the World Heritage List representing cultural properties from the same era as the Prehistoric Pile Dwellings around the Alps, with sites on Tentative List and with other known sites, particularly other pile dwellings and wetland sites in Europe. Finally an internal comparative analysis is undertaken to justify the choice of sites.

The thorough analysis demonstrates clearly that the substantial evidence presented in the pile dwellings of the nominations is not matched on the World Heritage list. Furthermore it cannot be matched with other sites on or off Tentative lists as the quantity and quality of the evidence and the density of the remains are un-matched by other sites.

In terms of the internal comparison, this study sets out parameters for the choice of sites as set out above. ICOMOS considered that these parameters needed to be augmented with others that relate to setting and conservation in order to nominate sites that could be



seen as exemplars in all facets and this issue was raised in the ICOMOS letter of 14 December 2010.

In its response, the States Parties further augmented the selection criteria, by adding sub criteria (as set out above) and has also emphasised the adequate protection/management of each component site. It did also give justification for including sites in urban areas as well as those with more natural settings, as otherwise important sites would be excluded. It did however accept that for some urban sites the protection would need to be enhanced and as a result some extra measures have been put in place and these are mentioned below.

ICOMOS considers that the revised selection of sites more clearly reflects the Outstanding Universal Value of the property and more clearly relates individual sites to that Outstanding Universal Value.

---

ICOMOS considers that the comparative analysis justifies consideration of this property for the inscription on the World Heritage List.

---

Justification of Outstanding Universal Value  
The nominated property is considered by the States Parties to be of Outstanding Universal Value as a cultural property for the following reasons:

- The series of prehistoric-dwelling structures, thanks to the exceptional number and importance of scientific results, most due to exceptional wealth of organic archaeological remains, provides an outstanding detailed perception of the world of the early agrarians in Europe, giving precise information on their agriculture, animal husbandry and the development of metallurgy.
- The period of more than four millennia covered by the series of pile dwellings indubitably coincides with one of the most important phases of recent human history: the dawn of modern societies.
- In view of the excellent possibilities of exact dating of the remains of wooden architectural elements (annual resolution by dendrochronology) of the series the understanding of entire prehistoric villages and their detailed spatial development over very long periods can be followed on the pile-dwelling sites, giving the best known archaeological sources for prehistoric dwellings.
- The unique preservation of organic material from prehistoric times is as well an exceptional opportunity for research in many fields of natural science, such as archaeobotany and archaeozoology.

ICOMOS considers that this justification is appropriate although it needs to be recognised that the important phase in human history relates to a specific part of the world in Europe.

## Integrity and authenticity

### Integrity

The series represents the well-defined geographic area around the Alps where the pile dwellings are extant to its full extent, as well as all the cultural groups within it during the whole period of prehistoric pile dwellings from 5,000 to 500 BC. The series and the nominated property therefore encompass the complete cultural context of the archaeological phenomena. The sites selected have been chosen to be those that still remain largely intact, as well as to reflect the diversity of structures, groups of structures and time-periods.

Many of the component sites can be said to be vulnerable to a range of threats ranging from the uses of the lakes, intensification of agriculture, development etc. ICOMOS considers that the monitoring of the sites will be crucial to ensure their continuing integrity.

ICOMOS notes that the visual integrity of some of the sites is to a degree compromised by their urban settings.

### Authenticity

The physical remains are well preserved and documented. Their archaeological strata, preserved in the ground or under water are authentic in structure, material and substance, without any later or modern additions.

The remarkable survival of organic remains facilitates the highest levels of definition in relation to the use and function of the sites themselves and to a variety of everyday industrial, domestic and ritual functions. The very long history of research, and increasingly transnational research, co-operation and coordination, provide an unusual level of understanding and documentation of the sites.

In terms of the ability of the sites to display their value, this is difficult as they are mostly completely hidden underwater which means that their context in relation to the lake and river shores is important in order to evoke the nature of the sitting of pre-historic societies (even though the present day appearance of the lake and river shores is quite different from when the pile dwellings were inhabited). This context is compromised to a degree on those sites that survive in intensely urbanised environments. Nevertheless, ICOMOS accepts the need to include important sites in urban areas but stresses the need for their strict protection in order to ensure that their authenticity is ensured.

Because the sites cannot be overtly presented in situ, they are interpreted in museums. In most there is a high level of honest definition on what is based on archaeological evidence and what is necessarily reconstruction (where for instance there is a lack of precise evidence for roof construction). An over-arching presentation framework needs to be developed that allows coordination between museums and an agreed

standard of archaeological data to ensure understanding of the value of the whole property and how individual sites contribute to that whole.

---

ICOMOS considers that the conditions of integrity and authenticity have been met although individual sites are vulnerable in terms of visual integrity and their ability to convey their value and to a range of different threats that will need careful monitoring.

---

Criteria under which inscription is proposed  
The property is nominated on the basis of cultural criteria (iii) and (v). ICOMOS considers that criterion (iv) should also be considered.

*Criterion iii bear unique or at least exceptional testimony to a cultural tradition or to a civilisation which is living or which has disappeared*

This criterion is justified by the States Parties on the grounds that the sites within the property are one of the most important archaeological sources for the early agrarian societies in Europe between 5,000 and 500 BC.

The exceptional waterlogged conditions preserved organic matter so the sites give an exceptionally detailed image of the living conditions of these prehistoric populations, providing unique knowledge of their social and economic development and their ecological interactions.

The results of over 150 years of research on the pile-dwelling sites had a considerable influence on the understanding of the development of the early agrarian societies of the Neolithic and the Bronze Age in general, and the interactions between the regions around the Alps in particular.

ICOMOS considers that this justification is more appropriate for criterion (iv), as the evidence from the collection of sites cannot be said to represent a single cultural tradition or civilisation but does provide exceptional evidence for understanding developments in human history.

---

ICOMOS considers that this criterion has not been justified.

---

*Criterion iv be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates a significant stage in human history*

The States Parties did not propose this criterion.

ICOMOS considers that the evidence collected from sites that have been excavated and researched has clearly provided much detailed material to augment understanding of the development of agrarian societies in the Neolithic, Bronze Age and early Iron Age in the Alpine and sub-Alpine region, and of the organisation and material culture of their societies as it changed and

evolved over time. The evidence has also contributed to a wider understanding of these periods of prehistory in Europe more generally. In these ways, the sites can be said to have contributed in an outstanding way to our understanding of significant changes in the human pre-history of Europe.

---

ICOMOS considers that this criterion has been justified

---

*Criterion v be an outstanding example of a traditional human settlement, land use or sea use, which is representative of a culture or cultures, or human interaction with the environment especially when has become vulnerable under the impact of irreversible change*

This criterion is justified by the States Parties on the grounds that the property gives excellent evidence of the early farmers' settlements, providing outstanding well preserved remains of wooden pre-historic architecture and reflecting building traditions over very long periods. The excellent state of conservation of wooden building elements in these villages and their most precise and detailed dating permit the reconstruction of architectural organization and development of these early human settlements and allow the writing of a history of architecture covering the span between 5,000 and 500 BC.

ICOMOS considers that the property has provided a very detailed and outstanding insight into the settlement and domestic arrangements of pre-historic, early agrarian lake shore communities in the Alpine and sub-Alpine regions of Europe over almost 5,000 years, thus allowing an unique understanding of the way they interacted with their environment, in response to new technologies and also to the impact of climate change.

---

ICOMOS considers that this criterion has been justified.

---

ICOMOS considers that the serial approach has been justified.

---

ICOMOS considers that the nominated property meets criteria (iv) and (v) and conditions of authenticity and integrity and that Outstanding Universal Value has been demonstrated.

---

Description of the attributes

The attributes are all the waterlogged remains and their associated archaeological finds and data as well as their location and setting that allows understanding of the relationship between the settlements and the lake shores.

## 4 actors affecting the property

### Development pressures

Urbanisation of lakeshores (Lake Zurich; Lugano, Lake Geneva; Lac d'Annecy; Lac Le Bourget; Lake Garda; Attersee and Lake Constance) is a threat.

Development controls are embedded in development planning (e.g. Lake Neuchâtel; and other Swiss lakes; on all the French lakes, and in the vicinity of all the Italian sites). All the nominated sites are being actively monitored in some way. At Zurich, Lugano, Bienne, Geneva (CH), Cantonal Archaeological Services are actively monitoring the sites while this is undertaken at Attersee (AT) by underwater research archaeologists. However, some of the regions do not yet have a rigorous framework for the management of *archéologie préventive*, i.e. the evaluation of development impact in advance of development, and some development, such as the development of jetties, and the mooring of private leisure boats, is exempt from planning control - notably in Austria and in some Swiss Cantons.

There is commercial and intense leisure boat traffic on all major and minor lakes, with the exception of Mondsee (AT) which is privately owned and where leisure boating is prohibited.

Speed is regulated close to the shoreline of all Swiss lakes. It is also controlled on the larger French lakes e.g. Lac d'Annecy and Lac Le Bourget; and on the Italian lakes, including Lake Garda where traffic and activity is policed by a special force of the *Carabinieri*. There are also speed restrictions on Lake Attersee. Boat sizes are limited and engines in many instances are limited to 2hp electric engines, or rowing boats (e.g. the smaller French lakes including Chalain and Clairvaux).

Leisure boat access is restricted or prohibited on a very great number of lakes in specific littoral areas where natural heritage protection measures have been taken.

The areas frequently coincide with the archaeological sites chosen for designation, but there are many notable instances where the natural heritage zones marked by buoys do not 'embrace' the nominated sites (e.g. Lake Zurich, Lake Geneva, Lac Le Bourget and Attersee). However, ICOMOS notes that dialogue with natural heritage agencies is increasing and that this was a growing trend across all countries and the regions visited.

ICOMOS notes also individual responses as at Lake Mütschach (AT- T-01) where leisure craft are limited in size and power and the site is actively supervised and monitored by water safety personnel who have dived on the site with the regional research archaeologist and know the site well.

Mooring of private boats (Lake Zurich; Lake Geneva, Lake Constance, Lac d'Annecy; Lac Le Bourget; N.

Austrian Lakes; Bavaria) is a largely unregulated activity in Switzerland and Austria and thus an issue for some of the nominated sites. While the mooring blocks of concrete are not especially damaging, particularly if the pile field is buried, temporary anchoring and the movement of mooring chains attached to mooring blocks are significant issues. Where natural protection measures are in place this activity is prohibited. The degree of erosion to-date is not extreme, but it is incremental, unrelenting and damaging - and ICOMOS considers that it could be ameliorated with a more concerted level of management close to the sites concerned.

In the additional information provided in February 2011 in relation to the reduced number of nominated sites, it was stated that for some sites in urban areas, additional measures will be taken, or have already been launched, in order to enhance their protection. These include extended 'no-anchoring' zones with surface marking buoys, or the relocation of mooring facilities further away from the site.

### Tourism pressures

#### Looting

ICOMOS noted one instance of looting, following the recent interception of looters by the *Carabinieri* on the south-eastern shore of Lake Garda (on an associated site close to IT-VN-04). The issue is mentioned in the nomination dossier in relation to sports diving activity. However, the identification of sites with signage could lead to further negative interest.

#### Environmental pressures

##### Erosion

Significant and accelerating erosion issues were identified on a number of the Swiss and French lakes during the 1980s and 1990s. The causes are numerous, but human activity is certainly a major contributing factor. Natural erosion is a significant factor and is caused by waves, created and driven by strong winds onto the windward shores of lakes. This occurs particularly where shallow former prehistoric shorelines on which the sites are located now form shelves of shallow littoral lake bed and fall away sharply and steeply to deeper lake water (exceptionally well-documented in France). Motorised boat traffic also creates significant wave action along lake shores.

Loss of water quality in the past 50 years (improved in the past 2 decades on a lot of lakes) together with the scale and intensity of boating activity has resulted in a major loss of reed beds and other littoral vegetation that formerly stabilized the lake shores. The regression of lake shorelines has occurred as a result with the resulting erosion of lake marl deposits that formerly covered the archaeological sites.

ICOMOS notes that a number of actively eroding sites are included in the nomination dossier (notably on Lake Zurich; Lake Neuchâtel; Lake Bienne (CH), the lakes of

Haut-Jura and Haute-Savoie (F ); and also at Lake Starnberg (D ). Most of these sites have either had works undertaken already or have plans in place to undertake works to slow/halt erosion. The damage to the nominated sites concerned is not catastrophic, but over time ICOMOS considers that it could be considerable.

#### Agricultural practices

Intense cultivation of corn and other cultivated crops in relatively shallow wet, peaty soil could damage some remains where the overburden of cultivated soil covering the sites is not especially deep - in some cases less than 1m. Some of these vulnerable sites are being actively monitored (e.g. at the largely excavated sites at Golzwill bog (CH-LU-01/2) due to the presence of the museum there and its associated activity); the sites at Desenzano del Garda (IT-LM 01), Lucone (IT-LM-05) are also being monitored.

Hydrological monitoring and controls coupled with natural heritage designation are in place at Ugg-Sumpf (CH- G-06); adjacent to Fiavé (IT-TN-02); Ljublansko barje (SI-IG 01-2); and at Federsee bog, where a concerted programme of land acquisition is linked to the recharging of land drains and the management of water levels (D -BW-12-15). In these contexts also, there are instances where private landowners exercise a valuable degree of custodianship (e.g. Castellaro Lagusello IT-LM-08) or the local mayors have overseen a programme of land acquisition (e.g. Chalais and Clairvaux, Pal di Livenza and Federsee).

#### Natural disasters

ICOMOS notes that storms that generate large waves pose the biggest threat to the pile dwelling sites as these can erode the banks as well as damage the sites. Wave action is exacerbated where reed beds no longer exist and there is nothing to slow down the force of the water. Various trial projects have been undertaken to control erosion and re-introduce reed beds although their impact on the pile sites is not yet fully understood.

A third of sites are said to be threatened by erosion or drying out and ten per cent severely threatened.

#### Impact of climate change

Changes in climate could lead either to more unpredictable weather and thus more storms, or prolonged dry periods that could lead to the drying out of sites.

---

ICOMOS considers that the main threats to the property are erosion, much of which is exacerbated by development and the changing uses of the Lakes.

---

## 5 Protection conservation and management

### Boundaries of the nominated property and buffer zone

The significant variation in the boundaries of the nominated sites reflects the known and recorded extent of each site (e.g. the topographic expression of the site, above water level, at Inkwil (CH-SO-02), or the surveyed extent of the site as at Sutz-Lattrigen (CH-B -06). Some of the sites are exceptionally large (e.g. at Apperswil (CH SG-01) which is close to an important historical and modern crossing point between the upper and lower Lake Zürich).

ICOMOS considers that the boundaries of the nominated sites are appropriate and reflect the existing knowledge of the site and are supportable in terms of definition of extent at least.

ICOMOS notes that there is a greater variation displayed between the smaller and larger areas of buffer zones. Where these are extremely tight to the nominated site boundary, the reason is generally linked to the ability to manage the area surrounding the known site (e.g. Uggiedmatt (CH- G-05) the site is in a modern urbanised environment and has been built on using piled foundations; a larger buffer zone would make no sense). Where very large buffer zones have been defined, there is good reason for this decision based on existing/survey knowledge. It reflects a supposition that associated remains or indeed sites may exist within the designated buffer area. The significant variation in size, therefore, is appropriate and also reflects the degree to which the areas defined can be managed.

---

ICOMOS considers that the boundaries of the nominated property and of its buffer zone are adequate.

---

### Ownership

A detailed table is provided in the nomination dossier of ownership which is a mixture of public and private.

### Protection

#### Legal Protection

As the series is transnational it does not have uniform, protective provision.

Each of the six States Parties from which the sites are drawn has a range of discrete systems of legal protective provision at national, regional and local level including federal government systems and their independent legislatures, notably in Switzerland, Germany and Austria.

The primary platform for legal co-operation and protection of the nominated sites between the States Parties at a transnational level is adherence to a number of international conventions which have been ratified by most, but not all of the States Parties (for instance

Austria has not signed the Valletta Convention 1992, although in the supplementary information received in February 2011, it was stated that ratification of the Valletta convention is now treated with priority by the Federal Ministry of Education, Arts and Culture).

For the particular sites in the nomination, the ratification of the Ramsar Convention (1971) is helpful as a range of protective provisions, arising from the protection of natural heritage areas, now extend to the sites nominated and in many cases incorporate their buffer zones. For the EU countries (all the States Parties except Switzerland) the Environmental Directives are also important and linked to statutory spatial planning controls. It is notable that Slovenia (which has no underwater sites within the nomination) is the only country to have signed/ratified the Paris (2001) convention on underwater heritage.

Switzerland has a strong federal legal and policy basis for cultural heritage protection. The central provision is used at cantonal level to provide the basis for a wide range of discrete cantonal statutory systems (26 in all), each with a system of community-based local government (which adheres to cantonal law). Added to this, there is a legal provision in respect of water protection.

The Federal Inventory of cultural heritage sites notably, does not include all the sites nominated. However, the federal law on spatial planning (PG; S 700) regulates land use and the Cantons and Communities prepare development plans. In the past 10 years a number of cantons have identified the protection of cultural heritage sites as a cantonal commitment. Cantonal archaeologists, frequently with links to dedicated research centres and museums, are employed to oversee this.

Cantonal inventories of the nominated sites have been undertaken, and assessment of planned development proposals that are not exempt and where the cantonal law requires it facilitates the identification of potential development impact and the protection of the sites. However, there does not appear to be a uniform system of mandatory planning referral and development impact assessment (for all developments) to all cantonal archaeologists. In the highly urbanised larger lake shore areas small-scale, but very damaging, development appears to be exempt from planning control, such as the mooring of private boats, the installation of private jetties; dredging to deepen shallow waters for a variety of purposes (not archaeologically controlled, but policed).

France: The concept of *Archéologie Préventive* permeates regional and local spatial planning control, and is underpinned by the national *Code du Patrimoine*, linked to the EU Environmental Directives and an Act 1993 establishing zoning provision for development control purposes. The concept of *Archéologie Préventive* was formally instated in law in 2001. All the nominated

sites have been assigned the status *Monuments Historiques*. This provides them with a nationally-governed protective provision, under legislation passed in 1913, and provides control of excavations. It does not extend to the buffer zones. Spatial planning and protective provision is rigorously upheld at local level by the local Communes and mayors and their local government structures. ICOMOS has understood that the purchase of the land on which some sites are located is also under way.

Italy's legislative provision for cultural heritage is complex. Two laws, one for natural heritage and one for cultural heritage, passed in 1939, underpin the protective provision for the sites selected for nomination, with a list of ancillary legislation (*Codice*) and national measures (*Decreto Legislativo*) to support these. The nominated sites are all protected under the national system for the protection of known/inventoried sites and the waters of the larger lakes (e.g. Lake Garda) are state-owned and policed by a dedicated force of Carabinieri. The state also owns all archaeological objects and through its regional offices for archaeology, controls excavation activity and the management of artefacts. This is all linked to spatial planning control through a number of instruments, vested in the preparation of Development Plans (PGT and PAT). Furthermore, there is an extremely strong network of regional museums, linked to the particular dispersed funding tradition in Italy that provide further support for the protection locally of cultural heritage.

Slovenia's legislative system for cultural heritage is comparatively straightforward with its Constitution upholding *the preservation of natural wealth and cultural heritage* and its Cultural Heritage Protection Act that provides the framework for management, and an inventory of all its archaeological sites (Cultural Heritage Registry) which affords legal protection to each inventoried site. The nominated sites in the Ljubjansko barje are further protected by the legally constituted creation of the Ljublansko barje Landscape Park and the spatial planning instrument for the Municipality of Ig. The protection and management of the sites extends to the control of the water table.

Austria has a federal system of legislation, but the protection of its historic monuments is a central federal responsibility and therefore the federal states do not have dedicated legislative provision for the protection of historic or archaeological Sites. The site at Deutschach (AT- T-01) is protected under federal law as are the sites at Mondsee. The sites on Attersee, however, are not protected in this way but the process of placing these sites under such protective provision is under way having commenced in early 2010. This will mean that underwater and wetland archaeology will be embedded in the Federal Monument Protection Agency (*Österreichisches Bundesdenkmalamt*) for the first time.

There is also federal legal provision for the protection of previously unknown finds. In addition, upon inscription,

sites inscribed on the World Heritage List are protected through a link to EU Environmental Directives in the form of a provision for the preparation of Environmental Impact Assessments.

At Aargau, there is federal state legal protection for the natural environment, defined in 2005 as a Ramsar area (BGBl. III Nr. 12/2006), while both Atersee and Mondsee are European Natura 2000 protection areas (LGBl. Nr. 131/2006). Protection of natural heritage areas is marked by buoys, as at the Swiss lakes, but this action is not linked to the identification or restriction of boating activity on/close to the nominated sites. ICOMOS notes that while the legal provision appears to be reasonably comprehensive, the structure for heritage management especially with relation to private development is somewhat limited.

#### Effectiveness of protection measures

Overall the protection in place is adequate but there is a need to ensure uniformity in relation to the approaches to development control and to Heritage Impact assessments, particularly amongst the Cantons in Switzerland, and, in the case of Austria, in relation to permission for private development.

---

ICOMOS considers that the legal protection in place is adequate but there is a need for consistent application across the six States Parties to ensure consistency in approaches to development control and heritage impact assessments.

---

#### Conservation

##### Inventories, recording, research

The sites have been surveyed and sometimes excavated over many different time spans and according to differing levels of detail and sophistication. The nomination dossier stresses that the international collaboration over the past five years that has taken place to allow submission of this trans-boundary nomination has encouraged the assembly of known material. In all areas inventories of the nominated and associated archaeological sites are now in place. ICOMOS notes that what is not clear is where and how this cooperative archive is stored for all sites.

At Lake Neuchâtel, the lake is over-flown and comprehensively photographed triennially and the photographic record is made available for archaeological monitoring purposes.

##### Present state of conservation

The current state of conservation is outlined in some considerable detail in the nomination dossier and the sites have been graded to reflect their conservation status, with 78% of the nominated sites deemed to be of Class A status (i.e. where the archaeological layers and structural elements are preserved and can be examined in the future).

However the vulnerability of all the nominated sites has to be acknowledged, but some sites are evidently more vulnerable than others. Some sites have suffered more damage and loss than others. The losses prior to nomination, have been occasioned largely on those sites that are located within the shallow waters of lakes and caused by natural erosion, urbanisation and development, desiccation, historical/past archaeological excavation, and commercial, leisure and tourism pressure/erosion.

The sites remain vulnerable due to their lack of surface expression, the contexts in which they survive and the fragility of their organic composition. They are vulnerable to natural erosion; the intensification of construction and development; the intensification of agriculture (requiring drainage of marshy ground); dredging on lakes for commercial boating traffic; increasing leisure boating activity; and other leisure activities, such as public swimming areas on the lakes and lake shores. Many were looted in the 19<sup>th</sup> century and modern looting has been noted in Lake Garda.

The exposed timbers are all actively decaying and eroding. Timbers and other materials, where partly or wholly covered either with lake marl, sand and gravel, and especially surviving organic archaeological deposits, are conserved in these lake contexts in a much better state of preservation than those with their upper elements exposed to open water or indeed to the air (as at Fiavé IT-TN-02).

Where active natural erosion is taking place, the conservation of sites presents quite a challenge. Active erosion can be seen on the windward sides of lakes (wind/wave action), especially where there has been a loss of reed beds; on shelves of lakes that have shallow littoral areas with a steep drop-off to deeper, central lake waters, culture layers are literally falling off the shallow shelves that they once accumulated on as the shelves themselves are eroding; where there is a very active through-flow of water; where intense commercial boating activity is taking place, giving rise to the creation of artificial waves when the boats move, or as a result of the natural wind-driven movement of a moored boat and both disturb/remove lake bed material.

These erosion processes are relevant at Lake Zurich, Lake Neuchâtel, the lakes of the Savoyan region, potentially at Atersee, and active, but not extreme at Lake Starnberg. Care has been taken, however, to identify the badly eroded or actively eroding sites and to ascribe them the status of 'associated sites'.

The use of erosion markers has been initiated at Lake Biemme and at Lakes Zurich and Constance erosion is being formally studied under an Interreg IV Project.

Transnational approaches to the in situ preservation of eroding sites and lake shores have been the subject of two notable conferences (1994 and 2004) exploring the

issues, methods and assessment of the efficacy of methods used.

However on the positive side, post Iron Age deposition of natural deposits covering sites (caused by inundation of sites on lakes and the development of peat on existing fens and mires) has had the effect of sealing a great number of waterlogged sites. While dredging and significant exposure and erosion events in the 19<sup>th</sup> century exposed many sites (associated sites), as did peat extraction during the first half of the 20<sup>th</sup> century, many sites still remain securely covered, if not deeply buried. A great number of the sites either had a natural protective covering or, where erosion is taking place, the sites were being monitored or conserved.

#### Active Conservation measures

There is evidence of an increasing coincidence of protective provision on lake shores and littoral zones on both natural and cultural heritage grounds, especially where the local municipality or regional authority has acquired the land. Furthermore, conservation appears to work best where natural heritage/environment protection measures (amsar, Natura 2000 or similar designations) are integrated with those focused on the preservation of the archaeological sites.

Modern management of water levels and water quality in many of the larger lake systems is taking place. This regulation of water levels and water quality ensures that, where it takes place, the sites are no longer exposed during period of extreme drought and water usage (many of the lakes and water bodies supply water to large municipal centres). Improvements in water quality are facilitating the concerted re-planting and subsequent natural regeneration of reed beds and lakeshore vegetation.

The link to natural heritage protection on the ground is well-established on the French lakes, with the reinstatement of reed beds actively underway in areas where sites are located (some nominated, some associated).

#### Effectiveness of conservation measures

Overall the array of conservation instruments that are being used is helping to stabilise the remains but the causes of decay and degeneration still remain susceptible to more preventative measures.

---

ICOMOS considers that the conservation measures are adequate.

---

#### Management

Management structures and processes, including traditional management processes

The six States Parties have formally agreed on the common management of the serial sites. By signing the nomination dossier they have each adopted the

Management Commitment between the States Parties. The establishment of the International Coordination Group with clearly defined aims and agreed rules was a first step. It has a Secretariat, hosted by Switzerland, for technical support.

In May 2010, the International Coordination Group held its constituting meeting in Ljubljana (Slovenia). A second meeting was organized in November 2010 in Vienna (Austria). The management Committee is therefore now operational. The Presidency changes each year between States Parties.

In the revised Management Plan that was submitted in February 2011, the overall management structure is defined. It comprises three levels. The International Coordination Group is formed of experts and representatives of each State Party; where necessary, there are national working groups that include regional experts and local entities in each country; and thirdly, regional / local entities are responsible for individual site management.

ICOMOS notes that the management of the nominated sites is informed by a huge body of scientific research knowledge and literature together with the active involvement regionally and locally of research institutions, archaeologists and scientists. On the ground, the management is national, regional and local. At local level strong and well-established systems of management exist in some, but not all, of the regions visited by the mission. In some instances, inscription is seen as providing leverage for additional protection and management and also for more specific development control in the future. Local management is particularly necessary for development control.

In Switzerland, where cantonal/regional and local archaeologists are employed, an efficient system of monitoring the sites and proposed development appears to be in place and an active and useful dialogue is under development about management controls, frequently linked to natural environment protection controls. However, ICOMOS is concerned that, as a management tool, monitoring (albeit active and concerted) is the main method of management proposed in many instances. This approach presupposes that damage has to be occasioned before any action can take place.

ICOMOS notes that where archaeological and heritage management resources are stretched and the lake shore is privately owned and in some locations this was evident (notably on Lake Geneva and in Austria at Attersee) protection of the sites from minor development appears to be very difficult to achieve.

Overall, the current methods of management range from:

- monitoring, including concerted underwater archaeological inspections;



- water-level and water quality controls on the larger lakes;
- active liaison with natural heritage protection personnel, increasingly including conservation and reinstatement or regeneration of lakeshore vegetation;
- inventory (database) of sites;
- inventories linked to development plans and, by association, development control;
- detailed archaeological survey and limited excavations where necessary;
- active monitoring (erosion markers, etc.) and conservation to prevent erosion;
- inventory linked to lake water policing;
- navigation and motorised boating speed controls;
- non-lake water table monitoring and controls.

In the additional information received from the States Parties in February 2011, it is acknowledged that not all the States Parties have reached the same level of management. In Austria several new management actions have been adopted in order to ensure adequate financial funding and institutional support for the enhancement of the management of the pile-dwellings sites. These include work by the Federal Monument Protection Agency (*sterreichisches Bundesdenkmalamt*) to compile a list of priorities for protection measures, the identification of deficiencies and capacity building.

Policy framework: management plans and arrangements, including visitor management and presentation

A management plan for the overall property has been prepared and agreed by all the States Parties. This is a high level document that sets out the aims of management but also includes an overall Action Plan to be delivered by individual countries as well as specific management actions for each of the participating countries.

Because most of the sites have no overt surface expression, the sites themselves are not suited to presentation for visitors or for tourist development without dedicated presentation and explanatory panels at the site location and this really only works where the sites are in an undeveloped context.

However, ICOMOS notes that the Management Plan does include details of a concept being developed in Switzerland to make visible sites in an appropriate way - probably by audio guides and information panels. It is intended to extend the project to all the sites in the other participating countries following a standardized guideline. In this way, the pile dwellings would be represented as an international phenomenon enveloping the entire Alpine region.

Currently, the presentation of the sites is mostly done in museums. These include the Latium, the Federseemuseum at Bad Buchau and the almost 90-

year old Pfahlbaumuseum at Unteruhldingen / Bodensee; the experimental archaeological reconstructions at lake Chalain, linked to a low-cost, museum display on the first floor of the local community centre; Italian and Swiss regional and local museums at Lug (CH); Annecy (F); Cavriana (IT); Iva del Garda (IT). In Italy, the Museo Archeologico Della Valle Sabbia, Gavardo coordinates a network of museums MAGN T each presenting these sites (the group uses the Palafittes, UNESCO and World Heritage brands) and providing teaching materials for children. In Austria the museum at Mondsee is by contrast poorly resourced, with the material on display dating to the 1980s and the artefacts on display lacking provenance and contextual reference.

Overall ICOMOS considers that there is a need to ensure some coordination between museums so that there is not an unnecessary proliferation and also to ensure structured access to finds and archaeologically sound presentations that allow understanding of the value of the whole property and how individual sites contribute to that whole.

risk preparedness

Storms pose the biggest threat to the pile-dwelling sites. Unprotected sites can be seriously endangered by wave action as well as flotsam and jetsam, etc. Protection measures (covering, breakwaters) put in place to prevent natural erosion help to diminish the immediate destructive impact of storms and more long term measures include erosion control and the introduction of reed beds.

Involvement of the local communities

Involving local communities is one of the common objectives shared by all States Parties.

resources, including staffing levels, expertise and training

Basic funding for the International Coordination Group of approximately 27,000 will be provided by the Swiss cantons, while the individual projects included in the action plan of the management plan will be financed by voluntary contributions from the States Parties involved, and by sponsorship from organisations and private individuals. Ongoing work on rescue archaeology and erosion control is funded mainly at a local level. However provisions of funding vary considerably even within countries. Some Swiss Cantons have regular funding while others do not and have to apply to Foundations.

In Austria, it appears that there are currently no regular sources of funding with universities and NGOs being the main providers of funds for excavation projects. However it is stated in the supplementary information that a national coordination group will be established and that this organisation will be sufficiently funded for communication, management and protection measures

by the Austrian Federal Ministry of Education, Arts and Culture.

In France, the staff involved in the management and protection of lacustrine sites comes from the devolved archaeological services of the ministry in charge of culture.

In Germany, within the State Cultural Heritage Department Baden-Württemberg, the wetland archaeology branch (*Fachgebiet Feuchtbodenarchäologie*) is responsible for wetland and underwater archaeology.

Most of the funding for archaeological research on Italian pile-dwellings comes from the State (through the Ministry of Cultural Heritage Activities), the regions and the municipalities.

In Slovenia, the Natural Park Ljubljansko barje is financed through the Ministry of Environment and Space and the Municipality of Ljubljana, while the Ministry of Culture entirely funds the work of the specialist staff (curators, technical staff and the director of the public institution) of the Institute for the Protection of Cultural Heritage of Slovenia and museums.

In all countries a wide range of specialist staff is available to advise on the conservation and management of the sites mostly through State Agencies.

#### Effectiveness of current management

By and large the ongoing management of the sites in terms of rescue archaeology, recording, conservation of finds and erosion control seems to be well resourced in all countries except Austria where there appears to be no regular ongoing funding for specialist staff or regular activities of the pile dwellings sites. However this is under consideration, as part of the basic framework for a sustainable conservation and development of the sites, established in 2010.

Overall there is a need for the highest level of protection for urban sites that are subject to the greatest range of threats to the site and setting.

---

ICOMOS considers that the management arrangements are mainly adequate but they need consistency in terms of effect and of the provision of adequate resources, and there needs to be a particular emphasis on the monitoring and protection of sites in urban areas.

---

## 6 Monitoring

Detailed monitoring indicators have been developed for three types of sites:

- Category A: the site is located in the lake, on an undeveloped section of shoreline or in a bog with little construction.
- Category B: the site is located entirely or partially on dry land and near existing towns or villages. The location is either a zone of average development density or agricultural usage.
- Category C: the site is located in an urban zone that is already developed.

The indicators relate to sediment cover, vegetation cover and the use of the lakes. The monitoring is carried out at intervals of between one and fifteen years. The erosion monitoring is linked to a series of erosion markers and they in turn are linked to detailed mapping of the site. At Lake Neuchâtel, active erosion of the sites on the lake has been the subject of concerted study and management over the past 15 years.

---

ICOMOS considers that the monitoring arrangements are adequate.

---

## 7 Conclusions

The Prehistoric Pile Dwellings around the Alps are an indisputably unique and discrete group of exceptionally well-preserved and culturally rich, prehistoric archaeological sites. They are also a group of sites that have been very well researched and documented over the past 100 years and their waterlogged structures have delivered extraordinarily well preserved evidence of houses, changing settlement patterns and the accoutrements of daily life of the early agrarian societies in Europe who lived in pile dwellings on the edges of lakes and river.

A total of 937 sites have been recorded in six countries. Many of these sites are fragile and they are also vulnerable to a wide range of threats, relating to their location at the edge of lakes that have a multitude of uses and whose shores are under pressure from development. To preserve these sites into the future will require long-term commitment, rigorous monitoring and perhaps expensive erosion control.

Of the 937 sites, 111 have been nominated as part of the series. They have been chosen to illustrate, or be linked to, certain expressions of prehistoric life and regional culture at particular points in a well-understood and researched chronology and cultural context.

ICOMOS considers that the series of sites of pile dwellings reveals exceptional evidence of life of prehistoric communities across a wide area of Europe and the way different cultural groups organised their settlements in response to varying social, and economic imperatives.

For a serial nomination there is a need to understand the relationship between the individual components and the

overall property that manifests Outstanding Universal Value. This raises the question as to how many sites are needed to convey Outstanding Universal Value in terms of capturing the necessary evidence and also conveying the value in visual terms.

ICOMOS considers that the response by the States Parties to select a smaller number of sites that can be seen as exemplars in terms of their inherent evidence and conservation as well as in terms of the criteria agreed by the States Parties is satisfactory.

The serial nomination that has been presented is impressive in terms of detail and collaboration between States Parties. Agreement has been reached in principle to ensure that as far as possible there are common approaches to protection, conservation and management within very different national frameworks. In this respect, ICOMOS considers that it would be desirable to ensure all sites have the highest level of protection available within each national system, that there are on-going resources for monitoring and erosion control and that a common standard exists for where Heritage Impact Assessments may be required. Furthermore it would be desirable to put in place an over-arching presentation framework that allows coordination between museums and an agreed standard of archaeological data.

**Recommendations with respect to inscription**  
ICOMOS recommends that the Prehistoric Pile Dwellings around the Alps, Switzerland, Austria, France, Germany, Italy, Slovenia, be inscribed on the World Heritage List on the basis of **Criterion d**.

**Recommended Statement of Outstanding Universal Value**

**Brief Synthesis**

The series of 111 out of the 937 known archaeological pile-dwelling sites in six countries around the Alpine and sub-alpine regions of Europe is composed of the remains of prehistoric settlements dating from 5,000 to 500 BC which are situated under water, on lake shores, along rivers or in wetlands.

The exceptional conservation conditions for organic materials provided by the waterlogged sites, combined with extensive under-water archaeological investigations and research in many fields of natural science, such as archaeobotany and archaeozoology, over the past decades, has combined to present an outstanding detailed perception of the world of early agrarian societies in Europe.

The precise information on their agriculture, animal husbandry, development of metallurgy, over a period of more than four millennia, coincides with one of the most important phases of recent human history: the dawn of modern societies.

In view of the possibilities for the exact dating of wooden architectural elements by dendrochronology, the sites have provided exceptional archaeological sources that allow an understanding of entire prehistoric villages and their detailed construction techniques and spatial development over very long time periods. They also reveal details of trade routes for flint, shells, gold, amber, and pottery across the Alps and within the plains, transport evidence from dugout canoes and wooden wheels, some complete with axles for two wheeled carts dating from around 3,400BC, some of the earliest preserved in the world, and the oldest textiles in Europe dating to 3,000 BC.

This cumulative evidence has provided a unique insight into the domestic lives and settlements of some thirty different cultural groups in the Alpine lacustrine landscape that allowed the pile dwellings to flourish.

**Criterion d** The series of pile dwelling sites are one of the most important archaeological sources for the study of early agrarian societies in Europe between 5,000 and 500 BC. The waterlogged conditions have preserved organic matter that contributes in an outstanding way to our understanding of significant changes in the Neolithic and Bronze Age history of Europe in general, and of the interactions between the regions around the Alps in particular.

**Criterion d** The series of pile dwelling sites has provided an extraordinary and detailed insight into the settlement and domestic arrangements of pre-historic, early agrarian lake shore communities in the Alpine and sub-Alpine regions of Europe over almost 5,000 years. The revealed archaeological evidence allows an unique understanding of the way these societies interacted with their environment, in response to new technologies, and also to the impact of climate change.

**Integrity**

The series of prehistoric pile-dwelling sites represents the well defined geographic area within which these sites are found to its full extent, as well as all the cultural groups in it during the time period during which the pile dwellings existed. It therefore comprises the complete cultural context of the archaeological phenomena. The sites selected have been chosen to be those that still remain largely intact, as well as to reflect the diversity of structures, groups of structures and time-periods. As a whole the series and its boundaries fully reflect the attributes of Outstanding Universal Value.

The visual integrity of some of the sites is to a degree compromised by their urban settings. Many of the component sites can also be said to be vulnerable to a range of threats ranging from the uses of the lakes, intensification of agriculture, development, etc. Monitoring of the sites will be crucial to ensure their continuing integrity.

## Authenticity

The physical remains are well preserved and documented. Their archaeological strata, preserved in the ground or under water are authentic in structure, material and substance, without any later or modern additions.

The remarkable survival of organic remains facilitates the highest levels of definition in relation to the use and function of the sites. The very long history of research, co-operation and coordination provide an unusual level of understanding and documentation of the sites.

However the ability of the sites to display their value is difficult as they are mostly completely hidden underwater which means that their context in relation to the lake and river shores is important in order to evoke the nature of their setting. This context is compromised to a degree on those sites that survive in intensely urbanised environments.

Because the sites cannot be overtly presented in situ, they are interpreted in museums. An over-arching presentation framework needs to be developed that allows coordination between museums and an agreed standard of archaeological data to ensure understanding of the value of the whole property and how individual sites contribute to that whole.

## Management and protection requirements

The series of pile dwelling sites are legally protected according to the legal systems in place in the various States Parties. There is a need to ensure that the highest level of legal protection available within each of the States Parties is provided.

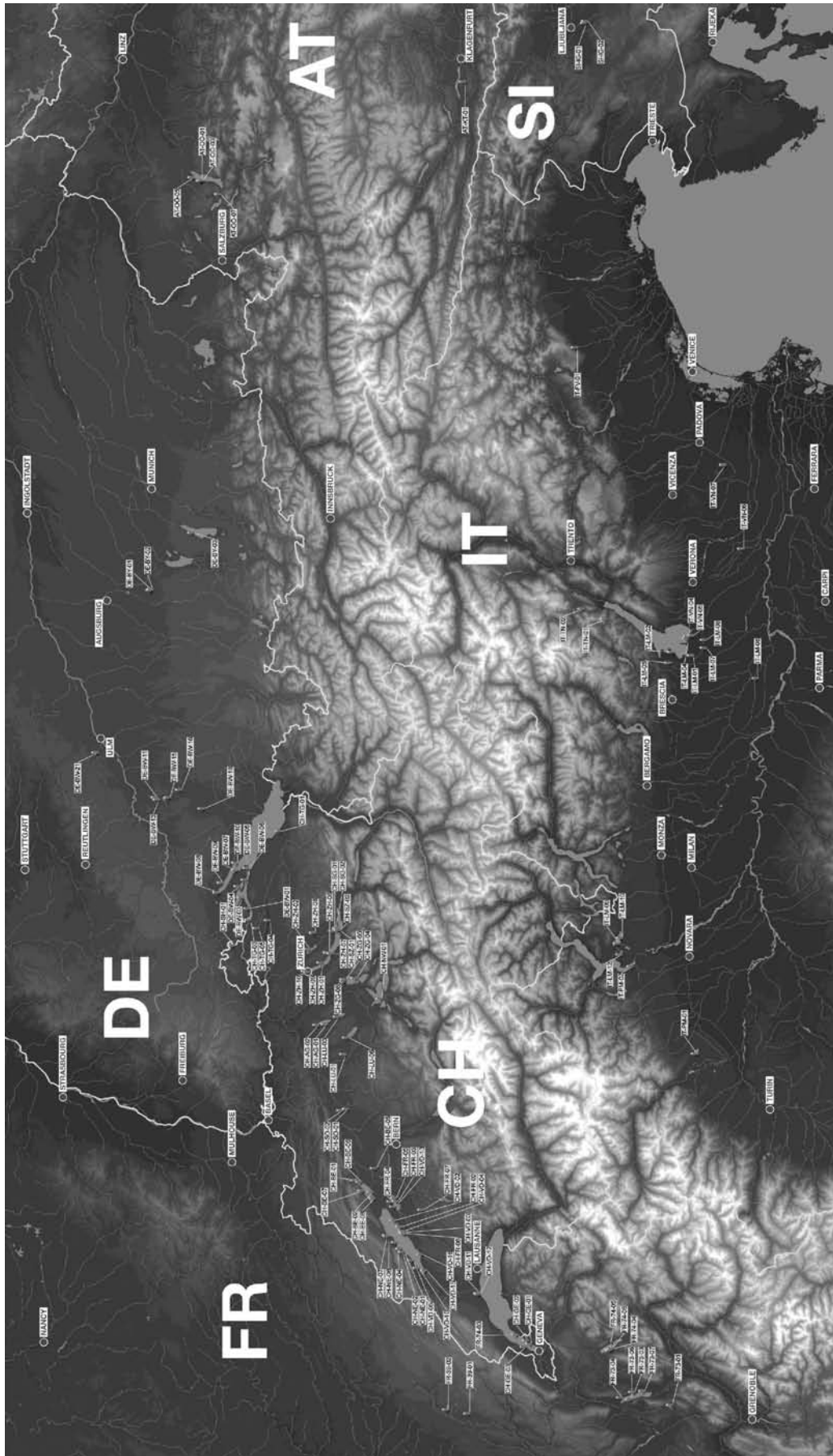
The common management system integrates all States levels and competent authorities, including the local communities, in each country, and connects the different national systems to an international management system, through an established International Coordination Group, based on a Management Commitment signed by all States Parties. Common visions and aims are translated into concrete projects on international, national and regional / local level in a regularly adapted action plan. Funding is provided by Switzerland for the Secretariat and by the States Parties for the different projects.

Proposed actions that may have a significant impact on the heritage values of the archaeological areas nominated for inscription are restricted. There is a need for consistent application of protection arrangements across the six States Parties to ensure consistency in approaches to development, particularly in terms of lake use, mooring arrangements and private development, and to heritage impact assessments.

Given the extreme fragility of the remains, and the pressures on sites especially in urban areas, there is a need to ensure that adequate funding is in place for on-going monitoring.

ICOMOS recommends that the States Parties give consideration to the following:

- Afford the highest level of legal protection available within national systems to all the sites and give priority to protecting all sites in Austria;
- Make available adequate resources to allow regular monitoring and erosion control systems to be put in place for all sites, including strict controls on boat mooring;
- Ensure consistency in approaches to development control across the six States Parties, and especially to heritage impact assessment procedures;
- Develop an over-arching presentation framework that allows coordination between museums and an agreed standard of archaeological data to ensure understanding of the value of the whole property and how individual sites contribute to that whole.



Map showing the location of the nominated properties

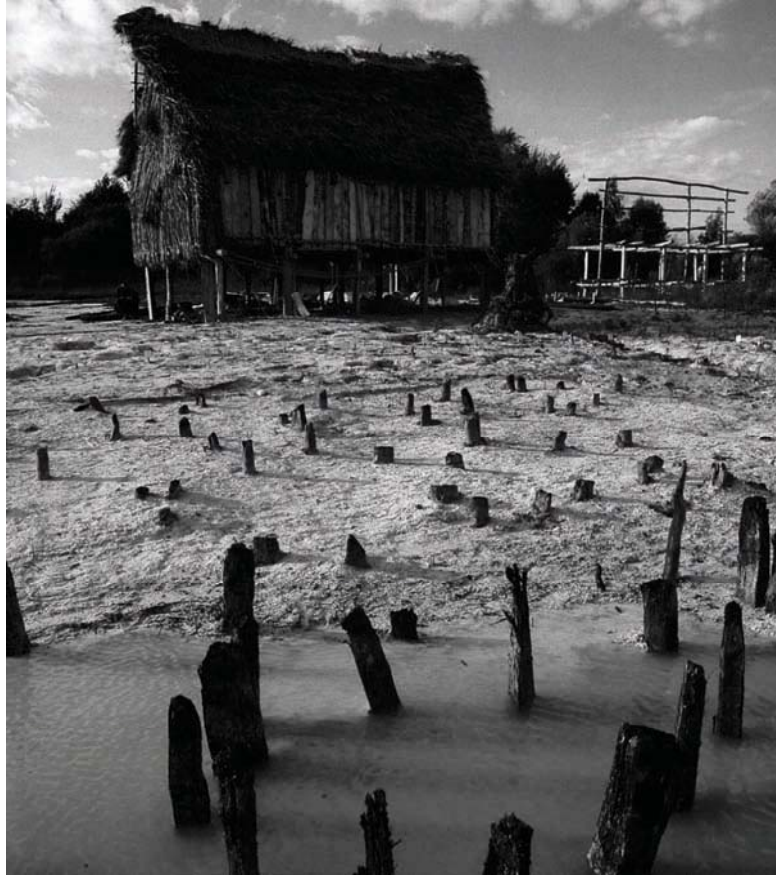


Aerial view of Lake Lugano (Switzerland)

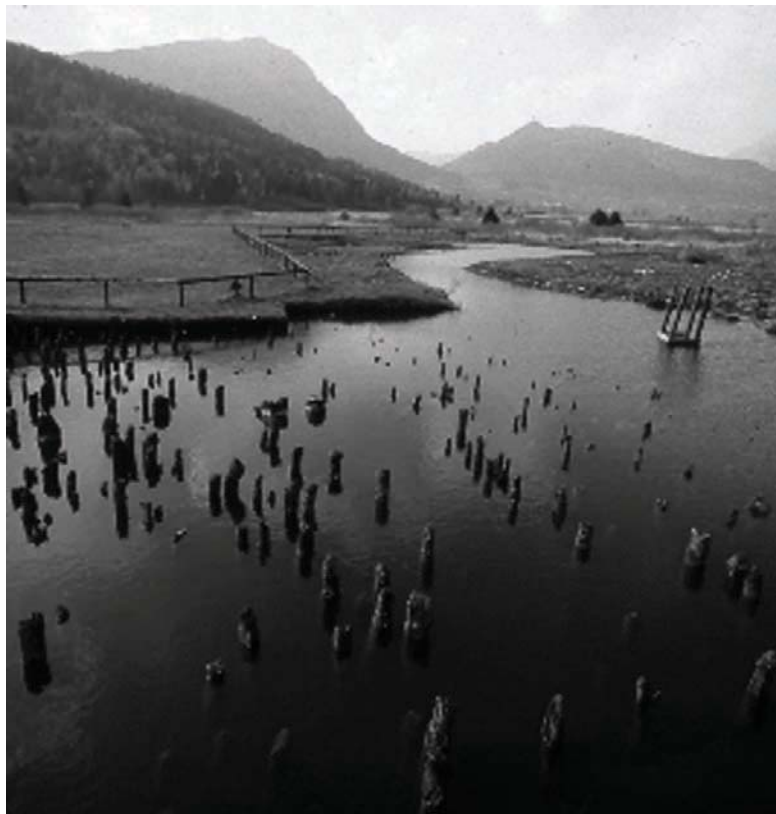


Aerial view of Neolithic settlements located on the shore of Lake Constance (Germany)



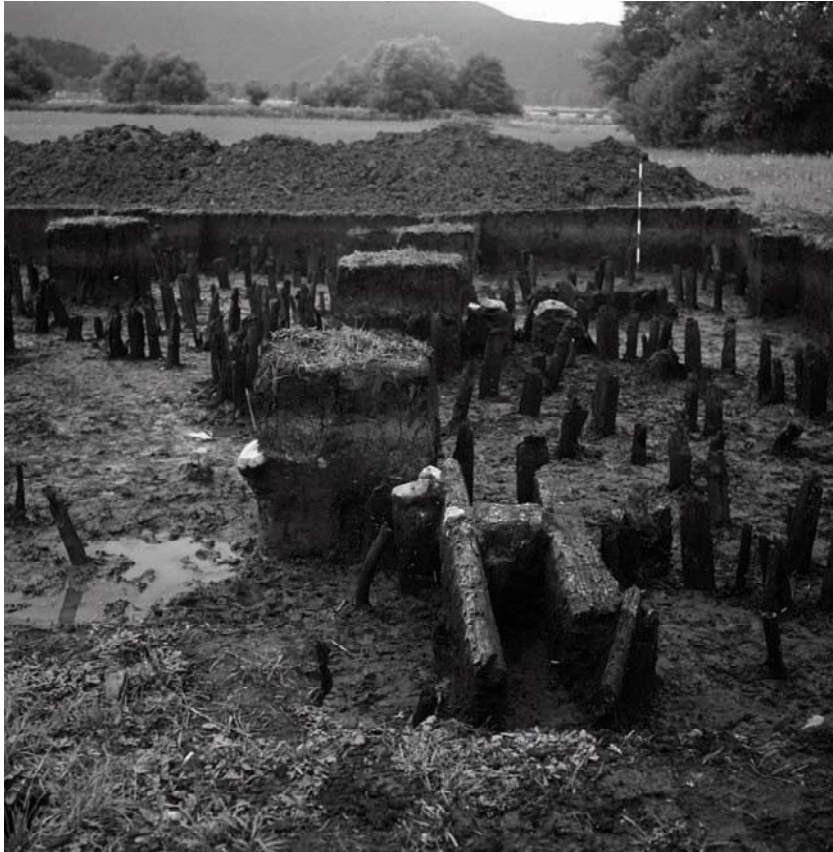


Original piles in Lac de Chalain with reconstruction of a Neolithic dwelling in the background (France)



Pile field of Fiavé Lago Carera (Italy)





Maharski prekop excavations from 1970 to 1976 (Slovenia)



Late Stone Age copper objects from settlements around Lakes Mondsee and Attersee (Austria)

---

# Old City and Ramparts of Alanya Turkey No 1354

---

Official name as proposed by the State Party  
Old City and Ramparts of Alanya with Seljuk Shipyard

Location  
Antalya Province  
Alanya District  
Turkey

**Brief description**  
Encircled by an enceinte of towered defensive walls, the Old City of Alanya is a Hellenistic and Byzantine stronghold located on a promontory projecting into the Mediterranean. It has retained many features from the 13<sup>th</sup> century Seljuk Empire including the Citadel, the Red and the Tophane Towers, a 13<sup>th</sup>-century shipyard, and several water cisterns. 19<sup>th</sup>-century Ottoman vernacular residential buildings along with the relics and remains of a Greek Orthodox residential quarter complete the ensemble.

**Category of property**  
In terms of categories of cultural property set out in Article I of the 1972 World Heritage Convention, this is a site.

In terms of the Operational Guidelines for the Implementation of the World Heritage Convention (January 2008), Annex 3, this is also nominated as an inhabited historic town.

## 1 Basic data

Included in the tentative List  
25 February 2000

International Assistance from the World Heritage Fund for preparing the Nomination  
None

Date received by the World Heritage Centre  
29 September 2009

**Background**  
This is a new nomination.

**Consultations**  
ICOMOS has consulted its International Scientific Committees on Historic Towns and Villages and on Fortifications and Military Heritage, as well as several independent experts.

## Literature consulted selection

Dağcı, İ. B., A 13<sup>th</sup> Century Shipyard at Alanya (Alaiyye), on the Mediterranean Coast of Turkey, in *The International Journal of Cultural Archaeology*, 38, 2009, pp. 13-20.

Hanish, H., The works of al-Malik al-Adil in the citadel of Harran, in *A Fortification au temps des croisades* (eds. N. Faucherre, et al.), 2004, p. 165-178

Ogel, S., The Seluk of Anatolia: Aspects of the Social and Intellectual History of Seluk architecture, *Foundation for Science Technology and Civilisation*.

Onge, M., Caravanserais as symbols of power in Seluk Anatolia, in *Power and Culture: identity, ideology, representation* (eds. J. Osmond and A. Cimдина), Pisa, 2007, pp. 49-69.

Avuz, A. T., The concepts that shape Anatolian Seluk Caravanserais, in *Uqarnas*, vol. 14, 1997, pp. 80-95.

**Technical Evaluation Mission**  
An ICOMOS technical evaluation mission visited the property from 4 to 8 September 2010.

**Additional information requested and received from the State Party**  
None

**Date of ICOMOS approval of this report**  
10 March 2011

## 2 The property

**Description**  
The nominated property (143,40ha) occupies the eastern slope and the top of the Alanya promontory, which has remained largely unaffected by urban development.

The fortified towered walls enclose the southern part of the peninsula, exploiting its geographical form to protect the town, which includes a 'low city' and a 'high city' as well as terraces, which are no longer cultivated. West and South of the promontory the rugged relief grants natural protection so a single wall provided ample defence. The northern side, however, required a much more solid system so an outer apron wall was built and a ditch carved into the rock.

The Seljuk phase of the city walls begins at the *izilkule* or Red Tower; these walls then climb up the hill and encircle the settled area by adapting to the topographic conditions. There are two openings in the northern side of the walls: the *Asagi Api* and the *ale Apisi* gates, the latter being a Seljuk adaptation of earlier structures.

The Red Tower is a five-storey, austere-looking octagonal structure. Each floor has a different plan articulated around a central pillar, and a water cistern is incorporated into the top floor. The tower exemplifies Syrian art in 13<sup>th</sup>-century military construction. The masonry is made mainly of reused stone, although it appears more regular than that of the Seljuk extensions of the walls.

The city walls encompass the 13<sup>th</sup>-century remains of the Seljuk sultan's palace, several cisterns of the same period, the ruins of a 12<sup>th</sup> century church, two residential quarters - Tophane and Hisarici - with some 200 houses, and the 13<sup>th</sup>-century shipyard.

This medieval shipyard, which still stands today, is trapezoidal in shape, measuring circa 57m in length and up to 40m in depth. It consists of five interconnected ogival-vaulted galleries which face the sea. The northern side of the Shipyard was protected by the Red Tower but the southern part was exposed to attacks. The two towers were therefore built in different periods. The shipyard and the Red Tower were built in regular ashlar masonry.

The two residential quarters comprise several scattered vernacular houses of the Ottoman Empire, mosques and an Orthodox church. The houses exhibit a variety of structures and materials: the walls of the ground and first floors are generally stone masonry with interspaced horizontal wooden elements, whilst the projecting facades which offer a view of the sea or a panoramic view, are made of plastered timber panelled with lathwork. The roofs are wooden and tiled. The internal and northern walls are also made of stone and covered with flat clay roofs for insulation.

The lack of springs in the promontory was overcome by collecting rain water into several cisterns, built for this purpose over different periods, which are scattered around the town. They were in use until the 1970s, when the Old City was connected to the public water supply system.

A lot of graffiti can be observed on the walls of the buildings depicting ships or naval subjects. This attests to the long-lasting importance of the maritime commercial function of Alanya.

The buffer zone (40ha) consists of the built-up area located immediately north of the walled city of Alanya and is delimited to the north by Damlatas Avenue. It contains Ottoman residential buildings and villas from the 19<sup>th</sup> and 20<sup>th</sup> centuries, some of which are protected along with their immediate setting.

#### History and development

The rocky topography of the Alanya promontory has made the site an ideal, natural stronghold.

The occupation of the promontory has been documented since the Hellenistic period, when the town was known as Coracesion. Remains of Hellenistic fortifications may be found in the Kaledon and near Arap Pasha church.

Coracesion (Coracesium to the Romans) became a centre of piracy, following the power and political vacuum experienced in the region in the 1<sup>st</sup> century BC. The Romans took over the region in 65 BC but little is known of the town under Roman rule, although, in the 2<sup>nd</sup> century AD, it minted its own coins.

The city became a centre for the export of timber during this time, thereby defining Alanya's trade under the Byzantine Empire when the town was renamed Alonoros and which continued under the Seljuks and the Ottomans.

Between the 11<sup>th</sup> and 13<sup>th</sup> centuries, the Seljuks moved gradually westwards from Persia and acquired control over the eastern and central parts of Anatolia. The Fall of Constantinople and the rupture of Byzantine hegemony in the region allowed the Seljuks to strengthen their position there.

Anatolian Seljuk sultans developed and implemented a deliberate economic policy based on trade. Pre-existing routes were revived and equipped with caravanserais or hans to connect Seljuk centres, as far away as Tabriz and Aleppo, with port towns from where goods were transported by boat.

One of the most important commercial arteries in Anatolia connected Erzurum, Sivas, Kayseri, Aksaray and Antalya, the capital city. This route terminated at the harbours of Trabzon and Sinop on the Black Sea, and Antalya and Alanya on the Mediterranean coast. To ensure free traffic for their goods, the Seljuks signed agreements with foreign trade agencies and sea-faring powers, like the Venetians and Genoese.

The Seljuk sultanate gained control of the nominated property, at the time still named Alonoros, which was under Byzantine control and already a fortified town. This only happened around 1220 due to the corruption of the Lord of the castle. Sultan Alaeddin Keykubad changed the name of the city again to Alaiyye or the city of Alaeddin - and initiated an important building campaign, which included his winter residence.

Apparently, the city owes its current form to the surge in construction at this time. Indeed, the Citadel and the walls were repaired and enlarged, while the Red Tower, defensive walls and shipyard were built.

The Seljuk era was one of the richest trading periods for Alanya but it was soon to end. Following Mongol attacks (1243) the Seljuk dynasty fragmented into local emirates. These lasted until 1308, due to alliances formed with the Mamluks, who had gained control of Anatolia from 1277. Alanya was definitively annexed to the Mamluk sultanate in 1427, but soon after, in 1471, the Ottoman Empire took over Anatolia and Alanya was incorporated.

Under Ottoman rule, the city only regained some prominence in the 16<sup>th</sup> century when it served as the base for the conquest of Cyprus, which had been under Venetian control. In this period the Suleymaniye mosque was rebuilt and a new bazaar was constructed. Alanya remained within the Ottoman Empire until 1923 when the Turkish Republic was created.

Following the establishment of the Turkish state and the treaty of Lausanne (1926), Alanya, along with many other

cities in Turkey and Greece, experienced the emigration of its Christian population to Greece. They were replaced by Muslims coming from Greece. Indeed, the Christian Orthodox quarter has remained uninhabited and neglected since that moment and is now in almost complete ruin.

In the last 25 years, several campaigns of archaeological excavations in and around the Seljuk citadel have been carried out and have yielded useful information predominantly about the Seljuk period of Alanya.

### 3 Outstanding universal value integrity and authenticity

#### Comparative analysis

The State Party has based the comparison on Alanya's Seljuk past and its relics, examining in particular three different aspects of the Outstanding Universal Value proposed for the property: the mixed urban fabric, the maritime specialised structures, the fortifications. The State Party holds that, although other cities share with Alanya a common Seljuk past and therefore retain buildings or structures from that period - i.e. *abadabad* in central Anatolia preserves its palatial complex, Antalya Sinop and *ayseri* their defensive walls - there is no city other than Alanya that has preserved the combination of military, residential, commercial and maritime architecture within an urban pattern of Seljuk origin.

When considering Alanya as a port town, the State Party emphasises the fact that the medieval shipyards and maritime fortifications of powerful cities like Venice, Istanbul and Acre no longer exist; those in Malta came later; and Barcelona and Corinth have lost the fortified structures that protected the port.

As a fortified city, Alanya would exhibit a completeness not found in other properties. The Ancient City of Aleppo (Syrian Arab Republic, 1986, (iii), (iv)) and Crac des Chevaliers (Syrian Arab Republic, 2006, (ii), (iv)) exhibit isolated features but not the combination present in Alanya. The Citadel and the Walls of Diyarbakir, on the Tentative List of Turkey, and *ayseri* contain large bastions comparable to Alanya but the *ed Tower* is said to stand out because of its original central plan, its architectural quality and its being part of complete port fortifications.

Finally, the State Party affirms that there is no other Mediterranean settlement, either Christian or Islamic, that contains the combination of structures dating back to as early as the 13<sup>th</sup> century.

ICOMOS firstly underlines that the comparative analysis should explain the importance of the nominated property in its national and international context. It should show that there is no similar property already inscribed on the World Heritage List and that there are no other similar properties either nationally or internationally that might in the future be nominated.

ICOMOS then observes that, in medieval times, several port towns flourished along the Mediterranean coastline. Their birth and development were the fruit of different cultural interactions and changing strategic exigencies, their fortune or neglect resulting from the shifts and disruptions in the political and economic predominance of one power in favour of another in the various sub-regions. None of these cities can be considered the product of just one civilisation, although they may exhibit more prominent traces of one epoch and constructive culture in respect to others. ICOMOS therefore considers that the comparison should not have been limited to cities with a Seljuk past but should have been expanded to other fortified cities at least at the national and regional level.

ICOMOS also observes that the State Party has not examined almost any of the relevant properties already inscribed on the World Heritage List, namely the City of Safranbolu (Turkey, 1994, (ii), (iv), (v)), Byblos (Lebanon, 1984, (iii), (iv), (vi)), the Old City of Acre (Israel, 2001, (ii), (iii), (v)), the Medieval City of Rhodes (Greece, 1988, (ii), (iv), (v)), the City of Valletta (Malta, 1980, (i), (vi)), the Old City of Dubrovnik (Croatia, 1979, (i), (iii), (iv)), Syracuse and the Etna Necropolis of Pantalica (Italy, 2005, (ii), (iii), (iv), (vi)), the Old Town of Corfu (Greece, 2007, (iv)), the Ancient City of Nessebar (Bulgaria, 1983, (iii), (iv)) or the Costiera Amalfitana (Italy, 1997, (ii), (iv), (v)). Although mentioned in the analysis carried out by the State Party, Istanbul and Aleppo have not been examined in the light of their complex and multilayered mix of urban and architectural structures. Additionally, consideration could have also been given to Portovenere, a medieval fortified port town, within the World Heritage Site of Portovenere, Cinque Terre, and the Islands (Italy, 1997, (ii), (iv), (v)) for its fortifications and related urban structures.

Among the properties on the Tentative List of the States Parties, only Diyarbakir has been considered, although not adequately developed, whilst *onya* (Turkey) could have been an even more relevant example, as it is proposed as a capital of Seljuk civilization, or *phesus* (Turkey), for the traces of its Seljuk past. Tartus (Syrian Arab Republic), the *nights'* fortification around the harbours of Malta (Malta), Sudak (Ukraine) and Gibraltar defences (U ) are also relevant examples of fortified settlements but have not been taken into consideration by the analysis elaborated by the State Party. Other, still existing, fortified settlements on the Mediterranean and the Black Sea that played a significant role as trade and harbour centres in the same period were Mitilini and Chios (Greece), and Balaklava and Feodosiya (Ukraine). In Italy, the walled towns of Noli or Castelsardo may also be recalled as examples of fortified settlements. They also provide relevant comparisons, when considering Alanya as a towered defensive enclosure with its citadel.

With regard to the *ed Tower*, ICOMOS notes that there is at least one earlier example of a fortification that made use of this type of polygonal central-plan tower: the citadel of Harran (Turkey) still exhibits three eleven-sided towers dating back to the end of the 12<sup>th</sup> and the beginning of the 13<sup>th</sup> century.

As for the shipyard, ICOMOS recalls that the 13<sup>th</sup> century shipyard of Amalfi (Italy) and the medieval shipyard of Barcelona (Spain) are still standing.

In summary, ICOMOS considers that the comparative analysis was not made against properties with similar values, almost all the relevant properties already inscribed on the World Heritage List have not been examined by the State Party and when included in the comparison have not been looked at with reference to the values claimed for the nominated property. The comparative analysis carried out by the State Party has not been sufficiently developed at the national or regional level.

---

ICOMOS considers that the comparative analysis does not justify consideration of this property for the World Heritage List.

---

Justification of Outstanding Universal Value  
The nominated property is considered by the State Party to be of Outstanding Universal Value as a cultural property for the following reasons:

- The Old City of Alanya represents the only surviving example of a palatial and harbour city that exhibits the urban morphology of a Seljuk urban, maritime settlement in this area.
- The citadel with its ramparts and the Tower, the shipyard, the Hemedek Citadel and the Bedesten (market hall) represent an outstanding materialisation of Seljuk culture in the region.
- The Shipyard, the best preserved of all Mediterranean shipyards, bears unique witness to a building and maritime tradition and attests to the new role of Alaiyye Alanya as a trade centre in the medieval epoch and a crossroads of cultures.
- The frescoes and mural painting decoration in the Seljuk palace complex and other structures of the same period are among the best preserved from the period. Of similar importance are the hundreds of examples of graffiti, showing ships and vessels from the Seljuk period.

ICOMOS firstly observes that the nomination dossier lacks consideration of the urban values of Alanya as an old city: no description is provided of the port city, the ancient harbour, the plan of the old town and its remains, nor of the intangible values that inextricably contribute to make up the complexity of a city. Alanya is a fortified settlement where the enceinte walls do not enclose an urban fabric, made up of historically-related civic buildings and open spaces, but only a citadel, a few religious edifices and a group of 19<sup>th</sup> century vernacular houses. Today only 457 people live in the Old City of Alanya, whereas the entire population of Alanya city centre exceeds 130,000 inhabitants.

ICOMOS also observes that there are other still surviving Seljuk settlements in Anatolia and its surrounding regions, i.e. Alanya (capital city for the Seljuks), Safranbolu, Kayseri, Aleppo and Damascus

(capital cities for the Syrian Seljuks), therefore Alanya is not unique as an example of Seljuk urban settlement nor of a Seljuk capital city. Alanya in fact exhibits the traces of a pattern of development, fortune and neglect common to other medieval ports along the coast of the Mediterranean Sea.

ICOMOS further observes that the defensive system and the citadel of Alanya pre-existed the Seljuks, who mainly adapted and repaired the Byzantine and the remains of the Hellenistic structures. The Tower is not a unique example of a polygonal central-planned tower, as has been shown in the comparative analysis.

ICOMOS also considers that the combination of military architecture and topography as seen at Alanya is representative of a widespread settlement pattern along the Mediterranean coast, although here it has attained a particular beauty.

Finally, the fact that Alanya was a centre for exchanges of merchandise as well as ideas and cultural values does not represent a unique or a distinctive feature of the nominated property, as all port cities played this role.

ICOMOS considers that the towered walls, the Tower, the shipyard, the Hemedek Citadel, the Bedesten (market hall) do not represent, individually, the complex interconnection of values of an urban settlement. The value of Alanya as an old city cannot derive from the value of individual monuments, therefore the City walls, the Citadel, the Tower and Tophane Towers, and the Shipyard cannot support the proposed Outstanding Universal Value of Alanya as an Old City.

In summary, ICOMOS concludes that this justification does not appear appropriate, in that what survives of Alanya, as an old fortified city, although important at the national and possibly regional level, does not stand out at the global level.

#### Integrity and authenticity

##### Integrity

ICOMOS notes that Integrity and Authenticity have been addressed together by the State Party but the Operational Guidelines for the Implementation of the World Heritage Convention (January 2008) requires (Heading II, paragraphs 85 and 88) that separate statements of authenticity and integrity should be provided.

The State Party holds that the nominated property is an extraordinarily well preserved medieval port-city, which has not been compromised by urban development or over-restoration. Only some of the residential buildings have been neglected, whilst the majority of them have been maintained and only a few have been added to.

ICOMOS considers that the nominated property contains the surviving elements of the Old City of Alanya but these are not sufficient to express the proposed Outstanding

Universal Value of Alanya as an Old City, a fortified urban settlement or a sultan city.

ICOMOS considers that the boundaries of the buffer zone should include the harbour area, from which the nominated property is visible, in order to avoid the closure of the views that can be enjoyed from there over Old Alanya.

ICOMOS nevertheless acknowledges that the Municipality of Alanya has approved the expansion of the nominated property to comprise a group of Ottoman houses close to the *ed Tower*.

ICOMOS considers that, while the monumental buildings exhibit a high level of integrity, the quarter once inhabited by the Greek Orthodox community has been neglected since its abandonment and lies almost in ruin.

ICOMOS also notes that a number of isolated residential buildings have been erected within the city walls, in contrast with the almost archaeological character of large parts of the walled area.

Finally, ICOMOS observes that technical installations external to the buildings do not fit well with the urban landscape of the nominated property and are visually intrusive. Guidelines to improve the technical solutions for these installations appear necessary.

#### Authenticity

The State Party considers that the authenticity of the nominated property is remarkable. The loss of centrality that Alanya experienced after the Seljuk sultanate lost its control over the city has helped to preserve its urban structure, as the town has not grown within its walled perimeter and has preserved traces of its different historical layers. At the same time, the Old City of Alanya has remained a lived-in place, thus ensuring the retention of the original functions of most structures.

ICOMOS first considers that the Old City of Alanya bears witness to the pattern of evolution common to several fortified settlements that grew up on the Mediterranean and Black Sea shores between the 11<sup>th</sup> and 13<sup>th</sup> centuries, taking part in a much larger political and economical phenomenon that extended beyond Seljuk might and involved all the other powers in the region.

Additionally, ICOMOS considers that the nominated property bears witness to an example of well preserved, towered Medieval city walls and fortifications, and not to a complex reality such as that of an old city.

ICOMOS considers that the conservation of the monumental structures has been generally respectful of the material authenticity of the fabric, although a study of the vernacular houses, especially of those left abandoned, would be beneficial for the understanding of the architecture and its appropriate conservation.

---

In conclusion, ICOMOS considers that the conditions of integrity have not been met when considering Alanya as an old city. Additionally, the boundaries of the buffer zone should include the harbour area from which the nominated property is visible, in order to avoid the closure of the views that can be enjoyed from there.

Finally, ICOMOS recommends that the State Party addresses the urgent issue of the conservation of the Greek Orthodox quarter and of the visual nuisances within the nominated property.

ICOMOS considers that the conditions of authenticity have not been met when considering Alanya an example of Seljuk urban settlement.

---

#### Criteria under which inscription is proposed

The property is nominated on the basis of cultural criteria (ii) and (iv).

Criterion (ii): exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on development in architecture or technology, monumental arts, town-planning or landscape design;

This criterion is justified by the State Party on the grounds that the Old City of Alanya with its ramparts and shipyard represents the best surviving example of the Seljuk technical and maritime civilisation, a civilisation which is not represented elsewhere with the same density and quality of remains. Alanya also contains mosques and churches, attesting to the long-lasting cohabitation of Christians and Muslims, as well as fine examples of vernacular wooden architecture from the 18<sup>th</sup>- 20<sup>th</sup> century.

ICOMOS observes that no evidence is provided of an early system of town planning of a medieval city where the houses are organised on a singular pattern adapted to the hilly terrain with a relationship between the walls, the urban fabric and the gates. Additionally, there is a considerable gap between the date of the walls (6<sup>th</sup>- 13<sup>th</sup> century) and the houses within (18<sup>th</sup>- 20 century).

ICOMOS considers that the surviving city walls and citadel, the *ed Tower* and the shipyard are individual monuments and therefore not sufficient to convey the sense of an urban morphology. Furthermore, today the Old City of Alanya is only a small fraction of the much larger modern town.

ICOMOS also observes that during the *oman period*, Coracesium was known as a castle placed on a steep cliff. Ibn Battuta in 1330 AD speaks about Alanya as a fortified citadel near the coast, but does not speak about the harbour, which is mentioned in the case of Antalya, recognised as the predominant port-city of the coast.

ICOMOS further considers that the defensive structures of Alanya have been mainly repaired and rearranged by the Seljuks, who, in Alanya, found an existing robust stronghold.

ICOMOS also notes that the presence of mosques and churches cannot be confined to the Seljuk period, nor can be said to be a distinctive feature of Alanya only. Besides, both the churches and the Greek quarter, among the traces of Alanya's multicultural past, lie in disrepair, nor have they been the object of any conservation plan yet.

---

ICOMOS considers that this criterion has not been justified.

---

*Criterion iv be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates a significant stage in human history*

This criterion is justified by the State Party on the grounds that the shipyard and other monumental buildings of the nominated property bear witness to the beginnings of the opening-up of the Seljuk dynasty a land-based power to maritime trade and its development into a Muslim, merchant and sea-faring society. The citadel and ramparts are outstanding examples of Seljuk urban defence and planning systems.

ICOMOS considers that other port cities, like Sinop, Trabzon and Antalya, were the terminal points of a more complex system of overland trade routes that connected important Seljuk centres as far away as Tabriz and Aleppo. Therefore, the nominated property is not the sole representative of Seljuk ports.

ICOMOS notes that Alanya does not have any ramparts, rather the walls form a towered enceinte enclosing the citadels and the shipyard. The Red Tower represents a particular type of military architecture that has also been found in Harran (Turkey).

ICOMOS observes the shipyard is not the only surviving example of a 13<sup>th</sup> century shipyard, since at least one other exists in Amalfi, and Barcelona conserves its royal shipyard which is, however, later. However, Alanya's shipyard retains its original setting, with the sea still entering, and it has not been transformed into a museum.

ICOMOS does however consider that the city walls and the defensive structures found in Alanya show many analogies in planning, architectural and building terms with many other Mediterranean coastal settlements, as the examples in the comparative analysis demonstrate.

---

ICOMOS considers that this criterion has not been justified.

---

---

In conclusion, ICOMOS does not consider that the criteria and Outstanding Universal Value have been demonstrated.

---

## 4 actors affecting the property

### Development pressures

The State Party holds that the urban development that occurred between the 1950s and the 1990s has had limited effects on the nominated property, in that new constructions are mainly outside the historic walls. The major concern is the possible gentrification of the Old City, due to the notable increase of property value, which not only would cause a substantial social modification and possible loss of sense of place but also radical adaptations of the residential built heritage because of different living standards.

The State Party however considers that the conservation plan and building regulations in force are effective tools to counteract this threat.

ICOMOS agrees that the property may be prone to gentrification as Alanya has also become a sought after destination for foreigners.

ICOMOS also considers that the status of the private parcels of land included within the boundaries of the nominated property and subdivided into building plots should be clarified by the State Party, since any new construction in those areas may seriously threaten the integrity of the property.

### Tourism pressures

The State Party holds that, currently, the main threat is represented by tour buses allowed access to the nominated property. This issue is being addressed through the Management Plan. The number of pedestrian visitors to the property is much less than the carrying capacity threshold of the property.

ICOMOS observes that the Sub-region B for tourism-related uses in the Conservation Development Plan may contribute to increase the tourist pressures. Therefore, ICOMOS suggests that the State Party consider revising the zoning, taking into account the gentrification issues mentioned in the section above, as well as in the light of the fact that the nominated property houses only 457 people, whilst the extant part of the houses are empty and in disrepair or reduced to almost an archaeological state.

### Environmental pressures

The marine and humid environment of the nominated property is the agent of specific forms of decay which are being addressed through continued maintenance, drainage and conservation works. The threats caused by the presence of vegetation within the nominated property are managed through regular manual pruning and removal. No other particular environmental pressures are reported in the nomination dossier.



## Natural disasters

Fire may be considered the most important threat to the nominated property but the municipality has installed fire hydrants in those parts that are inaccessible to vehicles. Additionally, the Alanya Museum has initiated a cooperation project with the local fire department.

## Impact of climate change

The State party does not report any specific impact caused by global climate change but ICOMOS considers that, in the region, its most likely manifestation could be through a rise in sea level and sudden and heavy rains accompanied by flooding and landslips.

---

ICOMOS considers that the main threats to the property are abandonment and lack of maintenance in certain areas and possible gentrification in others. ICOMOS considers that any future rehabilitation scheme within the nominated property should be carried out under special projects and take into consideration the existing urban structure, fabric and character.

With regard to the private lot subdivisions within the boundaries of the nominated property, ICOMOS recommends that the State Party clarify their status and also that any right of building that may have been obtained by the owners be settled without delay.

---

## 5 Protection conservation and management

### Boundaries of the nominated property and buffer zone

The nominated property is delimited on three sides by the natural perimeter of the promontory, and includes the walled enceinte of Alanya and the cliffs and areas immediately surrounding the walls, which have been kept free from construction. This area coincides with a Grade I protected area. Official additional information provided by the State Party on January 2011 reports that, on 21 September 2010, the Municipality of Alanya decided to expand the boundaries of the nominated property to include a group of vernacular Ottoman houses located immediately outside the city walls in proximity to the Tower, and comprises a copy of an amended map of the nominated property.

The buffer zone comprises a settled area north of the nominated property that acts as filter between the Old City and the modern expansion of Alanya. It comprises a number of Ottoman villas and houses, which are protected with their surroundings. Damlatas Avenue acts as the northern limit, whilst the eastern boundary coincides with the shoreline. In 2007, the estimated population within the nominated property counted 457 inhabitants, whilst in the buffer zone there were 3,058. No estimation of the summer population is provided.

ICOMOS considers that the physical tracing of the boundaries on the maps do not allow a clear understanding of their delineation.

ICOMOS appreciates the efforts made by the State Party to ensure protection for the Ottoman houses close to the defensive walls and encourages the State Party to finalise the protection process for these houses.

ICOMOS further considers that the entire port area should be included in the buffer zone because of the views that can be enjoyed from there over Ancient Alanya. Measures should also be put in place to avoid permanent constructions in this area.

---

In conclusion, ICOMOS considers that the boundaries of the nominated property appear adequate.

ICOMOS recommends that the boundaries be adjusted to correspond to the land limits of parcels and a thin line be adopted to represent them graphically.

ICOMOS recommends that the entire port area should be included in the buffer zone to grant protection of the views that can be enjoyed from there over the Old City of Alanya.

---

### Ownership

The ownership of the property is mixed: the towered walls, the shipyard, the Tower and the archaeological areas are owned by the State, although some of them are under municipal responsibility. The Directorate for the Foundations or Waqf owns religious and monumental buildings, i.e. the mosques and the Bedesten.

### Protection

#### Legal Protection

The nominated property is protected under the provisions of the Law for the Protection of Cultural and Natural Heritage as a 1<sup>st</sup> degree Natural, Archaeological, Historical and Urban Conservation site (decision n. 3782, 23.10.1987 of the Superior Council for the Conservation of Immovable Cultural and Natural Property) and of the Alanya Conservation Development Plan foreseen by the Law for Heritage Protection which was adopted by the Antalya Regional Conservation Council for the Conservation of Cultural and Natural Property (decision n. 4308, 23.7.1999). Additional layers of protection were provided in 1999 by establishing a buffer zone protecting the natural profile of the area overlying Damlatas Cave. This was further expanded by the Antalya Regional Conservation Council (decision n. 941, 31.3.2006) through the inclusion of this area in the 1<sup>st</sup> Degree Natural, Archaeological, Historic and Urban Conservation site. To the North, the classified conservation site' is further protected by a buffer zone for which a preservation plan for buffer zones was established in 1988 (decision n. 78 of the Antalya Regional Conservation Council).

The Conservation Development Plan is structured to ensure that all activities carried out in the protected conservation zone respect its heritage character. For this

purpose the plan identifies four sub-regions, each with homogeneous characteristics, which require specific measures. In Sub-region A, which includes the Citadel, the ramparts, the Shipyard and the Tower, no building or digging is allowed. In Sub-region B only structures approved for tourism functions are permitted; no excavations except archaeological ones can be carried out. Residence is allowed in this area. Sub-region C coincides with the residential area and here modification of buildings and structures following the guidelines set out in the plan is permitted. Sub-region D comprises the part of the old city that has long since been abandoned and is a special project area. Here no development is allowed before archaeological investigations are carried out. No projects are foreseen for this area yet.

The buffer zone is protected through urban regulations and projects should be approved by the Antalya Region Conservation Council. Some Ottoman villas and houses are protected with their environs. Along the Damlatas Avenue the buildings may have up to five storeys, whilst buildings along Iskele Road may reach six storeys.

The port area is under the jurisdiction of the Ministry of Transport. Currently, there is no intention to expand the port by building new piers for cruise ships.

ICOMOS considers that a tourist zone with residential use in the Conservation Plan for the nominated property does not appear necessary since residence is already allowed in zone C. Additionally a specific zone for tourism may in the future increase the threats of gentrification.

ICOMOS further considers that a solution for the conservation of the Greek Orthodox quarter should be found.

ICOMOS further observes that there are no clear criteria for the establishment of the urban regulations for the buffer zone, in particular with regard to the number of storeys allowed, the absence of the notion of inter-visibility within the protected site, the absence of rules concerning the modification allowed to the buildings and the advertisements. Additionally, Iskele Avenue plays a strategic role in the access to the nominated property, and therefore would deserve more attentive building regulations, in order not to affect adversely the integrity of the nominated property.

ICOMOS recommends that any future possible expansion of the port be examined in the light of the possible impact that this may have on the values of the nominated property.

Effectiveness of protection measures

The law provides for conservation plans to be implemented under the responsibility of special offices created in the municipalities and governorships, employing professionals with relevant expertise (i.e. history of art, archaeology, conservation, etc.).

The Municipality of Alanya is responsible for the implementation of the Conservation Development Plan and of the Conservation Plan for the Buffer zone. The municipality cooperates with the local office of the Ministry of Culture and Tourism.

ICOMOS considers that the lack of a comprehensive vision for the Sub-region D of the Conservation Plan for the protected area does not contribute to the effective protection of the values of an important, although neglected, component of the nominated property.

---

ICOMOS considers that the protective measures will be appropriate when the existing regulations for the nominated property and its buffer zone have been strengthened and made stricter with regard to visual nuisances and the modifications allowed to existing buildings.

ICOMOS recommends that a technical, financial and juridical feasibility study be developed for the Greek Orthodox quarter, examining different scenarios that may be the base for public debate within the city.

---

## Conservation

Inventories, recording, research

The State Party reports that graphic and photographic documentation, recording and inventories of the built structures within the citadel and of vernacular houses have been carried out.

A special plan for the documentation of the Seljuk Palace, the Byzantine church and the gateway to the citadel was elaborated and, on the basis of its results, conservation works started in 2001.

ICOMOS considers that much work has been done already, although the archaeological excavations have focussed mainly on the Seljuk heritage, largely overlooking the other periods and cultures that have left considerable traces at Alanya.

ICOMOS further considers that systematic documentation should also be carried out on the Ottoman vernacular built heritage, which remains insufficiently documented. Technical documentation of the residential edifices will provide a thorough and solid base for conservation and maintenance works.

ICOMOS also considers that it would be of great help if archaeological and stratigraphic analysis were to be carried out on the military and port structures to enhance the understanding of their construction and modifications.

## Present state of conservation

According to the State Party, the Seljuk ramparts are in very good condition today. The shipyard and the Tophane tower, as well as other buildings in Alanya, were restored in the 1950s and today are in rather good condition, and most of the structures forming the citadel are still standing.

The residential quarter that was inhabited by the Orthodox Christians who fled Turkey in the 1920s was never reoccupied, the houses have suffered from decades of lack of maintenance and use and today are almost in complete ruin.

#### Active Conservation measures

The conservation and development plan for the protected 1<sup>st</sup> degree conservation area includes two general projects: the Old City of Alanya with its Buffer zone and Shoreline Urban Planning Project and the Izilkule and Tophane Axis Project, which aim at the conservation and promotion of the area. The latter is articulated in seven sub-projects to achieve its objectives and, for its implementation, a protocol of intents between the Ministry of Culture and Tourism - General Directorate of Cultural Heritage and Museums and Alanya Municipality has been signed on 30.12.2008 to ensure that works will be done in accordance with the laws in force, management plans for the area will be prepared and security to the project area provided. There are also other smaller projects, i.e., the restoration scheme of the Alanya Castle and the restoration of a traditional Ottoman house to be used as the Site management office, which has been recently completed.

ICOMOS considers that, although efforts have been made to ensure the conservation of the built fabric of the nominated property, still much more needs to be done, in particular for the preservation of the Greek Orthodox quarter, otherwise precious testimonies of the former multi-cultural and multi-religious community of the Old City of Alanya will be lost.

ICOMOS considers that the urban arrangements and paving carried out at the entrance of the nominated property, close to Izilkule, are not in keeping with the values of the property. Additionally, the metal railings of the pedestrian platform, currently painted in white, could be painted a less obtrusive colour, e.g. black.

ICOMOS also observes that no specific information has been provided on the architectural project included in the wider Izilkule and Tophane Axis Project although they seem to have been approved by the Antalya Regional Conservation Council (decision n. 943, 31.3.2006).

ICOMOS also considers that it would be advisable that more systematic conservation and maintenance measures be designed, possibly within the framework of the Management Plan.

#### Maintenance

ICOMOS considers that maintenance of urban spaces can be improved, with special regard to garbage disposal and drainage system, and notes that the treatment of urban spaces and surfaces is not based on a global plan.

effectiveness of conservation measures

According to the State Party, those conservation measures already implemented appear to be effective in achieving their targets.

ICOMOS considers that, although effective, conservation measures are still too much based on individual projects, whilst structural initiatives framed in a comprehensive strategy would be more beneficial to the property and could possibly trigger a virtuous cycle, thus bringing more durable results.

---

In conclusion, ICOMOS recommends that the State Party establishes within the conservation plan for the nominated property a comprehensive strategy for conservation in which individual projects contribute to the controlled achievement of defined objectives. ICOMOS further recommends that the State Party considers addressing without delay the issue of preserving the Greek Orthodox quarter, abandoned since the 1920s and now in a dilapidated state.

---

#### Management

Management structures and processes, including traditional management processes

The municipality of Alanya has appointed the Director of the Alanya Museum as the coordinator for Alanya Castle, with responsibilities for coordinating the different relevant institutions. An advisory body, with representatives from academia, NGOs, chamber of architects, local and central government, citizens, and a coordination unit have been established.

ICOMOS considers that a management system has been in place for ten years. It is based on the existing legal framework and the administrative and technical structures of the Antalya Conservation Council, the Municipality and the Alanya Museum.

Policy framework: management plans and arrangements, including visitor management and presentation

The Management Plan aims at coordinating existing legal and planning instruments with a view for the protection of the cultural values of the nominated property. The management plan also contains an Action Plan that prioritizes activities for the achievement of the defined goals.

With regard to visitor management, the State Party informs that the Municipality has supplied the old city with basic facilities, i.e. public restrooms, direction and interpretation signage, and further ones are planned. Brochures exist and new ones are under preparation.

Conferences and workshops have been organised to disseminate among students a better knowledge of Alanya's cultural heritage and of principles of conservation.

Residents have been given the opportunity to participate in conferences on World Heritage and management.

Official additional information provided by the State Party on January 2011 includes the final version of the Management Plan.

ICOMOS observes that the Management Plan encompasses both the nominated property and the buffer zone.

ICOMOS recommends that the Management Plan be approved and implemented without delay.

#### Risk preparedness

No such heading is included in the nomination dossier, nor in the Management Plan, although the latter comprises a synthetic description of the main hazards that are likely to threaten the nominated property.

ICOMOS recommends that a risk preparedness strategy be developed without delay, based on the major identified threats.

#### Involvement of the local communities

In the nomination dossier it is stated that the Management Plan has been elaborated through participatory process.

Resources, including staffing levels, expertise and training

The nomination dossier gives an account of the financial resources available in 2008 for the nominated property, coming from different sources: 320,000 Euro (Ministry of Culture and Tourism); 1,190,000 Euro (Alanya Municipality Budget Dept for Culture), 265,000 Euro (10% of property taxes devoted to Cultural Heritage preservation).

The permanent staff dedicated to the management of the nominated property comprises a trained archaeologist, who is the director of the Alanya Museum, and a conservation architect, from the Alanya Municipality.

ICOMOS considers that it is important to provide information on the budget for the conservation and the enhancement of the cultural heritage of the nominated property that has been allocated for the immediate future (i.e., next triennium).

#### Effectiveness of current management

The Director of the Alanya Museum, a trained archaeologist, has been appointed site manager for Alanya Castle and cooperates with a conservation architect who works for the Alanya Municipality. The management team relies on external expertise to carry out large scale projects and plans.

---

In conclusion, ICOMOS considers that the management framework is overall adequate.

ICOMOS recommends that the Management Plan be approved and implemented.

Furthermore, ICOMOS recommends that a risk preparedness strategy be developed without delay, based on the major identified threats.

ICOMOS further recommends that the staff dedicated to the management of the property be augmented with trained professionals in the fields of archaeology, conservation, and structural engineering.

---

## 6 Monitoring

The nomination dossier lists a number of indicators that are considered relevant to measure the state of conservation of the nominated property. Monitoring is a responsibility of the local branches of the Ministry of Culture and Tourism and of the Alanya Municipality.

Records of the monitoring exercises are archived at Alanya Museum, the Directorate of Cultural Heritage and Antalya Museum and at a special bureau of the Alanya Municipality.

---

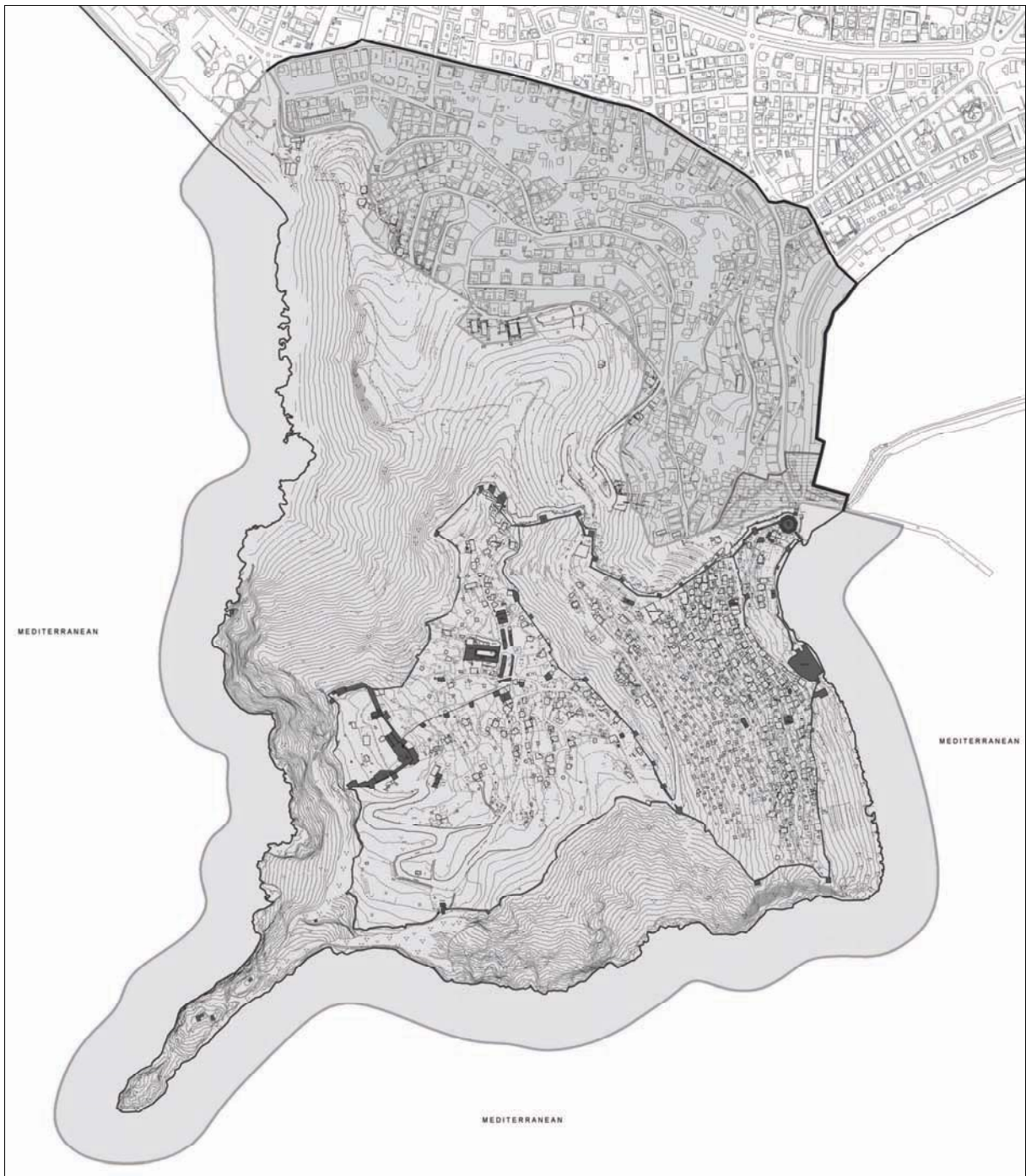
In conclusion, ICOMOS considers that a comprehensive monitoring strategy, with clear objectives and priorities should be developed, before establishing the appropriate indicators.

---

## 7 Conclusions

The Old City and ramparts of Alanya have been erected on a mountainous peninsula of Anatolia, projecting into the Mediterranean Sea. Alanya conserves, in a spectacular natural setting, its circle of almost complete defensive walls with three towers, the citadel, dating back to between the 6<sup>th</sup> and the 13<sup>th</sup> century, a medieval shipyard, several old cisterns and a collection of vernacular residential buildings of the Ottoman period. The monuments and the remains of the built heritage of Alanya represent a pattern of development common to several fortified Mediterranean settlements between the 11<sup>th</sup> and 13<sup>th</sup> centuries and therefore constitute a property bearing regional importance.

Recommendations with respect to inscription  
ICOMOS recommends that the Old City and ramparts of Alanya with Seljuk Shipyard, Turkey, should be included on the World Heritage List.



Map showing the revised boundaries of the nominated property





The peninsular rock of Alanya

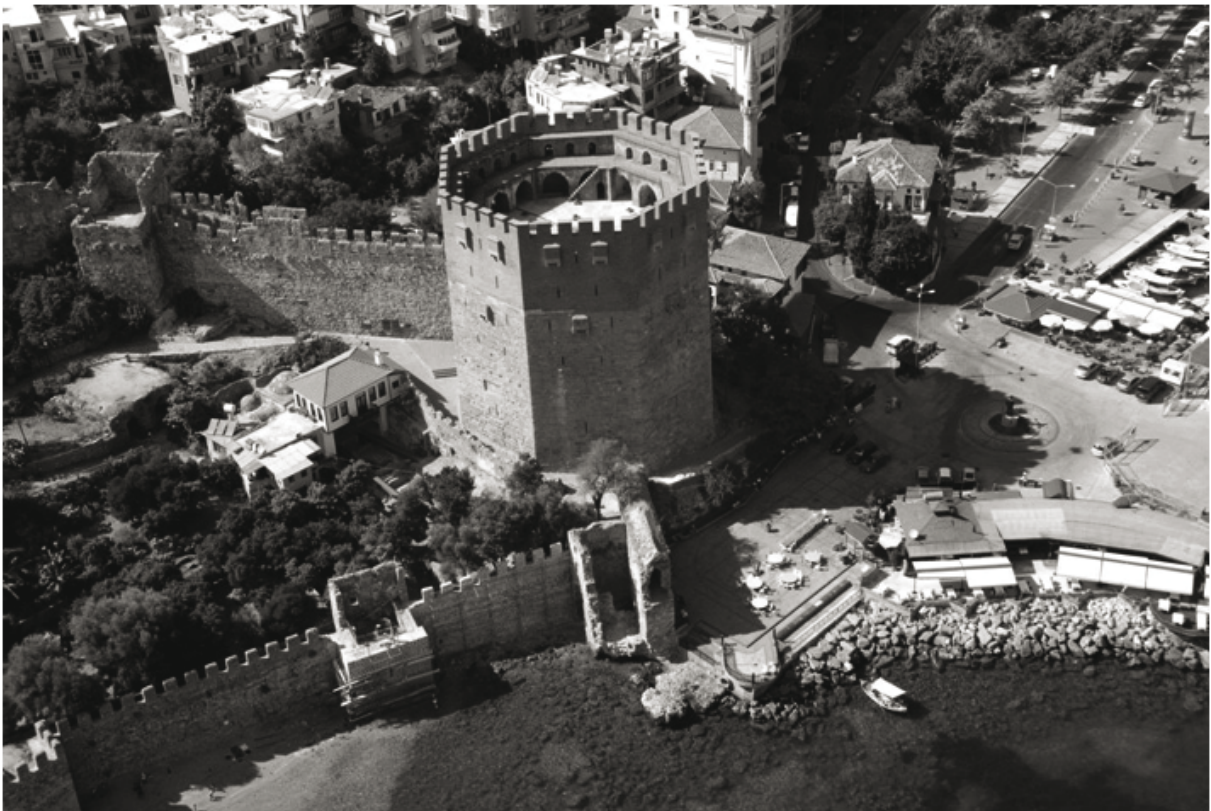


General view





Cannon House (Tophane), Seljuk Shipyard (Tersane), and ramparts



The Red Tower (Kizilkule)



---

# Selimiye Mosque Turkey No 1366

---

Official name as proposed by the State Party  
Selimiye Mosque and its Social Complex

## Location

Marmara region, Province of Edirne  
Republic of Turkey

## Brief description

Dominating the skyline of Edirne, former capital of the Ottoman Empire, the Selimiye Mosque and its Social Complex commissioned by Selim II are the ultimate architectural expression by the architect Sinan of the Ottoman mosque complex. The square mosque, with its single great dome, four soaring slender minarets, manuscript library, meticulous craftsmanship, brilliant Iznik tiles and marble courtyard together with its associated educational institutions, outer courtyard and covered bazaar, represent the apogee of an art form and the pious benefaction of 16<sup>th</sup> century imperial Islam.

## Category of property

In terms of categories of cultural property set out in Article I of the 1972 World Heritage Convention, this is a group of buildings.

## 1 Basic data

Included in the tentative List  
25 February 2000

International Assistance from the World Heritage  
Fund for preparing the Nomination  
None

Date received by the World Heritage Centre  
27 January 2010

Background  
This is a new nomination.

Consultations  
ICOMOS has consulted several independent experts.

## Literature consulted selection

Fletcher, Sir B., *A History of Architecture on the Comparative Method* (19<sup>th</sup> edition), The Athlone Press, London, 1987.

Goodwin, G., *A History of Ottoman Architecture*, Thames and Hudson Ltd., London, 1971.

Gay, S., *Sinan: the Architect and His Works*, 6<sup>th</sup> ed. M  
Publication, 2009.

Hattstein, M. and Delius, P. (eds.), *Islam: Art and Architecture*,  
Nemann, 2000.

Urban, D., *Sinan's Art and Selimiye*, The Economic and Social  
History Foundation of Turkey, 1997.

Michell, G. (ed), *Architecture of the Islamic world: its History and  
Social Meaning*, Thames and Hudson Ltd., London, 1978.

Necipoğlu, G., *The Age of Sinan: Architectural Culture in the  
Ottoman Empire*, Princeton University Press, 2005.

Technical Evaluation Mission  
An ICOMOS technical evaluation mission visited the  
property from 5 to 7 October 2010.

Additional information requested and received  
from the State Party

Additional information was requested from the State Party  
on 28 September 2010 including:

- A plan showing the locations of the Library, Sultan's prayer loge and muezzins' tribune/platform;
- Deeper comparative analysis in relation to the mosque's dependencies, both architecturally and socially;
- Explanation of how the buffer zone boundary was set in relation to protection of views of the property from all lines of approach;
- Clarification of what works were undertaken in converting the two madrasas to museums.

A response was received on 18 November 2010 providing the requested information on points 1-3 which has been incorporated into the relevant section below. The information was inadequate in relation to point 4.

ICOMOS sent another letter to the State Party on 13 December 2010 on the following:

- Reinforce justification of criterion (ii) by deepening the comparative analysis;
- Provide a textual description and photographs of the works undertaken to the madrasas in converting them to museums;
- Formally confirm that the south-west property boundary is as shown in the additional information, appendix 3;
- Consider changing the name of the property to 'The Selimiye Mosque Complex at Edirne';
- Provide information on the master plan of Edirne in relation to the treatment of the large adjacent green area immediately south-west in the buffer zone, and the relocation of car parking lots adjacent to the property.

A response was received on 28 February 2011 providing the requested information which has been incorporated into the relevant sections below.

Date of ICOMOS approval of this report  
10 March 2011

## 2 The property

### Description

The nominated property covers 2.5ha and is surrounded by a buffer zone of 37.5ha.

The property is located prominently on high ground in the city of *dirne*, which is near the junction of European and Anatolian highways and railways close to the border of Turkey with Bulgaria and Greece. It comprises the Selimiye Mosque, its fountain court, and associated charitable dependencies including the Dar' I-Kurra madrasa (Islamic college now the Foundation Museum); the Dar' I-Hadis madrasa (College of advanced studies in religious law now the Turkish and Islamic Arts Museum); the Arasta (covered market providing income to the foundation fund); the Dar' I-Kurra alcove (Islamic primary school); the *uvakkithane* (clock house/timekeeper's room, also used by astrologers), the outer courtyard of the mosque, which provided space for pilgrims/travellers' tents and booths, and the Library (included within the mosque).

The surrounding buffer zone is designed to cover the surrounding historic context and significant view corridors to the Mosque complex. It includes important buildings demonstrating the development of *dirne* from the inner fortress settlement of Roman Hadrianopolis (Macedonia Tower) through the early Ottoman period from when Hadrianopolis was conquered in 1361 and expanded by Sultan Celebi Mehmet from 1413-1421 including the Old Mosque and the Covered Bazaar to the important period of Sultan Murat II (1421-1451) including the *Şerefeli* Mosque (Mosque of the Three Balconies). It also covers the period after 1453 when Istanbul was established as the new capital and a number of important mosque complexes, caravanserais and markets were built in the city including the Selimiye Mosque and its Social Complex.

### The Selimiye Mosque

The Mosque with single dome and four soaring minarets dominates *dirne* from afar. Built in 1569-75 with its fountain court and two madrasas, it is symmetrically located at the heart of the outer walled rectangular court, which measures 190m x 130m. Entry is through a gateway in the centre of the north-west outer courtyard wall on axis with the mihrab (prayer niche indicating the direction of Mecca) in the south-east qibla (Mecca-facing) wall of the mosque. The Dar' I-Hadis madrasa is located north-east of the qibla and the Dar' I-Kurra madrasa is south-west. Between them, behind the qibla wall is the cemetery area. Both madrasas can be entered from the outer courtyard. The Arasta (covered bazaar) runs along the south-western side of the outer courtyard, with a central projecting entrance facing south-west. The Islamic primary school is located next to the entrance and the clock house is at the north-western end.

The prayer hall of the mosque is covered with a dome 31.3m in diameter reaching to an internal height of 42.3m. The architect Sinan, who was Chief Architect for the Ottoman sultans for fifty years from 1538 and built over 400 structures, wrote that this mosque built for Sultan Selim II was his greatest masterpiece, that he had exceeded the dome span of Hagia Sophia. The dramatic interior space is created by supporting the dome on eight large but independent supports within a square plan, allowing large window areas to admit copious light. The large, apsed mihrab recess in the south-east wall is lit from three sides and panelled in brilliantly coloured Iznik tiles. Ceramic and painted inscriptions run around the apse. The ceramic calligraphy in white on a blue ground is extremely striking.

The mihrab itself is of Marmara marble and is tall and narrow, culminating in muqarnas (stalactite ornament). The elaborately carved marble minbar (pulpit) projects from the pillar on the right as one faces the mihrab. Beneath the centre of the dome, the square muezzins' mahfil (singers' platform) is raised on foliate arcades on marble columns over a cusped marble fountain.

The imperial loge is located in the north-east corner and decorated with floral patterned Iznik tiles, inscriptive panels and exquisite inlaid doors. The Iznik tiles used throughout are particularly noteworthy, representing the highpoint of the Iznik production of the second half of the 16<sup>th</sup> century. Their design is attributed to Sinan himself, and makes use of numerous variations of the symbolic tulip motif which represents Allah. Other distinctive depictions include the apple tree and the fruit tree in blossom.

The carved timber doors and window sashes depicting traditional plant and geometric motifs exhibit an extremely high level of craftsmanship, particularly the ivory inlaid ebony window shutters in the mihrab of the imperial loge and the *kendekari* work of the main door to the mosque, which is inlaid with ivory and mother of pearl.

The mosque is constructed in masonry with brick arches and domes; the domes are covered in lead. It is faced externally in honey-coloured sandstone with red sandstone outlining windows, marking string courses and forming geometric patterns in the lower buttresses. The voussoirs of the exterior arches are made of alternating red sandstone and white marble. The relatively plain treatment of the exterior surfaces means that the external architectural impression depends on the careful juxtaposition of forms, which step up from the courtyard colonnade to the upper porch/gallery, to the springing of the octagonal arcade and the drum of the dome and finally to the dome itself.

The dome is anchored by the four, fluted stone minarets, which are 3.8m in diameter at the base and reach 70.89m in height to their lead covered cone points. Each minaret has three corbelled balconies; the two on the

north side have three independent and intertwining stairs by which to reach each balcony. The marble-paved fountain court is faced on the south-east by the marble portico of the mosque and surrounded by a dome-vaulted colonnade. The six columns on each side are reused from ruins in Cyprus, Aydıncık in the vicinity of Apıdagi peninsula, and Syria. The entrance to the mosque is marked by a larger dome and raised parapet in the colonnade before it. The doorway is crowned by recessed muqarnas. In the centre of the court, the sixteen-sided white marble fountain incorporates ablution faucets and small basins on each side for the use of those coming to pray, who may seat themselves on the individual stone block seats before them.

#### Social Complex

The two madrasas at the two corners of the mosque enclosure are almost identical mirror images of each other. Each comprises rooms around an almost square courtyard, which has an internal colonnaded arcade enclosing it. Each contains a domed square prayer space on the inner side facing each other across the courtyard area on the court axes, with small domed rooms around the two outer sides, each with their own fireplace and chimney. Entry is through a monumental doorway with muqarnas in the centre of each north-western wall, which are windowed arcades facing onto the outer courtyard. The masonry construction is stone-faced to the court, but exterior walls comprise coursed blocks interspersed with two rows of red bricks.

The covered Arasta bazaar built in order to provide earnings to the Selimiye Mosque and its Social Complex comprises 124 shops in two rows either side of a paved and covered laneway approximately 225m long. It acts as a retainer along that side of the mosque's outer court, to accommodate the change in level due to the steep slope of the land down to the south-west. A covered entrance lane lies perpendicular to the long north-west to south-east axis, which is itself on axis with the side entry to the fountain court of the mosque. The crossing is marked with a dome covering a square prayer space lit through the ornate plaster openwork grille of the dome's drum. Under this prayer dome the shopkeepers would follow the longstanding tradition of swearing every morning to practice fair dealing in trade. The covered ways have small clerestory windows above the roofs of the shops either side, stone entrance gateways at the ends of the long and short arms and a small gateway giving access to the outer courtyard of the mosque. The exterior walls of the shops have no windows. Construction is in coursed masonry with alternating red brick courses. Domes, vaults and arches are in brick.

The primary school is located in the southern angle of the Arasta bazaar and is constructed in the same type of masonry with alternating brickwork. The domed square classroom is raised above the level of the bazaar so that its dome is at the same level as those on the madrasas. It has an adjacent, open-sided loggia style teaching space for summer.

The uvakkithane (clock house) is located in the north-east corner room of the Arasta facing the three sun dials on the wall of the mosque. From here the uvakkit (time-keepers) prepared the annual calendar and the amadan timetable. They also gave basic astronomy lessons when required.

The outer court is enclosed by a stone, openwork balustrade along the north-east and north-west sides, with the ceremonial gateway in the centre of the north-west wall aligned with the mihrab of the mosque.

The Library is within the mosque, in the south-west corner, accessed from the outer courtyard. It comprises a small room 1.75m x 4.2m and a large room 9m x 6.65m. It includes a total of 8,117 books, 3,384 of which are manuscripts and 5,118 are printed works of art. The collection was begun with the donation by Selim II of 277 of his own books a few years before the completion of the complex and was kept in the imperial treasury until the library was complete. The manuscripts are preserved in glass showcases and the printed works are stored on shelves.

#### History and development

Selimiye Mosque and its Social Complex were built by Sultan Selim II, son of Suleiman the Magnificent, from 1569 to 1575 on the site named Sarıbayır or Savak Square. This was previously the site of İldirim Beyazid's palace, used as the first palace of the Ottoman Empire in Edirne, which was the capital from 1364. In 1453 Constantinople fell to Mehmet II and became the Ottoman capital, Istanbul. From that time the imperial court and administration were moved to Istanbul and the square where the old palace stood was used as military headquarters until giving way to the new mosque complex of Selim II.

There is extensive documentation of the design of the mosque by the architect Sinan and of his ordering and commissioning of the buildings and decoration in accordance with the wishes of Sultan Selim II. This includes booklets by Sinan's friend Said Celebi quoting Sinan as describing the Selimiye Mosque as his "masterpiece work". The documentation also includes orders for the stone and marble from specified quarries; the commissioning of İbrahim Molla Hasan for the calligraphy; the specified water source for the fountains, and the tiles from Iznik where the most significant and highest quality tiles of the time were manufactured. Selim II died before he could see the finished mosque. His successor Murat III required Sinan to carry out repairs needed to the mosque after a lightning strike in 1584. The earthquake of 1752 caused some damage to the balconies of one minaret, some of the window glass and cracked the dome over the uvakkithane. Subsequent minor earthquakes did not result in any damage. Some calligraphy in the mosque was renewed in 1808 and 1883. The fountain was roofed with a pavilion in 1808 but that has since been removed. Sometime later a small lavatory was created adjacent to the Sultan's loge and from 1839-1861 under Sultan Abdülmeşid the interior ornamentation

of the mosque was generally coated with plaster and carved and ornamented with baroque motifs, in some cases imitating the original. Bare stonework was also plastered and decorated. In 1874 lead work from some of the domes of the Arasta was used for making bullets and the domes were tiled. The mosque was occupied by Russian forces during the Ottoman-Russian War of 1877-8 and some tiles and carved decoration were removed from the Sultan's loge by one of the Russian military officers. This damage can still be seen today. At the end of the second Balkans War in 1913 some of the earliest carpets in the mosque were removed by fleeing Bulgarians.

Following the establishment of the Republic of Turkey in 1923, responsibility for the religious duties of the mosque foundations all over Turkey was placed with the Presidency of Religious Affairs and the General Directorate of Pious Foundations. Atatürk ordered the repair of the Selimiye Mosque following damage due to a great storm in 1930, and instigated a research program into the history of the architect Sinan. He also commissioned a sculpture of Sinan which today sits in the garden of Ankara University. Following another storm in 1932, the cones of the four minarets of Selimiye Mosque were removed and eventually restored during a major restoration program at the mosque in 1950-55. At this time the plaster and decoration applied during the mid-19<sup>th</sup> century renovation under Sultan Abdülmecid II was removed. In the 1960s one minaret was partly taken down to the second balcony and reconstructed; the marble paving of the fountain court was renewed; one column of the colonnade was replaced and the stone paths and entrance stairs from the outer court were rebuilt.

From 1978 -1983 and 1983-1985, the General Directorate of Pious Foundations initiated a major restoration program for the decorative work that had been lost or covered up during previous periods, particularly during the period of Sultan Abdülmecid II. This included the porphyry imitations, interiors of arches and hand-carved gypsum plaster in the vaults and semi-domes, stone imitation in the barrel vaults, window borders and calligraphy panels. Cracks in the main dome and fountain court were stabilised with brick stitches and dislodged bricks replaced. Cisterns beneath the main part of the mosque were cleaned out and sealed. Stone repairs and replacement were carried out to entrance doors and borders to the outer courtyard and paving in the fountain court. Broken marble stairs in the mosque were restored and the marble of the mihrab and minbar was cleaned. The 19<sup>th</sup> century layers of paint were removed from the muezzins' platform and the work of the classical period restored, keeping some examples of the later work for interpretative purposes. Decorative carved wood with inlaid work to doors, window shutters and the shutters in the Sultan's loge was cleaned and repaired. The tiled pediments of the portico to the fountain court were repaired. The earlier electric lighting installation within the mosque was removed and a new installation in keeping with the appearance of the original oil lamp system was implemented. The water supply and storage system were renewed.

Recent works (2004-2008) have included the repair of the wooden parts of the minarets and replacement of the lead cone covering, together with repair and regilding with gold leaf of the crescents and stars on the tops of the minarets and dome.

The Dar' l-Hadis Madrasa was converted to a museum for Turkish-Islamic Arts in 1971 and is still used today for that purpose. It had been previously converted to the Ethnography Museum in 1936. The domes were restored and the lead covering renewed in 2009. The portico arcades surrounding the courtyard have been glazed and display cases installed. According to information provided by the State Party in its response of 28 February 2011, the cement render applied to the walls during earlier refurbishment has now been removed to enable exposure and repair of the original plaster.

The Dar' l-Kurra Madrasa was converted to the City Museum by the order of Atatürk in 1925 and served that function until after World War II, when it was used as the office of the Ministry of Religious Affairs directorate, a student hostel, and storage until 2000. It was unused from 2000-2005 and was then restored in 2006 by the General Directorate of Pious Foundations. According to information provided by the State Party in its response of 28 February 2011, minimal repairs were required to the roof and structure as part of this project; rewiring was carried out using existing holes; the cement render applied to the walls during earlier refurbishment was removed in order to expose and repair the original plaster; the mihrab in the study hall was restored; fireplaces were converted to show-cabinets (without changing their sizes), the brick floor was renewed in accordance with the original design, the windows and doors were renewed and the whole of the cloister arcade was glazed. The madrasa is now the Foundation Museum, housing documentation, samples of materials found during restoration projects, lanterns, candle holders, astrolabes and other objects that have come from mosques and prayer rooms managed by the foundation.

There is some evidence that the Arasta was built by the architect Davud Ağa sometime after completion of Sinan's mosque complex by order of Sultan Murat III in order to provide earnings for the Selimiye complex. However it is argued in the nomination dossier that while it was completed by Davud Ağa, it was in fact designed by Sinan because he was the expert on dealing with building on sloping land, and the Arasta is built against the south-west retaining wall of the mosque's outer courtyard as part of the structural solution to building up the steep slope in this area.

The manuscript works in the Library were digitised as part of a major program from 2004-2006. The Library is now open to use by researchers.

### 3 Outstanding universal value integrity and authenticity

#### Comparative analysis

The State Party has compared the Selimiye mosque complex within the tradition of Ottoman domed structures and finds it the most successful solution to the problem of providing a large congregational space beneath a single dome. It also finds the architectural composition of dome with tall slender minarets sited on a high point visible from all lines of approach a unique landmark. The State Party argues that this is a unique masterpiece by the supreme architect Sinan in an unsurpassed location, and that it would therefore not be appropriate to consider the property in conjunction with other Ottoman mosque complexes by Sinan, of which there are several in Istanbul, as a serial nomination. The commission by Selim II of this mosque complex in *dirne* is significant because *dirne* was the first Ottoman capital for almost a century before Istanbul was taken, and Selim II spent his regency and the first years of his sultanate there. The State Party argues that this monument represents a climax of architectural achievement. Comparison with the two major mosque complexes in Istanbul that Sinan designed after he became Chief Architect, Şehzade and Sleymaniye, which are both part of the World Heritage property Historic Areas of Istanbul (1985, criteria (i), (ii), (iii) and (iv)), shows that they were achievements on his progress to the culmination at Selimiye. Şehzade (mid 16<sup>th</sup> century) is built with one central dome between four half domes to cover a square prayer space, and Sleymaniye (1550-57) is built on the model of Hagia Sophia with a central dome and two half domes to cover a rectangular prayer space. Sinan regarded this work as his qualifying work before producing the Selimiye masterpiece.

The State Party has also compared the property favourably with other great domed structures that are included in World Heritage properties, such as Hagia Sophia, Istanbul (537); Florence Cathedral (1294-1434) and S. Peter in the Vatican, Rome (1447-1556).

ICOMOS notes that comparison could also be made regarding the spatial concept with other World Heritage properties including Soltaniyeh in Iran; the Timurid structures in Kazakhstan (Mausoleum of Khoja Ahmed Yasawi) and Uzbekistan, and Humayun's Tomb in Delhi, as well as with monuments in Cairo such as the Mausoleum of Sultan Bay. These are all outstanding architectural achievements, but the fact they exist does not detract from the extraordinary spatial composition achieved by Sinan, heightened by the effect of the decoration and craftsmanship particular to the Ottoman period and the creative skill of its artisans. The siting of the Selimiye Mosque as a dominating landmark adds to its status as an outstanding monumental composition. The fact that this idea of an Islamic city crown was later adopted for the Mamluk Mosque of Mohammed Ali (1824-1848), which crowns the Cairo citadel, testifies to Selimiye's influence as an Islamic masterpiece.

ICOMOS requested the State Party in its letter of December 2010 to deepen the comparative analysis on the fact that the mosque is an archetype of the Ottoman world. In its response of 28 February 2011 the State Party has shown that the Selimiye Mosque at *dirne* was not an archetype of the Ottoman world in the sense of being the example from which later examples were developed. In fact the information shows that the mosque scheme of a central-dome located on four pillars together with four semi-domes as used by Sinan for the Şehzade Mehmet Mosque was reapplied in the construction of Yeni Istanbul Mosque started in 1597 and finished in 1661-64; in Sultan Ahmet Mosque in 1617; in the new Fatih Mosque of 1771, and in a simplified form in the Cairo Mosque of Muhammad Ali, 1830-48. No examples of the later use of the Selimiye *dirne* mosque type were given.

No comparisons were made in the nomination dossier for the *kulliye* (social complex). In response to ICOMOS' request for comparisons for the social complex, the State Party provided in November 2010 a history of the *kulliye* as a concept dating from pre-Islamic times, possibly Buddhist in origin, which reached its fullest expression during the Ottoman period. It essentially comprises a series of buildings associated with a mosque, which either provide free accommodation, food and sometimes baths to pilgrims and travellers where located on major routes, or free educational and welfare services to people in the heart of urban areas. In the case of the Ottoman sultans, the complexes in towns and cities had a symbolic role as well, to show the presence and benevolence of the Sultan in his piety, contributing to the identity of the city. The additional information includes discussion of two earlier 15<sup>th</sup> century *kulliyes*, the Fatih in Istanbul and the Sultan Beyazid II in *dirne*. The former includes four extensive madrasa complexes; the latter is oriented more towards pilgrims. In the 16<sup>th</sup> century the architectural composition of the complex eventually became the focus. For this period the discussion covers the other *kulliyes* designed by Sinan: Şehzade Mehmet in Istanbul (1543-1548), which provided a mix of educational (madrasas) and pilgrim accommodation; the Sleymaniye *kuliyeye* in Damascus, and the Sleymaniye *kuliyeye* in Istanbul. At the Şehzade the mosque itself is not large and is located in a walled outer courtyard with madrasa, soup kitchen and hospice rooms along one side, and a caravanserai outside the courtyard at one end. The arrangement does not create a dominant architectural composition.

The Sleymaniye in Damascus, also known as the Tekkiye (1560) was designed by Sinan for Sleyman I on the banks of the Barada river in Damascus for use by pilgrims on the road to Mecca. It had a madrasa added during the reign of Selim II. Both it and the mosque are arranged around fountain courtyards and the dependencies include a pilgrims' hostel, kitchen and refectories, and a row of shops which sold necessities to the pilgrims. There is a cemetery garden, and a large area for the tented encampment of the pilgrims extended to the west. The mosque itself is not large; it is a domed

square of similar proportions to many provincial mosques, has only two minarets, and the complex in the river valley is not a dominant landmark as at *dirne*.

The *S leymaniye* complex in Istanbul is the most comparable with the *Selimiye* complex at *dirne* in terms of dominant location and imperial symbolism. The social complex part of the *Selimiye* is in fact rather small compared with that of the *S leymaniye* in Istanbul, with only two madrasas compared with five at the *S leymaniye*. *S leymaniye* has as part of its social complex a *daruşşifa* (hospital) a *hamam* (bath building), an *imaret* (soup kitchen), a *tabhane* (travellers' hospice) and a *dar' I hadis*. Both mosques have a fountain court for ablutions before the main entrance opposite the *qibla* wall and a cemetery behind the *qibla* wall. Clearly as a social complex, *S leymaniye* is far grander in terms of imperial pious benefaction. The State Party made the point in the additional information that there was a greater need for madrasas and accommodation in the capital and that by the time the *Selimiye İliye* was built, there were numerous other *k İliyes* in *dirne*, so the need was not there. In terms of an imperial monumental composition, the *Selimiye* is superior. The five madrasas of the *S leymaniye* complex are not directly connected to the outer courtyard and are not symmetrically placed in relation to the mosque, thus not contributing to the architectural massing in the same manner as the two at *Selimiye*. *S leymaniye* shares the skyline with *Hagia Sophia* and the *Blue Mosque* at Istanbul, whereas *Selimiye* is the crown of *dirne*.

Overall it is clear that the dominant siting of the *Selimiye* complex, its symmetrical layout and the proportional build-up of the almost identical flanking madrasa structures to the dome of the mosque afford greater architectural unity to the overall complex than is attained by the *S leymaniye* complexes at Istanbul and Damascus.

ICOMOS considers that the comparative analysis and the additional information provide comparisons at the national, regional and international level with similar properties inscribed or not on the World Heritage List.

---

ICOMOS considers that the comparative analysis justifies consideration of this property for the World Heritage List.

---

Justification of Outstanding Universal Value  
The nominated property is considered by the State Party to be of Outstanding Universal Value as a cultural property for the following reasons:

- The nominated property is the culminating architectural masterpiece of Sinan (1494-1588), the most famous Ottoman architect, who built over 400 structures and was the Chief Imperial Architect from 1538 onwards. As such it dominates *dirne*, former capital of the Ottoman Empire and home base of the commissioning sultan, Selim II.

- The property demonstrates extraordinary design, structural innovation, craftsmanship, decorative splendour and architectural harmony and showcases the best building craft traditions of the 16<sup>th</sup> century.
- The property represents the architecturally superlative culmination of the mosque and social complex as a building type expressive of key values of Ottoman Islam – piety and charity.
- The Mosque is of high religious value for Muslims.

ICOMOS considers that the first three points of this justification are appropriate but the religious values associated with the mosque are of regional significance rather than to Muslims worldwide.

#### Integrity and authenticity

##### Integrity

The State Party argues that the *Selimiye Mosque* and its Social Complex retain their physical and functional integrity as a monumental landmark, being located on just one lot. The complex is still in use as a Mosque and for public functions (museums and bazaar) and still funded as a Pious Foundation.

ICOMOS concurs and notes that the location of the complex on the highest level in *dirne* town, which has been almost entirely declared as an urban conservation area with adequate legal protection, means that the dominating landmark status of the Mosque complex is well maintained. All the other attributes that convey the Outstanding Universal Value of the property are included within the boundaries of the site.

ICOMOS noted that the current parking area abutting the nominated property on the north-west detracts from the property and is inappropriate and this issue was raised in the letter sent on 13 December 2010. In response the State Party provided documentation on 28 February 2011 to show that pedestrianisation of roads along the border of the outer court of the complex is planned as part of the urban design project for the *dirne* Historical City Centre which includes the nominated property and part of the buffer zone. In conjunction with this the current parking area will be rearranged as a public park. Visitors will park in areas outside the buffer zone and will access the property via this public park. The Directorate of Transportation Services of *dirne* Municipality plans to complete the works around *Selimiye* by 2013.

##### Authenticity

The nomination dossier records that the buildings have been continuously maintained in accordance with the requirements of the General Directorate for Pious Foundations and have suffered minimal damage over the 434 years since the complex was built.

ICOMOS considers that the *Selimiye Mosque* is in an extremely good state of preservation. It underwent a significant conservation project focusing on the restoration of decorative elements in the mid 1980s, the

results of which were published in 1990. This project was largely directed at correcting inappropriate works carried out during the 19<sup>th</sup> and early 20<sup>th</sup> centuries. The garden within the outer enclosure wall of the Selimiye Mosque was landscaped in the late 20<sup>th</sup> century to create a green space for public use, but is not necessarily appropriate in terms of the original layout, which was not researched.

The Arasta bazaar was substantially reconstructed to the original design but with the inclusion of services, after a devastating fire in the 20<sup>th</sup> century.

ICOMOS considers that the detailed information provided by the State Party in its response of 28 February 2011 about works done to convert the madrasas to museums shows that some modifications were made to accommodate what is an appropriate new use for these buildings. The formerly open arcades to the courtyards of both madrasas have been glazed, and the fireplaces have been converted to showcases. It is stated that the fireplace openings and niches have not been altered in size. These modifications are not ideal but would seem to be reversible. Doors and windows have been renewed, as has the brick floor of the Dar' l-Kurra adrasa. Previously the interior stucco had been re-coated with cement render but this has now been removed, exposing the original plaster and also remnants of decoration in the study room of the Dar' l-Hadis adrasa. ICOMOS considers that these modifications do not prevent the property overall from expressing truthfully and credibly its Outstanding Universal Value.

---

In conclusion, ICOMOS considers that the conditions of integrity and authenticity have been met.

---

Criteria under which inscription is proposed

The property is nominated on the basis of cultural criteria (i), (ii), (iii) and (iv).

Criterion (i): represent a masterpiece of human creative genius;

This criterion is justified by the State Party on the grounds that the dirne Selimiye Mosque is a masterpiece of the human creative genius of the architect Sinan, the most famous of all Ottoman architects in the 16<sup>th</sup> century. The single great dome supported by eight pillars has a diameter of 31.5 over a prayer space of 45mx36m, and with its four soaring minarets it dominates the city skyline. The innovative structural design allowed numerous windows creating an extraordinary illuminated interior. The mosque complex was recognised by Sinan himself as his most important architectural work.

ICOMOS considers that the nomination demonstrates that the Selimiye Mosque is a superlative architectural achievement. This has been widely recognised by architectural historians and is not in dispute.

---

ICOMOS considers that this criterion has been justified.

---

Criterion (ii): exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design;

This criterion is justified by the State Party on the grounds that the architect Sinan in designing the Selimiye Mosque synthesised all that had gone before in Byzantine and Classical architectural engineering with innovative structural ideas which he tested experimentally himself in the scientific spirit of the period. The Clock House ( uvakkithane) and sundials reflect the scientific preoccupations of the enaissance with astronomy and chronology.

ICOMOS considers that the nomination shows that the mosque was designed by Sinan with the full benefit of his analysis of past structures and that he was an extraordinarily innovative architect reflecting the scientific spirit of the period. The location of the mosque at the high point of the city as a crown, proclaiming domination by Islam and the power and piety of the Sultan, influenced later architects and patrons also. But it represents a culmination of all that had gone before in terms of the architectural art and technology of domed space, and a possible model for future efforts by others, rather than an interchange of values.

ICOMOS requested the State Party in its letter dated 13 December 2010 to reinforce justification of criterion (ii) by deepening the comparative analysis on the fact that the mosque is an archetype of the Ottoman world. However as discussed above, the information provided by the State Party in response did not show the Selimiye Mosque at dirne to be an archetype of the Ottoman World.

---

ICOMOS considers that this criterion has not been justified.

---

Criterion (iii): bear a unique or at least exceptional testimony to a cultural tradition or to a civilisation which is living or which has disappeared;

This criterion is justified by the State Party on the grounds that Selimiye Mosque is an exceptional testimony to the architectural evolution of mosques throughout the Ottoman mpire starting with multi cupola types passing through single domed and semi-domed types to reach the spatial unity of Selimiye.

ICOMOS considers that this is really a sub-text of criterion (i) or (iv). Justification of criterion (iii) would need to argue that the mosque complex is exceptional testimony to Islam itself as a cultural tradition, or to the Ottoman mpire as a civilisation, rather than arguing that it is testimony to the evolution of the mosque as a type of building.

---

ICOMOS considers that this criterion has not been justified.

---



Criterion (iv): be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history;

This criterion is justified by the State Party on the grounds that the Selimiye Mosque with its cupola, spatial concept, architectural and technological ensemble and location crowning the cityscape illustrates a significant stage in human history, the apogee of the Ottoman Empire. The interior decoration using Iznik tiles from the peak period of their production testifies to a great art form never to be excelled in this material. The mosque with its charitable dependencies represents the most harmonious expression ever achieved of the style, this most peculiarly Ottoman type of complex.

ICOMOS considers that in the light of the additional information provided by the State Party on comparative analysis in November 2010, this criterion is justified.

---

ICOMOS considers that this criterion has been justified.

---

ICOMOS considers that the nominated property meets criteria (i) and (iv) and conditions of authenticity and integrity and that Outstanding Universal Value has been demonstrated.

---

#### Description of the attributes

The attributes carrying the Outstanding Universal Value of the property are the location and setting of the Selimiye Mosque Complex with its large dome and four slender minarets dominating the silhouette of Edirne city; the layout of the mosque and fountain court with its madrasas and Arasta bazaar, primary school and clock house with walls and gateways enclosing courtyards and green space; the exterior design, materials and architectural detail of the buildings; the spatial concept within the mosque and its structural design; its interior layout with centrally-placed muezzins' platform and fountain beneath; the mihrab and minbar; the Sultan's loge and library including the manuscripts and books; the craftsmanship, decoration and ornament, Iznik tiles and calligraphy which all together express outstanding architectural harmony.

## 4 Factors affecting the property

### Development pressures

The property is located at the heart of the city and is consequently vulnerable to urban development, traffic pressures and infrastructure redevelopment. It is protected as an Urban Conservation Site designated by the Edirne Conservation Council for Cultural and Natural Heritage. The population of the buffer zone area was 6,629 in 2007. The Reconstruction Plan for Protection was established in 2007 as a control on urban development.

ICOMOS notes that Edirne Municipality has taken steps to carry out urban improvements including limiting key streets to pedestrians. The property's location on high

ground gives it a landmark status that would be affected if strict height controls are not enforced on new development.

### Tourism pressures

There are a number of annual events that bring visitors and tourists to Edirne. It is close to Istanbul; the Trakya University's Balkan Congress Centre draws academics from the Balkans and Europe; many pilgrims come to the Selimiye Mosque during the month of Ramadan; and the annual historic Izkpinar Oil Wrestling event (which is currently a nomination for the UNESCO List of Intangible Cultural Heritage) fills all the hotels for that week. However the State Party believes that the Selimiye Mosque has the capacity to accommodate all visitors. It can hold 30,000-40,000 people but currently gets only up to 15,000 per day in peak period.

ICOMOS notes that as yet visitor numbers are low and as yet there is no visitor management system in place.

### Environmental pressures

Pollution due to the use of solid fuels for heating in Edirne's cold winters is detrimental to the property. Natural gas infrastructure was installed in 2009 and it is planned that natural gas will be available throughout the city by the end of 2011.

The relative humidity varies from 56% in summer to 82% in winter. It does not adversely affect wooden structures or ornament within the mosque, but does result in some organic growth on stonework. The Library is equipped with temperature and moisture measurement devices and also with a humidifier and dehumidifier in order to ensure optimal preservation of the manuscripts.

An early warning system and electronic alarm system have been installed against fire and safety respectively.

ICOMOS notes that the Library is inaccessible to the general public (although now open to researchers) and lacks adequate climate control systems. Relocation of the collections, possibly to one of the two madrasas, is apparently under consideration. Any such relocation would need careful consideration and any proposals of this nature should be submitted to the World Heritage Centre in accordance with paragraph 172 of the Operational Guidelines for the Implementation of the World Heritage Convention.

### Natural disasters

The mosque complex is not threatened by flood due to its location on high ground, but is covered by the fire, flood and earthquake emergency action plan for Edirne relating to the City Centre. Edirne is located in a second-degree seismic zone and has been almost totally destroyed twice. The most recent earthquake in Iznik in 1999 did not result in any damage. The mosque survived the previous severe earthquake in 1752. A land survey is to be undertaken in order to provide better information about earthquake predictability.

Storms and lightning are the natural risks that have caused damage to the mosque in the past. The minarets are protected by lightning conductors and the cones have been strengthened against storms.

The electrical installation at Selimiye was renewed in 1996, including a new transformer building and an underground fire service was provided to the Arasta. Renewal of the electrical system and installation of a fire service formed part of the works to the Foundation Museum in 2006 and to the Museum of Turkish-Islamic Arts in 2004.

#### Impact of climate change

ICOMOS considers that it is not clear what impact climate change might have on the nominated property.

ICOMOS considers that the main threats to the property are the possibility of earthquakes and storm damage. Lack of a visitor management system may be a problem in future.

## 5 Protection conservation and management

#### Boundaries of the nominated property and buffer zone

The boundary of the nominated property includes all the area covered by the nominated buildings and courtyards.

In response to the request from ICOMOS in the letter sent on 13 December 2010, the State Party provided documentation on 28 February 2011 showing that the nominated property covers the entire parcel of land denoted Block 379 on Urban Conservation Plan Land Survey Sheet No 50L-IIa, Section No 45. ICOMOS notes that the south-west boundary in this plan runs straight across in line with the projecting front of the south-west entrance to the bazaar as shown in the additional information (appendix 3) provided on 13 December 2010.

The buffer zone boundary was determined with the participation by all stakeholders within the site in accordance with the Operational Guidelines for the Implementation of the World Heritage Convention and national site management legislation. It covers most of the historic city centre, and is considerably less than the boundary of the Urban Conservation Area.

ICOMOS had noted that a view corridor on the southern side was not completely included in the buffer zone. In the additional information provided by the State Party it is stated that following a workshop with stakeholders on 7 October 2010 a new boundary was agreed to include two vistas of the Selimiye Complex not previously covered and this new boundary was approved by the Regional Conservation Council on 14 October 2010, Decision no. 3238. A plan showing this new boundary has been provided (appendix 3 to the additional information received on 18 November 2010).

ICOMOS welcomes this extension and considers it appropriate.

In conclusion, ICOMOS considers that the boundaries of the nominated property and buffer zone are adequate.

#### Ownership

The mosque and madrasas are owned by the Sultan Selim Foundation, which is part of the General Directorate for Pious Foundations. The mosque is used by the Provincial Office of Mufti; the Dar' I-Hadis by the Ministry of Culture and Tourism, and the Dar' I-Kurra by the General Directorate of Pious Foundations.

The Primary School and Arasta are owned by the General Directorate for Pious Foundations. The shops and school have been rented to private operators.

#### Protection

##### Legal Protection

The Mosque and madrasas are protected by Decision 1147 of the Superior Council for Immovable Antiquities and Monuments (1985), renewing the earlier decision 10370 of the Superior Council for Real Estates, Antiquities and Monuments (1978). The Arasta is protected by Decision 7697 of the Superior Council for Immovable Antiquities and Monuments (2003), which also included the whole complex as a conservation site.

The historic city centre including the mosque complex and other historic buildings is registered as a conservation site by Decision 37 (1988) and Decision 7697 (2003), which enlarged the area covered.

The buffer zone is protected by the Regional Conservation Council Decision 1715 (2007) and authorised by the Ministry of Culture and Tourism on 31 December 2007.

##### Traditional Protection

The mosques and Islamic complexes in Turkey are traditionally protected and maintained by the pious foundations known as the Wakf. A Declaration by the Pious Foundations Regional Directorate supporting the nomination of the property to the World Heritage List is included as appendix 5 in the additional information provided by the State Party.

##### Effectiveness of protection measures

The nominated property and its setting are protected by special legal protection afforded to World Heritage sites in Turkey, which was extended to the property when it was added to the Tentative List. The setting is effectively protected through height restrictions and specific urban conservation guidelines applying to the Urban Conservation Area that surrounds the property.

ICOMOS noted during an inspection of the entire nominated buffer zone that one building was found to be constructed with one floor higher than planned.

---

In conclusion, ICOMOS considers that the legal protection regime in place is satisfactory, but specific attention should be given to the application of height restrictions in the buffer zone.

---

## Conservation

### Inventories, recording, research

The existing architectural documentation was prepared for the Wakf as part of the 1980s restoration project. It is now proposed to undertake a 3D High Definition Survey using laser scanning equipment, particularly in order to make an accurate record of the intricate ornamentation.

ICOMOS considers that this is necessary in order to ensure accurate monitoring of the condition of the attributes carrying the Outstanding Universal Value.

### Present state of conservation

ICOMOS considers that the state of preservation of the Selimiye Mosque and its attached buildings is worthy of appreciation. All parts of the buildings are in good condition. However the garden within the outer courtyard of the Selimiye Mosque is inappropriately landscaped as noted above.

ICOMOS had noted that there is no general documented evidence of the procedures and methods of the Wakf conservation approach, leaving the conservation decision making process in the hands of the Director of Pious Foundations. The Wakf has created an independent company, *akif Construction Restorasyon*, to carry out any major conservation projects, including the 1980s work at the Selimiye. The 1980s work at the Selimiye Mosque was documented and published (in Turkish) as noted above. As part of the additional information supplied by the State Party (appendix 6), the Pious Foundations *dirne* regional Directorate provided a statement listing the international conventions signed by Turkey in relation to heritage, and the charters and declarations underlying international cultural preservation principles, and declaring knowledge and respect of these.

However ICOMOS considers there is a need for sharing of conservation philosophies and processes between government agencies and the Wakf, in order to reinforce cooperation between the two.

### Active Conservation measures

Current work is focusing on the new high-tech documentation of the Mosque interiors.

According to information provided by the State Party on 28 February 2011, the *Dar' l Hadis* *adrasa* is also undergoing works involving new electrical and audio wiring beneath the floor, installation of heating and

transfer to natural gas, and renewal of the glazing system to the arcade. reinstatement of the original decoration of the study room which was exposed when the cement stucco was removed in the previous restoration project has been proposed, along with works to the fireplace showcases. It is expected that the works will be completed in October 2011.

ICOMOS notes that the large green space immediately to the south-west of the complex, which is in the buffer zone, is currently subject to urban design proposals and that these need to be carefully considered in relation to the significance of the mosque complex. The project should be submitted to the World Heritage Centre at an early stage for review in accordance with the Operational Guidelines for the Implementation of the World Heritage Convention paragraph 172. Additional information was requested from the State Party in relation to this issue on 13 December 2010. The State Party responded on 28 February 2011 that the project design brief for the park awaits results of geo-radar and archaeological investigations which were undertaken in the area earlier this year. It is expected that the design of the project will be available by the end of 2011.

## Maintenance

Day to day maintenance and cleaning of the complex is the responsibility of the Mufti, the religious head of *dirne*.

### Effectiveness of conservation measures

ICOMOS considers the Selimiye complex to be well maintained.

---

In conclusion, ICOMOS considers that the property is well maintained, but attention should be given to a more appropriate landscaping treatment of the outer court garden and to the urban design proposals for the space immediately to the south-west of the mosque complex.

---

## Management

Management structures and processes, including traditional management processes

Under national legislation, *dirne* Municipality is responsible for preparing the Urban Conservation Plan for the Urban Conservation Area which includes the mosque complex as a designated religious and cultural site. According to the additional information provided by the State Party on 28 February 2011, the Urban Conservation Plan is the master plan for the historical core of *dirne* city, which includes the Mosque complex and its buffer zone.

All restoration and conservation activities for the property are carried out according to the National Act on the Preservation of Cultural and Natural Heritage no. 2863 and the Act on Pious Foundations no. 5737, and with the approval of the regional Conservation Council. Supervision of projects is the duty of the *dirne* regional Directorate of Pious Foundations. It is also necessary that

these bodies cooperate and coordinate with the Ministry of Culture and Tourism and the General Directorate for Pious Foundations.

A Coordination and Supervision Council, constituted by "representatives of local and central institutions" is being established by the dirne Municipality to oversee development of the Management Plan for the Selimiye Mosque and its Social Complex.

ICOMOS considers that the Wakf should be represented on this Council.

In addition there will be an Advisory Body made up of academics, representatives of NGOs, Chamber of Architects, local and central government and local citizens, which will evaluate the Management Plan and provide suggestions.

ICOMOS considers that the Wakf should be represented on this Advisory Board.

The Deputy Mayor of dirne has been appointed by dirne Municipality as the site coordinator.

Policy framework: management plans and arrangements, including visitor management and presentation

The Management Plan provided with the nomination dossier (Annex 5.d-3) was developed concurrently with the nomination dated January 2010. In the Introduction it is stated that it will be reviewed by the Advisory Board and approved by the Coordination and Supervision Council. It covers daily management of the complex including responsibilities for maintenance and monitoring. It names the members of the Advisory Board and Coordination and Supervision Council and sets out the financial sources for preservation. It also covers responsibilities within the wider management area of the buffer zone. It is not clear whether this has priority over the Urban Conservation Plan (master plan) which covers the buffer zone.

The objectives of the Management Plan are directed at ensuring the preservation of the Selimiye Mosque and transfer of its cultural and functional values as a whole to future generations. They cover structural preservation, management of development pressures, management of visitors, visitor services, research and training, data management and administration. An Action Plan is included with short term (1-3 years) and long term (over 5 years) items.

Under management of development pressures', there are a number of actions directed at controlling urban design and restricting the height of urban redevelopment within the Management Area (Buffer one) to 2-3 floors. It is proposed to restrict traffic entry to the historic core and according to the additional information provided on 28 February 2011, parking lots will be provided outside the buffer zone.

The total number of visitors annually is not known, nor whether the number is increasing. The dirne provincial Cultural and Tourism directorate reports 124,000 visitors to the dirne City Museum and the Foundation Museum annually. The imams and muezzins of the mosque guide visitors to the mosque and control the arrangements for group visits and tours. Recent records by the imams indicate that the congregation can number up to 10,000 regularly on Fridays and up to 15,000 per day during amadan and during the irkpinar Oil Wrestling week.

ICOMOS noted that on an ordinary day the number of tourists visiting the mosque could be no greater than 300-400. An average of 150 tickets is sold daily to the museum in the converted madrasa.

There are a number of annual programs related to the presentation and promotion of the property. These include Museums Week in May, when all elementary students visit the two museums in the Selimiye mosque complex; Foundations Week, also in May organised by the General Directorate for Pious Foundations on a different theme each year, which in dirne focuses on the Foundation Museum; and the World Day of Monuments and Sites in April organised under the presidency of ICOMOS Turkey, which provides scope for exhibitions at the Selimiye complex such as the Project of respect to Sinan.

ICOMOS noted that there is no Tourism Management Plan as such. There is a section (iii) on the Management of Visitors in the Action Plan (Targets 7.1 and 7.2). There is no permanent exhibit on Sinan or the unique features of the complex, at the property. ICOMOS considers that the presentation of the property and interpretation of it to visitors should be improved.

isk preparedness

This is not covered.

ICOMOS considers that a risk preparedness strategy for the event of earthquake, fire or severe storm should be prepared.

Involvement of the local communities

It is proposed that local citizens will be included among members of the Coordination and Supervision Council that is being established by the dirne Municipality to oversee development of the Management Plan for the Selimiye Mosque Complex.

ICOMOS considers that the State Party should be encouraged to include members of the local community on the Coordination and Supervision Council.

esources, including staffing levels, expertise and training

Management and conservation at the site is financed by revenue from the Arasta and by government subsidy.

The dirne Municipality Preparation and Implementation Office of World Heritage under the Deputy Mayor as site coordinator includes a technical and scientific consultant, a chief executive officer, an art historian, public manager, historian, two translators, a mapping technician and a graphic designer.

The dirne regional Directorate of Pious Foundations under the regional manager includes two restoration architects and an art historian.

Officials of the Ministry of Culture organise informative meetings with both dirne Municipality and the officials of the Governorship. Support is also provided by lecturers in the Department of Preservation-estoration at the Trakya University Faculty of Architecture and engineering. The Faculty organises the annual International Symposium of the Architect Sinan and ensures that participating experts have contact with the municipality.

#### Effectiveness of current management

ICOMOS considers that good co-ordination between the various bodies holding responsibility for the Urban Conservation Plan (master plan) for the historical core of dirne city and the Management Plan for the property, including its conservation, maintenance and visitor management is required to ensure effective management of the property. Documentation of the traditional systems of conservation and management of the property should be part of this.

In conclusion, ICOMOS considers that the management system is appropriate. ICOMOS notes that careful coordination is required between the Urban Conservation Plan (master plan) for dirne city historic core and the Management Plan for the nominated property, and the latter should include documentation of traditional systems of conservation and management of the property and be extended to include a risk preparedness strategy for the event of fire, earthquake and storm.

## 6 Monitoring

An architect from the dirne regional Directorate of Pious Foundations has been assigned to carry out monitoring duties. These include regular visits (every three months) to check humidity levels, vegetation growth, the condition of the interior decoration and ornament, effects of global warming, provide photographic documentation and organise necessary work. A Conservation, Implementation and Control Bureau is soon to be established within dirne Municipality and will initiate a systematic operation for monitoring the property and the buffer zone.

ICOMOS considers that visitor numbers need to be monitored accurately by an independent monitor.

---

In conclusion, ICOMOS considers that the proposed monitoring system is appropriate provided visitor numbers are accurately monitored, and that the proposed new documentation is required as an adequate base.

---

## 7 Conclusions

There is no doubt that the nominated property as a Mosque Complex satisfies criterion (i), being the supreme masterpiece of the architect Sinan, the most important architect of the Ottoman period. Criterion (iv) is also met. It is recommended that the property be renamed as The Selimiye Mosque Complex at dirne' in order to convey the unified and harmonious nature of the property, and the State Party was requested to consider this in the letter from ICOMOS of 13 December 2010. The response from the State Party of 28 February 2011 states agreement with this proposal. The property meets the conditions of Integrity and Authenticity.

It is noted that the buffer zone boundary has been recently amended to include additional view corridors. The plan showing the new boundary has been provided by the State Party. In view of the importance of the dominant setting of the property and its landmark status, it is extremely important that all view corridors be protected. ICOMOS therefore welcomes this extension and considers it appropriate.

Recommendations with respect to inscription  
ICOMOS recommends that the Selimiye Mosque Complex at dirne, Republic of Turkey, be inscribed on the World Heritage List on the basis of *Outstanding Universal Value*.

#### Recommended Statement of Outstanding Universal Value

#### Brief synthesis

Dominating the skyline of dirne, former capital of the Ottoman Empire, the Selimiye Mosque Complex commissioned by Selim II is the ultimate architectural expression by the architect Sinan of the Ottoman Empire. The imposing mosque stepping up to its single great dome with four soaring slender minarets, spectacular decorated interior space, manuscript library, meticulous craftsmanship, brilliant Iznik tiles and marble courtyard together with its associated educational institutions, outer courtyard and covered bazaar, represent the apogee of an art form and the pious benefaction of 16<sup>th</sup> century imperial Islam.

The architectural composition of the Selimiye Mosque Complex in its dominant location represents the culmination of the great body of work by Sinan, the most outstanding architect of the Ottoman Empire.

reference : The Selimiye Mosque Complex at Edirne is a masterpiece of the human creative genius of the architect Sinan, the most famous of all Ottoman architects in the 16<sup>th</sup> century. The single great dome supported by eight pillars has a diameter of 31.5 over a prayer space of 45mx36m, and with its four soaring minarets it dominates the city skyline. The innovative structural design allowed numerous windows creating an extraordinary illuminated interior. The mosque complex was recognised by Sinan himself as his most important architectural work.

reference : The Selimiye Mosque with its cupola, spatial concept, architectural and technological ensemble and location crowning the cityscape illustrates a significant stage in human history, the apogee of the Ottoman Empire. The interior decoration using Iznik tiles from the peak period of their production testifies to a great art form never to be excelled in this material. The mosque with its charitable dependencies represents the most harmonious expression ever achieved of the Turkish style, this most peculiarly Ottoman type of complex.

#### Integrity

The Selimiye Mosque Complex includes all the attributes of its Outstanding Universal Value within the property boundary, is well-maintained and does not suffer from adverse effects of development. In view of the importance of the dominant setting of the property and its landmark status, it is extremely important that all view corridors continue to be protected.

#### Authenticity

The Mosque Complex retains its authenticity in terms of form and design, materials and substance. The Mosque and Arasta retain their authenticity in terms of use and function, spirit and feeling. The madrasas have been slightly modified to serve appropriate new uses as museums.

#### Management and protection requirements

The property is protected under the National Act on the Preservation of Cultural and Natural Heritage no. 2863 and the Act on Pious Foundations no. 5737, and all works require the approval of the Regional Conservation Council. A Coordination and Supervision Council, constituted by representatives of local and central institutions is being established by the Edirne Municipality to oversee development of the Management Plan for the Selimiye Mosque Complex.

In addition there will be an Advisory Body made up of academics, representatives of NGOs, Chamber of Architects, local and central government and local citizens, which will evaluate the Management Plan and provide suggestions.

The objectives of the Management Plan are directed at ensuring the preservation of the Selimiye Mosque and transfer of its cultural and functional values as a whole to

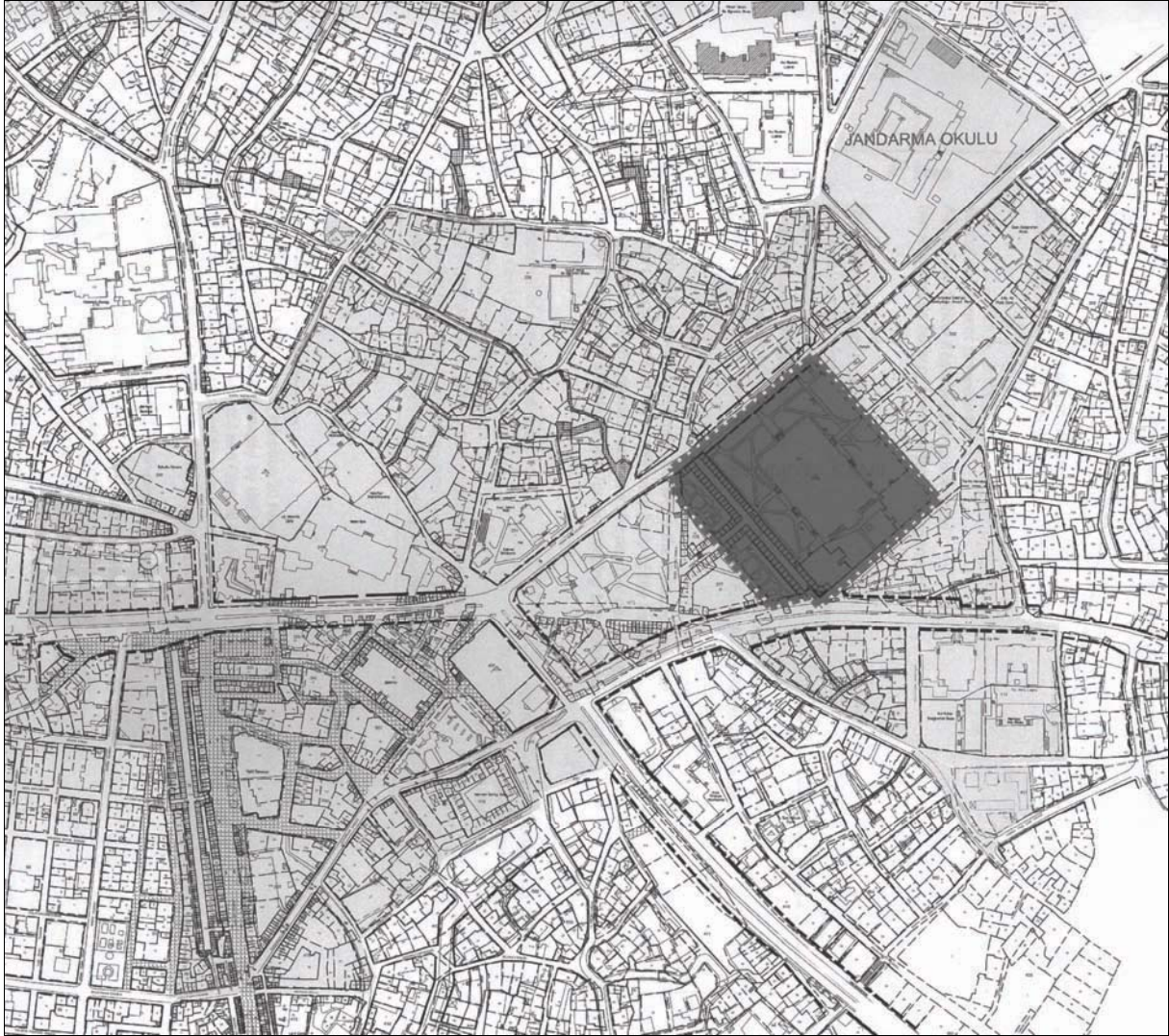
future generations. They cover structural preservation, management of development pressures including urban development within the buffer zone, management of visitors, visitor services, research and training, data management and administration. An Action Plan is included with short term (1-3 years) and long term (over 5 years) items.

Good co-ordination between the various bodies holding responsibility for the Urban Conservation Plan (master plan) for the historical core of Edirne city and the Management Plan for the property, including its conservation, maintenance and visitor management is required to ensure effective management of the property. Documentation of the traditional systems of conservation and management of the property should be part of this.

ICOMOS recommends that the State Party give consideration to the following:

- Submit for review to the World Heritage Centre the urban design proposal currently under preparation for the large green space immediately to the south-west of the complex in accordance with the Operational Guidelines for the Implementation of the World Heritage Convention paragraph 172;
- Give specific attention to the overall coordination between the Urban Conservation Plan (master plan) for the historical core of Edirne city which includes the nominated property and buffer zone, and the Management Plan for the property;
- Reinforce cooperation between Wakf and local and governmental agencies by including representation of the Wakf on the Coordination and Supervision Council and Advisory Board;
- Include documentation of traditional systems of conservation and management of the property in the Management Plan;
- Develop a risk preparedness strategy for the possible event of fire, earthquake and storm;
- Undertake research of the garden within the outer courtyard with a view to reinstating a more appropriate landscape treatment;
- Further develop tourist facilities and interpretation;
- Give specific attention to the application of height restrictions in the buffer zone.





Map showing the revised boundaries of the nominated property



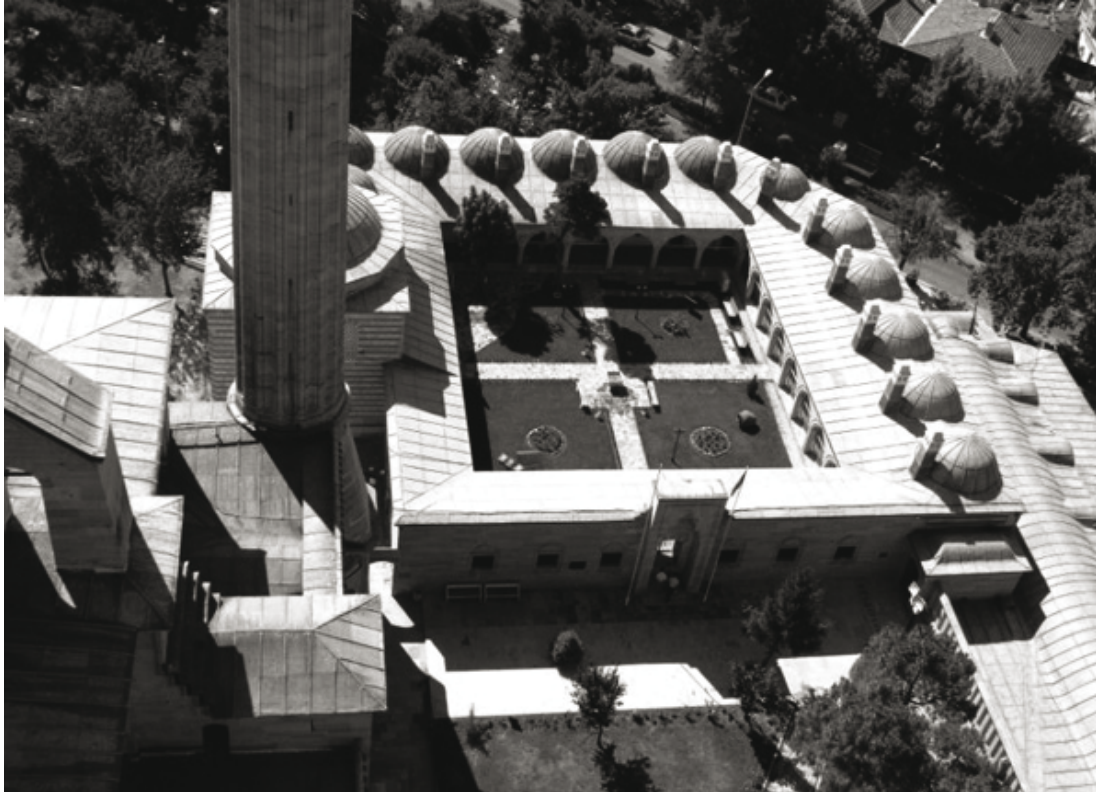


General view of the nominated property



The Mosque, interior view of the dome





Aerial view of the Madrasa Dar' l Hadis (Turkish and Islamic Arts Museum) from the minaret



The outer courtyard of the Mosque

---

# Residence of Bukovinian and Dalmatian Metropolitans Ukraine No 133

---

Official name as proposed by the State Party  
The residence of Bukovinian and Dalmatian  
Metropolitans

Location  
Chernivtsi City, Bukovyna  
Ukraine

**Brief description**  
Standing on a promontory between the Prut river and its tributary, the architectural ensemble of the residence of the Bukovinian and Dalmatian Metropolitans is a masterful synergy of architectural styles created from 1864 to 1882 by famous Czech architect Josef Hlavka. The residence is combined with a seminary and monastery and dominated by the domed, cruciform Seminary Church within a garden and park adorned with garden buildings. Together they embodied a powerful Orthodox Church presence during Hapsburg rule, reflecting a policy of religious and cultural toleration at that time.

**Category of property**  
In terms of categories of cultural property set out in Article I of the 1972 World Heritage Convention, this is a *monument*.

## 1 Basic data

Included in the tentative List  
11 June 2007

International Assistance from the World Heritage  
Fund for preparing the Nomination  
None

Date received by the World Heritage Centre  
29 January 2010

**Background**  
This is a new nomination.

**Consultations**  
ICOMOS has consulted several independent experts.

## Literature consulted selection

Bahr, W., Josef Hlavka. In tschechischer Architekt, Maumeister und Mäzen im alten Österreich, in *Österreich in Geschichte und Literatur*, 48, 2004, pp. 356-374.

Brumfield, William Craft, *The Origins of Modernism in Russian Architecture*, University of California Press, Oxford, 1991.

Documentation Centre for Sacri Monti, Calvaries and Devotional Complexes in Europe, *Atlante dei Sacri Monti, Calvarie e Complessi devozionali europei*, data base [http://www.sacrimonti.net/User/index.php?PAG\\_Sito\\_en/db\\_europa](http://www.sacrimonti.net/User/index.php?PAG_Sito_en/db_europa) (accessed 18.12.2010).

Frankova, Ruth, *Czechs in History Josef Hlavka one of the greatest Czech philanthropists*, Czech Radio 7, Radio Prague 12/03/2008 <http://www.radio.cz/en/section/czechs/josef-hlavka-one-of-the-greatest-czech-philanthropists> (accessed 26/10/2010).

Hirsch, Marianne and Leo Spitzer, *Ghosts of Home The Afterlife of Chernivtsi in Jewish Memory*, University of California Press, 2010.

Prokopovych, Markian, *Habsburgemberg Architecture, Public Space, and Politics in the Galician Capital, 1821-1918*, Purdue University Press, West Lafayette, Indiana, 2009.

Redl, D., Zwischen Wien und Czernowitz: Zu Werdegang und Wirken historistischer Architekten der k.k. Monarchie, in *Mitteilungen der Gesellschaft für vergleichende Kunstforschung in Wien*, 54, 2002, pp. 2-12.

Sailer, G., Josef Hlavka und die k.k. Central-Commission, in *Österreichische Zeitschrift für Kunst und Denkmalpflege*, 1990, pp. 151-155.

**Technical Evaluation Mission**  
An ICOMOS technical evaluation mission visited the property from 20 to 24 September 2010.

**Additional information requested and received from the State Party**  
Additional information was requested from the State Party on 22 September 2010 including:

- a detailed plan of the complex showing its layout and garden with locations and plans of the churches;
- clarification of why the nominated property boundary does not extend to the north-west point of the promontory and information on any earlier occupation of the site;
- further explanation of the impact on the property of alterations made to the complex in order to accommodate university use;
- clarification of the number of visitors and tourists allowed in the property at any one time.

A response was received on 8 November 2010 providing the requested information which has been incorporated into the relevant sections below.

**Date of ICOMOS approval of this report**  
10 March 2011

## 2 The property

### Description

The nominated property covers 8 ha and is surrounded by a buffer zone of 244.85ha.

The property is located on the south-eastern slope of the high promontory between the Prut river and its tributary the Lokuchka to the north-east of the historic inner city of Chernivtsi. It is bounded on the north-east by Josef Hlavka Street; on the south-east by Otsiubinskiy Street and on the south-west by Nekrasova Street. The high point of the hilly promontory known as Dominik Hill, on which the property is located, is to the north-west. The State Party clarified in its additional information that the land reaching to the north-western point did not historically belong to the nominated property and at present belongs to the city land reserve.

Now in use as the Yuriy Fedkovich Chernivtsi National University, the property comprises a walled entrance courtyard facing the former residence of the Metropolitan, flanked on the left by the former theological seminary building with the Church of the Three Hierarchs and on the right by the former monastery building with its clock tower, the whole enclosed in an outer, walled, landscaped park. At the south-west end of the Metropolitan residence building is the St. Ivan of Suceava Chapel.

The buffer zone covers the whole promontory and its forested slopes, surrounding the property and extending to its south-east to include the historic inner city of Chernivtsi. The historic inner city of Chernivtsi was declared a Conservation Zone in 1995. The first settlement was a distant fort on the opposite bank of the river Prut, followed by a small town of wooden houses and churches in the present location of the historic inner city. The small timber church of St. Nicholas (1607) dates from this time. The remainder was replaced completely during the period of the Hapsburg Empire, with a new town plan laid out by the French architect Albert Martin in 1825. However the focus of the main streets on the central square with the town hall remained unchanged in the new plan. The architecture of the present inner city is rich and varied, incorporating churches and commercial buildings in a range of 19<sup>th</sup> century styles including Neo-classical, Romantic, Renaissance Revival, Neo-Baroque and Viennese Secession, as well as buildings of the Romanian period from the 1920s to WWII representing Futurism, Constructivism and Functionalism. Important buildings include the 17<sup>th</sup> century St. Nicholas' Church, the Armenian Church said to be also designed by Josef Hlavka, the Wiener Sparkasse designed by Hubert Gessner (1901), the Romanian Orthodox Cathedral, St. Nicholas' Cathedral, the former Synagogue (now a cinema), the Theatre, the Railway Station, the City Hall and the former Guest House of the Metropolitan residence.

### residence buildings and churches

Constructed in intricately worked red brick with stone dressings, the residence buildings incorporate stylistic influences from Byzantine, Romanesque and medieval architecture in a remarkable historicist fusion, with round arched windows, castellated parapets, great stepped gable walls and ornately patterned, glazed tile roofs. The central court measuring 100m x 70m and laid out with box hedges as a formal garden is entered via an elaborate castellated gateway, from where a tree-lined path leads through the triple arched entrance to the imposing vestibule of the residence.

This central building contained the apartments of the Metropolitan bishops, and the lavishly decorated halls where they held meetings and entertained guests. On the first floor level the major spaces are arranged as an enfilade off the main gallery (a corridor 77m long and 3m wide), which also gives access to the terrace overlooking the garden. The major spaces include the central Synod Hall (known as the Marble Hall, which was the main meeting room for the bishops), the Blue Hall (the former library of the Metropolitan), the Red Hall (a smaller Synod meeting hall), and the Green Hall (the Metropolitan's personal reception room). The rooms are vaulted and ornamented with decorative brickwork, marble, wall paintings and stone carving. The Synod Hall is galleried with arcades supported on alabaster columns, and decorated with fresco paintings and mosaics depicting prominent events in the history of Bukovyna and the Orthodox Church. The Red Hall is described as *an extraordinary beautiful wooden ceiling, whose all painting resembles a sophisticated trimming with red Chinese silk*. The floor is red beech, oak and green lime parquet.

The Seminary building is on a U' plan wrapping around the Byzantine-style domed cruciform church dedicated to the Three Hierarchs (the three great Fathers of the Church - St. Basil, St. John Chrysostom and Gregory the Divine). The church was painted by artists from Vienna ( . Jobst, who made tempera paintings of the Nativity, the Resurrection and the Ascension) and Bukovyna ( . Buchevskiy, who painted the decorative embellishments of the church).

The Monastery building included a Psalmist school, a Museum, Icon-painting school, Visitors' chambers and a Candle shop. The dome of the clock tower at its centre is decorated with Stars of David, which was a gesture of thanks to the Jewish community of the city for its financial help to the building of the complex.

The residence complex is said to have been modelled on the layout of the Holy City, Jerusalem in a schematic but symbolic way, with the Seminary and Church representing Solomon's temple, the presbytery opposite representing the Roman Praetorium, and the residence representing the place of the Holy Sepulchre, with particular halls denoting the various shrines related to the Crucifixion and Resurrection. This represents a 19<sup>th</sup> century version of the well-known *Sacri Monti*, of which there are much earlier

examples in Italy and Poland included on the World Heritage List. Trinitarian symbolism is also present – the general ensemble consists of three main buildings; each facade is divided vertically into three and there are three dominant vertical features (two church domes and the clock tower). As well there are many repetitions of the triune motif in window divisions, and ornamental decoration.

#### The garden and park

Immediately behind the residence is a formal garden containing maples, oaks, lime-trees and hornbeams. In the centre is a monument to Josef Hlavka sculpted in 1937 by A. Severyn, a fir tree dating from the establishment of the park and two ponds with fountains.

Beyond is the park, landscaped in 19<sup>th</sup> century English style with asymmetrical tree-planting and glades, including a pond nestling amongst weeping willows; artificial hills, garden benches, a large stone grotto and sculptures.

#### History and development

Bukovyna became part of the Austrian Empire in 1774, as part of the political treaty with Turkey after Turkey's defeat in the first Russian-Turkish war. The Austrian Emperor Joseph II subsequently placed all townships and monasteries of Bukovyna under the guardianship of one bishop who was to become the founder of the Bukovyna Orthodox Church, established at Chernivtsi in 1781. The Bukovyna parish subsequently joined with the Dalmatian parish and in 1873 Bishop Evhen Hakman was made Archbishop of Chernivtsi and Metropolitan of Bukovyna and by imperial decree. He died before being formally elected to that office, but he had previously instigated the building of the new Orthodox residence complex in 1860.

At that time the site was occupied by an earlier timber bishop's residence, a stone church and wooden bell tower. The State Party provided a plan in its additional information showing the location of the earlier residence on the former Chernivtsi headman's estate, where the Bishop of Bukovina resided from 1774. These buildings were completely demolished prior to construction of the new residence complex.

The project was authorised under the Austrian imperial Ministry of Cults to be designed and supervised by the architect Josef Hlavka to reflect the cultural tradition of the Orthodox Church. It was funded through the *religionsfonds* (fund in connection with the Austrian law regulating the relationship between church and state), and thus became a political statement intended to demonstrate imperial tolerance of the religious group representing the most influential part of the population of the Bukovyna. The project gave great impetus to Bukovyna's construction industry; technical schools were established to train workers, quarries were opened near the Dniester river; brick and tile factories were built, and construction firms and craftsmen from many provinces and crown territories of the Austro-Hungarian Empire were involved. The complex was built in stages from

1864 to 1882. The St. Ivan Chapel and the main residence building (which was the Metropolitan bishops' palace), were constructed first, followed by the theological seminary in 1870, then the monastery wing with visitors' house, refectory, and school of the psalm readers in 1874, followed by the park and park buildings in 1877. The Seminary Church of the Three Hierarchs was begun in 1878. The power and influence of Bukovyna's Orthodox Metropolitane, which was the largest in south-eastern Europe at that time, is reflected in the monumentality of the ensemble. From 1873 it served as the archbishopric and metropolitane of Bukovinian and Dalmatian, with episcopies inadar (now in Croatia),otor (now in Montenegro), Trieste, Vienna and Prague.

Bukovyna was occupied by Russian troops in 1914 and after the collapse of the Austro-Hungarian empire became part of the Kingdom of Romania. The Bukovyna Orthodox Church was combined with the Romanian Orthodox Church. Following World War II, the Metropolitan residence was declared a State Reserve in 1945, and subsequently passed to Chernivtsi State University in 1955. At some previous time lime wash was applied over the murals in the Metropolitan's chapel and in other rooms. Utility buildings were placed in the former service/farmyard of the seminary and monastery.

The State Party advised in its additional information that in the process of converting the buildings for University purposes, some lightweight construction using gypsum plasterboard was carried out in the corridors of the left side of the Metropolitan's residence. Central heating, water supply, air conditioning systems and lavatories with modern sanitary engineering were also installed. In 1963 the architectural ensemble of the residence of the Bukovinian and Dalmatian Metropolitan was registered as a landmark of republican significance in the Ukrainian SSR, and in 1991 of national significance. Since 1967 the complex has been subject to regular maintenance and repairs. The roof was replaced in 1975 and damaged painting and decoration has been restored by the specialist scientific corporation *amyanets-Podilsk estavratsia*. ICOMOS notes that no details of this work have been provided and there is a lack of description of the interiors and insufficient interior photographs in the nomination dossier.

### 3 Outstanding universal value integrity and authenticity

#### Comparative analysis

The State Party has compared the property with national and international examples of architectural ensembles from three typological groups:

- secular aristocratic residences;
- archbishoprics and metropolitan residences of Central and Eastern Europe;
- architectural complexes of similar period and style.

The first two categories cover similar functions to the residence complex but over an earlier time period and include examples such as the 18<sup>th</sup> century Belvedere Palace of Prince Eugene of Savoy in Vienna; the 17<sup>th</sup> century Chateau Vaux Le Vicomte for Nicolas Fouquet; the 17<sup>th</sup> century Bavarian palace of Nymphenburg; the 18<sup>th</sup> century Peterhof in St. Petersburg; the Kiev-Pechersk Lavra (the present residence of the Metropolitan of Kiev and all Ukraine, head of the Ukrainian Orthodox Church), which comprises buildings from the 11<sup>th</sup>–19<sup>th</sup> centuries; the 18<sup>th</sup> century Würzburg archbishops' residence; and the 17<sup>th</sup> century Hellbrunn Palace in Austria built as the archbishop's summer palace. ICOMOS notes that these are all palace complexes within landscaped parks and gardens but they are of different architectural periods and styles.

Within the third category, covering the 19<sup>th</sup> century period and same geo-cultural area, the most appropriate architectural comparison made by the State Party is with the Vienna Arsenal of 1850-56, a military complex containing a chapel and the Museum of Arms, the brick, castellated, round-arched style of which is immediately recognisable in the Bukovyna residence. The Spanish Synagogue in Prague, dating from the second half of the 19<sup>th</sup> century, belongs to the same family of historicist architectural styles. ICOMOS notes that these examples lack functions comparable with the Chernivtsi residence complex and the identifying churches.

The State Party also argues for consideration of the symbolic value of the complex by comparison with other structures embodying spiritual identity that are included on the World Heritage List, giving examples including the Medina of Fez, Morocco (1981, criteria (ii) and (v)); Jesuit Missions of the Chiquitos, Bolivia (1990, criteria (iv) and (v)); Brasilia, Brazil (1987, criteria (i) and (iv)); Statue of Liberty (1984, criteria (i) and (vi)) and Independence Hall, USA (1979, criterion (vi)). It is noted that the residence of the Orthodox Metropolitans was a symbol of popular opposition to assimilation by the ruling state ideology.

ICOMOS considers that while the complex appears to be a unique architectural composition of its period, there is no discussion about other buildings and architectural complexes designed by Josef Hlavka (according to the documentation of the nominated property on the Tentative List there are about 150, including the Armenian Church in Chernivtsi), to support the masterpiece claim. In terms of the symbolic value of the property, comparison could be made with the World Heritage listed Rila Monastery in Bulgaria, rebuilt after a fire in 1833 in a red brick Byzantine revival style as a symbol of national pride in the face of Ottoman rule. The architecture of Rila however, lacks the finesse and symbolism of the historicist fusion evident at the Metropolitan complex.

The lack of discussion about the architecture of the complex in the context of 19<sup>th</sup> century Historicism generally in Europe at the time, and why certain styles

were chosen for the residence makes the comparative analysis inadequate. It would have been relevant to identify the contemporary examples that influenced Hlavka, and emphasis could be placed on his use of several historic styles and building traditions to create something new for a building type that was both old and new.

ICOMOS considers that the comparative analysis needs to be deepened to show that the architectural ensemble of the residence of the Bukovinian and Dalmatian Metropolitans is an outstanding example of 19<sup>th</sup> century Historicist architecture expressing the cultural identity of the Orthodox Church.

The comparative analysis was not made with properties with similar values.

---

ICOMOS does not consider that the comparative analysis justifies consideration of this property for the World Heritage List at this stage.

---

Justification of Outstanding Universal Value  
 The nominated property is considered by the State Party to be of Outstanding Universal Value as a cultural property for the following reasons:

- The complex is a masterpiece of European 19<sup>th</sup> century architecture by the famous architect Josef Hlavka;
- It represents a fusion of architectural and cultural influences from the Byzantine period onwards;
- It preserves the name and memory of Bukovyna, an outpost of Europe that resisted predatory armies from the south-east over the centuries;
- The property embodies the power and influence of the Orthodox Church in north-eastern Europe, which thrived in spite of the area becoming part of the Catholic Austrian Empire from the late 18<sup>th</sup> century.

ICOMOS considers that this justification is not entirely appropriate because it has not been demonstrated that the building complex was Hlavka's best, and the symbolism of the architectural fusion has not been explored. However the property does embody the power and influence of the Orthodox Church in north-eastern Europe, which thrived in spite of the area becoming part of the Catholic Austrian Empire from the late 18<sup>th</sup> century. That this was due to an imperial policy of 'pacification' through allowing various religious groups the unhindered practice of their beliefs and largely independent administration of their ecclesiastical institutions may be more indicative of clever government than genuine tolerance. However it was a significant policy of its time, allowing a few decades of peaceful coexistence in Europe in the late 19<sup>th</sup> and early 20<sup>th</sup> centuries prior to the subsequent upheavals of and after WWI.

## Integrity and authenticity

### Integrity

The State Party states that the property satisfies the condition of integrity since it has been preserved in its entirety and is well maintained. All buildings, gardens and park are retained.

ICOMOS concurs with this assessment and adds that the property includes all elements forming the cultural value of the property, and the property does not suffer from adverse effects of development or neglect. The State Party has confirmed in its additional information that the property boundary is its historic boundary.

### Authenticity

The State Party states that the property satisfies the condition of authenticity in that the form and design, materials and substance are retained in their original state and it still functions as the spiritual, cultural and educational centre of Bukovyna. While it has ceased to serve the original function of accommodating the Metropolitans of the Orthodox Church, it still serves a public function, namely the University. The buildings have not been changed for that purpose, apart from minor lightweight partitioning and the installation of services. In its additional information the State Party stated that utility buildings built during the Soviet period in the service yards flanking the seminary and monastery buildings are to be relocated outside the boundaries of the nominated property.

The main church regained its religious function following the end of the Soviet era, and the Metropolitan private chapel will be restored to its former appearance. The location and setting have been retained as the complex is still approached by streets lined with buildings of the same period as the residence, and the slopes of the promontory on which it is located remain forested.

ICOMOS notes that the whole of the town and residence can be seen from distant opposite hills, but the residence does not dominate to a significant extent. ICOMOS considers that the property may meet the condition of authenticity but the lack of descriptions and photographs of the interiors and details of restoration works makes this difficult to determine. ICOMOS notes in this respect that the original shaped wooden ceiling of the Synod Hall was lost to fire in 1942 and was replaced in the 1950s with a panelled ceiling painted in historicist Stalinist-era style.

---

In conclusion, ICOMOS considers that the condition of integrity has been met and the condition of authenticity could be met but the lack of descriptions and photographs of the interiors and details of restoration works makes this difficult to determine.

---

### Criteria under which inscription is proposed

The property is nominated on the basis of cultural criteria (i), (ii), (iii) and (iv).

### *Criterion i represent a masterpiece of human creative genius*

This criterion is justified by the State Party on the grounds that the architectural ensemble of the residence of the Bukovinian and Dalmatian Metropolitans (1864-1882) is the apogee of the brilliant European architect, public figure, Maecenas Josef Hlavka (1831-1908).

ICOMOS considers that the claim that the complex is the apogee of Hlavka's work lacks substantiation through discussion of other buildings and architectural complexes designed by Josef Hlavka.

---

ICOMOS considers that this criterion has not been justified.

---

### *Criterion ii exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, to urban planning or landscape design*

This criterion is justified by the State Party on the grounds that Chernivtsi architectural ensemble of the residence of the Bukovinian and Dalmatian Metropolitans (1864-1882) by architect Josef Hlavka fully reflects social, economical and cultural influences on the development of architecture and urban planning since antique times, the Middle Ages, absolutism and the Gruender period.

ICOMOS considers that the complex represents a version of 19<sup>th</sup> century historicist architecture and planning, and only represents an interchange of human values in terms of reflecting earlier architectural and planning influences as historicist architecture and planning do generally.

---

ICOMOS considers that this criterion has not been justified.

---

### *Criterion iii bear a unique or at least exceptional testimony to a cultural tradition or to a civilisation which is living or which has disappeared*

This criterion is justified by the State Party on the grounds that the architectural ensemble of the residence of the Bukovinian and Dalmatian Metropolitans (1864-1882) by architect Josef Hlavka is a brilliant specimen of clerical architectural ensembles having no equal in terms of unity of style, architectural and planning perfection, and dimensional expressiveness.

ICOMOS considers that this statement applies to criterion (i). The statement does not address whether the nominated property bears a unique or at least exceptional testimony to a cultural tradition or to a civilisation which is living or which has disappeared. The property could be said to bear an exceptional testimony



to a cultural tradition in the form of the Orthodox Church, but that is not argued in relation to this criterion.

---

ICOMOS considers that this criterion has not been justified.

---

*Criterion iv be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates a significant stage s in human history*

This criterion is justified by the State Party on the grounds that the architectural ensemble of the residence of the Bukovinian and Dalmatian Metropolitans (1864-1882) by architect Josef Hlavka represents a full and well-preserved specimen of organisation of a dimensional architectural ensemble of baroque residence; planning and architectural-dimensional organisation of religious buildings of classic Byzantine 5-dome, cross-domed plan; the application of Byzantine construction technologies of brick building, with the use of red bricks as a decorative material of complex facades and the application of middle-aged construction and planning techniques, specific to religious and monastery building, preserved in an unchanged way.

ICOMOS considers that the property is an outstanding example of 19<sup>th</sup> century historicist architecture, with a dramatic fusion of architectural references seemingly particularly relevant to the residence complex. The embattled nature of the Orthodox Church within the Catholic Austrian empire is perhaps signified by the elaborate, decorative castellation of the residence, while its power and reach is reflected in the tall stepped gable end walls deriving originally from medieval Flemish mercantile buildings, a motif Hlavka had used previously in his maternity hospital in Vienna. On the other hand, the long tradition of the Orthodox Church is signified by the use of Byzantine forms for the domed cruciform churches, while the decorative patterns incorporated in the tiled roofs of the complex signify the folk culture of the people. The *Sacri Monti* religious symbolism referred to in the nomination dossier is a variant of the revived interest in church symbolism which developed during the second half of the 19<sup>th</sup> century. It is unusual in an Orthodox establishment. Possibly in this case it reflects an earlier 17<sup>th</sup> century *Sacri Monti* in the vicinity of the site, which gave Chernivtsi its other name of 'Jerusalem upon the Prut'. In the 19<sup>th</sup> century, historicist architecture could convey messages about its purpose, and the residence of the Bukovinian and Dalmatian Metropolitans does this par excellence. In addition, the combination of purposes and the architectural and decorative quality and opulence could be considered unique through further comparative analysis.

The property could be considered as an outstanding example of an architectural ensemble illustrating a significant stage in human history if the comparative analysis is deepened to show that the architectural

ensemble of the residence of the Bukovinian and Dalmatian Metropolitans is an outstanding example of 19<sup>th</sup> century historicist architectural design and planning expressing the cultural identity of the Orthodox Church within the Austro-Hungarian empire during a period of religious and cultural toleration.

---

ICOMOS considers that this criterion has not been demonstrated at this stage.

---

ICOMOS does not consider that the criteria and Outstanding Universal Value have been demonstrated at this stage.

---

## 4 actors affecting the property

### Development pressures

The property as a University is subject to ongoing upgrading requirements in terms of modern infrastructure such as power supply, heating, sanitary facilities, communications and parking. No one lives within the property; students and staff attend daily. Around 625 permanent, part-time and casual staff work within the property.

An estimated 49,550 residents lived within the buffer zone as at 2007, and a larger number work within the area.

The State Party advised in reply to ICOMOS' query regarding the nature of alterations made to accommodate university use that in the process of converting the buildings for University purposes, some lightweight construction using gypsum plasterboard was carried out in the corridors of the left side of the Metropolitans' residence. Central heating, water supply, air conditioning systems and lavatories with modern sanitary engineering were also installed.

ICOMOS finds that the University's use of the property is appropriate, and that no unsuitable changes have been made or are foreseen to the property.

### Tourism pressures

The University's Historical and Cultural Centre is responsible for running tours within the property. It is open daily and tourists are guided in groups around the church, the main halls, the park and the ethnographic museum. Tourist numbers have increased since 200 and are now around 400 per day. There is concern about damage being inflicted on the interiors by tourists and various mitigating measures are proposed including warning signs and variation of visitor routes to spread the load. The Protection Contract between the City of Chernivtsi and the University requires tourists to be limited to a maximum of 40 in the property at any one time. In response to ICOMOS' request for clarification on this, the State Party stated that *at present under the actual state of the nominated site territory the site itself can host up to 00 tourists at a time.*

ICOMOS considers that the future management of tourist visitation needs to receive serious attention, especially in view of a possible major increase in numbers if the property is inscribed on the World Heritage List. At present there are no proper facilities for tourists, such as adequate toilets, quality refreshment, or souvenir shop. Parking facilities also need improvement.

Environmental pressures

The property is detached from the City of Chernivtsi, thus limiting effects of pollution and traffic.

Natural disasters

The property is located on high ground and not subject to flooding. The complex is equipped with a fire control system. It is located in seismic zone 7.

Impact of climate change

ICOMOS considers that the possible impact of climate change on this property is unclear and should be considered by the State Party.

---

ICOMOS considers that the main threat to the property is the future management of visitors/ tourists.

---

## 5 Protection conservation and management

Boundaries of the nominated property and buffer zone

The boundary of the nominated property is its actual land parcel boundary bordered by Josef Hlavka Street (N), Otsiubinskiy Street (S), Nekrasova Street (SW) and the Dominik Hill housing development (NW). In response to ICOMOS' query re the area of land to the north-west of the property the State Party stated that the land did not pertain historically to the nominated property and at present belongs to the city land reserve.

The boundary of the buffer zone follows Drohobytska Street on the north-west; Chernyshevsky, Chervnia, Nikitina, Gagarina Streets to Huska Street on the north-east; Taras Shevchenko, Orduby, D. Ahuly, Chervonoarmiyska and Shkyl Streets to Berezhnia Street on the south-east, and on the south-west Berezhnia, Pyrohova, Yivska Streets, along the Lokuchka river through Aspyska and Akhimova Street to Drohobytska Street. The boundaries of the buffer zone territory were defined in accordance with recommendations 11 dated 14 January, 2010 of the Research Institute of the Ministry of Culture and Tourism of Ukraine.

---

ICOMOS considers that the boundaries of the nominated property and of its buffer zone are adequate.

---

Ownership

The property on its 8ha site was transferred to Yuriy Fedkovich Chernivtsi National University under the Ministry of Education of Ukraine in 1955.

Protection

Legal Protection

The residence of the Bukovinian and Dalmatian Metropolitans was declared a National Park in 1945 by Decision of the Central Committee of the Ukraine Soviet Socialist Republic. It was registered by Decision of the Council of Ministers of Ukraine SS No. 970 in 1963 as an architectural monument of republican, and since 1991, national significance. The buffer zone was approved by the order of the Ministry of Culture and Tourism of Ukraine No. 661 in 2007. These decisions come under the laws of Ukraine on cultural heritage protection (2000 and amendments 2004); planning and building of territories (2000); architectural activity (1999); and presidential decree No. 587 on national cultural establishments (1994).

Effectiveness of protection measures

All works have been carried out with the approval of the monuments protection department in Chernivtsi, including the conservation of art decoration which must be done by artists who have a State licence.

---

ICOMOS considers that the legal protection in place is satisfactory.

---

Conservation

Inventories, recording, research

The University's Historical and Cultural Centre within the property holds drawings and information covering the history of construction of the property. The residence complex and its art historic values have been the subject of a number of scientific articles and conferences. There are numerous publications relating to the property's history and cultural significance by Ukrainian, Czech, Polish and Austrian historians and art-historians. No archaeological research has been undertaken.

ICOMOS considers that the state of knowledge is fully sufficient as a starting point for present and future conservation work.

Present state of conservation

The property has been subject to condition surveys on a regular basis since 1967. These have been followed up by an annual program of repairs and maintenance to buildings, gardens and park as well as restoration projects including painting and decorating by the specialist scientific corporation 'amyanyets-Podilsk estavrtsia'.

Consequently the state of conservation is reported by the State Party as "good".

ICOMOS concurs and notes that although the roof was replaced in 1975, the quality of roofing was so bad at that time during the Soviet era that since 2006 the roof has been gradually replaced again using quality colour-glazed roof tiles manufactured according to the original patterns and imported from Austria. So far this work has covered the residence building, the Seminary buildings and the Seminary church and is about to start on the clerical house. At the north-western wing of the residence drainage works are currently underway to ameliorate rising damp. The University's limited budget restricts the extent of building interventions and means works must be staged over a long time period. Work is needed to rehabilitate the gardens, especially in the park behind the residence building. The layer of whitewash applied during the Soviet era over the mural paintings in the Metropolitan private chapel and in some other rooms needs to be removed. Also some damaged or lost details of equipment could be restored based on remaining similar items, such as door handles, stoves, light fittings etc. Many of the stoves have been continuously repaired and restored, even though no longer in use. There is some damage to decorative finishes in corridors and stairways due to former leaks (affecting only 3 -5 % of the area).

Detailed information on the interiors and the works that have been undertaken to restore the interior decoration has not been provided.

#### Active Conservation measures

Regular condition surveys and conservation programs continue, within budgetary limitations.

The St. Ivan of Suceava Chapel, which was the private chapel of the Metropolitan bishops, is currently being restored for tourist access. It housed the ethnographic museum post-WWII but the museum has since been relocated to a former classroom.

The main rooms of the Metropolitan palace - the Synod Hall, Red Hall and Blue Hall - are on display to tourists and used for festival events. Some restoration works are planned for these.

The park contains rare species of trees and plants and a number of garden buildings and fountains, which are proposed to be restored.

ICOMOS considers that a conservation plan is required for the gardens and park behind the residence.

#### Maintenance

Regular condition surveys and maintenance programs continue. Work is undertaken according to the urgency of the works required.

ICOMOS finds that the state of the building is stabilised, without sign of defects, and that the postponement of some desirable active rehabilitation work does not have a negative influence on the cultural values of the property.

effectiveness of conservation measures

The State Party has noted that conservation measures undertaken in the past are not appropriate to today's standards and proposes to undertake training programs for staff involved in conservation and maintenance.

ICOMOS notes that descriptions and photographs of the interior decoration and mural paintings of the major halls and churches were not included in the nomination dossier.

ICOMOS considers that the property is well-maintained and conserved within budgetary limits. Special attention is needed to the conservation of the gardens and park behind the residence.

#### Management

Management structures and processes, including traditional management processes

Management of the property is the responsibility of the rector of the University, and is overseen by the Cultural Heritage Department of the Ministry of Culture and Tourism under the State funding program 'Comprehensive Program on Preservation of Historical Architecture in Chernivtsi for 2009-2015', approved by the Chernivtsi City Council in 2008. This covers maintenance, repairs and restoration of buildings and park, occupational health and safety, and site development including transport to the property, parking, and visitor interpretation and education programs. The University funds work related to its own use and needs within the property. Any changes to the property have to be approved by the Ministry of Culture and Tourism.

A 'Protection Contract' is signed annually with the Chernivtsi City Council covering the responsibilities of the University to the property in terms of use and maintenance.

Policy framework: management plans and arrangements, including visitor management and presentation

An outline Management Plan has been prepared for the property setting out goals in accordance with Feilden and Jokilehto (1998). No implementation dates are given, only that it will be reviewed each year in line with the agreement with Chernivtsi City Council, and more thoroughly every five years. This includes proposals for raising awareness among staff and employees of the university, as well as for the local community. The University's library and museum are open to researchers. An exhibition program is proposed. Annual financing of works to the property is provided via the State budget through the 'Programme of reconstruction of historical city centre for 2008-2012'.

The General Development Plan for Chernivtsi gives attention to the growth of tourist infrastructure as one of the major branches of the municipal economy. In relation

to the residence complex, tourism development has to be coordinated with the University's use of the property.

Parking is an issue to be dealt with under the General Development Plan, which proposes a new plan of access to the property, as well as alternative bus routes and traffic limitation in peak periods. Parking lots will be required for tourist buses. Road signs directing visitors to the property will be placed on highways leading to the property.

It is proposed to improve visitor information services by provision of an orientation desk/kiosk, map, leaflets in several languages, explanatory/interpretative signs at certain locations and advising suitable routes, especially for visitors with special needs. Access to adequate toilets is required for tourists, and new facilities will be required. Souvenir shops marketing objects of a high standard are also proposed.

ICOMOS encourages implementation of the Management Plan and recommends that a Tourism Management Plan be developed as part of the Management Plan.

#### Risk preparedness

The University is responsible for safety and security within the complex. It is proposed to undertake a risk preparedness strategy and emergency plan for implementation in case of catastrophe.

ICOMOS considers that a risk preparedness and management strategy should be a priority.

#### Involvement of the local communities

A Methodological Council is set up under the Ukrainian Law on Museums and Art at the University to advise on the activities of the University's History and Culture Centre/Museum. This is headed by the Public Service representative on Issues of National Cultural Heritage and convened not less than four times a year. It is proposed that the scope of this council will be widened to cover general strategy in relation to management of the property and the membership will be expanded to include competent specialists in the study and preservation of cultural heritage. It currently includes representatives of a number of government institutions but no general community members. However it is proposed that representatives of other organisations such as the Ukrainian Orthodox Church, research institutions, other departments of Chernivtsi City Council, travel agencies and non-government organisations can be invited to participate.

ICOMOS considers that the State Party should be encouraged to include members of the community on the Council.

Resources, including staffing levels, expertise and training

The conservation and management of the property is funded by the State budget according to conditions of approval of the financing programs at local and national

levels. The University engages qualified firms and companies to undertake required maintenance, repairs and restoration work. It also employs staff qualified in restoration and reconstruction, tourism and management, history and culture studies, and jurisprudence, some of whom have taken part in the UN SCO Summer School in amość (Poland).

Employees include:

Workers (electricians, construction engineers)	18
Technicians	15
Customer service staff	28
Supervisors and security staff	18
Park maintenance staff	10

Effectiveness of current management

The Management system for the property is considered by the State Party to be satisfactory.

ICOMOS concurs with this assessment but notes that a plan for tourism related infrastructure and the future management of the expected increase in tourist numbers is missing and must receive attention.

In conclusion, ICOMOS considers that the management system is appropriate and special attention is needed for visitor facilities and the future management of tourism at the property. The Management Plan should be further developed to include a risk preparedness strategy and a Tourism Management Plan and implemented as soon as possible.

## 6 Monitoring

The property is regularly inspected by staff from the university's maintenance section twice a year in preparation for the winter season and following it. Key indicators checked include the fence, load-bearing construction, roof and roof elements, heating (boiler house-steam heating), water supply system, sewerage system, electricity supply, fire safety, and the telephone installation. Factors such as damp, failure of damp roofing, fungi damage, masonry exfoliation, spalled brickwork, plaster damage, cracking, leaking roof plumbing, rust damage, timber decay, flaking paint decoration, and faulty garden drainage are noted for all components of the property.

ICOMOS considers that monitoring the condition of the garden buildings, paths, trees and other planting should be part of the monitoring system.

## 7 Conclusions

The nomination needs to be amended with a deepened comparative analysis to show that the property meets criterion (iv) and conditions of authenticity and integrity thus enabling Outstanding Universal Value to be

demonstrated. Amendments need to include discussion of examples by which Hlavka was influenced, and particular reference to his use of historicism and symbolism, with a focus on the way in which the property expresses the cultural identity of the Orthodox Church in the late 19<sup>th</sup> century.

Recommendations with respect to inscription  
ICOMOS recommends that the examination of the nomination of the residence of Bukovinian and Dalmatian Metropolitans, Ukraine, to the World Heritage List be **deferred** in order to allow the State party to:

- Further justify the Outstanding Universal Value of the property as being an outstanding example of 19<sup>th</sup> century historicist architectural design and planning expressing the cultural identity of the Orthodox Church within the Austro-Hungarian Empire by deepening the comparative analysis;
- extend the Management Plan to include a risk preparedness strategy and a Tourism Management Plan, and implement the Management Plan as soon as possible;
- Develop a conservation plan for the gardens and park behind the residence, and include the planting in the monitoring system;
- Provide details of interior restoration works and descriptions and photographs of the interior painting and decoration of the property.

ICOMOS considers that any revised nomination would need to be considered by an expert mission to the site.



Map showing the boundaries of the nominated property





Aerial view of the nominated property



General view





The Metropolitan Palace



The Seminary Building and Church

## E Latin America and the Caribbean

### New Nominations

---

# Bridgetown and its Garrison Barbados No 1376

---

Official name as proposed by the State Party  
Historic Bridgetown and its Garrison

Location  
St. Michael, Barbados

**Brief description**  
Historic Bridgetown and its Garrison are witness to more than three centuries of maritime development which allowed Bridgetown to be a major port city and trading centre in the 17<sup>th</sup>, 18<sup>th</sup> and 19<sup>th</sup> centuries. The port city was also an entrepôt for the movement of goods and enslaved people into the Caribbean and South America. The Garrison became the eastern Caribbean Headquarters for the British Navy until 1805 and its Army until 1905.

**Category of property**  
In terms of categories of cultural property set out in Article I of the 1972 World Heritage Convention, this is a group of buildings.

In terms of the Operational Guidelines for the Implementation of the World Heritage Convention (January 2008) paragraph 14, Annex 3, part is also an historic town which is still inhabited.

## 1 Basic data

Included in the tentative List  
7 October 2009

International Assistance from the World Heritage Fund for preparing the Nomination  
None

Date received by the World Heritage Centre  
1 February 2010

**Background**  
This is a new nomination.

**Consultations**  
ICOMOS has consulted its International Scientific committees on Historic Towns and Villages, on Fortifications and Military Heritage as well as other experts in this type of property.

**Literature consulted selection**

Alleyne, W., and Sheppard, J., *The Barbados Garrison and Its Buildings*, London, MacMillan Caribbean, 1990.

American fortifications and the World Heritage Convention, World Heritage papers no. 19, UNESCO, Paris, 2005.

Fraser, H., and Hughes, J., *The Historic Houses of Barbados*. Bridgetown, Barbados National Trust, 1982; 3<sup>rd</sup> edition, Wordsmith International, 2008.

Gosner, P., *Caribbean Georgian: The Great and Small Houses of the West Indies*, Washington DC: Three Continents Press, 1982.

Hartland, M., *A Concise and Illustrated Military History of Barbados*, Barbados, Miller Publishing Co., 2007.

"Urban Slavery in the British Caribbean", in *Perspectives on Caribbean Regional Identity*, edited by Elizabeth Thomas-Hope, 39-56, Liverpool: Latin American Studies Centre, 1983.

**Technical Evaluation Mission**  
An ICOMOS technical evaluation mission visited the property from 11 to 16 September 2010.

**Additional information requested and received from the State Party**  
The State party has provided ICOMOS with a report entitled "Historic Bridgetown and Its Garrison: Key Developments and Proposals, Refusals and Opportunity Sites 199–2010" on 9 September 2010. Information from this document is incorporated into this report. Additional information was received on 8 and 28 February 2011 including revised maps and a management plan.

Date of ICOMOS approval of this report  
10 March 2011

## 2 The property

**Description**  
Historic Bridgetown and its Garrison are located on the sheltered south-western of the Caribbean island of Barbados. Historic Bridgetown occupies the northern end of Carlisle Bay, whilst the Garrison is two kilometres away to the south. The two are and linked by a narrow strip, now a commercial corridor that curves around the Bay.

Historic Bridgetown was settled by the British in 1628 as part of its trading empire in the New World. It grew in the 17<sup>th</sup> century alongside other outposts in the Caribbean and North America such as Kingston, Boston, and New York. By the late 18<sup>th</sup> century a fort was built at Bridgetown and a Garrison established, linked to the vast network of fortifications in the Caribbean needed to secure Britain's political and economic interests. For over 200 years Bridgetown was the port through which sugar was transported, brought to the coasts from the sugar plantations carved out of the tropical forests, that were manned by labour brought from Africa.

As a colonial city, Historic Bridgetown is representative of 17<sup>th</sup> century English-influenced urban development in the Anglophone Caribbean. Bridgetown was built upon a

street layout resembling early English medieval or market towns with its narrow serpentine street and alley configuration, and is unlike the colonial towns established in the Caribbean by the Spanish (in the 16<sup>th</sup> century) or the Dutch and French (in the 17<sup>th</sup>–18<sup>th</sup> centuries) who utilized a grid pattern.

The Garrison ceased to be used for military purposes, when the British withdrew in 1905-6.

The historic town and its port have expanded rapidly over the past thirty years.

The nominated property consists of the core area of the old town, some of its surrounding suburbs, the port, the Garrison area, including the remains of the fort and the area around Bay Street. These are considered separately.

ICOMOS notes that the nomination dossier does not provide very precise information for many of the individual buildings and areas within the property. It also stresses that the 'property comprises 117 buildings of note and these are dispersed within an area of 187 hectares. The site contains many mixed value buildings in different states of condition and so it is clear that this is not a pure and homogenous ensemble'.

The old town area

This covers the footprint of the 17<sup>th</sup> century town characterised by organic informal planning with a maze of narrow streets.

The original buildings were constructed in timber but proved vulnerable to hurricanes and fires in 1675, 1780 and 1831. Successive re-building has largely kept the original layout of streets.

In 1765 a re-building act called for the use of more durable materials. This fostered the evolution of a distinctive building style that came to be known as Caribbean Georgian – simple symmetrical buildings with many features borrowed from the English Georgian but with overhanging first floor verandas that reflect the hot and humid climate. They were built first of the local coral stone – either rubble or sawn – and then after 1807, and the abolition of slavery, of bricks that were brought in as ballast on English ships. Many Georgian buildings were destroyed in the hurricane of 1831 but reconstructed in a similar style.

In the 19<sup>th</sup> and 20<sup>th</sup> centuries what is called Creolised architecture emerged reflecting the work of Afro-Caribbean artisans. In the late 20<sup>th</sup> century Bridgetown underwent extensive structural renewal. Some structures were rebuilt or have been provided with cosmetic modifications such as newer facades, while still retaining some original features underneath the newer work.

The nomination dossier provides few details of individual buildings and those that are mentioned are not described in their context.

Very few buildings survive from the 17<sup>th</sup> century. Those that do are the Nicholls Building, with a Dutch gable, and its neighbour in Lucas Street, houses in MacGregor Street, the Masonic Lodge and the Jewish Synagogue. The synagogue was one of the first built in the western hemisphere in 1654 by the Sephardic Jews who came from Brazil to pass on their expertise in the sugar industry.

Few details are provided on specific examples of Caribbean surviving Georgian buildings, apart from St Mary's church. There are a few examples of plantation homes that reflect the prosperity of the Barbadian sugar plantation economy.

19<sup>th</sup> century – the Parliament Buildings built in the neo-Gothic style in the early 1870s

The following are the other buildings within the historic areas that have been protected as monuments: the Empire Theatre (1922), the Daphne Joseph Hackett Theatre, Marshall Hall (1861), the Anglican St. Michael's Cathedral and St. Mary's Church, the Nidhe Israel Synagogue, the Calvary Moravian Church, James Street Methodist Church, and St. Patrick's Roman Catholic Cathedral.

Suburbs of the old town

The vernacular 'chattel house', which is found throughout Barbados, still remains a feature of Bridgetown and its environs. The chattel house was the "movable possession" of the Barbadian labourer in the post-emancipation period during the mid to late 19<sup>th</sup> to early 20<sup>th</sup> century. The small wooden houses were usually built in the Georgian style of pine imported from Canada on a foundation of coral blocks or sawn stone. They were erected on tenant land that was rented from a plantation or larger landowner. The nomination dossier mentions that there are still a large number of chattel houses in Bridgetown but does not give details of number and location.

The port

The port developed on the shores of the basin into which the Constitution River flows to the sea. The area, which came to be known as the Careenage, was wide enough to provide anchorage for small vessels and for dock facilities, while larger vessels anchored out in Carlisle Bay, Lighters (large shallow-draft row boats) transported sugar, rum and molasses to the larger ships in Carlisle Bay and brought imported goods as well as passengers. In 1657, a portion of the waterfront was declared a public wharf for use by merchants and others. In the late 17<sup>th</sup> century, several private wharves were added. What remains of the historic portion of the docks and facilities are located within the boundaries of the nominated property while the modern docks are in the buffer zone.

The Bridgetown Dry Dock constructed between 1889 and 1893 is said to be the only surviving dry dock with a screw-lifting mechanism in the world. The 'Screw Dock' or screw lifting dock, represents an innovation in dry dock technology. It was constructed between 1889 and 1893. Its total lifting capacity is 930 tons. In 1897 as many as 1,500 foreign vessels anchored at Carlisle Bay for maintenance and repair.

ICOMOS notes that very few details are provided in the nomination dossier. The Screw Dock is not in use and needs conservation and it is doubtful that it can ever again serve its original purpose. Although it is said to be scheduled for imminent restoration, there is no indication of what its future use would be, or how such a restoration could be made sustainable.

The two storey warehouses with thick walls of coral stone built to withstand hurricanes, have been adapted as restaurants and shops. The Old Harbour Police Station was demolished about ten years ago to be replaced by restaurants and shops.

The Chamberlain Bridge, erected in 1872 across the harbour, a swing bridge operated by two persons, that allowed entry into the inner basin of the Careenage, was demolished and replaced with a hydraulic lift bridge in 2006.

Nowadays the careenage is mainly utilised by pleasure craft.

North-east of the town is Queen's Park House used as the residence of the Commander of the British troops, after they first arrived in Barbados. This building was built in 1780 after a hurricane. It is now used as a theatre and art gallery by the National Cultural Foundation.

The Fort (Needham's and later Charles Fort) and St Ann's Castle

The fort, originally constructed in the 17<sup>th</sup> century from wood, is on the southern promontory of the harbour mouth. By the 1660's it had become the most powerful of the coastal defence structures with some 36 cannons at its disposal. The fort was rebuilt of stone during the first half of the 18<sup>th</sup> century, with two additional fascine batteries constructed on either side during the 1740s, when England was at war with both Spain and France. It became the largest of the many forts which guarded the south and west coasts.

Work on the 14-acre citadel commenced in 1779 with troops being sent out in 1780, as a result of the capture, by the French, of several neighbouring British islands.

The fort is currently part of the gardens of the Hilton Hotel. Only the ramparts remain with a number of cannons dating from 1824.

St Ann's Castle was constructed slightly inland to strengthen defences in the early 18<sup>th</sup> century. It was built

in the shape of a hexagon although it seems the full scheme was never constructed. During the 1840s a tall look-out tower was added. This formed part of the Island's signal stations and between 1914 and 18 it became a wireless station and communicated with ships as far away as the US coastal area.

Both the fort and St Ann's Castle were included in the Garrison area as it developed.

The Garrison area

The Garrison area is the remains of the British colonial Garrison complex.

The construction of the Garrison followed on from the reconstruction of Charles Fort in the 18<sup>th</sup> century. It led to the establishment of 'garrison government' that utilized the socially stabilising military complex of the Garrison to concentrate governing control and to try and temper what was seen as the pure commercialism of the 'plantation government' system that had functioned in Barbados up to this time.

The Garrison site was constructed over a period of some 80 years from 1789.

The Garrison was constructed at the south end of Carlisle Bay, around St Ann's Castle. It covers about 60ha. It consists of three main areas: the open grass parade grounds, the barracks and other buildings to the lower western side, and the fort and site of the naval dockyard next to the coast.

Historically the Garrison was enclosed by walls on the sides away from the coast. Its 8,500 foot (approx 2km) long eastern boundary still retains some of its original wall while the western and southern limits were defined by over 5,000 feet of peninsular coast along Carlisle Bay and the South coast which is now occupied by the Grand Barbados Beach resort. ICOMOS notes that no plans are provided to show the location of the walls and original boundaries of the Garrison, in comparison to what is now nominated.

The former grass parade-grounds are now known as the Garrison Savannah, and used as a horse racing circuit.

The main Bay Street, part of the commercial corridor linking the south coast to Bridgetown, cuts through the site and separates the parade ground from the area with the barracks buildings to the west and the fort beyond.

Within the overall Garrison area there are approximately 100 buildings or sites, of which more than half have been identified as having potential historic, architectural or cultural significance. Only around a dozen are protected structures and these are the ones that are described. Few details are provided of the rest.

Facing onto the Savannah is the Main Guard built in 1804 with a Clock Tower, and in the pediment a coat of

arms of George III, constructed in Coad' stone (a type of pottery). The Main Guard was used among other things as a court martial with the prisoners being housed in a guard house to the North.

The largest building in the garrison is the two storey Stone Barracks built in 1791 for officers. The building suffered extensive damage in the 1831 hurricane after which the double stone arches were added, to replace the destroyed wooden galleries. In 1906 it became government apartments, until it reverted to the military as soldiers' barracks at the end of the 1970's.

Behind this are two brick buildings now painted red. These are the 1790 West India Barracks and the 1842 Iron Barracks (to the south). Together with the Stone Barracks they enclose the north, south and eastern sides of the original and smaller 18<sup>th</sup> century parade ground, now covered with several modern warehouses used by the army for large scale administrative furniture and equipment.

Three further Barracks blocks to the east of the parade ground were built together in 1807-1808 and were said to house 400 men each. They were damaged in the hurricane of 1831 but rebuilt. They are now used as government offices.

A Drill Hall built in 1790 as a barracks, was converted to an armoury after only 20 years. Towards the end of the Garrison period it changed again and became the headquarters office for the Garrison. Despite a number of further changes of use, its adaption to an armoury in the early 19<sup>th</sup> century necessitated its only major physical change.

The Royal Artillery Barracks were built in 1812, and were first turned into apartments and then into commercial units. These are not mentioned in the nomination dossier.

The Garrison's prison is situated in the extreme north-east of the Garrison. Its western, and more visible, portion dates from 1853 while the eastern section dates from 1818. The Complex became the Barbados Museum in 1933.

The Military Hospital was erected in 1803-1806 and damaged by the hurricane of 1831. It was restored in 1840 and later sold as apartments in 1928.

A small part remains of the Regimental Engineers' quarters which once extended down Bay Street.

The Military cemetery, in the west towards the Fort, which pre-dates 1816, is still in use today.

The site of the naval dockyard is now the area of the Mobil oil refinery that was closed in 1998, although the tanks remain. Built in 1805, the dockyard's function was subsequently moved to the English Harbour, Antigua.

The buildings were then used as barracks before being destroyed in the 1831 hurricane.

The Garrison buildings are built on traditional British colonial lines, in a design that can be found throughout the Caribbean but also in India. Many of the buildings date from after 1831 when the earlier buildings were destroyed in a hurricane. The replacement buildings contained iron posts to make them more robust against storms. Some of the barracks now contain government offices. Originally all were painted stone colour.

Several individual or smaller houses are still present on site and have been converted variously to houses or to offices or to the yacht club. Few details are provided to enable understanding of how these relate to the other more major structures.

ICOMOS considers that what is not clear from the information provided is the overall original plan of the Garrison and how far this still survives albeit in many places in-filled with other more recent buildings.

Within the Garrison site there has been some development such as hotels the very tall and extensive Hilton near the fort, the Savannah hotel immediately to the south of the Savannah and the Island Inn and Barbados resort near the northern boundary - and some housing units. Along Bay Street the Garrison buildings have merged with other development along the commercial route. To the south of the Garrison in the buffer zone there are extensive tourist developments along the coast.

Just outside the Garrison area is George Washington House located at the top of Bush Hill to the north-west of the Savannah. Originally constructed circa 1720, it is now the oldest house in the area.

#### History and development

Barbados was briefly Spanish and then a Portuguese possession. When the British settlers arrived in 1628 it was uninhabited.

The 64 settlers had been dispatched by a group of London merchants who had granted them a lease of 10,000 acres of land. Each was given 100 acres to the north of the Careenage waterway on which they planted staple crops and tobacco and cotton. They first imported Amerindian labourers to work the plantations and then later brought in further enslaved labour from Africa, and indentured labour from England, Ireland and Scotland.

In the 1650s the cash crops of tobacco and cotton were displaced in favour of a new crop, sugar. The development of the sugar economy was greatly helped by the migration of Dutch and Sephardic Jewish communities from Bahia and Recife in north-eastern Brazil, from where they had been expelled by the Portuguese. They brought with them capital and expertise in sugar cultivation.

By 1680, the entire landscape of Barbados had been transformed as forested land was cleared for sugar cultivation.

To service the sugar industry - exporting goods and importing labour - the town and port of Bridgetown was developed. In 1681, Governor Dutton of Barbados was granted the authority to build fortifications (this was when the original wooden Needham's Fort was developed), city boroughs, ports and other places for the convenience and for the better loading and unloading of goods and merchandizes.

The earliest boundaries of Bridgetown were defined in 1660 and they remained more or less in place until 1822.

The development of the urban layout of the town clearly reflected Bridgetown's significance as a major town in the English colonial system. In the 17<sup>th</sup> century, the port accounted for 60 percent of the value of English exports to the English Caribbean. The premier port of the Caribbean continued to play a significant role in the trade between England and its American colonies in the 18<sup>th</sup> century.

During the slave period, residential location in the town did not follow a clear-cut pattern which segregated members of the white elite from the enslaved and from poorer whites and free coloureds. A cross-section of peoples and cultures from across the Atlantic could be found in the expanding port town of Bridgetown, but the planning and architecture did not necessarily reflect the social groupings.

Over time, fire and hurricane ravaged the building stock. The major attempt to mould the town into some uniformity came in the 1760s. After a fire had devastated the town in 1766, an Act was passed to permit a special Commission to put into place such regulations and conditions as they felt were necessary to control construction in the town. Henceforth, buildings were made of brick or stone and all buildings were roofed with copper, slate, tile, sawed stone, or block-tin and no other materials.

The precise history of the development of the urban layout is not defined in the nomination dossier, nor are details provided as to which areas contain buildings from which period of history and what evidence there is for who lived where.

The foundations for the eventual establishment of a permanent garrison in Barbados were laid during the period of the Civil War in England (1642-1649). Lord Willoughby, having been appointed Governor of the royalist Barbados by Charles II in exile, arrived in 1650 to strengthen its defences, which included the construction of Needham's Fort in that same year.

The need for a permanent major garrison in Barbados was born out of conflict between Britain and France in 1778 by France's allegiance with the USA during the War of Independence. Work on a 14 acre (5.7 ha) citadel at Fort George commenced in 1779 with troops being sent

out in 1780 as a result of the capture, by the French, of several neighbouring British islands.

The troops were initially located in areas in Bridgetown until temporary barracks were built, in 1783, in what is now Queens Park. With the immediate threat of invasion removed, on cessation of the American War of Independence in 1783, troop numbers were drastically reduced and construction of the citadel at Fort George abandoned.

Nevertheless, the British Government, concerned with the future security of the islands, in 1785, decided to establish permanent land forces in the Windward Leeward Islands with Barbados as the headquarters. The area surrounding Charles Fort and St. Ann's Castle was chosen. Final plans were drawn up in 1789 for a grand scale fortress of approximately 8ha, within which St. Ann's and many of the new buildings would be contained.

The first purchases of land by the Crown occurred during 1789 and 1790, totalling approximately 26.1ha. The first period of construction, of the new Garrison, began immediately and lasted about three years.

The war, being fought on both sides of the Atlantic, had drained British resources in the Caribbean where they were challenged to maintain large numbers of European troops due to the high mortality rates caused by yellow fever and malaria.

In 1795, the British Government approved the recruitment of slaves and, along with Jamaica, the Barbados Garrison provided one of the main bases for the formation of the 'West India regiments'.

The first seven 'West India regiments' were raised in 1795, with the numbers rising to twelve by 1798. Between 1798 and 1806, an estimated 6,376 slaves were bought by the army for these regiments; making the British Army the largest slave trader in the West Indies.

Between 1808 and 1814 new lands were acquired, bringing the total area of the main Garrison site up to about 65.56 ha. The Garrison was now capable of stationing 2,700 men and, with the end of the Napoleonic Wars in 1815, about to enter a period of stabilization.

After the relocation of the naval administrative headquarters to Antigua in 1816, expansion continued although at a much reduced rate. During this time (mid-1820s) there were approximately 130 garrison buildings at the Garrison.

Further development did not take place until the late 1930s, after reconstruction as a result of the 1831 hurricane.

By 1854 troop numbers had fallen to about 1,500 and, in this latter period, the atmosphere of the Garrison began to change to one of greater hospitality. Horse racing had commenced in the 1840s while cricket had been first



introduced to Barbados in 1805. The Ordnance Hospital Complex became an officer's recreational facility.

The decision to remove forces from the colonies was taken in the mid-1890s. The removal of British troops was completed in November 1905, followed in January 1906 by the removal of the battalion of the 1<sup>st</sup> West India Regiment. In the years that followed the Crown sold off all its properties with the majority being passed to Government. All in all, approximately 100 structures and sites from the pre-1906 periods have survived in one form or another.

Barbados became an independent state and formally joined the Commonwealth of Nations on November 30, 1966.

### 3 Outstanding universal value integrity and authenticity

#### Comparative analysis

The analysis compares the historic city and its Garrison with 29 properties inscribed on the World Heritage List such as Historic Centre of Camaguey, Cuba; St. George, Bermuda (USA); Old Havana, Cuba; Brimstone Hill Fortress, St. Kitts and Nevis; Island of Goree and Saint-Louis, Senegal; with 14 properties on Tentative Lists such as Georgetown's Plantation Structure and Historic Buildings, Guyana; St. George Fortified System and Historic District, Grenada; City of Charlestown, Saint Kitts and Nevis; and the Underwater City of Port Royal, Jamaica, and with monumental art erected by or for British heroes in the British Empire as well as other towns or cities not on the World Heritage List but which have comparable architecture or hosted garrisons.

The comparisons are not made of the whole property but rather of certain aspects or features of it under the following headings: urban layout significance, administrative importance, maritime-mercantile significance, military significance, cultural significance, and architectural significance.

The analysis compares Bridgetown's street layout to other 17<sup>th</sup> and 18<sup>th</sup> century towns. The 17<sup>th</sup> century town of Port Royal in Jamaica was devastated by an earthquake in 1692, and its street layout, particularly its historic shoreline development, is no longer visibly intact above sea level. All other urban spaces in the British Caribbean (Basseterre and Charlestown, St. Kitts and Nevis; St. John's, Antigua; St. George's, Grenada; Georgetown, Guyana and Port of Spain, Trinidad) were subsequently planned on a grid pattern like towns in the French (Pointe-à-Pitre, Guadeloupe; Fort-de-France, Martinique; Jacmel, Haiti); Dutch (Curacao, Netherlands Antilles and Paramaribo, Suriname) and Spanish Caribbean (Havana, Cuba; Santo Domingo, Dominican Republic; San Juan, Puerto Rico). The Historic town of St. George (Bermuda) is seen as the only other urban space that has a street layout similar to Bridgetown.

In terms of administrative importance, the comparative analysis states that Bridgetown is the 'oldest town with a continuous site of political administration in the British Commonwealth outside the United Kingdom'. However the comparators offered do not cover the whole spectrum of British colonial towns. Furthermore, they relate to administrative systems rather than any reflection of those systems on the ground.

In terms of mercantile-maritime significance, it is suggested that these aspects of the British colonial presence in the Atlantic area are currently not reflected on the World Heritage List, in the form of a port used for trade and the transfer of people.

In terms of military significance, comparisons are made with other similar garrison and military settings in the Caribbean and North America such as Jamaica's Garrison, Nelson's Dockyard in Antigua, St. Kitts Fortress, the original garrison site located north-east of St. George, Fort Prospect and the Naval Dockyard in Bermuda, the Garrison complexes in Fredericton, Canada, Fort King George, Georgia, Colonial Michilimackinac, Michigan, Fort Henry, Canada, and Crown Point, New York. Mention is also made of garrisons in the Far East, Australia and Singapore.

It is suggested that the closest comparisons with Bridgetown's Garrison occur regionally in terms of materials being built of ballast brick or stone.

In terms of size only Jamaica's Garrison (which protected military and trade interests in the northern Caribbean) could be considered as a direct comparison with Barbados. Jamaica's Up Park Camp provided the headquarters for administering British forces in the Bahamas, Bermuda and Belize; while Barbados administered all those stationed from St. Kitts in the north, to British Guiana in the south.

However, while Jamaica retains some tangible evidence of its 18<sup>th</sup> and 19<sup>th</sup> century garrison plant, the integrity of the site has been seriously compromised. In all other respects, the remaining garrison outposts within the British Caribbean were static national defensive stations.

However the other large garrison in the Caribbean which is not described in detail was the garrison of Shirley Heights which overlooks what is now called Nelson's Dockyard in Antigua (and was the dockyard that took over from Barbados in the early 19<sup>th</sup> century). Much of the garrison is now in ruins but the dockyard is now well restored and within a national park, and it is possible to appreciate the layout of the whole complex.

Out of the many garrisons established by Britain elsewhere in the world, those mentioned include barracks in Singapore, Sydney and Hong Kong (but no mention is made of the large barracks inside the Red Fort in New Delhi). It is suggested that Bridgetown's Garrison has the most intact architecture and continuity of use and also "Its garrison area is one of only three

such areas in the world and the only one in the Western Hemisphere.” However ICOMOS notes that what is not clear is which sites are being referred to. And no distinction is made between naval garrison and those built inland.

ICOMOS considers that the comparisons are related more to the size and continuous use of the Barbados Garrison, and particularly the barracks blocks, rather than its integrity in terms of barracks, fort and naval dockyards which were the components needed in the Caribbean. Although Barbados retains more of its barracks buildings, it is no longer possible to gain a clear link between the barracks, the forts, the naval dockyards and the sea. By contrast, Antigua retains much more clearly the relationship between barracks, dockyard and port.

In terms of whether the barracks blocks might be considered to be of architectural significance, ICOMOS considers that more detailed comparisons would be needed to substantiate this.

In terms of cultural significance it is suggested that Barbados is significant as a port that trans-shipped slaves. Comparisons are made with Gorée and St. Louis in Senegal which played similar roles in the trans-shipment of enslaved Africans in French West Africa.

In terms of architectural significance, the comparative analysis states that “Caribbean creolized urban architectural principles and design were constant throughout the redevelopment of the town and have contributed to the development of a unique Barbadian vernacular” and also “the development of the chattel house in the post emancipation period is unique to Barbados”. However few specific details are provided to substantiate these statements.

The comparative analysis is broadly in two parts: one of comparisons for the city in terms of urban plan, architecture, and the use of the port and second of comparisons for the Garrison area.

For the city it is clear that the organic form of the urban plan, that reflects its English influence, is different from many other towns in the Caribbean that have grid layouts reflecting influences from other European colonial powers. In terms of the architecture that populates that plan, a strong case has not been made for the way it reflects specific social organisation or bears evidence of how the city developed in an outstanding or unique way. Much of the details provided in the nomination dossier are historic rather than contemporary and no convincing case has been put forward for how the ensemble of buildings that exists today, combined with the organic plan can be said to demonstrate in an outstanding way a cultural tradition.

It is suggested that port cities are underrepresented on the List. However the remains of the port in Bridgetown

have been much altered and the future of the screw dock is uncertain.

In terms of the garrison, it has been shown that the barracks blocks that survive at Bridgetown and the area covered by the garrison are more extensive than many other remains of garrison areas although those at the Red Fort in Delhi have not been considered and these are much larger than Bridgetown and were in use until 2003. The comparison separates barracks blocks from naval dockyards, whereas in the Caribbean these were closely linked. A more meaningful comparison would be between the whole ensembles of garrison buildings that were within the same area. In Barbados there has been erosion of the building near the sea, with the dockyard being destroyed and the fort compromised, but the main barracks buildings have survived, whereas in Antigua the naval dockyard has survived and the barracks blocks are mainly ruins, although overall the site retains its integrity as a spatial unit.

In conclusion ICOMOS does not consider that a case has been made for the city to be considered for the World Heritage List and it does not consider that a full enough case has been made for consideration of the garrison area.

---

ICOMOS considers that the comparative analysis does not justify consideration of this property for the World Heritage List at this stage.

---

Justification of Outstanding Universal Value  
The nominated property is considered by the State Party to be of Outstanding Universal Value as a cultural property for the following reasons:

- As one of the earliest towns with a unique serpentine street layout established in the mid 17<sup>th</sup> century as an urban centre and port in the Caribbean network of military and commercial outposts of the British Empire, Historic Bridgetown and its Garrison was the focus of trade-based English expansion in the Americas.
- Historic Bridgetown was an entrepôt not only for goods and slaves destined for Barbados, but was also the trans-shipment point for enslaved persons distributed throughout the Americas.
- A new architectural style, Caribbean Georgian, was created by the local builders.
- As a result of its strategic location and economic importance at the height of European imperial conflicts in the region, Historic Bridgetown and its Garrison became the Western Caribbean Headquarters for the British Navy until 1805 and its Army until 1905. The British Colonial Garrison concept developed into a form of imperial administration and control for their British colonies and, as such, is a unique form of garrisoning, not replicated by other imperial powers.

- Its Garrison area is one of only three such areas in the world and the only one in the Western Hemisphere.
- Historic Bridgetown's Garrison is the most structurally complete 18<sup>th</sup> and 19<sup>th</sup> century British Colonial Garrison in the world.
- Historic Bridgetown and its Garrison participated in the international trade not only of goods, but also the transmission of ideas and cultures that characterized the developing colonial enterprise in the Atlantic World.

ICOMOS considers that although Bridgetown was the focus of trade-based English expansion in the Americas, the issue is whether what survives demonstrates that role, whether the surviving fabric – the fusion between the layout of the town, its buildings and the remains of its port and garrison – can be seen as an entity that is outstanding in the way it manifests its former power and influence.

Although the town has an organic layout which is unusual in the Caribbean, the relationship between its layout and the buildings does not appear to represent clearly any distinctive social structure or historical periods or process to an exceptional degree. And neither does the architecture appear to be exceptional. The Caribbean Georgian buildings and the chattel houses both exist outside Bridgetown and the numbers, and quality, of those within the town has not been shown to be exceptional.

The port was an entrepôt not only for goods and slaves destined for Barbados, but was also the trans-shipment point for enslaved persons distributed throughout the Americas. However there is slight evidence of that role in the remaining buildings and the port has been much altered.

The Garrison government model adopted by the British was not entirely replicated by other imperial powers, and Historic Bridgetown and its Garrison was the eastern Caribbean Headquarters for the British Navy until 1805 and its Army until 1905. The issues are whether the Garrison at Bridgetown can be said to be an exceptional example of the garrison approach and whether it can also be said to reflect the important role of Bridgetown's garrison in the eastern Caribbean over a period of 100 years.

So far, as set out above, it appears to be the case that the Garrison at Bridgetown and that of Antigua complement each other and reflect the importance of garrisons in the east and west of the Caribbean respectively. The case has not been made for considering the Bridgetown Garrison in building terms to be the most exceptional and complete in the world in architectural terms.

It is stated that Historic Bridgetown and its Garrison participated in the international trade not only of goods, but also the transmission of ideas and cultures that

characterized the developing colonial enterprise in the Atlantic World. Whereas this is true, a case has not been made for how the property reflects those ideas.

#### Integrity and authenticity

##### Integrity

The nomination dossier includes a single section for both integrity and authenticity.

According to the State Party, the conditions of integrity are guaranteed by the persistence of the irregular urban layout, the presence of administrative, mercantile and maritime buildings, the churches, residential and chattel houses, the large number of buildings and structures associated with the Garrison, and the public monumental art.

ICOMOS considers that the area nominated for the town covers the area that reflects the layout of the first settlement and the port. The area nominated for the garrison contains the overall area of the Garrison. The area nominated to join the two areas is a strip of the bay along Bay Street that has been added as a link rather than for what it contains.

Within the town and port the street layout largely persists but the condition of existing buildings and structures vary widely from near ruin to recently restored. Overall the urban fabric has not been shown to reflect a coherence that in turn relates to its function and history. The port area has been considerably altered and the condition of the Screw Dock is such that the overall structure is vulnerable.

In terms of the garrison, a large proportion of the main buildings survive – from the barracks and administrative and service sections, but the naval dockyard no longer survives and the setting of the fort has been much compromised by the building of the Hilton Hotel.

The basic road network at the Garrison has not changed since the complex was closed in 1905. Its boundary wall remains largely intact and entrances to the site occur at their original locations. Within, the layout of the main barracks blocks has been compromised by the addition of modern warehouses, and overall the garrison area has had a number of new buildings, housing and hotels that detract from the legibility of its original layout.

##### Authenticity

A particular strength of the nomination dossier is the way it is underpinned by extensive historical, architectural and other research publications on Historic Bridgetown and its Garrison.

Nevertheless, the city appears to have undergone extensive structural renewal during the latter part of the 20<sup>th</sup> century. Its mainly 19<sup>th</sup> century building stock suffers from neglect or has been much rehabilitated and adapted for commercial or tourism uses as opposed to

being conserved or restored with a heritage preservation perspective. ICOMOS considers that it is thus difficult for the overall urban area to convey its meaning in terms of reflecting social, cultural or, economic importance. The port has been much altered and that too can no longer be read for the way it formerly functioned.

Within the garrison, the main individual barracks blocks and administrative buildings retain a high degree of authenticity. However ICOMOS notes that little information is given on the large number of ancillary buildings, many of which have been converted to other uses. The fort and naval dockyard area and the coastline around the south-west of the garrison have been much compromised by new development. Overall the ability of the garrison to convey its meaning in terms of its original function and the relationship between the various component parts is vulnerable, as development has to a degree removed the overall clarity of its layout.

---

ICOMOS considers that the conditions of integrity and authenticity of the property as nominated have only been partly met.

---

Criteria under which inscription is proposed

The property is nominated on the basis of cultural criteria (ii), (iii) and (iv).

Criterion (ii): exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design;

This criterion is justified by the State Party on the grounds that in the scramble for the exploitation of resources and wealth in the Americas, Historic Bridgetown and its Garrison was pivotal to development of the infrastructure and projection of British imperial power within the contested theatre of the Atlantic World spanning the 17<sup>th</sup> to 19<sup>th</sup> centuries. In addition to its prominence in the development of administration in the English colonies of the Atlantic World, Historic Bridgetown and its Garrison was the centre for the transmission of ideas concerning administration, trade, communications, culture, science and technology in the British Empire in the 17<sup>th</sup> century and early 18<sup>th</sup> century, and in the Anglophone Caribbean from the 17<sup>th</sup> to 19<sup>th</sup> centuries. The town's buildings were designed in the Georgian style, which was transplanted from Britain, but with adaptations for the tropical climate, that came to be known as Caribbean Georgian.

ICOMOS considers that Barbados did have a pivotal role in the development of the English colonies of the Atlantic World and was one of the centres for the transmission of ideas concerning administration, trade, communications, culture, science and technology in the British Empire in the 17<sup>th</sup> century and early 18<sup>th</sup> century, and in the Anglophone Caribbean from the 17<sup>th</sup> to 19<sup>th</sup> centuries. However what needs to be demonstrated is precisely

how the nominated property manifests this influence and ideas and this has not been set out precisely.

ICOMOS considers that the development of the garrison might be said to have absorbed ideas from Europe and further transmitted them to other areas of the Caribbean and that these can be seen in the fabric and layout of the buildings, but it has not been demonstrated how the city similarly reflects an absorption and transmission of ideas.

---

ICOMOS considers that this criterion has not been justified.

---

Criterion (iii): bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared;

This criterion is justified by the State Party on the grounds that in the pre-emancipation period, the maritime mercantile orientation of the town produced a cosmopolitan culture comprising free and enslaved persons living and working in an urban matrix that supported and supplied the dominant plantation-based economy of the island. The social stratification of Bridgetown over this period is well documented with references to several occupational, religious, ethnic, free and enslaved groups (including merchants, mariners, traders, artisans, hotelkeepers, Anglicans, Quakers, Methodists, Sephardic Jews, freed persons, bonded servants and enslaved Africans) who all lived and worked in the town supporting the commercial interests of the rural plantation economy and international trade.

These communities made their mark on the townscape with their activities participating in the creation of a creolized Caribbean culture, which intangibly survives in the dialect, music and cultural practice; and tangibly survives in urban architecture designed by colonial architects for the tropical environment and built with local labour. Some communities have left lasting impressions of their presence with the erection of monuments to their beliefs such as the numerous protestant Churches (Anglican, Methodist, and Moravian), Catholic Cathedral and Jewish Synagogue that are still used today. Historic Bridgetown and its Garrison is the ideal urban space to map social, cultural, economic and political continuities and transformations from the pre-emancipation to post-emancipation period.

ICOMOS considers that though the nomination dossier demonstrates that the nominated property has played an important role in the creolization process, its outstanding significance has not been demonstrated within the framework of the Caribbean process of creolization where, for instance, France, Spain and other nations have also played significant roles.

---

ICOMOS considers that this criterion has not been demonstrated at this stage.

---

Criterion (iv): be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history;

This criterion is justified by the State Party on the grounds that the Garrison and fortifications constitute an integrated semi planned urban landscape with a strong architectural theme, surviving over the years, to represent an almost complete 18<sup>th</sup>-19<sup>th</sup> century British colonial Garrison. The remaining landscape, which has been essentially unchanged for the last 200 years, provides a unique glimpse into a pivotal period and significant stage in the history of British imperial administration and the Garrison's roles as a staging base for the advancement of British interests in the region. As a major centre of maritime trade and military operations, Historic Bridgetown and its Garrison possess an outstanding collection of colonial warehouses and dock facilities. The Parliament of Barbados is a testimony to almost 400 years of stable government in the former English colony and now independent state in the British Commonwealth. The variety of Catholic, Protestant and other sacred spaces or places of worship in a comparatively small place is unparalleled in the region.

ICOMOS considers that the Garrison as an ensemble might have the capacity to demonstrate this criterion on its own. However further comparisons need to be made to establish more firmly the scope of the garrison, its relationship with other Caribbean garrisons and with other garrisons around the world in order to demonstrate more precisely how it might be considered to be outstanding and to confirm its overall integrity and authenticity.

The Screw Dock is an outstanding structure but its context has been eroded and it is vulnerable and not functioning. For the most part, the individual buildings in the urban area, taken singly, are not unique, nor outstanding. The Parliament Building, although it represents an early form of government in the Caribbean, is itself not an outstanding example of a legislative building and cannot be seen as an "outstanding example." Also, in considering the religious buildings, with the possible exception of the synagogue, they do not appear to be outstanding, or unique, in design. As an ensemble the urban buildings do not have a coherence that allows them to be read as outstanding examples of urban planning or architecture.

---

ICOMOS considers that this criterion has not been demonstrated at this stage.

---

In conclusion, ICOMOS considers that part of the nominated property, the garrison area, might possibly meet criterion (iv) if the comparative analysis is deepened and the conditions of authenticity and integrity can be met, but that the property as currently nominated does not meet the proposed criteria, has not met the conditions of authenticity and integrity and the

Outstanding Universal Value has not been demonstrated.

---

#### 4 actors affecting the property

##### Development pressures

Historic Bridgetown and its Garrison suffer from typical contemporary urban area developmental pressures such as commercial, mercantile, tourism, infrastructural development and urbanisation. The most enduring development problems are those that have affected the scale, proportions and layout of the property. The construction of both the Grand Barbados Hotel and the Hilton Hotel at the garrison, have caused major impacts as a result of their scale, as has the tall tower of the Tom Adams financial centre within the Crompton/ oebuck St conservation area in the city.

Major tourist resorts along the coast in the buffer zone have compromised the relationship between the garrison and the coast. Within the garrison the spatial plan has been to a degree eroded by infill and developments such as four-storey office buildings but during the mission details emerged of larger-scale threats.

Within the garrison conservation area, there are proposals for an office complex next to the 1830 Lexham house, (not described in the nomination dossier) and much larger developments at the Garrison Savannah for a 'Field Stand' to create a racino (presumably a racing casino) including bar, restaurant, slot machines and a viewing/hospitality terrace to seat 150 people, and for multi-purpose night time lighting.

The garrison area also faces threats from the impact of many incremental changes to its smaller buildings and infill developments.

The Pier Head area, which comprises the Screw Dock and a number of warehouses which served the Careenage, has been designated as a Special Development Area which makes provision for the vesting of lands and financial arrangements to facilitate the public/private partnership for the redevelopment of the area. Outline planning approval has been given for the comprehensive redevelopment of this site for retail, restaurants, entertainment, offices, museum, design centre, hotel, and/or residential and parking.

Within the Bay Street area there are a considerable number of permissions including one for a 10 storey hotel. Further plans and opportunities for the development of the Carlisle Bay area from Pier Head to the Savannah Hotel in Hastings are described in a report submitted by the State Party in September 2010 and entitled "Development Opportunities within the Historic Bridgetown and Its Garrison Property and Buffer zone". These might involve the future of the old General Hospital and the former naval Dock yard at Needham's Point.

ICOMOS notes that this report highlights the important urban development pressures experienced by Historic Bridgetown and the overwhelming movement towards rehab / reuse / new interventions as opposed to conservation / restoration / maintenance approaches.

#### Tourism pressures

Barbados has a robust tourism industry which has been more seriously developed since the 1960s. The potential threat to the site from increased tourism will be mitigated through proper forward management planning. Historic Bridgetown and its Garrison have unfulfilled capacity for numbers which must be addressed and managed accordingly.

Generally speaking, there has not been a significant amount of development due to tourism pressure. However there are several hotels within the garrison area including the very large Hilton Hotel and others in the buffer zone.

#### Environmental pressures

No specific environmental pressures or threats are identified in the nomination dossier on either the quality of air or water or the quality of life in the city.

#### Natural disasters

The major concern facing Barbados, in respect of natural disasters, is the potential for hurricanes (last hurricane to visit the island was in 1955). Though not as prone to these conditions as other Caribbean neighbours, Barbados can expect to see such occurrences every fifty to seventy years. In between these hurricanes are numerous tropical storms and flood events that can cause medium to severe damage. Earthquake and other such phenomena are very rare occurrences seldom affecting Barbados. Bridgetown has suffered several important fires over time that have destroyed much of its early buildings. The State Party established a "Disaster management policy" in 2003, to mitigate these specific threats and the Nomination Task Force is working collaboratively with the Barbados Fire Department for the preparation of an emergency Disaster Plan for the nominated property.

#### Impact of climate change

Global warming presents an unknown level of threat. It is suggested that the effects of rising sea levels will be less evident in these regions than elsewhere.

---

ICOMOS considers that the main threats to the property are natural factors such as hurricanes, floods and fires and development pressures.

---

## 5 Protection conservation and management

#### Boundaries of the nominated property and buffer zone

The boundaries of the nominated property are clearly delineated on the maps and plans included in the revised maps received in February 2011 and cover an area of 187 hectares. An estimated population of 4,790 people live within this area.

The area of the buffer zone covers 321 hectares. An estimated population of 3,750 people live within this area.

---

ICOMOS considers that the boundaries of the nominated property adequately cover the urban area and the garrison. The rationale for the buffer zone boundary is not clear, nor is it clear how the buffer zone offers protection.

---

#### Ownership

In respect of the land area, there are 1,566 individually delineated properties within the nominated property. The ownership proportions (by land area) are as follows:

- 53 (88.00 ha) owned by the Government of Barbados (Crown) and Government owned agencies (Central Bank of Barbados, Barbados Tourism Investment Inc, Bush Hill Tourism Trust Inc, National Housing Corp, Needham's Point Holdings Ltd and Needham's Point Development Inc).
- 27 (44.66 ha) owned by private commercial entities.
- 17 (27.67 ha) owned by private individuals.
- 4 (6.19 ha) owned by religious organizations.

Land areas above do not take into account public roadways and waterways and therefore will not equate to the total area of the nominated property.

#### Protection

##### Legal Protection

Bridgetown and surrounding constituencies are administered by members of the Barbadian parliament. There is no overall legal protection for the nominated property. Specific properties, sites and areas have been designated under the following Acts:

- The Town and Country Planning Act, 1968 (Cap.1968-240). Within the Act are provisions for the protection of cultural heritage sites. Within the area of the nominated property, specific properties have been designated as archaeological areas and conservation areas as well as monuments and buildings of special architectural or historic interest. The list is provided in the nomination dossier.

- The Barbados National Trust Act, 1961 (Cap. 196:1-58). The Trust is a body incorporated by the Barbados National Trust Act 1961, with, among other responsibilities, the mandate to list buildings and monuments of historic and architectural interest, compile photographic and architectural records, preserve chattels of historic or artistic interest and make the public aware of the value and beauty of the island's heritage.
- The Preservation of Antiquities and Relics Bill Act, 2006 is under revision. The Act essentially makes provision for the proper management of any archaeological activities within Barbados and the conservation of any antiquities or relics associated with these activities.

There are five designated conservation areas. Four are in the urban area and cover rather less than half of it. The fifth is the garrison area which covers most but not quite all of the historic areas of the garrison. This means that large areas are subject only to planning controls.

ICOMOS considers that the provisions of the Town and Country Planning Act, supported by the Physical Development Plan Amended (2003), provide the necessary legal mechanisms for protecting the designated sites and areas within the property. More specific policies need to be adopted for the areas outside the designated conservation areas.

#### Effectiveness of protection measures

These protective measures are implemented and enforced through the collective efforts of the Government of Barbados, statutory corporations, local non-governmental organizations and members of Barbadian civil society who have an interest in heritage preservation and cultural development. The effectiveness of the protection measures seems not always to be adequate in terms of constraining development within the conservation areas, and elsewhere, as detailed above.

---

ICOMOS considers that the legal protection in place is technically adequate for the designated areas but its implementation needs strengthening and for the non-designated areas specific planning policies need to be adopted.

---

#### Conservation

##### Inventories, recording, research

A Committee investigating into the condition of historic buildings and sites was established in Barbados in November 1909, and was involved in collecting any data in existence relative to old forts, ancient buildings, old cemeteries and tombs on plantations. The Land Tax Department maintains a detailed inventory of all the individual properties within the country. Inventories of historic properties were undertaken in 1951 and 1984; the Ministry of Community Development and Culture, World Heritage Task Force retains a refined and updated

property inventory specific to the nominated property; the Barbados Museum and Historical Society maintain a database of archaeological and historic sites using the xeGesIS Spatial Data Management system, developed by English Heritage; other institutions and agencies also maintain specialized inventories. Addresses where inventories, records and archives are held are listed in the nomination dossier.

#### Present state of conservation

The buildings and monuments within the nominated property boundaries vary in condition from abandoned and decaying to recently restored. While the more central and commercial zones have been substantially rehabilitated, the decay is more noticeable in the lower income residential areas (e.g. Nelson Street, Cats Castle, and Church Village). The state of preservation of properties in the Bridgetown portion of the nomination is of concern to ICOMOS. The nomination dossier acknowledges that many buildings and areas within the five conservation areas are suffering from inadequate maintenance and neglect often as a result of becoming unused. Within the garrison area one of the main barrack blocks, block B, is neglected.

#### Active Conservation measures

During the past 10 years, six buildings have been restored or rehabilitated and four more are scheduled to be restored in the near future. The completed ones include the former Town Hall/Vestry, Old Spirit Bond Warehouse, Parliament building and former synagogue. Twelve adaptive reuse projects have been approved by the planning authorities and are in various stages of implementation.

#### Maintenance

Property owners are responsible for maintenance of the respective properties in their traditional manner. Because of the lack of specific design and maintenance regulations, inappropriate materials and colours have been used. However, in some cases, where conservation work has been carried out by public works or by private initiatives, it has been exemplary.

#### Effectiveness of conservation measures

ICOMOS considers that the current conservation measures are minimal and this is impacting on the authenticity of the structures. Given the number of buildings and the scale of the problem major capacity building is needed as well as new sources of funds. ICOMOS appreciates the difficulty of achieving these. However what is also needed are measures to promote adaptive re-use rather than re-development.

---

ICOMOS considers that although several large restoration projects have been completed, the scale of the necessary work needed in the overall nominated area is very considerable with some buildings being



decayed or near collapse and this means that the overall integrity of the nominated area is highly vulnerable.

## Management

Management structures and processes, including traditional management processes

Metropolitan Bridgetown is managed directly by the Barbadian parliament through various departments and agencies. It is a documented system that is coordinated and implemented by the State Party itself.

The Ministry of Community Development and Culture has established the special Barbados World Heritage Task Force to manage the nominated property. It is made up of the Barbados National Trust; the Barbados Museum and Historical Society; the Lands and Surveys Department; the Ministry of Tourism; the Natural Heritage Department; the Office of the Attorney-General; the Town and Country Development Planning Office; the University of the West Indies, History Department and Heritage Studies Department. It is assisted by various agencies that have public awareness and education programmes that specifically focus on the preservation and conservation of Barbados' cultural heritage, both tangible and intangible.

Policy framework: management plans and arrangements, including visitor management and presentation

The Barbados World Heritage Task Force has prepared the Management Plan.

One of the proposals included as part of the Management Plan is the establishment of a National World Heritage Committee, to replace the current Barbados World Heritage Task Force. The Committee will be characterised by multi-sectoral membership, reflecting the diverse public and private sector skills and expertise that are seen to be required for the management of the property.

The purpose of the committee is to facilitate coordination and engagement between key public and private stakeholders to ensure "buy in" of the Plan itself and the proper implementation of the provisions of the Management Plan; to coordinate funding allocated to the Management Plan and to the implementation of initiatives contained therein, promote, implement and coordinate the activities identified in the Management Plan; and to review, evaluate, update and amend the Management Plan.

The Management Plan is said to be a paradigm shift in the Caribbean from the traditional notions of preserving cultural heritage, which typically focuses on built culture. It includes the preservation of intangible heritage such as oral traditions, rituals, language, dance, music, literature and visual arts.

Until the Management Plan is implemented several existing plans provide management of the nominated

property. They are: The Physical Development Plan Amended (2003); The Urban Rehabilitation Plan for Bridgetown, 1999; The Coastal Zone Management Policy, 1998; The Tourism Sustainable Development Plan, 1997; and The National Strategic Plan of Barbados 2006. However these are not necessarily in line with the need to protect the potential Outstanding Universal Value of the property.

It is stated the funds to implement the Management Plan will come through the annual budgets of the individual agencies involved from the 2013-2015 Government budget, subject to approval, from the local private sector and from UNESCO International assistance.

## Risk preparedness

Barbados has for more than 40 years established a national emergency management system which, by legislation, comprises government ministries and departments (including the emergency services), the public sector, non-governmental and community based organizations, and regional and international agencies, including the United Nations system.

## Involvement of the local communities

The Barbados World Heritage Task Force under the guidance of the Ministry of Community Development and Culture has developed and implemented a public awareness and education programme, which caters specifically to educating Barbadians about the nominated property of Historic Bridgetown and its Garrison.

Resources, including staffing levels, expertise and training

Identified organizations with responsibility for the conservation and management of cultural heritage have achieved significant levels of qualification in the fields of architecture, archaeology, city planning, engineering, historical and cultural research, and other related technical fields. Each has fulfilled their training and professional development requirements in both national and international institutions. Details of the key individuals are provided in the Management Plan.

ICOMOS considers that it is not clear what the situation is with crafts people and whether there are the skills required to restore, repair and maintain historic buildings. The State Party is working on a partnership with the University of the West Indies to develop a programme of studies and training in traditional crafts, materials and conservation. It is also negotiating with international institutions in Puerto Rico and the United States for the provision of conservation expertise.

In order for Barbados to create its own pool of specialized conservation craftsmen and professionals, ICOMOS recommends that the State Party establish a national programme of studies and training in traditional crafts, materials and conservation in collaboration with the West Indies University.

ffectiveness of current management

The current management system for the protection and enhancement of Bridgetown's heritage is under the direct responsibility of the State Party; it is well documented, but it is not specific to the nominated property's boundaries, buffer zone or to the attributes of potential Outstanding Universal Value. The Historic Bridgetown and its Garrison Management Plan that was completed in February 2011 will provide, once it is fully implemented, management that is specific for the nominated property.

---

ICOMOS considers that the current management system needs to be augmented and made more specific through the adoption and implementation of the new Management Plan.

---

## 6 Monitoring

Currently, the collation of the records pertaining to the monitoring of heritage conservation interventions in Bridgetown is fragmented, but the institutions where they can be found are identifiable. These include the Archives Department, the Government Information Service, the Barbados Museum and Historical Society, the Ministry of Tourism, the Barbados National Trust, the Ministry of Community Development and Culture, the Ministry of Transport and Works and the Town and Country Development Planning Office (TCDPO). These institutions and agencies gather information that pertains to the current legislation and regulations but it is not specific to the nominated property and its buffer zone.

The State Party proposes that the Barbados World Heritage Committee be the focal point for the monitoring of the nominated property. Various monitoring indicators/ have been suggested and need to be refined and implemented.

---

ICOMOS considers that the proposed monitoring system needs to be refined and implemented as part of the Management Plan implementation.

---

## 7 Conclusions

Historic Bridgetown and its Garrison are two relatively discrete areas linked by Bay Street that curves around Carlisle Bay. The town and the garrison areas have quite different attributes and to a degree represent different aspects of the way Barbados developed.

The town reflects mainly the impetus of trade, and the import and export business of the port and the comparative wealth that this generated. Although Bridgetown was a heterogeneous community that combined to produce a Creole culture, this culture is much more manifest in intangible ways than in what can be seen in the urban streets. The results of hurricanes and fires and more recent development in some areas and

lack of maintenance in others have taken their toll on the historic fabric and its coherence. It is no longer possible to read the way the port used to operate, the Screw Dock is abandoned and awaits conservation and a sustainable use, many of the warehouses need repair, some are derelict and both the small chattel houses and the larger Caribbean Georgian houses are scarce. Although the Parliament building and several of the churches have been well restored they are small islands. Nevertheless what does exist is of huge importance as national symbols and needs to be protected and sustained.

The garrison area by contrast reflects the governance of the island. Many of its barrack building are large and the whole garrison was spread out to cover much of the peninsula at the south end of Carlisle Bay. Most of the key barracks buildings have survived, together with the Drill Hall, later the Armoury, the Prison, the cemetery, St Ann's Castle and the Fort. Four of the barrack buildings are now offices or commercial units, and the hospital is now apartments. The former parade ground, around which three of the main barrack blocks are arranged, is now covered by modern warehouses. What has not survived is the naval dockyard, and its site is now part of a Mobil oil depot. The fort has been much compromised by the development of a large Hilton Hotel in whose garden it now sits.

anged around the building mentioned are some 90 other buildings that were part of the barracks but they are not all described in the nomination dossier and appear not to be protected. Many of them have been turned into houses or clubs or other uses. Also in between the garrison buildings there has been development of hotels, some houses and an office block. Perhaps more worryingly further quite major development is planned to facilitate the use of the former parade ground for horse racing and other sports in the form of a large Field Stand to create a racino (presumably a racing casino) including bar, restaurant, slot machines and a viewing/hospitality terrace to seat 150 people, and there are proposals for multi-purpose night time lighting. In the buffer zone to the south are extensive tourist developments.

The garrison is said to be the most complete survivor of an English colonial garrison. ICOMOS considers that further comparison are needed to indentify more clearly how it relates to other garrisons and why it could be seen as outstanding whether as the prime example of a garrison in the Caribbean or as the best preserved global example in terms of its architecture.

However ICOMOS is also concerned that the integrity of the garrison is not intact and is under threat from the various proposed developments. The overall garrison is much more than the main barrack blocks and needs to be understood for what it conveys of the overall resources of the garrison and how it functioned. Currently attention has been given to the barrack blocks and with much less attention to the ancillary buildings, to its spatial patterns and to its setting. As many of the

individual buildings have been converted to other uses, it is the outside form of the buildings and their disposition that is left to convey their meaning. Some of the changes already made, and others proposed, would seem to be very difficult to reconcile with the idea of the intactness of the garrison. Of particular concern are proposals for the large stand/covered terrace for the parade ground and the continuing incremental changes to the landscape of the Garrison.

ICOMOS considers that further consideration should be given to exploring the significance of the Garrison and whether more adequate protection and management can be put in place to halt threats to its integrity and to its ability to present the story of Garrison government.

#### Recommendations with respect to inscription

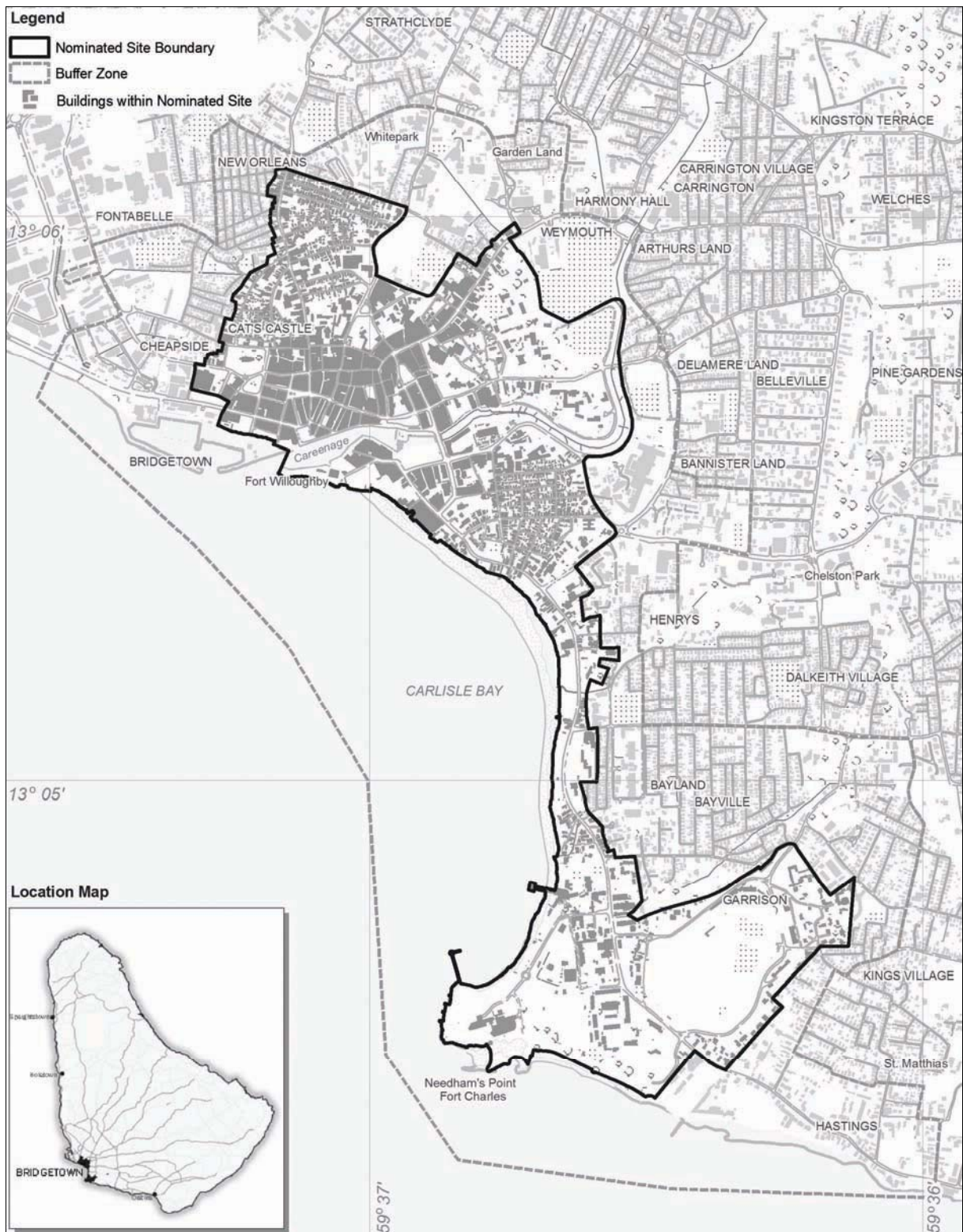
ICOMOS recommends that the examination of the nomination of Historic Bridgetown and its Garrison, Barbados, to the World Heritage List be deferred in order to allow the State Party to:

- Further deepen the comparative analysis for the Garrison in order to understand better how it relates to other sites in the Caribbean and to English and British garrisons around the world; and how it might be considered outstanding;
- Consider ways to strengthen protection of all the Garrison's buildings and its overall spatial layout, and to mitigate some of the landscape changes that have already occurred, in order to strengthen and protect its integrity and authenticity;
- Undertake a detailed analysis of the spatial layout of the Garrison and how it has changed over time;
- Depending on the outcome of these, consider nominating a smaller area that encompasses the Garrison alone;
- Adopt and fully implement the new Management Plan.

ICOMOS considers that any revised nomination would need to be considered by an expert mission to the site.

ICOMOS further recommends that the State Party give consideration to the following:

- establish a programme of studies and training in traditional crafts, materials and conservation in collaboration with the West Indies University.



Map showing the revised boundaries of the nominated property





Parliament buildings



Warehouses and Screw Dock at Pier Head





Drill Hall, Stone Barracks and Main Guard, the Garrison



Plantation House - Bay Mansion, Bay Street

---

# Coffee Cultural Landscape

## Colombia

### No 1121

---

Official name as proposed by the State Party  
Coffee Cultural Landscape

#### Location

47 municipalities in Caldas, Quindío, Risaralda, and Valle del Cauca Departments

Sites A, part of F: Department of Caldas

Sites B, C, part of F: Department of Risaralda

Sites D, E, part of F: Department of Valle del Cauca  
Republic of Colombia

#### Brief description

The series of six landscapes and eighteen urban centres extends through some of the coffee producing areas within the foothills of the western and central ranges of the Cordillera de los Andes. The landscapes reflect the growing of coffee in small plots carved out of the high forest over the past one hundred years and the way farmers have adapted cultivation to difficult mountain conditions to produce a high value product. The architecture in some of the urban settlements is a fusion between Spanish cultural patterns and the indigenous culture of the region.

#### Category of property

In terms of categories of cultural property set out in Article I of the 1972 World Heritage Convention, this is a serial nomination of six *sites*.

In terms of the *Operational Guidelines for the Implementation of the World Heritage Convention* (January 2008) paragraph 47, it is also a series of six *cultural landscapes*.

#### Basic data

Included in the Tentative List  
25 April 2001

International Assistance from the World Heritage Fund for preparing the Nomination  
None

Date received by the World Heritage Centre  
1 February 2010

#### Background

This is a new nomination.

#### Consultations

ICOMOS has consulted its International Scientific Committee on Cultural Landscapes and several independent experts.

Comments on the assessment of this cultural landscape were received from IUCN on 1<sup>st</sup> February 2011.

The information was carefully considered by ICOMOS in reaching the final decision and recommendation in March 2011, and IUCN has also reviewed the presentation of its comments as included in this report by ICOMOS.

#### Literature consulted selection

Fonseca, L., and Saldarriaga, A, *La arquitectura de la vivienda rural en Colombia', Minifundio cafetero en Antioquia, Caldas, Quindío y Risaralda*, Vol. 2, 1984.

Moguel, P., and Toledo, V.M., *Biodiversity Conservation in Traditional Coffee Systems in Mexico', in Conservation Biology*, No.1, Vol. 13, 1999.

Tobón, N., *Arquitectura de la Colonia en Antioquia*, 1984.

#### Technical Evaluation Mission

A joint ICOMOS/IUCN technical evaluation mission visited the property from 28 August to 6 September 2010.

Additional information requested and received from the State Party

On 12 October 2010, ICOMOS requested the State Party to provide supplementary information on:

- The possibility of the series being extended in the future to include further sites;
- How the landscape of the nominated sites is an exceptional reflection of these social and economic parameters and how it is different from that of other sites;
- Whether the way coffee is cultivated is specific to the areas nominated and if so how are these specificities reflected in landscape terms, and what types of production has persisted over time;
- How each of the six sites relates to the overall Outstanding Universal Value proposed for the serial nominated property;
- Whether the industrial heritage has been studied and inventoried;
- The possible start-up of gold mining activities.

A reply was received from the State Party on the 12 November 2010 and this information has been incorporated into the relevant sections below.

Date of ICOMOS approval of this report  
10 March 2011



## 2 The property

### Description

Since a few decades after settlers from the Antioquian region moved south to the foothills of the western and central ranges of the Cordillera de los Andes in the 19<sup>th</sup> century, as part of a massive migration, the region's economy has revolved around coffee. The region is now identified as the Coffee region ( *el Cafetero*) or Coffee Triangle (Triángulo), where 35% of Colombia's coffee production is cultivated, in the main by small scale farmers. The link between people and coffee in this mountainous region has fostered a strong cultural identity.

The nominated property consists of six landscape areas of cleared forest on the slopes of hills where coffee has been planted, and in some areas intercropped with sugar, corn, beans, plantain etc, and where coffee planting accounts for around 57% of the total area of the farms. Eighteen urban settlements associated with the farms are also included in the nominated area, mostly on the ridges above the farms.

The six rural zones vary in size between 826 ha to 47,406 ha. Overall it is stated that all the zones together contain approximately 24,000 coffee farms, which house around 80,000 people. The urban centres have a collective population of over 220,000 inhabitants.

The landscape areas or zones appear to have been chosen to be representative of the whole coffee growing area (rather than to be exceptional) and also to reflect:

- mountain growing coffee,
- predominance of coffee crops,
- down-slope cultivation (from the settlements), ecosystems of environmental interest,
- hydric availability,
- the presence of coffee growers' municipal committees.

ICOMOS notes that the nomination dossier is somewhat imprecise with the result that the nominated areas cannot be described in any detail.

### Coffee Farms

The farm sizes are small, the average being around 4.6 hectares, of which 2.6ha are planted with coffee trees.

All the coffee is grown on steep slopes up to 50 inclination in places and this does not allow for mechanisation. The coffee plants are renewed regularly the average age of the plants is said to be 5.9 years.

The coffee grown is of the *Coffea arabica* species, grown in high altitudes in America and parts of Africa and Asia (as opposed to the *Coffea robusta* species which is grown at low altitudes in southeast Asia and parts of Africa). The coffee produced in Colombia, Kenya and Tanzania is known as High Grown coffee and is

subject to wet mill processing - which includes fermentation and yields a mild coffee. Recently a new variety of the coffee plant, *Castillo*, has been introduced into the nominated farms rather than the Colombian variety.

Traditional coffee cultivation involves the planting of coffee plants within clearings in the forest, leaving enough trees to provide shade. However unshaded coffee enhanced by fertilisers produces higher yields but has more detrimental effects in environmental terms. These newer methods were introduced in the 1960s (see History and development). In the nominated areas shade systems, semi-shade systems and full-sun exposure systems are all to be found, and are used according to altitude, slope inclination, soil quality, and rainfall patterns. However, it is stated that there has been a positive trend in the last few years to a return to more shaded systems due to the demand for environmentally certified beans and the increasing cost of fertiliser. Shaded systems are mainly found in the Central and Western parts of the nominated area.

What the nomination dossier stresses is that the way in which coffee is grown in agronomic terms, is not specific to the region nominated.

Traditionally, once the ripe berries were picked, the flesh of the berry was removed, in a process called depulping, and the beans were then fermented to remove the layer of mucilage. When the fermentation was complete, the beans were washed with water to remove the fermentation residue. Finally, the beans were dried. Various alternatives were used for the drying process, such as the drying patios, revolving drums known as *Guardiolas*, and drying trolleys. The drying patios, used on the old coffee farms, were huge structures of 4 or 5 floors with roofs, wood or wicker floors and no walls to allow a flow of air. *Guardiolas* were large spinning drums with a door through which the coffee would enter the drum which was constantly turning on an axis and fed with hot air.

ICOMOS notes that it is not clear if any drying patios survive but some of the old machines are kept on a few farms and in the museum, and some houses have sliding roofs over coffee drying areas that are not mentioned in the nomination dossier.

Today in the nominated area an almost waterless system of processing is used a mechanical demulsifier, which depulps the coffee cherry and leaves the coffee bean ready for drying and classification. The drying is carried out on concrete patios or in warm air dryers.

### Urban areas

The urban areas are mainly on the flattish tops of hills with the coffee fields running down the slopes. The architecture of the Antioquian colonisation (see History and development) was influenced by Spanish-style building traditions and planning although the grid pattern

had to be adapted to the steep terrain. The traditional building materials were *tapia*, or cob, and *bahareque*, plaited cane, which were combined for the walls, and clay tiles for the roofs. In the nominated area some 57% of the walls are still constructed in these traditional materials. At the end of the 19<sup>th</sup> century, as a result of prosperity in the coffee economy, woodwork and fretwork whose designs reflected local traditions, began to be added to the Spanish style buildings.

The urban areas are said to be in three categories of which the first have traditional structures that conserve their homogenous architectural qualities, such as Salamina. The second category has traditional structures which are not completely homogenous, such as Neira and Montenegro; and the third category is expanding settlements which have modified their original character, such as Anserma and Uinchá. These categories are not defined for all the urban areas.

ICOMOS notes that the descriptions provided in the nomination dossier are not detailed and provide few details of the eighteen towns, nor do they indicate for the different landscape areas the number of farms, the particular characteristics of the coffee husbandry, the types of houses, how the lands are owned, the social structure etc. or how they related to the coffee criteria for selection mentioned above. Rather the areas are said to have attributes that relate to archaeology, festivals and urban structure.

The details provided for each zone are confined to the following which gives very little information on the coffee growing farms:

Zone A: Municipal areas of Rio Sucio and Supá, department of Caldas

This covers 1,390ha at an altitude of 1,545 metres above sea level. As well as Antioquian settlers (see History and development) the area also includes indigenous populations of the Embera community and an Afro-Caribbean population linked to mining. The area hosts the Carnival of Rio Sucio.

Zone B: Municipal area of Uinchá, department of Isralda

This covers 826ha at an altitude of 1,825 metres. As well as coffee, plantain, yucca, sugar cane, blackberry and asparagus are grown. It is said to have great archaeological potential given by the fact that it was inhabited by tribes of Guaqueramaes and Tapascos, who dedicated themselves to the exploitation of alluvial gold and the extraction and commercialization of salt.

Zone C: Municipal areas of Aguadas, Chinchin, Neira, Palestina, Pácora, Salamina y Villamaría, Department of Caldas

This zone covers 47,406ha at an altitude between 1,500 and 1,900 metres. The economy is based on coffee and tourism. The zone includes the towns of Chinchin,

Marsella, Neira, Palestina, Pácora and Salamina y Villamaría. The historic centres of these towns are arranged according to the Spanish grid layout, which, on the outskirts, become irregular in order to adapt to the region's topographic characteristics and to the towns' old access paths. The town of Salamina is well known for its decorative woodwork. The historic centre of Salamina is a first category protected area.

Zone D: Municipal areas of Armenia, Calarcá, Circasia, Córdoba, Filandia, Gnova, Montenegro, Pijao, Uimbaya and Salento, and rural areas of Pereira, Department of Isralda; Municipalities of Alcalá, Ulloa, Caicedonia and Sevilla, Department of Valle del Cauca

This zone covers 42,820ha at an altitude between 1,200 and 1,550 metres. The zone is the main tourist area of the region. The region was previously inhabited by the Uimbayas indigenous people, renowned internationally for their fine gold-work among the most important in Latin America before the conquest now kept in the Uimbaya museum. It includes the urban areas of Calarcá and Montenegro. This area houses the first park and museum dedicated to coffee.

Zone E: Rural areas of the municipalities of Trujillo, Iofrío, Department of Valle del Cauca

This zone covers 4,008ha at an altitude of 1,370 metres. It has top quality soils and, as a result, presents the best conditions for coffee growing, given that the altitude is also ideal (between 1400-1800 masl). It includes protected natural areas such as the Pacific Forest reserve. It is also said to have great visual diversity.

Zone F: Rural areas of the municipalities of Anserma, Belalcázar, department of Isralda; San José, department of Caldas; Apá, Balboa, Belén de Umbrá, La Celia and Santuario, department of Isralda; Municipalities of Ansermanuevo, Iguila, and Icairo, department of Valle del Cauca

The zone covers 44,670ha at an altitude of between 1,000 and 1,900 metres. It includes the following urban areas: Apá, Belalcázar (in Ansermas country), Belén de Umbrá, Icairo, Isralda, San José and Santuario. Anserma, named after the indigenous people who used to live in the area, is one of the oldest towns of the region. It was founded as "Santa Ana de los Caballeros" in 1539. Anserma was also the epicentre of waves of Antioqueño colonization towards the south and west which produced the founding of towns such as Apá, Santuario, Belalcázar and Isralda. The area is adjacent to the National Natural Park Tatamá, and presents a high level of biodiversity.

ICOMOS notes that what is not clear from the nomination dossier, as few details are given of the specificities of the various zones and particularly about coffee planting, is how each area contributes toward the potential Outstanding Universal Value as a coffee landscape in terms of specific attributes. Such details as are given concentrate on archaeological potential, the

festivals, the town planning and nature conservation in only one area is coffee growing mentioned as a key attribute that is one which is said to have an ideal climate for coffee growing.

Some coffee areas have more of a traditional approach to coffee planting in a way that respects the environment but not all; similarly some of the urban areas are said to demonstrate strong local characteristics in terms of architecture and planning that have persisted, while other do not have these characteristics.

In the original nomination dossier, it was stated that the series might be extended. However, in the supplementary information provided on 12 November 2010, it is said that this will be unlikely.

ICOMOS considers that the justification for the serial approach has not so far been clearly demonstrated in terms of showing how the six areas contribute different attributes of the potential Outstanding Universal Value.

#### History and development

As coffee growing only started in the 19<sup>th</sup> century the main historical details are those related to coffee. The nomination provides details on the earlier history that relates to the indigenous populations, although it is not made clear how the landscape reflects this earlier history and indeed the Spanish invasion in the 16<sup>th</sup> century, led to the physical and cultural disappearance of most of the indigenous groups that lived in the Cauca River Middle Valley.

What shaped the coffee landscape were the mass migrations of the 19<sup>th</sup> century. The seeds of this migration were sown in the second half of the 17<sup>th</sup> century, when nomadic groups of miners began to emerge as a result of the decadence of the large mines granted by the Spanish Crown. The miners decided to flee the protection of the Spanish and this ultimately led to a massive migration of the workforce as the scarcity of land and reduced agricultural productivity generated a crisis that affected all the productive sectors by the end of the 18<sup>th</sup> century.

In response to the crisis, Judge Mon y Velarde adopted drastic measures and conceded free access to limited extensions of land for founding agricultural towns and settlements close to the mining centres, without consideration of the previous rights enjoyed by the landowners.

These measures led to the foundation of new towns, and established a model for the colonization of what were to become the coffee producing areas such as Aguadas, Salamina, Aranzazu, Manizales, Pereira, Quindío and Tolima.

The colonization process was to establish settlements and their surrounding agricultural zones simultaneously. By 1819 the area around Salamina, founded in 1825, had begun to be occupied. In the process there were

also fights between independent settlers and those who had received licensed security of tenure through concessions. During the next 120 years, 86 towns were founded in an area of over a million hectares. The few indigenous people who were left were given land in reservations in *iosucio* and *uincha*.

Coffee was ideal crop for the new settlers as it did not require great capital investments, it combined well with subsistence crops, and was durable and easily processed. The forest was cleared to provide land for the new coffee plantations.

The first Coffee Growers National Congress was held in 1927. Later that year with the support of Colombia's Government, the Colombian Coffee Growers Federation (FNC) was created, dedicated to improving living conditions for coffee growing communities using collaboration, participation, and innovation mechanisms.

In the 1960s, there was a marked change in the cultivation techniques because of the development of new rust resistant coffee varieties and a search for greater productivity. A portion of the traditional plantations, distinguished by long productive cycles, low density plantations, varieties of tall trees, the use of shade trees, and low productivity were replaced by 'technified' and denser plantations with organised layouts and smaller trees, less shade, and greater productivity. Given the greater yield per hectare, technified systems require more intensive labour and a greater use of fertilizers. The percentage of technified plantations increased from 5% in 1970 to 80% in 1993-1997.

These changes brought about considerable change in the landscape. Farms became smaller and the number of farms grew significantly (by 90% in Caldas). The most dramatic changes were seen in the reduction of grasslands and the increase of other crops, forests and weeds. These transformations also created a certain degree of environmental deterioration. The coffee institutions are, however, increasingly committed to making coffee production more environmentally friendly.

### 3 Outstanding Universal Value integrity and authenticity

#### Comparative analysis

The comparative analysis compares the nominated sites with coffee growing areas in Colombia and in the rest of the world and with other inscribed cultural landscapes.

Coffee cultivation is widespread in Colombia and there are similarities with other coffee growing areas but the nominated sites are seen as distinctive for their 'coffee culture' with coffee shops, coffee highway and coffee festivals, and for the fact that most farms are small scale family operations using manual labour.

Little information is given about other Latin American countries. Comparisons are made with the inscribed sites of the Alto Douro Wine region, Portugal (2001, criteria (iii), (iv) and (v)), the Agave Landscape and Ancient Industrial Facilities of Tequila, Mexico (2006, criteria (ii), (iv), (v) and (vi)), and the Archaeological Landscape of the First Coffee Plantations in the South-east of Cuba (2000, criteria (iii) and (iv)), where few similarities are found. The main similarities are considered to be with the coffee growing areas of Ethiopia, where coffee is also grown in the high forests. No comparisons are made with the coffee growing areas of East Africa or Asia.

ICOMOS considers that the comparative analysis partly justifies consideration of the property on the World Heritage List but that more detailed comparisons are needed with other areas of Latin America and the Caribbean, such as the Jamaican Blue Mountain area, and this is where history shows that coffee entered the Americas through the French Caribbean island of Martinique, in order to demonstrate more clearly how the property is distinctive.

More comparisons are also needed within the hinterland of the property in order to understand why the six landscapes have been selected and why some towns have been excluded and in order to understand how the nominated sites each contribute to the potential Outstanding Universal Value. Furthermore there is a need to demonstrate why the nominated areas are exceptional rather than being merely typical of the wider coffee growing areas in Colombia and why all are needed.

---

ICOMOS does not consider that the comparative analysis justifies consideration of this property for the World Heritage List at this stage.

---

#### Justification of Outstanding Universal Value

The nominated property is considered by the State Party to be of Outstanding Universal Value as a cultural property for the following reasons:

- It is an outstanding example of human adaptation to difficult geographical conditions, from which came the subsequent establishment of slope and mountain coffee production.
- The human, family, and generational effort put in by the coffee growers and the permanent support of their institutions are an exceptional example of collective action in overcoming challenging economical circumstances and surviving this rough, isolated landscape.
- All this helped to constitute an exceptional productive system that has proven to be sustainable in economic, social, and environmental terms, despite the price cycles inherent to coffee agriculture.
- The evolution of the coffee trade combined with traditional production methods has, for over a

century, opened the path for the production of a coffee of exceptional quality.

- The life and essence of this region pivots around coffee which has generated a wealth of cultural manifestations ranging from the musical to the gastronomical, passed down from generation to generation. Coffee also affected human settlement and urban architecture here.
- The property's cultural heritage is well represented in urban and rural dwellings that adapted to the conditions of the steep territory and provided the functional needs associated with coffee production.
- The Coffee Cultural Landscape (PCC) displays a diversity of cultural values, considered exceptional in a global context. They reflect the close relationship between man and nature in the production of a high quality coffee in the midst of the challenges and opportunities engendered by the steep lands of the Colombian Andes.

The values that are the basis of the proposal for the inscription of the property are stated to be:

- 1 Human, family, generational, and historical effort put into sustainable production of quality coffee.
- 2 Coffee culture for the world.
- 3 Strategic social capital built around its institutions.
- 4 Combining tradition and technology to guarantee product quality and sustainability.

ICOMOS considers that as what is being nominated is a series of cultural landscapes, there is a need to set out not only what that landscape is but why it is outstanding in terms of the way it reflects various interactions between people and their environment over time, related to coffee growing. Currently much of this detail is lacking.

ICOMOS considers that the mountainous coffee areas with their collaborative way of farming in clearings in the high forest, and their distinctive vernacular buildings, do appear to have the potential to demonstrate outstanding universal value. However, the way the forest landscape has been adapted for coffee growing and the characteristic of that coffee agriculture do need to be described and articulated in detail in order to understand the rationale for the selection of sites. Currently few details are provided to allow an understanding of what has been nominated, in terms of the landscape or in terms of the buildings that provide the functional needs for the coffee producers.

And if the system is a truly sustainable interaction between people and their environment, then the characteristic of this need stressing. From the information provided in the nomination dossier, it is clear that some coffee growing areas are farmed in an environmentally satisfactory way but not where these are. Within the nominated areas are flat lands with extensive sugar production such as between Manizales to Salamina and it is not clear how these contribute to potential Outstanding Universal Value.

Similarly some towns are category 1 and 2 in terms of their distinctive buildings, but it is not clear where these settlements are in relation to the nominated sites, nor is it clear how the other towns contribute to Outstanding Universal Value.

If the nominated sites are to be exceptional manifestations of coffee growing culture, they need to be chosen to manifest outstanding examples of sustainable coffee farming and distinctive urban areas that reflect the best fusion between Spanish planning and local building traditions.

ICOMOS considers that more detailed information need be provided to in order that a clear rationale can be established for what is in and what is outside the nominated sites and how each of them contributes to the potential Outstanding Universal Value.

#### Integrity and authenticity

##### Integrity

From the information provided in the nomination dossier, ICOMOS considers that it is difficult to understand how the boundaries of the nominated sites define a distinctive coffee growing area. In the supplementary material provided in November 2010, the State Party states that *The sites of the Coffee Cultural Landscape PCC are located in what is known as the Cafetero, or coffee growing region of the country. The region has a common territory, legacy and culture and is home to a number of areas that share, in general terms, the physical, social and cultural characteristics of the Coffee Cultural Landscape. In some cases, the PCC also extends to areas in other departments such as the south eastern parts of Antioquia and the northern region of the Tolima department.* This confirms the impression that the coffee landscape is widespread and covers all areas where coffee is grown. ICOMOS considers that what does not seem to have been established is how the nominated areas are in some way exceptional examples that demonstrate the traditions of coffee growing and their distinctive settlements.

It is therefore difficult to determine integrity in terms of whether all the attributes necessary for Outstanding Universal Value are within the boundaries, nor which attributes might be vulnerable. For individual sites, it is also not possible to comment on the rationale for the boundaries in relation to the attributes, and thus on the integrity, as so little information is provided to describe and define these sites.

##### Authenticity

Very few details are provided of the many towns and villages and it is not clear how authenticity might apply to them. Certain towns are protected for their architecture and planning such as Salamina and this clearly reflects a fusion of Spanish and local traditions in its fretwork decoration. But almost no details are provided of the other towns apart from their names.

As for the coffee landscape, although in general terms the arrangements of the coffee plants are given, ICOMOS considers that it is not clear what specifically characterises the sites nominated and thus what their specific form is.

---

ICOMOS considers that the conditions of integrity and authenticity have not been met at this stage.

---

#### Criteria under which inscription is proposed

The property is nominated on the basis of cultural criteria (v) and (vi).

*Criterion v be an outstanding example of a traditional human settlement, land use, or sea use which is representative of a culture or cultures, or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change*

This criterion is justified by the State Party on the grounds that the Coffee Cultural Landscape is an exceptional example of a sustainable and productive cultural landscape; It is the result of the effort of several generations of *campesino* families who, for more than 100 years, have accumulated knowledge of how to adapt coffee cultivation to small plots of land and to the difficult conditions of their surroundings. They have created a strong, unparalleled cultural identity, not to mention having produced one of the finest coffees in the world.

The rural inhabitants of the zone have also developed exceptional models of collective action forging a social, cultural and productive institutions in the process while, at the same time, they have generated innovative practices in the management of natural resources. Cultural heritage is directly associated to living arrangements and the activities of coffee production like in no other region.

The landscape in the PCC contains settlements which are organized in orthogonal layouts in steep terrain (vertiginous slopes). The natural and tropical conditions present in the climate, altitude as well as the creative methods used to adapt the cultivation of coffee to these conditions has forged a unique landscape in the world.

The architecture is the product of a symbiosis between Spanish cultural patterns recreated with the materials and indigenous culture of the region; the highly ornamental construction techniques used in urban and rural domestic buildings are the result of this cultural mixing and have led to many myths and customs which define their symbolic value. For this reason, the architecture is also a fundamental element which contributes to the unity, authenticity and integrality of the landscape.

ICOMOS considers that the property has the potential to justify this criterion but the nominated areas need to be more clearly defined to reflect the specificities of the

landscape in order to show that the nominated areas are exceptional in terms of coffee cultivation and architecture. In order to achieve this, the comparative analysis needs to be expanded to show how the nominated sites have been selected, how as a group they are exceptional rather than typical, and how each of the component sites contributes to Outstanding Universal Value.

---

ICOMOS considers that this criterion has not been justified at this stage.

---

*Criterion vi be directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance*

The State Party justifies this criterion on the grounds that the 100 year old coffee tradition makes for an associated culture that is one of a kind and one of the most representative symbols of national culture in Colombia and abroad.

Coffee cultivation has led to a rich cultural tradition of tangible and intangible manifestations in the territory, the architecture, and the landscape that are passed down from generation to generation.

The PCC stands out for its deeply instilled rural culture of exceptional characteristics, with social, political, religious, and artistic referents that are the result of the interrelation of two phenomena: the historical occupation and land exploitation process known as the Antioquian colonization and the development of coffee production as the region's main productive activity.

The cultural manifestations, associated directly to the PCC, are not limited to the regional culture, but they relate strongly to national identity, defining the Colombian image nationally and abroad. These elements are typified by the Juan Valdez character, his *sombrero aguadeo* a traditional style of hat and the raw hide shoulder bag still used by the coffee producers. The importance of coffee is such that it has given way to a multitude of artistic expressions ranging from music, to painting, writing, and photography.

ICOMOS considers that there is a need to set out what the ideas are that have outstanding universal significance that is greater than national significance, in order to satisfy this criterion.

---

ICOMOS considers that this criterion has not been justified at this stage.

---

---

ICOMOS considers that the serial approach has not yet been justified in terms of the selection of sites.

---

---

ICOMOS does not consider that the criteria and Outstanding Universal Value have been justified at this stage.

---

## 4 actors affecting the property

### Development pressures

The nomination dossier acknowledges that development or lack of it in various forms is a key threat to the area. Coffee farmers are at the mercy of the global markets. Therefore a downturn could lead to small-scale farmers having to give up farming. An upturn on the global markets could mean more changes to the vernacular buildings.

### Changes to local buildings

The nomination dossier acknowledges that the local population is largely unaware of the value of the local architecture and has therefore introduced alien materials and structures.

ICOMOS considers that uninformed and unsympathetic alterations to the traditional architecture using alternative "modern" material and intervention constitute a significant threat to the traditional architecture within the PCC. Whereas there is legislative protection and financial assistance for listed buildings within the urban context, all other traditional architecture currently remains endangered.

However various programmes have been initiated to train craftsmen. So far however few of the buildings are protected.

### Negative impacts of agricultural processes

The nomination dossier states that pollution of natural resources and the loss of micro basins and hydric sources, due to inappropriate use of pesticides, fertilizers, and other agro-chemical substances used in farming and coffee growing, are the major risks to the environment in the PCC. Also the waste water from the wet processing of the coffee can pollute streams. However the coffee institutions, through Cenicaf, have designated a significant proportion of resources to researching cleaner production technologies that reduce the negative effects on the region's ecosystem. It is estimated that around a third of farmers now use an ecological Post Harvesting Process and Waste Management System.

There appears also to be a negative impact on the environment from full sun planting of coffee without shade trees. The traditional planting left shade trees in the forest clearings in which the coffee was planted and these not only were remnants of the forest but they also provided an ecological corridor. The full sun planting clear fells the areas and separates the plots with small hedges; it also uses more artificial fertilisers.

It is acknowledged that the risk of soil erosion is high. This could be exacerbated by any change in climatic conditions. It is also acknowledged that this can be counteracted through mass incorporation of practices that protect the environment such as shade systems, cross-slope planting, and selective weeding. Some of

these practices are already applied in parts of the property. It is stated that they would be more easily and massively implemented if the region were inscribed.

IUCN notes that *shade grown coffee is the traditional system and supports significantly higher levels of biodiversity. IUCN questions, therefore, why plantations with open grown coffee are included in the nomination.*

#### Gold Mining

The ICOMOS mission was made aware of a possible start-up of gold mining activities in the province of *Uindó*. This holds the potential to severely damage the integrity of the nominated property. The State Party has confirmed that potential areas of mining interest exist near the buffer zone and that current mining controls mean that licences could be issued subject to regulations within the areas identified although they could not be issued in National Parks and other areas protected for natural value. It is stated that there are currently mining activities in this region for sand, gravel, gold seam and alluvium gold, and that the AngloGold Ashanti multinational has been granted the necessary permits for prospecting and exploration of areas within the central forest reserve, located between Tolima and *Uindó*.

#### Tourism pressures

Since the mid 1990s, rural tourism has expanded and the region now receives around half a million visits each year.

ICOMOS notes that there appears to be little tourism strategy for areas outside of the urban and semi-urban environments. Furthermore, within the isolated and rural communities that constitute the heart of the PCC none seems evident, yet road improvements are taking place to encourage tourism development. Other types of infrastructure such as bed capacity, etc., and more significantly training of host communities to handle internal and external visitors appear to be missing.

ICOMOS considers that the greatest negative impact of tourism so far is the way it has distorted land and property values and led to changes in buildings. The State Party acknowledges that this situation threatens the architectural heritage by generating a distorted real estate market.

ICOMOS considers that there is an urgent need for a cultural tourism strategy and programmes that respect the attributes of the cultural landscape in line with ICOMOS principles.

#### Environmental pressures

IUCN notes that *the natural values of the landscape have been changed and little is left of the original vegetation across most of the area. However, the last remnant natural forest, including bamboo forest, are important for protecting biodiversity while conserving upper watersheds and riverbanks. An important effort*

*has been carried out in the Uindó department to restore natural forest creating biological corridors among protected areas, which retain natural values within the landscape including ecosystem services. An important collection of flora, located in the Uindó Botanical Garden, comprises most of the threatened plant and trees including palms species as well as others with social and economic value for local stakeholders. The National Center for Bamboo Studies Centro Nacional para el estudio del bambú Guadua Center, also in the Uindó department, holds an important collection of native bamboo species.*

#### Natural disasters

Attention is drawn in the nomination dossier to threats of landslides, flooding, flash-floods and avalanches, volcanic eruptions and earthquakes. Whilst landslides pose the greatest risk to the crops, seismic movements, like the earthquake in 1999 on the other hand, constitute the greatest risk in terms of the region's architectural heritage.

In recent years, attention has turned from dealing with disasters to disaster prevention and The National System for the Prevention and Attention to Disaster has been set up through regional offices, and has established a Local Committee in each municipality to be in charge of guarding against disasters, and reporting them when they do happen. The Committees put together Contingency Plans for each municipality, according to the threats they may be exposed to. In addition, regional authorities include in their Departmental Development Plans a "Prevention and Attention to Disaster Sector" to provide their offices with the required instruments.

#### Impact of climate change

ICOMOS considers that any increase in rainfall would exacerbate the threat of landslides. IUCN notes that *climate change in general is a threat to the values of the landscape and mitigation and adaptation measures should be important components of site management.*

ICOMOS considers that the main threats to the property are changes to the ecology of the area from full sun planting, changes in materials and form of traditional buildings and the potential impact of gold mining.

## 5 Protection conservation and management

#### Boundaries of the nominated property and buffer zone

The six sites nominated and the buffer zones form a visually contiguous unit with their surrounding landscapes and ICOMOS considers that the rationale for their delineation and separation is not always clear. Furthermore, as has been set out above, the justification for the six areas is also not entirely clear in terms of the



specific attributes that they contain. Their boundaries tend not to coincide with recognisable features in the landscape and furthermore, do not include the upper watersheds of the farmland or the natural forests out of which the coffee farms were carved, and which are important water catchment and natural conservation areas, as IUCN also notes.

This last point is also emphasised by IUCN who state that the proposed boundaries, in most parts of the nominated property do not consider natural attributes as protected areas, upper watersheds and remnant natural forest.

The selection of some towns for inclusion and the exclusion of others is not justified. The city of Manizales, which is excluded, still has industrial heritage of the now defunct Coffee Cable Car system that operated within the PCC, and some of the cable towers remain. The historic cable terminal has been restored. ICOMOS suggests that consideration needs to be given to whether the links between the landscape of the communication system that linked it with ports on the Caribbean Sea and the Pacific Ocean are significant.

These are defined in the nomination dossier as innovative communications systems such as the Manizales Villamaría Mariquita cable car system (1922), the Manizales Aranzazu cable car system (1929), and the Caldas railroad (1927), which were fundamental for the commercialisation of coffee production, for connecting communities, and for transporting merchandise.

Other towns are included but no distinguishing features are provided.

ICOMOS considers that the nominated area or areas should be a landscape that exemplifies the coffee system working in harmony with the environment, that displays traditional architecture, and that demonstrates the wider links that facilitated the coffee trade. An appropriate buffer zone to protect the nominated areas should be contiguous with administrative areas.

ICOMOS considers that the rationale for the boundaries of the nominated property and of its buffer zone are not entirely clear in connection with the possible attributes of the overall coffee landscape, with geographical features or with watersheds and surrounding natural forests.

#### Ownership

The majority of the property is in private ownership a collection of urban and rural plots. There are some reserves in public ownership.

#### Protection

##### Legal Protection

Legal protection exists for certain buildings in the cities and the historic centres of Salamina and I Cairo have

been protected at national and local level respectively. Protection is however absent for buildings in the semi-urban and rural areas that make up the majority of the nominated property and for the overall coffee landscape. The coffee farmers have a degree of protection, in terms of the use of the land.

Protection is implemented at the national government level, primarily through the Ministry of Culture in conjunction with the Ministry of Environment, Housing and Territorial Development, and also the Ministry of Commerce, Industry and Tourism. These collaborate with Private Sector and Civil Society organisations and the community to implement protection within the PCC. Thus there is an integrated protection mechanism operating at the National, Provincial, Municipal, Sub-District, and Town Centre levels. Apart from legal protection, the main protective instruments are land-use plans and protection of the status of the coffee growing area that is wider than the nominated property.

The land use plans of the municipalities when revised will need to take into account the provisions of the PCC Management Plan.

#### Traditional Protection

The coffee farmers are the custodians of the landscape and thus of crucial importance. IUCN notes that *the basis for protection of some of the area's natural values is customary law and governance integrating customary and formal protection and management in a complementary and consistent fashion is needed. Local inhabitants seem to be well prepared to participate effectively in governance and decision making regarding their natural landscape conservation.*

##### Effectiveness of protection measures

An effective integrated protection network exists but this is not underpinned by protection of many of the buildings or of the cultural aspects of the landscape.

ICOMOS considers that the legal protection in place is not adequate and should be extended to buildings in the semi-urban and rural areas and to the overall landscapes. Protection also needs strengthening in particular with regard to mining activities.

#### Conservation

##### Inventories, recording, research

The property has been described, and documented in terms of its architectural traditions and associated intangible cultural heritage. In addition various surveys have been undertaken on projections for coffee cultivation. This work began from as early as 1995 when the idea of the PCC was first conceptualized. There are a number of publications in the form of posters, flyers, pamphlets, journal articles, books, and multimedia presentations for the interpretation, conservation and development of the natural and cultural patrimony of the

PCC, including its associated intangible heritage. However, ICOMOS notes that there is no inventory of coffee farmhouses and buildings or of the urban architecture.

#### Present state of conservation

The present state of conservation is generally good for traditional architecture, urbanism and cultural components although the waning use of traditional materials and craftsmanship is an issue for buildings and for the landscape. ICOMOS notes that there are issues connected to the lack of environmentally friendly practices in terms of landscape conservation related to the use of fertilisers associated with full sun cultivation.

#### Active Conservation measures

These relate to programmes to support the coffee farmers and their working practices and to restore protected buildings. There appears to be little active conservation of the overall cultural landscape.

However in places the coffee production process has been adapted to use minimal water quantity and water treatment systems are placed in most farms. Several certifications schemes are used, including seven "sustainable coffee labels", which require that the coffee is cultivated without the use of chemicals or emphasize social aspects or a combination of both. An emphasis is put in the production of special coffees which integrates the environmental conservation, economic equity and social responsibility concepts. IUCN notes the positive trend in terms of conservation of coffee production across some of the property.

#### Maintenance

This is carried out by private owners apart from the few buildings in State ownership.

#### Effectiveness of conservation measures

The conservation measures undertaken by owners are generally adequate where traditional materials are used on buildings but this is not generally now the case.

---

ICOMOS considers that there is a need to undertake an inventory of the farmhouses, and buildings associated with the coffee farms and of the urban architecture and to continue the training and encouragement for traditional craftspeople and for the use of traditional materials on buildings, and to encourage environmentally satisfactory processes in coffee farming.

---

#### Management

Management structures and processes, including traditional management processes

A Management Committee has been established consisting of the Ministry of Culture, the Colombian Coffee Growers Federation (FNC), the Governors of Caldas, Quindío, Risaralda and Valle or their delegates,

and a regional Technical Committee brings in representatives of the Coffee Growers Committee and the universities. The State Party has appointed an Executive Director to oversee the implementation. There is therefore a structure in place that can begin to provide an overall management framework for the property.

Policy framework: management plans and arrangements, including visitor management and presentation

A Management Plan has been drawn up for the conservation and development of the landscape as a plan to establish the changing conditions of the landscape and not its immutability. The Management Plan was developed with the support of the Centre for Regional, Coffee and Business Studies (CERCO) based on the guidelines proposed by the technical teams from the Caldas, Quindío, Risaralda and Valle del Cauca departments. The FNC, the Ministry of Culture, and the National Planning Department also contributed to the Plan. The Management Plan is made up of three main sections:

- (I) Characterisation
- (II) Instruments for the management of the PCC
- (III) Strategic guidelines

Guaranteeing environmental sustainability is an integral part of the PCC Management Plan and the nomination dossier states that approval of the nomination will undoubtedly help to secure this.

However IUCN stresses the need for management to respect an active series of national and local protected areas within the region and in the property boundaries holding a rich biodiversity, specially related with birds.

IUCN considers that an integrated management system, including the local environmental authorities (*Corporaciones Regionales Autónomas*), would be required to ensure that there is an effective overall approach to the management of the property natural assets. Protection of the natural values of the property should be a central objective in the management system for the property.

#### Risk preparedness

The National System for the Prevention and Attention to Disaster, has established a Local Committee in each municipality to be in charge of guarding against disasters.

The Committees has put together Contingency Plans for each municipality according to the threat they may be exposed to. In addition, regional authorities include in their Departmental Development Plans a "Prevention and Attention to Disaster Sector". The National Government has also established certain special laws, such as the *Ley del Qui* (created due to the volcanic eruption in 1986), the *Ley de* (due to the flooding of

the Cauca river), and the *ey umbaya* (due to the 1999 earthquake in the Coffee region) that deal with the effects of natural disasters in the area.

#### Involvement of the local communities

Local communities are fully involved in the management arrangements.

Resources, including staffing levels, expertise and training

Funding for the implementation of the management plan comes from a variety of sources including national and regional authorities and this is said to make consolidation of the medium terms projection of the plan difficult. Nevertheless all the authorities have some funds available for cultural heritage and the Ministry of Culture co-finances work on protected buildings.

A wide range of professional staff are attached to the Ministry of Culture and to Cenicaf, many of whom are well qualified in tangible and intangible heritage. Extensive training programmes exist, some linked to universities, for capacity building skills related to landscape management.

#### Effectiveness of current management

The management plan is detailed and comprehensive. Its aim is to manage change in the landscape. ICOMOS considers that what needs strengthening is a clearer articulation of the attributes of the coffee landscape that need sustaining as a framework for sustainable development as these are not set out clearly in the nomination dossier or in the management plan. Cultural landscapes change and evolve over time but that does not mean all elements can change if their perceived value is to be maintained. In the case of the coffee landscapes the attributes that define their specific characteristics need to be much more clearly defined. In turn the management system and resources and training need to be directed at sustaining these attributes.

---

ICOMOS considers that the management system for the property is adequate but it needs to be focused on a clearer understanding of the attributes that need to be sustained.

---

## 6 Monitoring

A wide range of indicators have been developed related to the social structure of the coffee farms in order to monitor the resilience of the industry. Indicators also relate to archaeology, the implementation of the management plan and the number of protected buildings. ICOMOS considers that it would be desirable to augment these indicators with others related to the traditional building construction, and to the practices of coffee cultivation and the landscapes that these produce.

---

ICOMOS considers that the indicators developed are detailed and wide ranging but should be augmented to address traditional building technology and practices of coffee cultivation.

---

## 7 Conclusions

This nomination has been prepared systematically and with the full support of the local community over a considerable period of time. This has allowed for there to be strong local support for its aim to strengthen the coffee growing community. ICOMOS considers that it is however short on details of the built or landscape features of the six areas.

It is made clear that coffee cultivation methods in the nominated areas are not distinctive nor are they all traditional. Some practices such as full sun cultivation, (where all the trees are cleared, rather than the traditional shade grown systems where the coffee farms were carved out of the forest but leaving standing trees between the coffee plants to provide shade), are less environmentally sensitive than full shade cultivation. Further the way the coffee is processed is now done using modern methods and thus few structures exist, apart from drying roofs, that are distinctive to the coffee cultivation.

What is characteristic about the larger region is its mountain landscape and the small scale of the farms, which in recent years seems to have become more fragmented.

However, as few detailed descriptions are provided of the individual areas in terms of landscape and settlements, ICOMOS considers that it is not clear why the nominated areas are exceptional amongst the very large tracts of land dedicated to coffee farming. The nominated areas include three comparatively large areas and three quite small areas, one of which is some way from the others. What is not clear is the rationale for the choice of these six areas and precisely why certain areas have been nominated, how the areas relate to their hinterland or why certain towns have been included and others excluded. The nomination dossier lists criteria for the choice of landscapes related to coffee production and social systems, but at the same time the attributes associated with the chosen areas are said to be related not to coffee farming and its impact on the landscape, but to archaeology, festivals and urban planning.

Many towns have been included in the nominated areas but without in some cases a clear rationale for their inclusion in terms of how they manifest distinctive sentiments related to the coffee growing processes.

ICOMOS considers that the special qualities of the coffee landscape need to be better articulated and described as a basis for defining a nominated area or

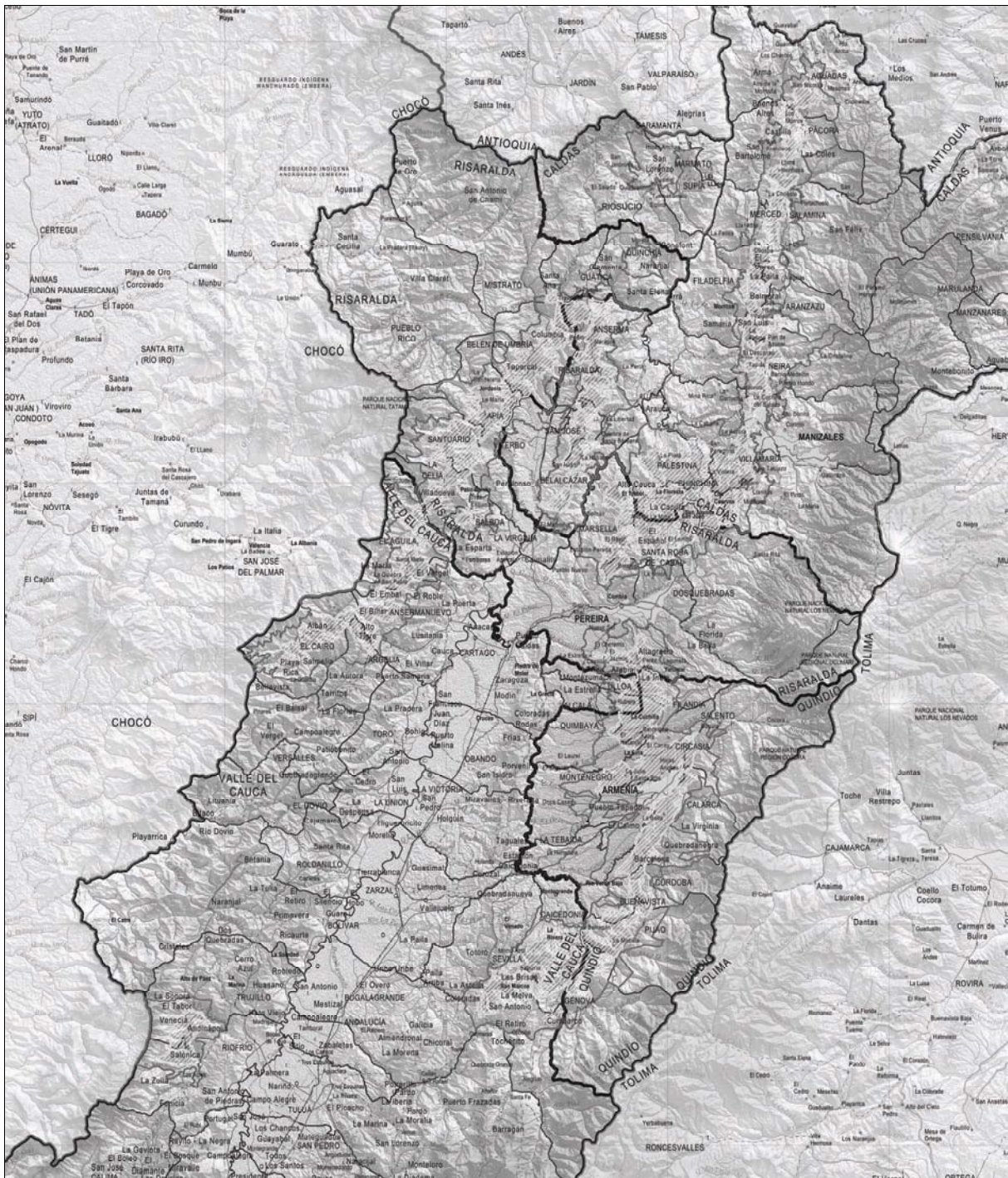
areas that are outstanding in relation to their wider surroundings in terms of cultural and environmental parameters, related to the way they manifest the exceptional impact of coffee production processes over time. And the areas nominated need to be described in detail and provided with adequate protection, particularly from mining activities.

There is furthermore a need for the nominated areas to be seen as exemplars in terms of their farming practices and the way these respect the environment and are sustainable over time. ICOMOS, in line with IUCN, considers that shade grown coffee as the traditional system that encourages soil stability, minimise the use of fertilisers and supports significantly higher levels of biodiversity should be the dominant system in the nominated areas.

Recommendations with respect to inscription  
ICOMOS recommends that the examination of the nomination of Coffee Cultural Landscape, Republic of Colombia, to the World Heritage List be **deferred** in order to allow the State Party to:

- Augment the comparative analysis with other areas of Latin America and the Caribbean and within the hinterland of the property in order to justify the distinctiveness of this area and the selection of sites;
- Define more clearly the distinctive qualities of the cultural landscape in cultural and environmental terms, in order to demonstrate how a nominated area or nominated areas can be seen as exceptional examples of a cultural landscape shaped over time by coffee production in relation to their surroundings;
- Define boundaries within which shade grown coffee is the dominant process, and which encompass discrete landscape areas that respect watersheds and remnant natural forests; and define buffer zones that relate to geographical features and administrative areas;
- Undertake an inventory of the farmhouses, and buildings associated with the coffee farms and of the urban architecture;
- Put in place adequate protection for both cultural and natural parameters, including for buildings in the semi-urban and rural areas and for the overall landscapes, and, in particular, strengthen regulations to prohibit mining activities.

ICOMOS considers that any revised nomination would need to be considered by an expert mission to the site.



Map showing the boundaries of the nominated properties

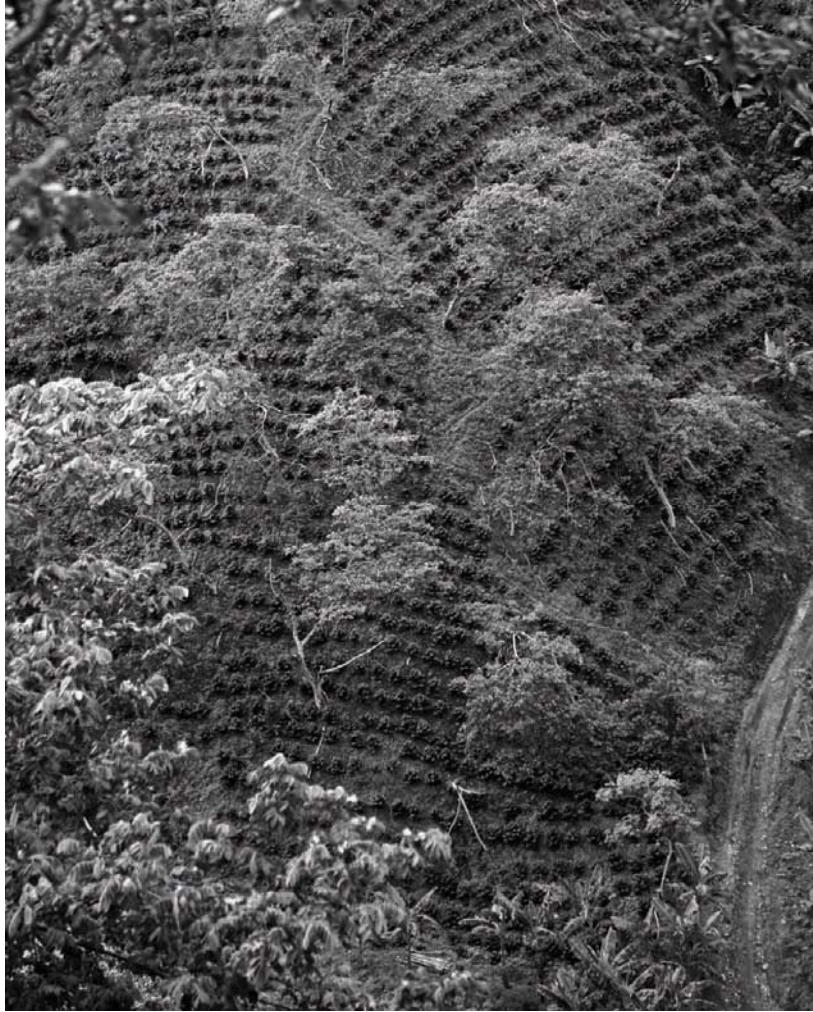




Typical cultivated landscape of the Coffee Country



Coffee farms, Valle del Cauca department



Slope coffee plantations, Caldas



Labour-intensive traditional method still used in coffee production





Traditional house in the PCC



Typical architecture of towns and villages

---

Fundidora Monterrey  
Mexico  
No 1357

---

Official name as proposed by the State Party  
Fundidora Monterrey Blast Furnaces

Location  
City of Monterrey  
State of Nuevo L  
Mexico

**Brief description**  
Fundidora Monterrey was the first large integrated iron and steel plant in Latin America, at the beginning of the industrialisation of Mexico. It produced large quantities of iron, steel and semi-finished products on the same site from 1903 until 1986. Its present-day heritage includes the vestiges of blast furnaces no.1 and no. 3, and some of their auxiliary equipment, including a set of hot-blast stoves which has become a regional icon. The other industrial facilities have disappeared or have been converted. Today the site is a leisure park, and blast furnace no. 3 has become a Museum of Steel.

**Category of property**  
In terms of categories of cultural property set out in Article I of the 1972 World Heritage Convention, this is a group of buildings.

## 1 Basic data

Included in the tentative List  
15 October 2008

International Assistance from the World Heritage Fund for preparing the Nomination  
None

Date received by the World Heritage Centre  
1<sup>st</sup> February 2010

**Background**  
This is a new nomination.

**Consultations**  
ICOMOS consulted TICCIH and a considerable number of independent experts.

**Literature consulted selection**

Hoehmann, J., "The industrial Heritage of modern Iron and Steel Making", TICCIH Bulletin, 36, Spring 2007, p. 6-7.

ICOMOS Mexicano, Monterrey, ICOMOS Mexicano, 2006.

Martinez Guarda, J., Historia de la Siderurgia latinoamericana, Santiago, 2002.

apata Novoa J., La muerte de Fundidora : reconversión de la cultura industrial mexicana, Mexico, 1989.

**Technical Evaluation Mission**  
An ICOMOS technical evaluation mission visited the property from 22 to 24 September 2010.

**Additional information requested and received from the State Party**  
A letter was sent to the State Party on 29 September 2010, asking it to provide historic maps and plans illustrating the development of the site and enabling an analysis of its evolution.

The State Party provided additional documentation on 10 November 2010, of which an analysis is included in this evaluation.

Date of ICOMOS approval of this report  
10 March 2011

## 2 The property

**Description**  
The property consists of the vestiges of the blast furnaces of the former iron and steel company Fundidora Monterrey, situated in an area of around 3.5ha. This however represents only the central part of the former Monterrey iron and steel making plant, which in its heyday occupied an area of 113ha, some three-quarters of which today form the buffer zone.

The industrial site is today surrounded on all sides by the conurbation of Monterrey. It has been converted into a park for leisure activities, cultural events and sports activities. The Museum of Steel (blast furnace no. 3) focuses on the production of iron and its transformation into steel, and the past industrial activities of Fundidora Monterrey.

The nominated property and its buffer zone contain a total of 26 buildings or main structures which underpin the testimony and significance of the property. It also includes 127 machines and parts of machines, and a collection of 500 scale models of items produced at the plant.

The property forms an elongated strip of land, which was once adjacent to the river, from which it is now separated by an expressway. It contains the vestiges and sites of the three blast furnaces and their auxiliary equipment. However, the plant extended a great deal further, to the north, west, and south-west, with a large number of additional workshops for the furnaces, the rolling mills, the preparation of semi-finished products, storage areas, and railway loading areas, etc. A certain number of these industrial elements are present in the buffer zone, in the form of reutilised buildings or technical and architectural vestiges.

Blast furnace no. 1 (1903) is at the centre of the nominated property. It comprises the former central structure of the furnace, which is 24 m high, from which most of the directly adjacent auxiliary equipment has been removed. Still in place however are the five hot-blast stoves, an overhead walkway, and the lower circular piping for the "blast", i.e. the admission of hot air required for operation of the blast furnace. The hot-blast stoves are metal cylinders some 20 m high, with walkways at their summits, above which stands a metal chimney of some fifteen metres. Identical, installed parallel to each other, and today cleared of nearby constructions, they constitute one of the emblematic images of the site. The stoves are themselves dominated by their large hexagonal brick chimney. To the north, the bays containing the foundry and the converters have been demolished, and their location is now occupied by a square at the centre of the property.

To the east of blast furnace no. 1 remains the enormous rectangular compressor building, which is made of brick. It contains some of the steam pumps which used to operate in this building. They have been conserved inside the building, which is today used for receptions, social events and exhibitions. This building dates back to the origins of the plant, but the equipment was changed when the site was modernised. The building is emblematic of industrial architecture at the turn of the 19<sup>th</sup> and 20<sup>th</sup> centuries.

To the north-west of blast furnace no. 1 is the power generating plant, in a building which underwent three successive extensions during transformations of the iron and steel plant. A certain number of machines have been conserved, in rooms which have been converted for social and cultural purposes, and the interior layout thus bears no relation to the original use. A recent facade has been added on one of the sides.

Blast furnace no. 2 (1940) was demolished during the 1990s. All that remains are its foundations, in the midst of a green area. It should however be noted that this blast furnace was shut down when blast furnace no. 3 was being started up, and that many of its technical components were therefore cannibalised.

Blast furnace no. 3 was built in 1965-67, using plans and machines which came from the United States. This was the last furnace in which iron and steel were produced at Fundidora Monterrey. Although this furnace has been little affected by interventions since it was shut down, this is not the case for its environment.

The blast furnace still has its refractory brick lining and its cooling system. It also still has its immediately adjacent functional technical elements, such as the ramp and the loading system, the hot air inlets, the tuyeres, and the gas and dust recovery units, etc. It is equipped with external facilities such as the hot-blast stoves and their chimneys, and the piping between the stoves and the blast furnace.

The equipment of the external functional areas once used for the storage and handling of the ore and coal has

disappeared, and these spaces have been transformed into the squares and avenues of the park, and thus bear no relation to their former industrial uses.

The casting bay was located next to the base of the blast furnace; the area was divided into two levels, for the casting process itself and control operations, and then either for the moulding of the iron in pig moulds, or the conveying of the molten iron and its transfer into Bessemer converters to make steel. The bay building has been rebuilt with identical external volumes, but significant changes were made in terms of materials, external appearance, interior space distribution and finishing. What was initially an open space with minimal architectural structures, for carrying out foundry work in conditions that were at once spectacular, unpleasant and dangerous, has been transformed into a comfortable and welcoming museographic space, complying with the safety and energy saving standards of the early 21<sup>st</sup> century. For example, the walls, floors, lighting and ventilation bear no relation to the past industrial situation.

The museum is however entirely dedicated to iron and steel making and its history. The property has been reappropriated with this idea in mind: access to the interior of the blast furnace, possibility of reaching the upper platform via a lift which follows the inclined plane once used for loading the furnace, etc.

The walls of the pit used for slag storage today support the roof of an underground level of the museum. Its green colour is a vague evocation of the past presence of the slag expelled from the blast furnace.

Amongst the other 26 remarkable buildings and structures conserved on the site as a whole, mention should be made of the foundry model workshop building and the model warehouse, various vestigial chimneys bearing witness to workshops which no longer exist, a bridge crane, and converters which have been decontextualised.

ICOMOS considers that it would be helpful to have a descriptive inventory of the 26 macrostructures referred to in the nomination dossiers and a map indicating their location. An industrial inventory of the buffer zone would also be useful to illustrate which vestiges actually remain of the integrated iron and steel making activities of Fundidora Monterrey.

#### History and development

After a period of strict control of the trading and production of iron by the Spanish and Portuguese colonial empires, the controls were lifted when the countries of Latin America gained their independence, and this continued throughout the 19<sup>th</sup> century. However, tentative efforts to produce iron in the late 19<sup>th</sup> century in Brazil, Colombia and Mexico proved shortlived.

Taking advantage of the presence in the Nuevo L. region of ore, coal and a railway connection, the Monterrey Iron and Steel Smelter Company (Fundidora) was founded in 1900. It benefited from the new economic

and financial measures which enabled a combination of local and foreign capital. The first blast furnace was built using technology from the United States. The plant began to operate in 1903. It was the first large integrated iron and steel plant in Latin America, successfully combining the production of iron and its conversion into steel on the same industrial site.

While blast furnace technology was relatively long established, and had been steadily improved during the industrial revolution in the Western world, the large-scale production of steel only began in Europe, and then in the United States, in the last quarter of the 19<sup>th</sup> century, thanks to the introduction of Siemens-Martin furnaces (Germany France) and of Bessemer converters, followed by Thomas-Gilchrist converters (Great Britain). These techniques were introduced for the first time in Latin America at Fundidora Monterrey.

In the 1900s, the plant was carrying out regular and continuous production, with the presence of technicians from Europe and North America. Subsequently, the works operated with local personnel, using a single blast furnace, for some forty years. The site went through some difficult periods, notably during World War One and the crisis in the 1930s. The factory and its industrial group then sought to increase vertical integration, by covering all activities from mining to the delivery of semi-finished products. Many additional workshops were created at the Monterrey site as a result. During this period, Monterrey was experiencing powerful growth in industrialisation and urban development. The city became a major industrial centre in Mexico and Latin America.

The Second World War period led to a sharp upturn in the steel market in America. In 1941-42, major works were carried out to modernise the plant and increase its productivity. A fifth heat-blast stove was built on the site of blast furnace no. 1, the compressors were improved and reinforced, and blast furnace no. 2 was built close to the first one. This was a period of expanding production.

In the 1950s, with its two blast furnaces providing a total capacity of close to 1000 tons per day, the company decided to diversify into flat products. At that time it was one of the most dynamic companies during the post-war industrial revival in Mexico.

In 1965, the construction of a new blast furnace (no. 3) was undertaken, using the most modern and innovative technology, once again from the United States. It was completed in 1967 and its output was much greater than the combined output of the two earlier blast furnaces, which were then shut down. A further modernisation stage, carried out shortly afterwards with the assistance of a Japanese company, enabled an increase of more than 50% in the factory's output.

But these efforts to increase productivity coincided with a sudden slowdown in the market. The federal state then acquired 25% of the company's equity to consolidate its debt. Unfortunately, this period was very difficult for

Mexico as a whole, and the country's currency was devalued in 1976. The company's debt tripled in size. On the social front, a memorable strike took place which had major consequences, one of which was the nationalisation of the company in 1979. However, the company never recovered from the impact of these events, and it stopped improving its production facilities which, after being highly innovative at the outset, became almost obsolete a dozen years later. The plant was shut down in 1986, leaving behind a very difficult social situation and a vast industrial wasteland.

The Fundidora Park Property Trust was founded in 1988, when ownership was transferred from the federal state to the regional state of Nuevo León. The fundamental idea was to gradually transform the industrial space and some of the buildings into an urban park and leisure centre. Structural and architectural work was gradually undertaken, resulting in the disappearance of some old industrial buildings and the addition of other buildings, such as the theatre, bearing no relation to the site's previous functions. There was a serious deterioration in the condition of some buildings and outdoor facilities, such as the main bay of blast furnace no. 3, whose roof was threatening to collapse by the late 1990s. The still substantial vestiges of blast furnace no. 2 were demolished in 1996, and many of the remaining metal elements were sold, with no concern for conserving the industrial heritage.

In 2001, the whole of Fundidora Monterrey was declared to be an industrial archaeology site of national interest, reflecting a new approach based on valorising the site's industrial past. The Museum of Steel project was concretised and was combined with the rehabilitation of blast furnace no. 3, its remaining auxiliary buildings and its immediate surroundings. The museum project and the restoration of the bay were undertaken in 2005, thanks to a major financial effort by the authorities. Meanwhile, the leisure and business park activities for the rest of the property were fully confirmed in 2006, as a result of the efforts of Parque Fundidora, the restructured public entity in charge of the rest of the property and the buffer zone.

As for blast furnace no. 3, a series of completely new challenges, some of which were hard to reconcile with each other, were faced: ensuring the safety of an industrial site which had been abandoned for almost 20 years, restoring it in accordance with the spirit of heritage conservation, and designing a lively museographic entity situated in direct juxtaposition with very large-scale objects. The project which is at once architectural, museographic and archaeological includes a specific programme for the conservation of the industrial vestiges, and their treatment with a view to ensuring their conservation and their presentation in line with museographic and aesthetic considerations. The corresponding works were completed in 2007.

### 3 Outstanding universal value integrity and authenticity

#### Comparative analysis

The State Party first provides a comparison with European industrial sites already inscribed on the World Heritage List and presented as major milestones in the history and heritage of the worldwide iron and steel industry, namely: Blaenavon Industrial Landscape, Wales, United Kingdom (inscribed in 2000, criteria (iii) and (iv)), the Zollverein Coal Mine Industrial Complex at Essen, which is characteristic of the Ruhr area in Germany (2001, criteria (ii) and (iii)), and the Völklingen Ironworks, in the Saarland in Germany (1994, criteria (ii) and (iv)). In conclusion, the State Party emphasises the points these major sites have in common with Monterrey:

- the close relationship between the production of iron and that of steel;
- a multi-faceted industrial heritage in which technical, aesthetic and social values are closely interrelated;
- a key project based on the development of abandoned industrial sites in order to pass on, and bear testimony to, past values.

Furthermore, the high degree of authenticity and the good level of integrity of the inscribed properties mentioned above is generally acknowledged.

The analysis of European sites continues with an examination of the Museo de La Siderurgia (Museum of Siderurgy) MUSI, Langreo, Spain, an important mining and industrial heritage site in the Asturias (Tentative List, Spain). As at Monterrey, the museum is located in the industrial space occupied by a disused blast furnace, and its cultural objectives are very similar. The two sites, it is argued, have had a similar economic and industrial history

The State Party then considers several sites in Latin America. The *Fábrica Siderúrgica de Ipatinga* Iron Factory, in Brazil, dates back further, to the 19<sup>th</sup> century. Its techniques are therefore different, and only a small part of the heritage has been conserved, but it remains a landmark site in regional industrial history.

The La Pradera Foundry in Colombia dates back to the end of the 19<sup>th</sup> century; it included several successive blast furnaces and a great deal of auxiliary equipment. As in the case of Fundidora Monterrey, today it is a business park with a museum, and the site has, moreover, conserved the most significant elements of its industrial heritage.

The Samaca Foundry, also in Colombia, dates from the start of the 20<sup>th</sup> century, and like Monterrey it is an integrated iron and steel plant. The Samaca site is still operating, but it has conserved many architectural features of heritage significance, and early machines.

ICOMOS considers that the comparisons made are interesting and relevant in the Latin American context, where in fact there are relatively few properties of this

type. It is unfortunate however that no effort has been made to find a similar site in the United States, a neighbouring country from which the technologies used at Monterrey originated.

As for the other properties considered, the comparisons are not sufficiently numerous, and are often unhelpful, except in the case of the Völklingen Ironworks. The comparisons are moreover undermined to some extent by efforts to find sites which are similar in terms of promotion. Promotion should only be considered as one dimension of the way the property is managed, and should not be looked on as a way of establishing the basis of the property's value. They encompass subjects which are clearly different (mining, industrial landscapes, excessively broad historical span). Furthermore, there is no truly international approach to how similar properties - making use of the same technical iron and steel production system employing 20<sup>th</sup> century technologies - are conserved today. Present-day conservation of blast furnaces from this period can be observed in a relatively large number of former iron and steel sites worldwide. There are several dozen of this type, particularly in Western and Central Europe, Russia, the United States and Japan, where preservation initiatives began to be taken from the 1970s onwards.

In many cases, conservation efforts are focused primarily on the blast furnace, largely disregarding the other elements of the integrated production process, for example with regard to steel production (converters, conveyor systems, ovens, etc.) and in particular the elements whereby the metal was transformed using rolling mills and machine tools, as was for a long time the case at Monterrey. The nominated property clearly reflects this tendency. More generally, there are basically two schools in terms of the conservation approach. The first is a form of renovation and reconstruction of the blast furnace and its auxiliary equipment, accompanied by a restructuring of the site and its surroundings for museographic or cultural purposes. The blast furnace becomes more like the "star attraction" of a staged presentation, rather than an object conserved in its context. The second and opposite school focuses its efforts on a policy of conserving the industrial testimony as it was bequeathed by the history of the property, without adding or taking anything away, and interpreting the place and its vestigial equipment. Amongst the examples given, Völklingen represents this tendency, but there are in fact several other examples, such as Duisburg in Germany, Sloss Furnace at Birmingham (Alabama, United States), and Nizhny Tagir (Urals, Russia).

ICOMOS considers that the genuinely outstanding 20<sup>th</sup> century properties are those which are sufficiently complete and authentic to bear testimony to the whole of the iron and steel making process.

---

ICOMOS considers that the comparative analysis does not justify consideration of this property for the World heritage List.

---

Justification of Outstanding Universal Value  
The nominated property is considered by the State Party to be of Outstanding Universal Value as a cultural property for the following reasons:

- The industrial heritage of Fundidora Monterrey bears technical, scientific and industrial testimony, particularly in the case of blast furnaces no. 1 and no. 3, which is of profound historic, social and aesthetic significance.
- This industrial complex fuelled the powerful industrial development of north-eastern Mexico. It bears testimony to very intense economic, social and cultural interchanges between the north of Mexico and the whole of Latin America.
- Blast furnaces no. 1 and no. 3 bear a unique testimony, particularly in the Latin American context, to several successive generations of technology which have all had a powerful industrial influence in this region of the world.
- In the course of its history, the property has made use of technologies from the United States and Japan; it has employed European engineers; it has helped to provide advanced technological training in Mexico and more generally in Latin America.
- The property's blast furnaces are the only ones conserved in the region as part of a determined effort to encourage technical and scientific education.
- The conservation approach adopted in this property, with a Museum of Steel, is intended to promote a new form of coexistence between a community and its culture, and to pay tribute to the plant's workers and technicians.

ICOMOS considers that this justification is primarily historic. The property did indeed play an outstanding and unique role in the diffusion of integrated iron and steel making, and more generally of heavy industries in the 20<sup>th</sup> century, from the initiating regions of Europe and the United States to Mexico and Latin America. However, the state of conservation of the property and the development choices made since the closure of the plant mean that it no longer bears testimony to the integrated iron and steel industry, but only to the blast furnace. Furthermore, the museographic values attributed to part of the property are related to the management and promotion of the property, but do not in themselves constitute outstanding value, as this term is applied in the World Heritage Convention.

#### Integrity and authenticity

##### Integrity

The State Party points out that the integrity of the property is mainly based on blast furnaces no. 1 and no. 3, which bear testimony to complementary historic periods. Integrity should be assessed for this property

nominated as a group of buildings, forming a coherent and comprehensible whole, thoroughly adapted for the use of the public by means of the museographic efforts made. The State Party considers that the integrity of the property in its present-day state complies with the various charters and reference texts, and particularly with those issued by ICOMOS and TICCIH.

When blast furnace no. 1 was shut down in 1967, the parts which were most crucial for its understanding and the most visually important were conserved, while certain elements were dismantled and reutilised for the new blast furnace.

The challenge of conserving the integrity of blast furnace no. 3, which was shut down in 1986, was considerable when it was restored and incorporated into the Museum of Steel. The State Party considers that the technical integrity of this part has been maintained at a level of 90%, fully in line with the interpretation approach adopted for present-day visitors.

ICOMOS considers that the concept of the integrity of the property raises several problems, as the property has undergone substantial transformations on several occasions.

It is first necessary to consider the history of the property beginning from the industrial restructuring of 1965-67, which led to the shutdown of blast furnaces no. 1 and no. 2 and their cannibalisation. The closure of the site (1986) was followed by the gradual setting up of the leisure park (late 1980s to the present day). A series of interventions were carried out during this period, such as the demolition of blast furnace no. 2, the conversion of disused buildings, the construction of new buildings, often of imposing size such as the theatre, on the edge of the property, and substantial landscaping changes (parks, roads, various infrastructures, etc.). Generally speaking, the old machines were sold for scrap. The latest stage was the museographic and interpretation centre project (2005-2007), combined with the restoration of blast furnace no. 3. It is only from this point onwards that the concept of industrial heritage has really been taken on board, on the basis of vestigial remains which had already undergone profound changes.

The integrity of the industrial structure, with regard to the integrated activities of Fundidora Monterrey, is basically weak, firstly because only the part directly associated with the blast furnaces constitutes the nominated property (less than 5% of the area of the industrial site), and secondly because, in the property, the elements which are representative of casting, the conversion of the molten iron into steel, and the transformation of the steel into semi-finished products are not present. The 26 heritage items listed, of which several have been changed, decontextualised or transformed, should be compared with the 80 buildings present during the years of industrial activity. The property does however include several large and well conserved technical buildings, some of which date back to the origin of the plant, with significant

testimony in the form of their technical equipment (the compressor building, the power generating plant building, and the foundry model workshop).

Finally, the architectural and landscape changes, which are in line with the objectives of the park, are no longer in any way representative of the specific atmosphere of an iron and steel plant. Urban high-rise buildings also affect some of the important visual perspectives of the property.

In conclusion, ICOMOS considers that the integrity of the property in structural terms is weak. The technical and industrial testimony it bears is incomplete, and the architectural and landscape atmosphere characteristic of iron and steel making in the 20<sup>th</sup> century has been greatly modified.

#### Authenticity

The various individual technical and industrial elements of the property which have been conserved may be described as authentic, in that all the elements come from the Monterrey site and were functional at some point in its history. The State Party has recently made an effort to draw up an inventory of, and conserve, technical and architectural elements which bear testimony to the site's industrial past. However, the expression of the authenticity of these individual elements is adversely affected as they frequently lack any relationship with their historic environment, either simply because the environment has disappeared (see Integrity), or because of the addition of buildings, the modification of interior layouts, and very substantial landscape transformations. The remaining machines and structures have lost much of their significance, and they have been treated as aesthetic elements. This is the case, for example, of the vestiges of blast furnace no. 1. In addition, some elements have been repositioned and decontextualised, and now play a purely decorative role which is sometimes diametrically opposed to their past function, e.g. a Bessemer converter which has been made into a swimming pool fountain. In other words, conservation has tended to focus on individual objects, usually treated more for their monumental value than for the testimony they bear to a complex industrial process, and making them understandable is considered to be merely a museographic matter.

The indoor and outdoor areas which provide the setting and environment of the technical heritage elements have been profoundly transformed in order to cater for visitors. Generally speaking, they no longer bear testimony today, on their own, to the working atmosphere of iron and steel making. They are no longer authentic.

In conclusion, ICOMOS considers that the technical and industrial elements present on the site are individually authentic, but that the expression of their authenticity is severely hampered by the frequent absence of authentic relationships between them, by the indoor and outdoor architectural transformations, by the changes to the landscape of the property, and by the sometimes

questionable use of industrial heritage elements for decorative purposes.

---

ICOMOS considers that the conditions of integrity and authenticity have not been fully met.

---

Criteria under which inscription is proposed  
The property is nominated on the basis of cultural criteria (ii) and (iv).

*Criterion ii exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town planning or landscape design*

This criterion is justified by the State Party on the grounds that Fundidora Monterrey bears testimony to the dynamism of the iron and steel industry of Nuevo Leon throughout the 20<sup>th</sup> century. The plant was an early and crucial element of the industrialisation of Mexico, and more generally of Latin America, due to the economic and technological role that it played. It bears witness, through the exemplarity of its integrated iron and steel making site, to the considerable cultural and technological interchanges which took place between North America, Nuevo Leon and the various regions of Mexico. It played a powerful role in providing training in new skills which was beneficial to the Mexican nation. It was an example for the industry and a symbol for the whole of Latin America.

ICOMOS considers that the integrity and authenticity of the nominated property are not sufficient to enable it to bear testimony to the historic past of technical interchanges and to the diffusion of the large integrated iron and steel plant model embodied by Fundidora Monterrey in Latin America during a large part of the 20<sup>th</sup> century. The property is no longer able today to give adequate expression to historical values which are clearly unquestionable.

---

ICOMOS considers that this criterion, although well founded historically, is not sufficiently well expressed in the state of integrity and authenticity of the property and its buffer zone.

---

*Criterion iv be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates a significant stage in human history*

This criterion is justified by the State Party on the grounds that Fundidora Monterrey is a representative example of the introduction of integrated iron and steel making techniques in the second phase of industrialisation in Mexico and in Latin America. It was the first company to produce iron and steel there simultaneously, and for a long time it was the largest in the region. It played a pioneering role in the diffusion of techniques from Great Britain, Germany and the United



States into less industrially developed regions. The plant was installed by an American company.

Blast furnaces no. 1 and no. 3 are today the only ones to have been preserved anywhere in Latin America, and they bear testimony to a powerful component of this region's cultural identity. They are unique and well conserved symbols of national and international industrial history. Their rehabilitation was carried out using a multidisciplinary historical, architectural, artistic and didactic approach. Blast furnace no. 3 is today outstanding for the role it plays in keeping the memory of the industrial heritage alive.

ICOMOS considers that Fundidora Monterrey has unquestionably been an eminent example of a technological complex illustrating the history of the iron and steel industry in the 20<sup>th</sup> century, particularly in Latin America, but that its current state of integrity and authenticity, and the restructuring choices made, mean that this criterion cannot be met. The testimony Fundidora Monterrey provides is both national and regional, and is strengthened by what is clearly a considerable effort in terms of museographic promotion, but it must be stressed that this is outside the scope of the World Heritage Convention.

---

ICOMOS considers that this criterion has not been justified.

---

ICOMOS does not consider that the criteria and Outstanding Universal Value have been justified, because of the insufficient state of integrity and authenticity of the property and its buffer zone.

---

#### 4 Factors affecting the property

##### Development pressures

The property is today located inside the conurbation of Monterrey, one of the largest cities in Mexico. ICOMOS considers that development pressure is being felt inside the buffer zone because of the ongoing process of transforming the former industrial site into a leisure park and a public urban space, which is resulting in modifications and in new constructions. It is also being felt in terms of visual impact on the property's landscape from distant high-rise buildings (such as the government building).

There is no illegal occupation of land within the boundaries of the property and its buffer zone, and projects are subject to the obtaining of public authorisations.

##### Tourism pressures

Visitors to the property and its immediately surrounding area are of two types: a very wide range of urban users of the leisure areas and attractions of the park, and

visitors to the Museum of Steel and the industrial site. A large number of artistic, sports and social events are held in the buffer zone and in certain parts of the property, for example through the renting out of heritage spaces equipped for this purpose. At the present time, ICOMOS considers that the pressure comes mainly from the need to develop leisure activities in the buffer zone.

##### Environmental pressures

Monterrey has clearly defined seasons, with large temperature differences. Rainfall is irregular and sometimes violent. These climatic conditions are the explanation for the choices made in reroofing and in the thermal insulation of walls.

No environmental or pollution problems remain today as a result of activities on the former industrial site. The ground, which was once polluted, underwent treatment when the site was rehabilitated.

##### Natural disasters

Very violent and repeated storms sometimes cause major flooding in the region, but the position of the industrial site, which is sufficiently high in relation to the bed of the river, enables effective draining of the torrential rainfall.

##### Impact of climate change

Climate change does not seem to have any identifiable impact on Monterrey or on the property.

---

ICOMOS considers that the main threats to the property are urban pressure, because of the specific development of the buffer zone and of the emergence of high-rise buildings affecting the property's skyline.

---

#### 5 Protection conservation and management

##### Boundaries of the nominated property and buffer zone

The property has a surface area of 3.55 ha, and its boundary is marked by a footpath. It contains the most significant of the vestiges which have been conserved. However, it represents only a small proportion of the area occupied by the former industrial site (about 113 ha). There are no people living inside the property boundaries.

The buffer zone has a surface area of 74.91 ha, inside the boundaries of the former industrial site. There are no inhabitants in the buffer zone.

---

ICOMOS considers that the boundaries of the nominated property reflect only a limited number of the past industrial activities of Fundidora Monterrey. Its buffer zone corresponds to most of the area covered by the extension of the former iron and steel plant, but the state of conservation is fragmentary and decontextualised.

---

### Ownership

The owner of the property and the buffer zone is the government of Nuevo L on. The public entities *Parque Fundidora* and *Museo del Acero A.C.* hold the concession for the property.

### Protection

The official documents concerning the technical and architectural elements of the property set out the protective measures taken, under the terms of the federal laws of the State Party and of the regional state of Nuevo L on.

The public entity in charge of applying the legal protection measures is *Parque Fundidora*.

Control of the application of the laws on the heritage protection of the property is exercised at federal level by: the National Institute for Fine Arts, the World Heritage Office of the Public ducation Department, and the National Institute of Anthropology and History (INAH), and at regional level by the Urban Development Agency of the government of Nuevo L on.

### Legal Protection

The general laws which apply to the protection of the property are:

- The federal law on monument and site conservation;
- The cultural heritage law of the state of Nuevo L on.

By a decree of the government of the state of Nuevo L on (February 2001), the property and the buffer zone are designated for the purposes of museography and industrial archaeology.

Taking over from the economic, social and cultural development structure instituted by the state of Nuevo L on in 1988, the public entity *Parque Fundidora* was established by a law of the state of Nuevo L on in July 2006. It is a decentralised department of the administration of the state of Nuevo L on, which is in charge of managing the park's infrastructures for social, cultural, economic and tourism purposes. The law also establishes the *Museo del Acero* as an autonomous and separate entity whose purpose is museographic.

Blast furnaces no. 1 and no. 3 were declared to be artistic monuments of Mexico by a federal government decree in November 2009.

### Traditional Protection

The attachment felt towards the property by former plant workers and managers, and more generally by the inhabitants of Monterrey, ensures that the local context is favourable for protection initiatives.

ffectiveness of protection measures

ICOMOS considers that the necessary legal texts for the protection of the property are in place, but this is a recent

state of affairs. arlier development choices have compromised the integrity and authenticity of the property in a way which is difficult to reverse.

---

ICOMOS considers that the legal protection in place is adequate, but has only recently been effectively applied, and that the property has already been considerably damaged.

---

### Conservation

Inventories, recording, research

The archives of Fundidora Monterrey consist of 7000 files of archives, 20,000 plans, and 22,000 photographs. The current library comprises 6600 volumes, of which 1600 come from Fundidora Monterrey.

A large amount of historical, technical and architectural documentation exists about the conserved and preserved elements of the property. Information was provided on this matter by the State Party in its response dated November 2010; however, there is still a shortage of information about the parts of the property which have been removed, restructured or restored, and about the buffer zone, between 1986 and the early 2000s.

### Present state of conservation

The vast industrial site abandoned when the plant was shut down has since then been extensively remodelled and reconstructed, but this was done without any concern for the conservation of the industrial heritage until the decree of 2001 was issued. Important elements of the site, in both the property and its buffer zone, were dismantled; buildings were demolished or converted; many machines and facilities were removed, or in some cases were repositioned or partially conserved, mostly on the basis of aesthetic criteria. Many new buildings were erected such as the theatre, and a large building on the northern edge of the property, exactly opposite blast furnace no. 1. A special conservation effort was made for blast furnace no. 3, and its immediately-adjacent technical auxiliary equipment, when the *Museo del Acero* (Museum of Steel) was set up at the end of the 2000s.

### Active Conservation measures

A detailed inventory and conservation programme was undertaken in 2005 covering the individual archaeological elements still on the site, under the control of the Urban Development Agency and Parque Fundidora.

In practice, two documents set out the rules for management and conservation to be applied by staff:

- the *Guide to the use and conservation of buildings, visitor facilities and public spaces*;
- the *Manual for the service and organisation of the park*.

These documents set out the rules for the maintenance of the buildings and facilities, and coordinate the conservation and restoration policies.

The creation of an overarching department specialising in the conservation of the blast furnaces and industrial vestiges of the property has been announced by the Urban Development Agency of Nuevo Leon, in partnership with the Museum of Steel.

#### Maintenance

The maintenance of the property is carried out by the specialised staff of Fundidora Park and the Museum of Steel.

#### Effectiveness of conservation measures

ICOMOS considers that the presence of effective conservation measures is relatively recent. The measures were mainly introduced following the decision made in 2005 to restore and restructure blast furnace no. 3 in order to turn it into the Museum of Steel. They led to the choices already examined (Description, History, Integrity). Considered from the viewpoint of individual elements, the protection measures have been effective, putting an end to the scrapping of the elements, and ensuring effective conservation based on extensive documentation. Considered from the viewpoint of the industrial complex, set in a given context and environment, the measures were belated and led to questionable choices. The general conservation policy has been carried out primarily in order to provide a symbolic and artistic presentation of the property. The way in which blast furnace no. 3 was converted into the Museum of Steel may be seen as an option adopted with a view to the promotion of the property.

---

ICOMOS considers that conservation of the property's individual archaeological features has been managed effectively from 2005 onwards, but also that the overall choices made in the long term have led to the disappearance or decontextualisation of many elements, and to aesthetic and decorative approaches which are far removed from the conservation of the property's initial values.

---

#### Management

Management structures and processes, including traditional management processes

The basis for the management of the property was established by the law of 2006 which set up two complementary public entities (presented in the section on Protection): *Parque Fundidora* and *Museo del Acero*.

The first entity operates primarily through the decisions made by its board of directors, on which a large number of administrative and economic bodies of the regional State and the city are represented. In addition to its management of the leisure park, *Parque Fundidora* is in charge of blast furnaces no.1 and no. 2, the associated

green spaces, and the former industrial and technical facilities buildings of the property. It has a *Central Operations Division*. It is also in charge of the buffer zone.

The second property management entity is *Museo de Acero Horno*, which is in charge of the Museum of Steel and the conservation of blast furnace no. 3.

These two entities report to the Sustainable Urban Development Secretariat of the government of Nuevo Leon, and more specifically to its Urban Development Agency. This Agency establishes the medium-term management programme for the property and its buffer zone. The Agency also manages urban development outside and close to the buffer zone.

An *Integrated Management Office* for the various component parts of the property and an *Overarching Coordination and Conservation Unit* are currently being set up. Their future briefs have been defined, and include drawing up a Management Master Plan, supervising conservation, and monitoring.

Policy framework: management plans and arrangements, including visitor management and presentation

The current Management and Conservation Programme for the property and its buffer zone is to be superseded by a Master Plan for management and conservation supervision.

The Museum of Steel also has its own programmes for the maintenance and conservation of blast furnace no. 3, and the development of museum activities and visitor facilities.

The user guide and the park service and organisation manual set out the basic rules governing the conservation and management of the property.

The handling and control of visitor flows during cultural, sports or social events is carried out by the site management and organisation services, particularly with regard to parking areas and vehicle traffic.

The property is also governed by, and must comply with:

- the Development Plan of the State of Nuevo Leon (2004-2009);
- the Urban Plan of the City of Monterrey (2002-2020); and particularly the Plan for the Integration of the Fundidora Park with the historic Antiguo district and the Macroplaza.

The Museum of Steel, which reutilises the vestiges of blast furnace no. 3 and the area previously occupied by the furnace's casting and steel conversion bay, constitutes an important and extremely comprehensive interpretation area covering the production process, its scientific and technological aspects, and the history of iron and steel making in Mexico and throughout the world.

ICOMOS considers that a management system is in place. However, it works towards general objectives relating to the development of the park's activities, for the whole property and its buffer zone, and to the museographic promotion of the vestiges of blast furnace no. 3. This furnace now constitutes a well organised centre for the interpretation of the property and the history of iron and steel making. It should be stressed that a major effort is being made to conserve the architectural and industrial heritage elements which are still in place. All the above provisions and programmes together form the Management Pplan, but it should be noted that this plan has not yet been approved by the supervisory authorities.

#### isk preparedness

A brief outline is given of the arrangements to cope with rainfall and flooding risks. There is also a substantial visitor safety and control service which operates during important cultural, sporting and social events.

#### Involvement of the local communities

The local communities intervene through their elected representatives in the institutions of the State of Nuevo L on, and through the authority the representatives exercise on the Sustainable Urban Development Secretariat of Nuevo L on and its Urban Development Agency. These bodies are, moreover, directly present in the management structures, and particularly in the Park's board of directors.

esources, including staffing levels, expertise and training

The park's management structure receives public funding and has its own revenues, generated by its leisure and business park activities.

The museum budget, in addition to entrance fees, is guaranteed by public funding, and by the contribution of foundations dedicated to promoting the education of young people.

The park management and coordination unit, which reports to the Urban Development Agency, is staffed by conservation personnel and specialist architects. It may also call on specialists from the National Institute of Anthropology and the National Institute of Fine Arts for support.

The material and human resources allocated for the conservation of the property are at present incorporated in the two administrative and technical structures in charge of the management of the property and its buffer zone.

ICOMOS considers that the question of material resources and staffing must be clarified, particularly by the indication of specific figures for the budgets and human resources actually allocated for conservation.

#### ffectiveness of current management

ICOMOS considers that the management by the two entities (the leisure park and the Museum of Steel) is in place, and that it forms a management system which is appropriate for achieving their general development objectives. However, from this viewpoint the management of the property's conservation is hampered by past development choices, and the priority given in the past to presenting the property in a way which is essentially museographic, aesthetic or decorative. Furthermore, the overarching entities for management, conservation and monitoring of the property, which have been announced, need to be confirmed. They must include not only architects and engineers, but also historians and heritage conservation specialists.

---

ICOMOS considers that the management system for the property is effective, in terms of its general development approach. However, it is suffering from the impact of choices made in the past, which have undermined the property's integrity and authenticity. The system's overarching operation must be clarified, and the management and conservation plan must be approved and implemented.

---

## 6 Monitoring

Monitoring of the property's conservation is currently carried out by *Parque Fundidora* and by its supervisory entity, the Urban Development Agency of Nuevo L on. The overarching conservation and monitoring entity which has been announced has not yet been confirmed.

The indicators presented primarily concern the methods used to study and document the existing structures, and particularly blast furnace no. 3. This leads to a diagnosis of the element considered, and to an intervention proposal.

Periodical monitoring has been in place since September 2007. It is in particular intended to include a monthly check on the state of corrosion of external elements. The overall conservation plan is drawn up and implemented on the basis of all the proposals concerning individual elements.

---

ICOMOS considers that monitoring of the elements forming the property is in place, but that the overarching structure in charge of ensuring its long-term monitoring needs to be instituted. Technical data sheet forms for the monitoring of individual elements and structures of the property would be advisable.

---

## 7 Conclusions

The historical role of Fundidora Monterrey in the diffusion of an integrated iron and steel industry model in Mexico during a large part of the 20<sup>th</sup> century, and more generally its cultural and economic influence across Latin America, are unquestionable. However, the abandonment of industrial activity was followed by a lengthy restructuring phase (from the end of the 1980s to the start of the 2000s), and by the setting up of an urban park offering a wide range of artistic, sporting, economic and social activities. This was an extremely substantial and perfectly legitimate economic restructuring effort, whose success was crucially important for the urban development of Monterrey. Concern for promoting and conserving the industrial heritage did not appear until later, in particular with the Museum of Steel project, whose importance and major pedagogical role ICOMOS wishes to stress. However, too many of the industrial elements had disappeared by then, or had been fundamentally changed or repositioned. Today, the integrity of the site is no longer adequate, and its authenticity has been compromised; in particular, it has lost a great deal of its historic significance as an early and pioneering integrated iron and steel plant in Mexico and in Latin America. The conservation choices, which were made rather late (in the mid-2000s), were, moreover, focused more on the individual presentation of residual elements for museographic, aesthetic or purely decorative purposes. The authenticity of the property, particularly in bearing testimony to the industrial context, has been definitively compromised.

### Recommendations with respect to inscription

ICOMOS recommends that Fundidora Monterrey Blast Furnaces, Mexico, should **e r ed** on the World Heritage List.



Aerial photograph showing boundaries of the nominated property



General view of the nominated property



Blast furnace no. 1 and the set of hot-blast stoves





Blast furnace no. 3, now the Museum of Steel



The compressor building after restoration

Properties deferred or referred back by previous sessions of the World Heritage Committee

---

## León Cathedral Nicaragua No 1236

---

Official name as proposed by the State Party  
León Cathedral

Location  
León, Nicaragua

**Brief description**  
León Cathedral was constructed between 1747 and the early 19<sup>th</sup> century. It is 105,83 m long by 57,13 m wide. The project was conceived by the Guatemalan architect Diego José de Porres Squivel on the basis of a rectangular layout, used for Latin American Cathedrals from the 16<sup>th</sup> century. Architectural features and proportions respond to trends that originated in Antigua Guatemala that reach in León their most significant expression. From a stylistic point of view, the monument shows the transition from Baroque to Neo-classic and is characterized by the sobriety of its decoration. The Cathedral contains important movable works of art.

**Category of property**  
In terms of categories of cultural property set out in Article I of the 1972 World Heritage Convention, this is a monument.

### 1 Basic data

Included in the tentative List  
16 June 1995

International Assistance from the World Heritage Fund for preparing the Nomination  
None

Date received by the World Heritage Centre  
22 September 2006  
26 February 2010

**Background**  
This is a referred back nomination (32 COM, Quebec City, 2008).

A first nomination dossier for León Cathedral was examined by the World Heritage Committee at its 32<sup>nd</sup> Session (Quebec City, 2008). At the time, ICOMOS recommended to refer back the nomination to the State Party.

The World Heritage Committee adopted the following decision (32 COM 8B.45):

the World Heritage Committee,

1. Having examined Documents WHC-08 2.CO 8B and WHC-08 2.CO I .8B1,
2. Refers the nomination of the León Cathedral, Nicaragua, back to the State Party to allow it to:
  - a) complete the planning and implementation schedule for the restoration and conservation of the monument;
  - b) complete, approve and implement the Special Plan for the historic centre of León;

Recommends that:

- a) special attention should be given to the improvement and enhancement of the historic centre of León, especially in relation to the area surrounding the Cathedral. In order to improve life quality and urban landscape, the local government should consider actions aiming at authorizing the opening of the metropolitan commercial centre, removing disruptive commercial advertising signs in the historic centre, and burying the wires and cables of the public services;
- b) risk preparedness, especially for natural disasters, should be addressed as one of the main issues of the management plan;
- c) improve the coordination among national, local and Diocese stakeholders in order to improve the protection and management;
- d) the State Party should ensure that special Parliament fund for León Cathedral continues;
- e) the State Party should undertake, if not already done, a systematic inventory of the works of art and movable heritage contained in the nominated property.

The State Party supplied on February 2010 the following new information:

- A Management Plan entitled "Instituto Nicaragüense Plan de Manejo Catedral de León, Managua, 2009";
- Computerised (CAD) as-built drawings in plan, elevation and cross section of the Cathedral as well as a plan of the electrical system;
- A scaled drawing showing the historic centre of León and its protected area including all listed buildings;
- A scaled drawing showing the revised and extended León Cathedral's buffer zone;
- A scaled drawing showing the historic and urban evolution of León Cathedral's buffer zone.

**Consultations**

ICOMOS consulted various experts in this type of property.

**Literature consulted selection**

Angulo Iiguez, D., et al., Historia del Arte Hispanoamericano, Barcelona, 1945-1956.

Angulo Iiguez, D., *La arquitectura del siglo XIII en Nicaragua*, Managua, 1988.

Gutiérrez, J., *Arquitectura y Urbanismo en Iberoamérica*, Madrid, 1989.

Hubler, G., and Soria, M., *Art and Architecture in Spain and Portugal and their American Dominions*. Baltimore, 1959.

Palacios, A., et. al., *Proyectos de Intervención en Catedral de León*, Nicaragua, 2009.

Polanco Uezada, C., *Diagnóstico Integral de la Catedral de León*, Nicaragua, Instituto Nicaraguense de Cultura (INC), 2009.

#### Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the property from 8 to 12 September 2010.

Additional information requested and received from the State Party

ICOMOS sent a letter to the State Party on 2 November 2010 requesting confirmation of extended buffer zone and schedules for management plan approvals. A response was received on November 2010 which was inadequate.

ICOMOS sent another letter on 16 December 2010 related to the following:

- The timetable for the formal approval by the State Party of the "Instituto Nicaraguense Plan de Manejo Catedral de León, Managua, 2009";
- The timetable for the approval and implementation of the "Plan de Desarrollo Municipal";
- Confirmation of extended buffer zone.

The State party responded on 24 February 2011. The information provided have been carefully considered in the relevant sections.

Date of ICOMOS approval of this report  
10 March 2011

## 2 The property

### Description

The nominated property covers an area of 0.77ha, corresponding to an urban block containing the Cathedral and an open space to the front of the Cathedral. The area of the Cathedral is 5,295.48 square metres (0.529ha).

The architectural layout corresponds to a rectangular plan, according to the generalised model of the 18<sup>th</sup> century cathedrals, earlier employed in Lima and Cuzco, among other Latin American Cathedrals. The interior layout of the basilica consists of five longitudinal naves, the central one is the highest.

The roof was conceived to produce a particular luminosity in the inner space. Through the vaults with pendentives and lanterns, natural light penetrates and bathes the

interior and also ensures good ventilation. The roof consists of vaults, cupolas crowned by lanterns and ribbed vaults. The central nave has the shape of a Latin cross and its central axis is made up of 9 cupolas, two of them with lanterns. The external walls are, except for the main facade, barely decorated, with few reliefs. The main materials for the walls, columns and buttresses are brick and stone, bound with lime and sand. The baroque features, which prevail in the roof, cannot be perceived from the ground because the five large terraces are retreated and protected by balustrades surmounted by more than one hundred pinnacles and forty large and small cupolas, which constitute the external counterpoint of the vaults in pendentive. The harmony between the cupolas and the Cordillera constitutes a relation between architecture and the natural environment.

The main facade, from where the two towers rise, has two levels divided by an entablature decorated with frieze and garlands. It is composed of five spans (laterals, centrals and intermediates) separated by pairs of pilasters. Three of the eleven doors correspond to the main facade. Two styles are coexisting here, Baroque and Neo-classic.

As the Cathedral was built according to the tradition, i.e. starting with the chevet (external part of the choir), its principal facade is in general accordance with the 1767 plans and presents a later style. The main facade has elements from Greek and Roman architecture, such as the ionic capitals, the triangular pediments, the barrel vault and the cupola. Renaissance elements are also present, such as the basilica structure, the pinnacles, the horizontal proportion and the balustrade. From the Baroque architecture, the facade borrows the break of the entablature, the cornice, the columns, the curved pediments and the lack of definition of the columns capitals. From the Neo-classic style, it has lengthened pillars, covered with garlands; from Gothic architecture, the four-centred arch and the pinnacles; from the Mudejar architecture, the alfiz.

Because of the co-existence of various architectural styles, the Cathedral can be considered as an eclectic building. Baroque and Neo-classic styles prevail in the main facade and late Baroque in the chevet. Also, the influence of the architecture of Antigua Guatemala is manifested through the proportions and the volumes of the towers, the prevalence of horizontal over vertical lines, the general heaviness and the mortar decoration.

In the interior, the supports are cruciform pillars with the flanked frontages of pilasters. According to the architectural features of Antigua Guatemala, the pilasters are decorated with grooves up to the under-surface of the arcs. All pillars are formed by multiple beams. On the entablature, the cornice carries a convex frieze, another typical element of Antigua's architecture. The transept is dominated by a hemispherical cupola. There are no lateral chapels; they were replaced by the Way of the Cross, giving the inner area the particular perspective of the Spanish-American cathedrals.

The set of circles and multiple arcs prevail in the interior baroque structure of the Cathedral. The mannerist influence of the neo-classicism is however present in the vault of the Sanctuary, in which the interior abounds in ornaments. The golden altarpieces of baroque style decorated with statues and paintings were destroyed and replaced by neo-classic marble and cement niches. Some have been hidden in the basements of the Cathedral and others scattered in the rural localities of the county or in other cathedrals of Nicaragua, such as Matagalpa. The Cathedral has seven basements, whose function is to support the weight of the building, but which are also used as funerary crypts for famous people.

The cloister or Patio of the Prince, located behind the chevet, is representative of the traditional architecture of León: a central court surrounded of a gallery of wooden carved columns. This space has a singular charm, in many ways a typical Nicaraguan space, integrated into the building but dominated by the church. In the Patio of the Prince, the roof of the gallery leans on the building. It rests on a wooden structure covered with tiles.

The Cathedral also shelters important works of art; among them the wooden Flemish altarpiece, the Pulpit, the 1770 mosaic and a set of the oldest statues which survived the destruction and displacement of the altarpieces. The 14 stations of the Way of the Cross were painted by the Nicaraguan Antonio Sarria between the end of the 19<sup>th</sup> and the beginning of 20<sup>th</sup> centuries. In the art gallery of the Chapter Hall, fifty portraits of the bishops of the dioceses of Nicaragua and Costa Rica and the bishops of what became the diocese of León are kept.

#### History and development

Although the volcanoes of the region caused frequent catastrophes, the plain where León is located is a land of exceptional fertility thanks to the deposits of volcanic ash. At the beginning of the 16<sup>th</sup> century, the Province of Maribios was moderately populated; the inhabitants lived close to Lake Amoyutlán or near its margins and the sea was nearby. The Amerindian population had chosen a place where the water and the hunting resources abounded, on volcanic grounds of an astonishing fertility, where they could also easily fish and had access to sea salt.

In 1523, the first Spanish exploration carried out by Gil González Dávila arrived from southern Nicaragua. Spaniards found gold but did not launch a conquest. In 1524, Francisco Hernández Córdoba took possession of the lands explored by Gil González and founded the towns of León and Granada, which were at the beginning mere military camps.

After an agreement with the local government, the inhabitants made the decision to abandon the first town of León and to re-establish it on its current site. The Mayor, Pedro Munguía Mendiola transmitted the decision to Guatemala; the authorization of the Spanish authorities came a month later, between February and March of 1610.

The Cathedral was started in the second half of the 18<sup>th</sup> century at a time when the local colonial society was emerging as a blend of the contributions of local Indian traditions and the traditions that arrived with Europeans and Africans. A cathedral responding to local expectations was finally achieved, following the building of five earlier churches. Some argued that León deserved this cathedral because it was the oldest ecclesiastical head office of Central America.

The demolition of the old church and the construction of the new Cathedral began in 1747, when Isidro María y Figueroa was the Bishop. Construction materials came from different places; the stone employed for the foundations and basements was extracted from the Chiquito River area, and the terracotta bricks used for the construction of the walls were manufactured in furnaces at the farm of Hato Nuevo, located 7 km away on the road between León and Managua. The workers were Amerindians, therefore it was a team of Spaniards, Creoles, Amerindians, Africans and mulattos who contributed to the building of the Cathedral.

In 1748, Bishop María y Figueroa demolished the chevet of the earlier Cathedral and started the foundations. However, he died suddenly and there was a long delay in the resumption of the works. In March 1760, Fray Antonio de Navia Bolaños y Moscoso took office and works continued until 1761, a date which marks the opening of lime and brick factories. The Cathedral plans were drawn in 1762 by the Guatemalan architect Diego José de Porres Squivel, and were sent to Spain to obtain the approval of the Crown, and to secure the necessary funds for continuing its construction. They were approved in 1767; the original documents are kept in the Archivo General de Indias (Seville). When the plans were sent to Spain, two thirds of the Cathedral had already been built.

The Diego José de Porres Squivel style is manifested in the whole work. On arrival of the new bishop, Lorenzo Tristán y Smoneta, the side aisles near the central nave were still missing. A few years later, in 1780, he had the honour of inaugurating the three naves. Tristán also acquired crowned ornaments, such as the ciboria and the chalices. Work on the front part, the turns and the Sanctuary's vault occurred between 1785 and 1795 under the direction of Bishop Juan Félix de Villegas. He entrusted Fray Francisco Gutiérrez, who had built three convents in Madrid, and directed the extensions of the collaterals and the completion of the Chapter Hall and the Almonedas' room. The Sanctuary's vault was set up between 1795 and 1799. In 1810, the Dominican Bishop Nicolás García Jerón started one of the most prolific periods of building, including the construction of the towers and the main facade. This work was directed by Hipólito Estrada de Orellana.

In 1821, Nicaragua became independent from Spain and became a Catholic Spanish-speaking country, with an ethnically heterogeneous society. León was the capital

where the highest civil and religious authorities lived, as the Cathedral was the Seat of the Bishop of Nicaragua and Costa Rica. By this time, León had become a multi-ethnic society, and there were strong links between the human environment, the city and the building of the Cathedral. In the 19<sup>th</sup> century, new ideas emerged, such as those of the French Enlightenment. León was a place where liberal ideals were born and disseminated, and under the supervision of the Church, the primary, secondary and tertiary education in Nicaragua started, promoted by bishops and implemented by priests.

In the mid-19<sup>th</sup> century, the outside of the Cathedral was completed. On 6 March 1860, after the civil wars, Fray Bernardo Piñol y Aycinena took office at the diocese of Nicaragua. A few days later, he consecrated the Cathedral. That year, the southern tower and the chevet were rebuilt. On 20 November, the Cathedral was designated as a minor basilica by Pope Pius IX.

In relation to the physical condition of the building, damage has occurred through the centuries. Despite the high seismic activity in the area, the Cathedral survived many violent earthquakes. In 1960, the house building enterprise Cardenal Lavayo Fiallos carried out work on the northern tower. In the 1970s, the outside walls of the building were entirely covered with parasitic plants which damaged the ornaments of the facade. The roof was also invaded by plants and, was also cracked. In 1976, the walls, corroded by moisture, were treated to allow access to the underground levels. In 1983, the Cathedral was declared National Historic Heritage. Between 1992 and 1994, it was entirely restored, with the exception of the murals, frescos and the square.

### 3 Outstanding universal value integrity and authenticity

#### Comparative analysis

The nomination dossier includes a comparative analysis between León Cathedral and other Central American monuments, especially those located in Antigua Guatemala, inscribed on the World Heritage List in 1979. Antigua was the crucible of artistic forms that spread to the rest of Central America. In spite of the constant seismic threat, the architecture developed in the 18<sup>th</sup> century, bears the sign of a particular and distinctive Baroque. It was a period of great constructions: churches, convents, civil buildings, etc. Concerning cathedral typologies, the most important work is León Cathedral, designed and planned by Diego José Porres Quijvel, who belonged to the main family of architects of Antigua. León is the only example on Antigua of Baroque applied to a cathedral that is still standing and preserving its original conception and function.

There are stylistic differences between the Cathedrals of León and Antigua. Antigua Cathedral was finished in 1680, and has architectural features which pre-date the local Baroque; its main and lateral facades were conceived according to a classical Renaissance layout,

they are remarkably sober and their only ornaments are plain pillars, entablatures, pediments and niches. In the interior, the system of support corresponds to the 17<sup>th</sup> century: cross pillars following the Renaissance model instituted by Diego de Siloé in Grenade Cathedral (Spain) and used in Mexico City, Puebla, Guadalajara, Lima and Cuzco cathedrals. The interior of Antigua Cathedral is Renaissance style. Antigua Cathedral was seriously damaged by earthquakes, especially in 1773 when a good part of the structure was destroyed, rendering the building unable to perform its function.

Other Central American cathedrals (Ciudad Real and Comayagua) do not reach the size of León and are not faithful to the typological features given by Porres to Antigua's Baroque architecture. In those cathedrals there are no canalled pilasters, which were largely employed in León. The Tegucigalpa Cathedral does not respond to the typical lay-out of cathedrals, because it was first an 18<sup>th</sup> century parochial church, and made a cathedral in the early republican period (19<sup>th</sup> century).

In the rest of the Americas, there are other cathedrals that could be compared with that of León. Peru and Oaxaca (Mexico) show some similar problems regarding seismic risks. Architecture of the 17<sup>th</sup> and 18<sup>th</sup> centuries in these regions bears common features: massive constructions, scarcely elevated, essentially built up in stone and with no plaster. These features give the cathedrals a sober and heavy appearance (eg. Oaxaca, Cajamarca, Puno, Cuzco). León's Cathedral presents two distinctive features. First, stucco plaster makes the architecture appear lighter. The clear plaster balances the lack of height of the towers, whose proportions were calculated in relation to the seismic risk. Only Trujillo's Cathedral (Peru) currently has a similar kind of plaster. Secondly, the placement of the numerous windows and lanterns and the interior presence of ascending and curved lines, typically Baroque, and the absence of chapels, determine a sublime interior space, with very good lighting and ventilation, more than in the above mentioned cathedrals. These two specific features allow León's Cathedral to be seen as an example of integration of functionalism and aesthetics, put together in spite of the geological constraints.

ICOMOS considers that the comparative analysis provided by the State Party demonstrates the similarities and differences between the nominated property and other similar Latin American monuments, most of them included in historic centres inscribed on the World Heritage List. As a result, León Cathedral demonstrates the use of an extended building layout of Spanish origin, used in the Spanish Americas between the 16<sup>th</sup> and 18<sup>th</sup> centuries. In the framework of Latin American colonial cathedrals, the monument illustrates a specific architectural interpretation typical of Antigua Guatemala that reached its most perfect expression in León, responding to specific geographical and climatic conditions.

---

ICOMOS considers that the comparative analysis justifies consideration of this property for the World Heritage List.

---

Justification of Outstanding Universal Value  
The nominated property is considered by the State Party to be of Outstanding Universal Value as a cultural property for the following reasons:

- The monument is a unique testimony to the application of a regional architectural style to a religious building following the layout of cathedrals, which fulfils the original functions and preserves its integrity.
- The monument exceptionally reflects the influence of this regional style and its consolidation. As the main architectural work of the society that built it, it is the expression of Spanish art and of regional characteristics, shaped by the geographical environment and the society that supported its erection. The building reflects the Central American experiences in architecture during the colonial period. If earthquakes damaged Antigua in 1773, León Cathedral survived adverse circumstances, such as earthquakes and political and economic difficulties. It combines exceptional function and architectural aesthetics.
- The monument is a unique testimony of the Antigua (from Antigua Guatemala) Baroque, it retains its integrity and provides access to the work of the main architects that gave origin to this regional style
- The building is the material expression of the process of formation of the Latin American society; it allows study of particular features and the social, political and cultural relationships during an essential period of its history, when it started affirming its particular identity which led to the independence movements of the early 19<sup>th</sup> century. It is a centre of exceptional immaterial cultural manifestations and is linked to individuals from the realm of an art of great importance.

ICOMOS considers that this justification is appropriate because it sets forth the property's exceptional architectural and societal attributes.

#### Integrity and authenticity

##### Integrity

The nomination dossier includes no specific discussion of integrity of this property.

ICOMOS considers that the monument has been properly conserved. It is intact and although subject to repair and maintenance, has not had extensive alterations.

ICOMOS notes the unsightly commercial communication tower located in front of the Cathedral and recommends that it should be relocated.

##### Authenticity

The nomination dossier includes a detailed study of the authenticity of the nominated property, based on the following aspects: plans, style, function, materials, workmanship and setting. With regards to plans, the building was constructed according to the original project (kept in the India's Archives in Seville) by Diego José de Porres and constitutes an excellent example of a Hispanic-American cathedral of the 18<sup>th</sup> century, with a typical rectangular plan, following the model of Seville Cathedral and extended all over the Americas. The monument has not undergone substantial modifications to its plan or its original structure. The cathedral keeps the original styles with no modifications: Baroque and Neo-classical. The building fulfils the original social and religious functions. It is the space that allows cohesion for social, cultural and political relationships among the inhabitants of León. For Nicaraguan society, the monument is the landmark of the main religious festivity of the country, the Gritería.

Building materials are those used in the original construction. Restoration projects implemented during the 1990's by national and local organisations have strictly respected original materials and techniques. The Cathedral has a predominant position from an urban point of view. Facing the central plaza, it was the nucleus of administrative and social functions in the city.

ICOMOS considers that authenticity is maintained by the permanence of the original plan, materials, functions, social significance and relationship with the urban setting.

---

ICOMOS considers that the conditions of integrity and authenticity have been met.

---

##### Criteria under which inscription is proposed

The property is nominated on the basis of cultural criteria (i), (ii), (iii), (iv), (v) and (vi).

Criterion (i): represent a masterpiece of human creative genius;

This criterion is justified by the State Party on the grounds that León's Cathedral testifies the artistic perfection reached despite many obstacles. Built in spite of natural, economic, political and social constraints suffered by the province of Nicaragua in the 18<sup>th</sup> century, it is a masterpiece from the point of view of art. In a superb space, it combines the lay-out of cathedrals with harmonious proportions, featured by the equilibrium of horizontal and vertical lines, interior sumptuousness featured by a remarkable curvilinear movement, abundant lighting and natural ventilation, and the extraordinary relation it achieves with its natural setting. Architectural styles of the period (baroque and neo-classicism) merge with the framework of the features of the region, including the adoption of elements of León's civil architecture. This is a massive construction that responds to the seismic characteristics of the area.



The cathedral maintains a significant ensemble of movable properties spanning from Gothic to neo-classicism; it constitutes a good example of furniture art and styles of the colonial period. It has resulted in the establishment of an architectural school in Nicaragua inspired in Antigua (Guatemala).

The Cathedral combines aesthetic criteria and functional necessities, and has survived the impacts of volcanic activity to which it has been exposed over time.

While recognising the importance of the monument for the Nicaraguan and Central American societies, ICOMOS considers that the property is an example of the application of several architectural and stylistic resources but does not consider it a masterpiece of a human creative genius.

---

ICOMOS considers that this criterion has not been justified.

---

Criterion (ii): exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design;

This criterion is justified by the State Party on the grounds that Le n Cathedral is an example of different architectural influences of Spanish Art adapted to the geographical and social space, and to the environment of Latin America, especially in the city of Le n. Different influences are translated in the building, resulting in its own characteristics that stem from the geographical environment and local workmanship, reflecting the new society appearing in the Americas, particularly in Central America in the 18th century. This new society created a monument that expresses its identity, its social, religious and artistic syncretism, and interacts with the landscape.

ICOMOS considers that the significance of Le n Cathedral as an example of an exchange of human values in relation to a specific area of the world has been demonstrated by the several influences that merge in the monument and by its significance for a multi-cultural society.

---

ICOMOS considers that this criterion has been justified.

---

Criterion (iii): bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is still living or which has disappeared;

This criterion is justified by the State Party on the grounds that Le n's cathedral is a testimony to Hispanic-American traditions since it expresses the cultural and religious syncretism arising from the merging of local traditions (Spanish and Amerindian) that led to new ways of life. The culture given by the Spaniards to the New World was predominantly religious; that is why many of these cultural expressions relate to the Christian faith; such as churches, saints' portraits, religious

sculptures, etc. Cathedrals were the achievement of the efforts of inhabitants and constituted the highest expressions of this cultural identity. Le n Cathedral is a remarkable example of the constancy of a new society.

ICOMOS considers that the arguments proposed by the State Party to support the application of this criterion have already been evoked for the application of criterion (ii).

---

ICOMOS considers that this criterion has not been justified.

---

Criterion (iv): be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history;

This criterion is justified by the State Party on the grounds that Le n's Cathedral constitutes an outstanding example of a regional Central American architectural style. In the span of time between the 16<sup>th</sup> and 18<sup>th</sup> centuries, Hispanic America was the scenery of an historic and cultural phenomenon of world relevance - the encounter between two worlds and the implantation of a European culture in a new continent. In architectural terms, cathedrals are the best expressions of this phenomenon. In Central America, art and architecture adopted local expressions, particularly during the 18<sup>th</sup> century, in the Antig e o Baroque, whose main monument was not erected in Guatemala, but in Le n. At the same time, the monument reflects the transition from Baroque towards new architectural and artistic expressions typical of the 19<sup>th</sup> century.

ICOMOS considers that Le n Cathedral constitutes an outstanding example of the regional interpretation of a typology of religious building merging several architectural and stylistic sources in an ensemble featured by its unity and architectural and social significance.

---

ICOMOS considers that this criterion has been justified.

---

Criterion (v): be an outstanding example of a traditional human settlement, land-use, or sea-use, which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change;

This criterion is justified by the State Party on the grounds that Le n Cathedral illustrates the conception of urban space of New World towns, and of the related social relationships. This space symbolized the emergence, during colonial times, of new forms of cultural expression that would later become the local cultural identity. The Cathedral has maintained its significant position since 1610 onwards and reflects the spiritual, cultural and social life of the society that erected it.

While recognising the importance of the Cathedral as the core of the town and main reference in the urban landscape, ICOMOS considers that it does not reflect, by itself, all the features of traditional urban settlements.

---

ICOMOS considers that this criterion has not been justified.

---

Criterion (vi): be directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance;

This criterion is justified by the State Party on the grounds that León Cathedral is the nucleus of important cultural manifestations that are landmarks of Latin American cultural identity, especially the traditional *Gritería*, dedicated to the Immaculate Conception. This religious celebration of national importance is currently reproduced in other Central and North American countries. At the same time, León Cathedral is linked to historical facts relevant in Latin-America and at world level: the first reactions against the colonial regime; the life and works of Rubén Darío, founder of the first poetry movement born in Latin America and whose work reached world significance; the hero of independence Miguel Larreynaga; the scientist Luis H. Debayle; the poets Salomé de la Selva and Alfonso Cortés; and the musician José de la Cruz Mena.

ICOMOS recognises that the nominated property has an unquestionable social and cultural significance at national and regional levels, but those considerations do not reach a universal significance. The relationship between the poet Rubén Darío, who reached world-wide recognition and the nominated property, has not been sufficiently demonstrated by the State Party.

---

ICOMOS considers that this criterion has not been justified.

---

In conclusion, ICOMOS considers that the nominated property meets criteria (ii) and (iv) and conditions of authenticity and integrity and that Outstanding Universal Value has been demonstrated.

---

#### Description of the attributes

From a historical point of view, León Cathedral is an outstanding testimony to colonial Central-American society. The author of the project, Diego José de Porres Squivel, adds historical value to the monument, since Porres was the most outstanding architect of Antigua Guatemala during the 18<sup>th</sup> century.

The Cathedral is an example of the application of architectural layouts that were brought by the Spaniards to the New World and lasted over 300 years in the construction of churches. In this case, the application of the typical quadrangular layout is integrated with architectural features coming from Antigua Guatemala that reached in León their most complete expression.

Among the Antigua features are the mainly horizontal proportions and the low and thick towers as a response to earthquakes, and the internal and external decoration. Finally, from a stylistic point of view, León Cathedral constitutes a remarkable example of transition from Baroque to Neo-Classical.

## 4 Factors affecting the property

### Development pressures

The impact of human activities is substantial in the historic centre of León, enhanced by the prolonged economic crisis. In the neighbourhood of the Cathedral, human factors constituting a threat for the conservation of the monument are concentrated. The area serves a double function: it is a commercial and an institutional centre. Most economic, social and cultural activities are developed in the area; as a result, big gatherings of people occur, most of them coming from surrounding neighbourhoods.

In response to point 3.a of decision 32 COM 8B.45 (Commercial Centre), the State Party, with the sponsorship of the Agencia Española de Cooperación Internacional called for the construction of a new Metropolitan Commercial Centre in 2008, which was aimed at relocating the public markets increasing demand for commercial spaces and to reduce the current traffic loads, pollution and vibration, noise levels, waste disposal, and street vendors. The commercial centre was built and the street vendors were moved to this new facility but were immediately replaced by new street vendors. Municipal authorities realize that this is essentially a cultural and political problem and intend to raise the matter to higher levels of authority. Other development pressures are being addressed in the Municipal Development Plan (see section 5 below).

ICOMOS considers that the State Party has gone a considerable way since 2007 to meet point 3.a of decision 32 COM 8B.45. Building and opening the commercial centre and relocating street vendors were an important step towards improving the Cathedral's immediate environment. ICOMOS recognises that the issues concerning street vendors remain unresolved and will require long-term cultural changes and political action to affect the desired changes.

ICOMOS recommends that the State Party continues to work to find ways to resolve the situation concerning street vendors who use the streets and public spaces surrounding the Cathedral for their businesses.

### Tourism pressures

León is a key place for tourism in Nicaragua, based on its historic heritage. The Cathedral is one of the main attractions of the country with a considerable number of visitors (45,000 in 2009). The provision of tourist services and facilities for the Cathedral started in 2001; some

guided tours are available for both Nicaraguans and foreigners.

The tourism use of the Cathedral is limited, due to insufficient number of guides and surveillance staff and lack of information material for visitors. Visitors access to the roof can be a risk to the visitors as well as to the building. The number of visitors is not controlled, and this could be a cause of deterioration. The Direction of Cultural Heritage has recommended that visitor groups should not exceed 10 people in order to prevent accidents, and reduce the impacts on the building.

ICOMOS notes that the INTU (the National Tourism Agency) is in the process of upgrading and updating the "Plan Integral de Turismo" (Comprehensive Tourism Plan) nationwide. This plan will include a component which will comprise specifically the Cathedral and city of León.

#### Environmental pressures

There are serious problems with pollution of surrounding areas. Agricultural practices have led to the deterioration of the quality of the land and water resources, and surface and subsoil waters are polluted. In addition, pollution of the Chiquito river results from the activities of craftsmen concentrated next to the river banks near the Cathedral.

Air pollution caused by motor vehicle traffic is also a concern. Due to the configuration of the historic centre, the streets cannot absorb the current volume of traffic. This pollution is one of the factors of deterioration of the Cathedral walls. The circulation of heavy vehicles also creates noise pollution affecting the experience of the monument for visitors and the community. Waste management systems are inadequate in this part of the city.

ICOMOS notes that since 2007, the Municipality has begun to implement various elements of the Municipal Development Plan (in preparation) that include traffic and noise pollution reduction, burying of electrical cables and regulating commercial signs.

#### Natural disasters

The monument is threatened by natural disasters; among them seismic activity, volcanic eruptions, landslides, hurricanes and storms. Earthquakes represent the most serious risk since they can reach 8 on the Richter scale. León County is classified in the fourth level of risk at the national level; it is level 8 in a 0-10 range. León is located next to the Pacific coast, the most threatened area in Nicaragua. The city has suffered strong earthquakes over time; buildings constructed over or next to faults are the most threatened. This is the case of the Cathedral, located next to faults that cross the historic centre. Concerning volcanic risks, León County is classified in the highest category of risk; in a scale 0-10, it is classified 10. The town is threatened by three nearby volcanoes: Cerro Negro, Telica and Momotombo.

Regarding hurricanes, León is ranked 4 in a 0-10 range and 9 regarding floods. The indirect impact can be more serious than the direct impacts. Hurricanes generally produce strong winds from the Pacific, causing persistent and intense rains, with flooding occurring particularly in areas near watercourses. This is a cause of risk for León Cathedral, located by Chiquito river. Intense rains overload the Cathedral roofs; water infiltration also affects the interior, threatening the stability of walls, plaster and painting. In terms of the frequency of storms, León is placed second in the categories of risk.

The SINAPRED institution (Sistema Nacional Para la Prevención, Mitigación y Atención de Desastres) should mitigate the impact of these natural disasters.

#### Impact of climate change

Although the nomination dossier does not specifically address climate change, it is evident that the region where the city of León is located is very vulnerable to these impacts, due to its exposure to phenomena like cyclones, storms, heavy rains and winds. The State Party has demonstrated an awareness of the climatic risk that, together with seismic and volcanoes activity, contribute to define León Cathedral as a place exposed to high levels of risk.

The nominated property continues to face natural decay and deterioration processes caused by excessive humidity, moisture, masonry parasites, fungi, solar radiation, expansion and contraction due to temperature differentials, intense rainfalls, and rising damp. These natural phenomena are typical of this region and climate and, even though they are not serious causes for concern, they do require permanent monitoring and regular maintenance to remain at acceptable levels.

---

ICOMOS considers that the main threats to the property are related to natural factors (seismic activity, volcanoes, hurricanes and heavy rains) and to development and environmental pressures caused by human activities. A rigorous risk preparedness plan is necessary to address these risks, including the implications for land use and urban planning. These considerations should be integrated into the existing Cathedral Management Plan (see Risk Preparedness in Section 5 below).

---

## 5 Protection conservation and management

#### Boundaries of the nominated property and buffer zone

The nominated area consists of an urban block of 0.7 ha corresponding to the Cathedral and the open space at its front.

The original nomination dossier provided for a buffer zone of 12.55ha, corresponding to 13 urban blocks of León's historic centre. Notwithstanding the fact that the original 2007 proposal proved satisfactory, the State Party has

proposed to extend the buffer zone, from 13 blocks/12.55 hectares, to 27 blocks/28.71, and include 3 additional urban/visual axes, on the grounds that:

- The new extended buffer zone includes other important churches and buildings which, since colonial times, were meant to establish an urban relationship with the Cathedral.
- The new extended buffer zone also includes more cultural and historical buildings of great interest, which have been already surveyed, studied and catalogued, some of which are currently under restoration.
- The 3 additional axes will provide additional protection regarding long-distance urban relationships / visuals between the Cathedral and specific historic urban neighbourhoods, thus supporting its role as a city landmark.

ICOMOS sent letters on 2 November and 16 December 2010, to receive confirmation on this extension of the buffer zone.

In its letter sent on 24 February 2011, the State Party confirms the rationale for the extended buffer zone and its size. The letter also reports the description of the three urban/visual axes. There is however no explicit confirmation of the official extension of the buffer zone.

ICOMOS congratulates the State Party for extending the buffer zone; this measure should further enhance the property's protection. However, ICOMOS notes that the linear axes along the Calle real and through El Sagrario and Guadalupe neighbourhoods do not contribute to strengthen the safeguard of the values of the nominated property, whilst their delimitation and shape make difficult to enforce any measure for ancillary protection to Leon Cathedral.

ICOMOS therefore recommends that these two linear axes be removed from the buffer zone.

---

ICOMOS considers that the boundary of the nominated property and the extended boundary of the buffer zone are adequate, except for the linear axes along the Calle real and towards Guadalupe neighbourhood through El Sagrario, which ICOMOS recommends be removed from the buffer zone.

---

#### Ownership

The Cathedral is owned by the Diocese of Leon.

#### Protection

##### Legal Protection

The Constitution of Nicaragua establishes that the State is responsible for the conservation and protection of the cultural heritage of the nation, including archaeological, historical and linguistic heritage.

At the national level, Leon Cathedral has been registered as Cultural, Historic and Artistic Heritage of the Nation by

Decree of the Minister of Culture dated 7 July 1983. All properties constituting the historic and artistic heritage of the Nation are protected by specific laws, especially Decree-Law 1142 on Protection of Cultural Heritage of the Nation (1982), modified by Decree-Law 1237 (1983). This Law establishes the basis of the current structure for heritage protection in the country. No intervention can be undertaken without authorisation of the Direction of Cultural Heritage of the Nicaraguan Institute of Culture. In the specific case of Leon, the Direction has a group of Inspectors that oversee projects and supervise works on historic buildings, in coordination with the Department of the Historic Centre at Leon Municipality. In 1999, Leon Cathedral was declared by the National Assembly "Monument of the Millennium" by Decree 2432.

Law 261 on Municipalities establishes that local governments are responsible for protection of archaeological, historical, linguistic and artistic heritage. Decree 52 of 1997 establishes that local governments shall maintain cultural and historic sites and conserve landscape with the aim of promoting national and international tourism.

The Cathedral is located in the historic centre of Leon. Use and management must take into account national and local legal instruments. Municipal rules on regulation of urban development were passed in 1998, including land use and conservation of environmental and cultural resources. Implementation of the rules is the responsibility of the Direction of Physical Planning and Local Development.

At the local level, technical control and supervision is the responsibility of the Department of the Historic Centre; all interventions must be approved by the Cultural Heritage Office, which has implemented municipal ordinances for Leon's urban development. These ordinances are the main tools used for regulating development, establishing zones, densities, etc. The Municipality's Department of Historic Centre has recently finished the draft for the new urban rules as part of a Special Plan of Protection. These rules are under revision for approval by the Cultural Heritage Office.

In response to point 2.b of decision 32 COM 8B.45 (Complete Special Plan for the historic centre of Leon), the Municipality is updating and integrating all development and revitalization city plans (including the Special Plan of Protection for the Historic Centre, the Cathedral Square Revitalization Plan and the Cathedral's Master Plan) into a single all-in-one master plan known as "Plan de Desarrollo Municipal" (Municipal Development Plan), which is to become the ultimate protection and management comprehensive tool for the entire Historic District.

ICOMOS supports this initiative which should ensure better coordinated protection, conservation and management of the property and improved environmental conditions in the Historic Centre.

ICOMOS sent letters on 2 November and 16 December 2010 to request the timetable for the approval and implementation of the "Plan de Desarrollo municipal".

The State Party responded on 24 February 2011 that the municipal authorities are working to achieve the approval of this Plan and of the Master Plan for the nominated property.

ICOMOS recommends that the State Party completes, approves and begins implementation of the Municipal Development Plan in order to meet the requirements of point 2.b of decision 32 COM 8B.45.

#### Effectiveness of protection measures

The inclusion of León Cathedral in the category of Cultural, Historic and Artistic Heritage of the Nation establishes a special legal protection regime. These measures appear to be effective for the protection of the property.

---

ICOMOS considers that the legal protection of the nominated property is adequate. In order to ensure the protection of the buffer zone, ICOMOS urges the State Party to approve the "Plan de Desarrollo municipal" (Municipal Development Plan) and the corresponding legal instruments for its implementation.

---

#### Conservation

##### Inventories, recording, research

The 1992-1994 restoration project was preceded by the inventory and diagnosis of the Cathedral. The work has been documented photographically, and the documentation is available at the National Library and Archives. The Catalogue of immovable cultural properties of León was made in 1994. In 2005, a new survey was carried out. The resulting documentation is available in the Department of the Historic Centre in León. As one of the main historic monuments of the country, León Cathedral has been the subject of much historical and architectural research. The bibliography mentioned in the nomination dossier includes a range of published research works. Concerning training of professionals, the National Autonomous University of Nicaragua trains ethnologists, archaeologists, sociologists and historians, and the National University of Engineering trains architects and engineers. Both universities have undertaken research works on cultural heritage, including León Cathedral.

Since 2007, a full set of computerised (CAD) architectural survey drawings was prepared. A complete condition survey of the building and a partial artefacts inventory was completed in 2009. The results of this inventory are included in the 2009 Cathedral Management Plan. This work was undertaken in response to point 3.e of decision 32 COM 8B.45 concerning the undertaking of a systematic inventory. Although the nomination dossier and the Cathedral Management Plan include a detailed description of movable works of art, only an incomplete

inventory of the Cathedral's treasures has been supplied. León Cathedral authorities argue that revealing the details of the entire treasure may jeopardize its safety at this time. Stakeholders are currently exploring ways to fully complete the treasury's inventory while ensuring its conservation and safety.

ICOMOS supports this cautious approach that is meant to safeguard the Cathedral's treasure.

ICOMOS recommends that the State Party make special arrangements with the Diocese authorities to complete the Cathedral's treasure inventory while ensuring its conservation and safeguard.

#### Present state of conservation

The nomination dossier includes a detailed report on the monument's current state of conservation, including assessment of deterioration in relation to each material component. With regard to the roof, the exterior plaster has surface cracks and damage to the drainage system has been caused by environmental pollution. These factors contribute to the problems of humidity in the interior of the building, affecting the structural system, especially the arches. The balustrade that crowns the walls of the naves is cracked and some pieces are detached. Remains of parasitic organic materials are visible in the interior or the roof structure, causing fissures that allow leakage into the roof space. The Patio del Príncipe does not currently have any major conservation problems; some tiles are broken or displaced, and some components have been poorly repaired. The structure is also weakened by the poor condition of electrical wiring.

External walls have surface cracks. Some interventions have also inappropriately used cement. Considerable fissures are observed, and there are traces of corrosion on the elements supporting the bells. In general, painting of the internal surfaces is in good condition. Internal walls are affected by humidity coming from the roof, and there are fissures in some arches. Some sculptures on the interior walls are damaged, and some are missing. Humidity is also a problem in the basement walls, probably coming from the soil porosity. Solid waste has accumulated in the small ventilation openings. Wooden doors and windows are in good condition. Some of them need some preventive maintenance or restoration. Floors are in good condition; replacements have been undertaken according to technical requirements appropriate for conservation.

ICOMOS appreciates the detailed report on the state of conservation included in the nomination dossier and the Cathedral Management Plan and considers that the property continues to have an acceptable level of conservation. There are, however, significant causes of decay that, if properly addressed, could be controlled and reduced to acceptable levels. ICOMOS encourages the State Party to increase its efforts to control these causes of deterioration in the on-going restoration plan.

## Active Conservation measures

Between 1990 and 1994 the Ministry of Culture carried out restoration works to the Cathedral, coordinated by the Direction of Cultural Heritage of the Municipality of León and the Committee for the restoration of the Cathedral. The project aimed at conserving the cultural and socio-economic values of the monument. In the work plans for conservation of cultural heritage for 2007, the Direction plans to implement new conservation and restoration project, similar to that of 1992-1994. This project is needed in order to address the progressive deterioration of the monument. This project is included in the Cathedral Management Plan annexed to the nomination dossier and is awaiting final approval to proceed.

Concerning point 2.a of decision 32 COM 8B.45 (Conservation planning): the State Party supplied the Cathedral Management Plan entitled "Instituto Nicaragüense Plan de Manejo Catedral de León, Managua, 2009" which includes schedules for the nominated property's restoration.

During the last 3 years, the conservation actions undertaken by the State Party include the preparation of the as-built and survey plans; a complete building condition assessment; plan / design / schedule intervention projects; complete restoration of the Way of the Cross paintings; and exterior wall plaster maintenance.

ICOMOS sent letters on 2 November and 16 December 2010 to request the timetable for the formal approval by the State Party of the Cathedral Management Plan.

The State Party responded on 24 February 2011 and provided a copy of the "Acuerdo" n. 54 2010 signed on 15 October 2010 through which the Conservation Plan for the Cathedral was approved by the Instituto Nicaragüense de Cultura (INC). However, the above mentioned agreement has not been signed by the Diocese of León, which is the owner and main user of the nominated property. The agreement only mentions in its article two that the INC with the Diocese will establish the means necessary for the implementation of this Conservation Plan.

ICOMOS urges the State Party to continue the dialogue with all relevant stakeholders to build consensus on the Cathedral Conservation Plan as well as the Management Plan for the nominated property and to achieve their approval and implementation by all stakeholders.

## Maintenance

Quality maintenance is carried out regularly on the monument, but ICOMOS is concerned by the use of water blasting techniques used during recent wall plaster maintenance.

ICOMOS recommends that maintenance techniques and programmes be reviewed by a qualified conservation professional.

ICOMOS is concerned by a potentially dangerous situation regarding the electrical system and connection to the Cathedral. The Cathedral has two different and separate electrical connections that travel aerially and connect to an open-air unprotected electrical panel. A recent inspection revealed that the overall electrical charges are not balanced and the lightning conductor isn't grounded.

ICOMOS recommends that the State Party addresses the electrical system connection issue and the lightning system grounding issue urgently because they are public safety issues.

## Effectiveness of conservation measures

The León Cathedral continues to be conserved to acceptable international levels of conservation that maintain its integrity and authenticity. ICOMOS appreciates the progress made by the State Party in relation to the conservation of the property.

---

ICOMOS recommends that the Conservation Plan and the Management Plan for the Cathedral be approved by all relevant stakeholders as soon as possible and implemented as a means of ensuring the long-term conservation of the property.

---

## Management

Management structures and processes, including traditional management processes

The management of the property is the responsibility of a number of public and private institutions, with varying levels of expertise. At the national level and pursuant to the Constitution, the Nicaraguan Institute for Culture (INC) has the primary responsibility for conservation and promotion of national culture. The Institute was established by Decree-Law 427 in 1989, and is under the Ministry of Education, Culture and Sports.

At the local level, the Department of the Historic Centre of León Municipality is responsible for the protection and preservation of the historic centre and the main buildings. The Department is in charge of the implementation of the Special Plan for the revitalisation of the Historic Centre, urban control, formulation and supervision of projects and communication and public awareness activities.

The Diocese of León, as the owner of the building, is also involved in the conservation and management of the property. The Diocese has been responsible for the administration of the Cathedral since its construction in the 18<sup>th</sup> century and acts together with national and local institutions responsible for cultural heritage. The Cathedral Management Plan proposes the creation of several new planning, technical and management coordinating bodies,

but as first custodian, the Diocese has not agreed to the proposed inter-institutional Cathedral Preservation Council management body. The stakeholders are discussing new arrangements to create such a body.

Concerning point 3.c of decision 32 COM 8B.45 (Coordination), though coordination and teamwork has improved among the main stakeholders since 2007, there remains a great deal of progress to be made on this issue.

ICOMOS encourages the State Party to continue its efforts towards building trust and collaboration amongst the stakeholders.

Policy framework: management plans and arrangements, including visitor management and presentation

The Nicaraguan Institute for Culture (INC) implements a plan of cultural development that includes a cultural heritage conservation programme. The programme is financed by the general budget of the Republic and is implemented by the Directorate for Cultural Heritage. The Plan sets out strategies and specific activities determining the priorities. León Cathedral is considered an absolute priority of the Nicaraguan State. This is illustrated by the large 1992-1994 restoration project, to the regular surveillance and to an annual budget for contributing to its maintenance. The Cathedral Management Plan was prepared by the Directorate for Cultural Heritage (INC 2009).

The Cathedral Management Plan has not yet been officially approved by the State Party.

ICOMOS sent letters on 2 November and 16 December 2010 to receive information about the approval of the management Plan for St. Leon Cathedral and the Development Plan for the Municipality.

The State Party has responded on 24 February 2011 informing that approval of the management Plan is expressed in the Administrative Agreement signed on 8 November 2010.

ICOMOS recommends that the Cathedral Management Plan be officially approved by all the executive stakeholders (León's Diocese and the Municipality – the INC has approved the Conservation Plan for the Cathedral) and by the State Party itself.

As mentioned earlier, in response to point 2.b of decision 32 COM 8B.45 (Special Plan for the Historic Centre of León) the Municipality is updating and integrating all urban development and revitalization city plans (including the Cathedral Management Plan and the Plan for the Historic Centre of León) into a single all-in-one master plan known as "Plan de Desarrollo Municipal" (Municipal Development Plan). This will ensure that all development activities and projects are better coordinated.

ICOMOS sent a letter on 16 December 2010 to receive information about the timetable for the approval of the Plan de Desarrollo Municipal.

The State Party responded on 24 February 2011 that the municipal authorities are working to finalise the approval of this plan.

ICOMOS supports this approach and acknowledges that some parts of the Plan that positively impact the preservation of the Cathedral are already in progress, such as traffic improvements, electric cables burial and commercial signs control. However, ICOMOS recommends that the State Party continue to work for the final approval and implementation of this plan, which is extremely important to ensure the appropriate level of safeguard of the nominated property and of its buffer zone.

Visitors to Nicaragua and especially León and the Cathedral have doubled in recent years, reaching over one million nationwide and 45,000 annually at the Cathedral. ICOMOS is concerned that the current visitors' management system is weak and does not adequately support the interpretation the Cathedral's outstanding history and features. There is no interpretation centre; there is a lack of qualified tour guides; tour operators misrepresent the Cathedral's history; there is no official effective tourism management plan in effect; the policing of tourists is ineffective; there is no tourism information office in proximity of the Cathedral.

On the other hand, ICOMOS notes that the INTU (the National Tourism Agency) is in the process of updating the Plan Integral de Turismo (Comprehensive Tourism Plan) nationwide and that it will include specific information about the Cathedral.

Risk preparedness

ICOMOS appreciates the exhaustive and frank recognition of the different risk factors that actually or potentially affect this property. Concerning point 3.b of decision 32 COM 8B.45 (Risk preparedness), the issue to include risk preparedness in the nominated property's Management Plan, remains to be addressed.

Involvement of the local communities

León Cathedral is highly valued as one of the main historic and artistic monuments of the country. Citizens have been consulted during the preparation of the Plan for the conservation of the surroundings of the Cathedral. Some civil associations, among them the Nicaraguan Chamber of Tourism, chamber of commerce, residents' organisations, professional and artistic organisations have participated in the debates and the development of the plan.



resources, including staffing levels, expertise and training

At the national level, the Nicaraguan Institute for Culture has 90 specialists and technicians in conservation and management of cultural heritage that are responsible for the execution, supervision and monitoring of conservation actions, specially for León Cathedral. At the local level, the Municipality of León, through the Department for Historic Centre and the School-Workshop, has 82 specialists and technicians in protection and conservation of cultural heritage of the historic centre. The staff includes 2 architects, 3 engineers and 67 technicians with a range of specialisations.

Regarding the private sector, there are a considerable number of specialists and technicians in diverse fields related to cultural heritage management both at the national and local levels that can provide services to the public administration. Moreover, some educational institutions have specialised professionals; among them the Centre for Archaeology and Documentation and the Centre for Geological Research, both belonging to the National Autonomous University of Nicaragua, and the School of Architecture of the National University of Engineering (Managua).

Concerning training in building technology, the Municipality of León operates the School-Workshop of León, under the patronage of the Spanish Agency for International Cooperation (AECI). Since 1991, the School has offered technical training with the goal of providing human resources for heritage restoration projects. The School has participated in several projects; among them the restoration of León Cathedral between 1992 and 1994. Concerning training of professionals, the National Autonomous University of Nicaragua trains ethnologists, archaeologists, sociologists and historians, and the National University of Engineering trains architects and engineers. Both universities have undertaken research works on cultural heritage, including León Cathedral.

Concerning staffing levels and their expertise, The Municipality has made considerable progress since 2007. The municipal administration has hired more staff with higher levels of expertise. They have also acquired more equipment (computers, software, etc.).

The national government provides a special budget for restoration and conservation of León Cathedral. At the local level, the Department of the Historic Centre is supported by collaboration with the Spanish Agency for International Cooperation.

Concerning point 3.d of decision 32 COM 8B.45 (Special Parliament Fund), the State Party has reinstated the Special Parliament Fund for the León Cathedral that had been terminated in 2007.

#### Effectiveness of current management

Current management systems are effective in ensuring the basic conservation of the Cathedral but are weak

concerning the overall management of the nominated property and its buffer zone.

---

ICOMOS considers that management structure and plans are adequate. ICOMOS recommends that the Cathedral Management Plan and the Municipal Development Plan be approved and implemented and that risk preparedness be included in those plans. ICOMOS encourages the State Party to continue its efforts towards building trust and collaboration amongst the stakeholders.

---

## 6 Monitoring

The Department of the Historic Centre (Municipality of León) and the Direction of Cultural Heritage (Nicaraguan Institute of Culture) are in charge of monitoring the state of conservation of properties in the historic centre.

The nomination dossier includes a list of key indicators and periodicity of measurements. Indicators are related to specific material components, to staff, to financial aspects, to cultural activities and to instruments and procedures for the conservation of the monument.

---

ICOMOS considers that key indicators and monitoring arrangements are adequate to monitor the state of conservation of the property in relation to its Outstanding Universal Value.

---

## 7 Conclusions

ICOMOS considers that León Cathedral is not only the main historic and artistic monument of Nicaragua, but also a building of high significance for Central America. The monument bears historical, architectural, artistic and environmental values that link it to the cultural identity of a specific region in the world. From an architectural and artistic point of view, León Cathedral is one of the best expressions of Central American religious architecture; it testifies to the persistence of layouts spread by the Spaniards in the Americas between the 16<sup>th</sup> and 18<sup>th</sup> centuries and, at the same time, bears specific features linked to a particular regional style from Antigua Guatemala, and achieving in León its most significant example.

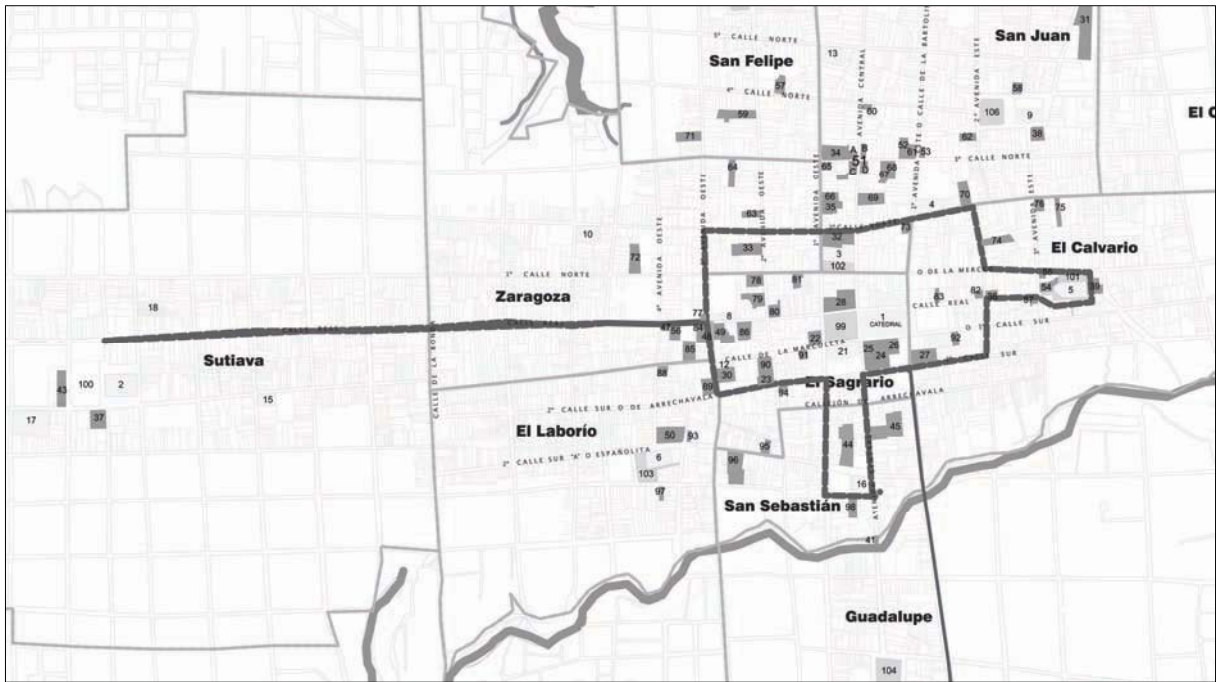
Although the town is located in a region subject to natural disasters, the building has survived, and maintains a high degree of integrity and authenticity. Although improvements are recommended, the property is adequately protected. Management is weak but should be significantly improved by the adoption and implementation of the Cathedral Management Plan and the Municipal Development Plan.

Recommendations with respect to inscription  
ICOMOS recommends that the nomination of León Cathedral, Nicaragua, be referred to the State Party in order to allow it to:

- Officially approve and implement the Cathedral Management Plan by all the executive stakeholders and by the State Party itself;
- Complete, approve and begins implementation of the Municipal Development Plan;
- Slightly amend the boundaries of the buffer zone by removing the linear axes along the Calle Real and through El Sagrario towards Guadalupe.

ICOMOS further recommends that the State Party give consideration to the following:

- Continue to work to find ways to resolve the situation concerning street vendors who use the streets and public spaces surrounding the Cathedral for their businesses;
- Address the electrical system connection issue and the lightning system grounding issue urgently because they are public safety issues;
- Relocate the unsightly commercial communication tower located in front of the Cathedral;
- Complete the Cathedral Management Plan with a section on risk preparedness;
- Continue its efforts towards building trust and collaboration amongst the stakeholders;
- Make special arrangements with the Diocese authorities to complete the Cathedral's treasure inventory while ensuring its conservation and safeguard.



Map showing the revised boundaries of the nominated property



West fa ade



North fa ade





Interior view



Prince Court

# ICOMOS

**2011**

**Addendum**

## **Evaluations of Nominations of Cultural and Mixed Properties to the World Heritage List**

ICOMOS Report for the World Heritage Committee, 35th ordinary session, UNESCO, June 2011

WHC-11/35.COM/INF.8B1.Add



United Nations  
Educational, Scientific and  
Cultural Organization



World Heritage Convention

**UNESCO**

World Heritage Convention  
World Heritage Committee

**2011**

**Addendum**

**Evaluations of Nominations of Cultural  
and Mixed Properties**

ICOMOS report for the World Heritage Committee, 35th ordinary session  
UNESCO, June 2011



**Secrétariat ICOMOS International**

49-51 rue de la Fédération

75015 Paris

France

Tel : 33 (0)1 45 67 67 70

Fax : 33 (0)1 45 66 06 22

# World Heritage List Nominations received by 1<sup>st</sup> February 2011

## V Mixed properties

### A Asia - Pacific

#### Minor modifications to the boundaries

Australia [N/C 147ter]

Kakadu National Park

1

## VI Cultural properties

### A Africa

#### Properties referred back by previous sessions of the World Heritage Committee

Ethiopia [C 1333rev]

The Konso Cultural Landscape

2

Kenya [C 1295rev]

Fort Jesus, Mombasa

16

#### Minor modifications to the boundaries

Mauritius [C 1259]

Le Morne Cultural Landscape

29

### B Arab States

#### Creation of buffer zone

Syrian Arab Republic [C 20]

Ancient City of Damascus

30

### C Asia - Pacific

#### Minor modifications to the boundaries

Malaysia [C 1223]

Melaka and George Town, Historic Cities of the Straits of Malacca

32

### D Europe

#### Properties referred back by previous sessions of the World Heritage Committee

France [C 1153rev]

The Causses and the Cévennes, Mediterranean agro-pastoral Cultural Landscape

34

France, Argentina, Belgium, Germany, Japan, Switzerland [C 1321rev]

The architectural work of Le Corbusier, an outstanding contribution  
to the Modern Movement

47

Israel [C 1105rev]

The Triple-arch Gate at Dan

72

#### Minor modifications to the boundaries

Cyprus [C 848]

Choirokoitia

83

Italy [C 726]  
Historic Centre of Naples 85

Spain [C 522rev]  
Renaissance Monumental Ensembles of Úbeda and Baeza 87

**Creation of buffer zone**

Germany [C 271]  
Pilgrimage Church of Wies 89

Germany [C 515rev]  
Abbey and Altenmünster of Lorsch 90

**E Latin America and the Caribbean**

**Minor modifications to the boundaries**

Chile [C 1178]  
Humberstone and Santa Laura Saltpeter Works 92

**Creation of buffer zone**

Honduras [C 129]  
Maya Site of Copan 94

---

# Kakadu National Park (Australia)

## No 147ter

---

### 1 Basic data

#### State Party

Australia

#### Name of property

Kakadu National Park

#### Location

Northern territory

#### Inscription

1981, 1998, 1992

#### Brief description

This unique archaeological and ethnological reserve, located in the Northern Territory, has been inhabited continuously for more than 40,000 years. The cave paintings, rock carvings and archaeological sites record the skills and way of life of the region's inhabitants, from the hunter-gatherers of prehistoric times to the Aboriginal people still living there. It is a unique example of a complex of ecosystems, including tidal flats, floodplains, lowlands and plateaux, and provides a habitat for a wide range of rare or endemic species of plants and animals.

#### Date of ICOMOS approval of this report

10 March 2011

### 2. Issues raised

#### Background

The World Heritage Committee at its 22<sup>nd</sup> Session (Kyoto, 1998) considered a report on mining in the Kakadu National Park. In ANNEX VI.1 p.117 of the Committee report which summarises a mission report (document reference: WHC 98/CONF 203/INF. 18), it is stated that in relation to the Koongarra Mineral Lease: *"The mission recommended that all efforts be made to seek the agreement with the traditional owners to include the third Mineral Lease, the Koongarra Mineral Lease, in the Park and therefore preclude mining"*.

#### Modification

The modification proposed by the State Party is stated to be addressing a request of the Committee at its 22<sup>nd</sup> session to add the Koongarra Project Area (Koongarra) to the property, although as stated above it was a recommendation of a mission that was reported to the Committee.

The Koongarra area extends to 1,228 hectares and is in the eastern part of the Kakadu National Park, completely

surrounded by the property, which currently extends to 1.98 million hectares.

The Koongarra area is Aboriginal land. It was originally excluded from the property due to potential mining interests. No mining authorisations have ever been granted at Koongarra because the required authorisations, including from traditional owners, under the Australian Government's *Aboriginal Land Rights (Northern Territory) Act 1976* have not been met.

The Northern Land Council, on behalf of the traditional owners, requested that Koongarra become part of the Kakadu National Park and the Park Board of Management agreed. In July 2010 the State Party approved its inclusion.

Koongarra lies next to the Kakadu escarpment and is approximately three kilometres east of Nourlangie Rock. It is located in a valley bounded by the Mount Brockman outlier and the Arnhem Land plateau. The catchment of Koongarra Creek feeds Nourlangie Creek and then drains into the South Alligator River. Detailed maps have been provided and descriptions of the boundary.

The Koongarra area includes the Nourlangie rock art sites. This and the Ubirr rock art site, 50 kilometres to the north-east, are the two major foci of rock art in the Park.

The information provided by the State Party does not include any details of the rock art, in terms of scope and extent, documentation, archaeological research or how the sites are specifically protected and conserved.

### 3. ICOMOS Recommendations

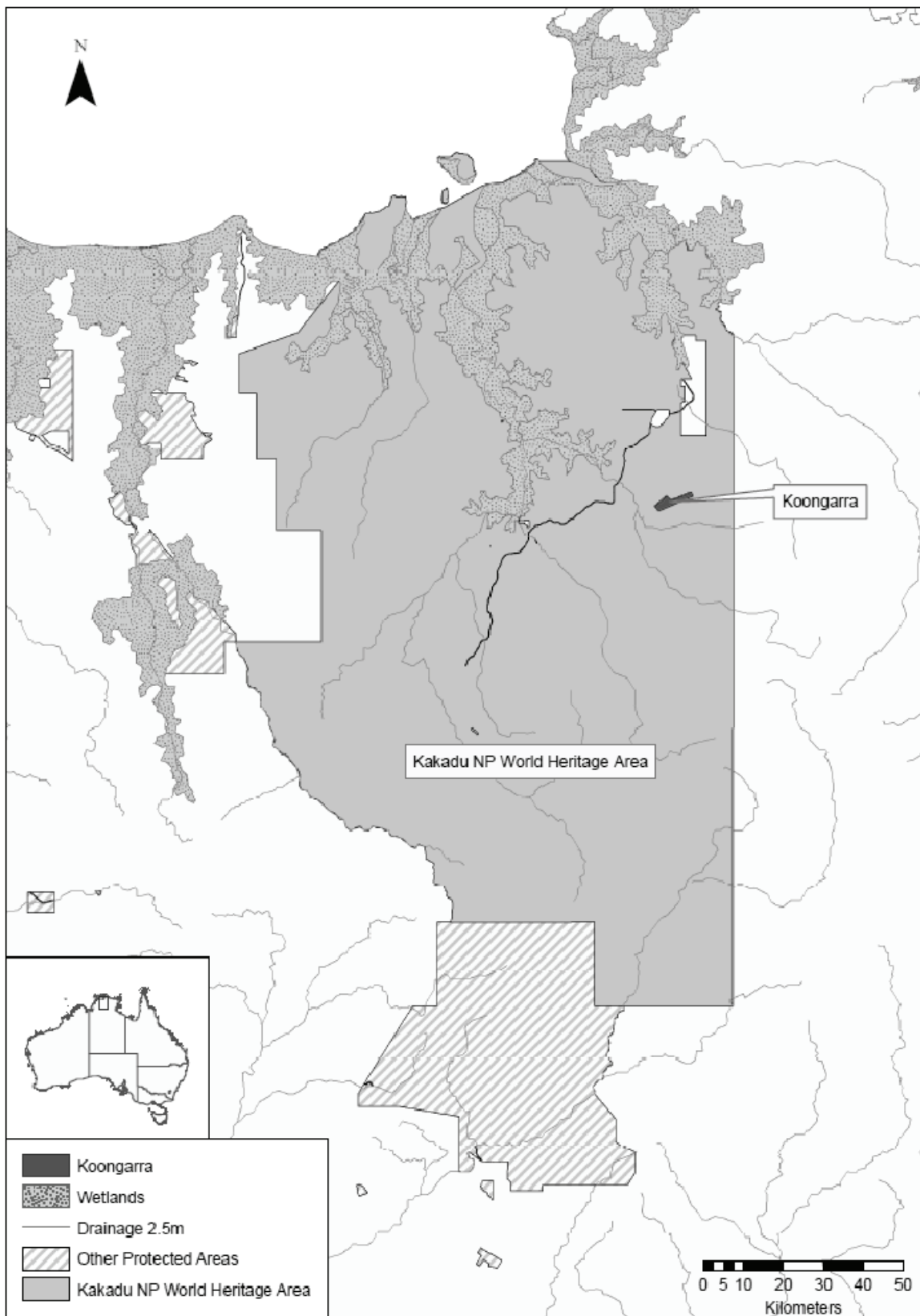
#### Recommendation with respect to inscription

ICOMOS recommends that the proposed minor modification to the boundary of Kakadu National Park, Australia be **approved**.

ICOMOS further recommends that the State Party provide to the World Heritage Centre by 1st February 2012:

- An inventory of the rock art sites within the extension, including a map, and of their associated archaeological sites;
- Details of their state of conservation;
- Details of their conservation management arrangements.

ICOMOS also recommends that the State Party ensures that the rock art sites are included as attributes in the draft retrospective Statement of Outstanding Universal Value that is to be drafted as part of the Periodic Reporting process and submitted to the World Heritage Committee for approval.



Map showing the revised boundaries of the property

---

## Konso (Ethiopia)

### No 1333rev

---

#### Official name as proposed by the State Party

The Konso Cultural Landscape

#### Location

Konso Administrative District, Southern Nations, Nationalities and Peoples Regional State (SNNPRS), Federal Democratic Republic of Ethiopia

#### Brief description

At the end of the Ethiopian arm of the Great Rift Valley, lie the intensively terraced, steep, arid Konso highlands, rising to around 2,000 metres and overlooking plains on all sides.

The nominated area extends to 55 sq kilometres. Lying on the eastern slopes, the property encloses the upper reaches of three high level valleys, two draining to the south-east and one to the north.

The stone walled terraces, some rising to five metres in height, support fields of millet and corn, and are part of an intense, communally organised and finely balanced agricultural system which incorporates water-management systems that ensure that water seeps from one terrace to another in order that the greatest number of fields make use of the available water.

Within the terraced landscape, are stone-walled settlements (*paletas*) crowing the summit of hills. They are variously encircled by between one and six defensive dry stone walls. Each of the settlements has several large open communal and ceremonial spaces (*moras*), with large round thatch-roofed structures (*paftas*), used for meetings, games etc, and bachelors' dormitory. The mainly thatched roofed domestic and agricultural buildings are arranged around fenced compounds.

The Konso are notable for the erection of *wakas*, memorial statues to a dead man. These stylised wooden carvings are arranged in groups, representing the man, his wives and heroic events such as the killing of an enemy or an animal such as a lion or a leopard.

#### Category of property

In terms of categories of cultural property set out in Article 1 of the 1972 World Heritage Convention, this is a *site*.

In terms of the *Operational Guidelines for the Implementation of the World Heritage Convention* (January 2008) paragraph 47, it is also a *cultural landscape*.

## 1 Basic data

#### Included in the Tentative List

30 September 1997

#### International Assistance from the World Heritage Fund for preparing the Nomination

1998

#### Date received by the World Heritage Centre

27 January 2009

31 January 2011

#### Background

This is a referred back nomination (34 COM, Brasilia, 2010).

A first nomination dossier for the Konso Cultural Landscape was examined by the World Heritage Committee at its 34<sup>th</sup> session (Brasilia, 2010). At the time, ICOMOS recommended that the nomination be deferred in order to allow the State Party to:

- Undertake and provide a more detailed inventory of the key attributes such as town walls, *paftas*, shrines;
- Re-define the boundary to reflect the key attributes of the property, the geo-morphology of the area, and social and cultural units, and in particular consider the interface between Dokatu towns and Karat;
- Augment the comparative analysis;
- Define and put in place a buffer zone to protect the property from urban development;
- Strengthen and augment structures and regulations to ensure support for customary systems;
- Strengthen the planning processes to ensure that the spatial planning of the towns is conserved;
- Ensure more active involvement of regional and national authorities in the management and conservation.

ICOMOS considered that any revised nomination with revised boundaries would need to be considered by an expert mission to the site.

Furthermore, ICOMOS considered that the international community should be invited to support this extraordinary landscape to ensure that its communities can meet the challenge of establishing a sustainable future.

The World Heritage Committee adopted the following decision:

Decision 34 COM 8B.11:

*The World Heritage Committee,*

1. Having examined Documents WHC-10/34.COM/8B and WHC-10/34.COM/INF.8B1,

2. Refers the examination of the nomination on the basis of cultural criteria of Konso Cultural Landscape, Ethiopia, back to the State Party to allow it to:

- a) Undertake and provide a more detailed inventory of the key attributes such as town walls, paftas, shrines;
- b) Re-define the boundary to reflect the key attributes of the property, the geo-morphology of the area, and social and cultural units, and in particular consider the interface between Dokatu towns and Karat;
- c) Augment the comparative analysis;
- d) Define and put in place a buffer zone to protect the property from urban development;
- e) Strengthen and augment structures and regulations to ensure support for customary systems;
- f) Strengthen the planning processes to ensure that the spatial planning of the towns is conserved;
- g) Ensure more active involvement of regional and national authorities in the management and conservation;

3. Also considers that the international community should be invited to support this extraordinary landscape to ensure that its communities can meet the challenge of establishing a sustainable future.

In response to this decision, the State Party has supplied the following new information to supplement the original nomination dossier:

- Executive summary and revised nomination file, January 2011
- Management plan, January 2011
- Konso proclamation, April 2010
- Maps showing revised boundaries
- Photos and note on photos, 2011

The revised nomination is for a much enlarged area, some four times the area of the first nomination and includes some settlements as well as extensive terraced landscapes. It also includes further walled towns.

#### Consultations

ICOMOS consulted its International Scientific Committee on Cultural Landscapes and several independent experts.

Comments on the first ICOMOS assessment of this cultural landscape were received from IUCN on 18 February 2010 and were related to the following issues:

- Boundaries
- Protection and Management

The information was carefully considered by ICOMOS in reaching the final decision and recommendation in March 2010, and IUCN has also reviewed the presentation of its comments as included in ICOMOS's first report.

#### Literature consulted (selection)

Amborn, H., 'Agricultural Intensification in the Burji-Konso Cluster of South-Western Ethiopia', *Azania: Journal of the British Institute in Eastern Africa* XXIV, 1989.

Hallpike, C.R., *The Konso of South Western Ethiopia: A Study of the Values of a Cushitic People*, 1972.

Shinohara, T., 'The Symbolic Meaning of the Pot on the Roof. A case study of the Konso in Southern Ethiopia', in *Nilo-Ethiopian Studies*, 1, Kyoto, 1993.

Watson, E., *Living Terraces*, 2009.

Watson, E.E., 'Agricultural Intensification and Social Stratification: Konso contrasted with Marakwet', in Mats Widgren and John Sutton, eds., *Islands of Intensification*, 2004.

#### Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the property from 19 October to 1<sup>st</sup> November 2009. As this is a referred nomination, ICOMOS has not been able to undertake a second mission to consider the revised boundaries, or to view the new areas.

#### Additional information requested and received from the State Party

None

#### Date of ICOMOS approval of this report

10 March 2011

## 2 The property

#### Description

The revised nominated area extends to 230 sq kilometres or 23,000 ha, about 10% of the overall Konso hills. This is just over four times the area of the first nomination. The revised boundaries, as understood from the maps provided, now follow recognisable geographical features and encompass coherent geographical areas.

The much enlarged area extends the property slightly to the north, east and south and substantially to the west. It brings in eight more walled towns near the original twelve and extensive terraced hills in the west that display very different settlement pattern of scattered unfortified, small villages with rectangular houses.

The dry and rugged Konso range of mountains rise out of the Ethiopian arm of the Great Rift Valley in south-west Ethiopia. The area is home to the Konso speaking people who live in stone walled settlements on the summit of hills, facing high level valleys that drain to the surrounding plains. All slopes of the mountains display



steep stone-revetted terraces that make agriculture possible in this area of low and unpredictable rainfall through sophisticated soil and water conservation measures, many carried out communally, and encompassing rain-water harvesting, leaf fodder, intercropping and agro-forestry.

The first nomination covered land lying on the eastern slopes of the hills enclosing the upper reaches of three high level valleys, two draining to the south-east and one to the north. The much enlarged nomination extends the boundaries to cover the western parts of the Konso hills and so also includes the valleys draining to the west.

In the north-east of the nominated area is the modern urban area of Karat and this has been excluded.

Within the original nominated area were 12 fortified settlements, 3 associated sacred forests, used for ritual and medicinal purposes plants, and shrines. The enlarged area has encompassed as far as ICOMOS can understand, eight more fortified settlements in the east and an unknown number of unfortified settlements scattered over the western valleys. No details have been provided for these additional settlements, apart from some data on two in an Annex.

The various aspects of the landscape are considered separately.

#### *Terraced Landscape*

The Konso area has the highest degree of uncertainty regarding rainfall due to its position at the southern extremity of the highlands. The problem is not usually an absence of rain but an abundant discharge in a short time, hence the use of terracing to collect the maximum amount water and to discharge any excess in a regulated way.. In those years when rain is scarce, the terraces similarly optimise the collection of water.

The terraces prevent soil erosion and maximise water retention. Crops are grown in rotation throughout the year. Coffee, cotton and chat are cash crops. Twenty-four different varieties of millet are grown as well as wheat, barley, sorghum, maize, peas, beans, potatoes, banana, cotton and coffee.

The descriptions provided relate to the terraces in the area covered by the original nomination. Terraces can be up to 8m high and the width depends upon the steepness of the slope. They are made where the soil is cut away to make a perpendicular face and a stone wall built against it. Foundations are usually small (10 – 25cm). Stone is moved from above and used to level the lower area.

Men and women work together in building and maintaining the terraces, although stonework is the job of men. Women use *tomas* (long wooden bowls carved from trees) to move earth.

Bends in the wall are reinforced by turrets. Turrets seldom rise more than 2m above the field. They are used as platforms to protect crops from birds and animals. For further support, flanking walls are built to cross the terraces perpendicularly, approximately 50m apart. These are up to 1.5m high and serve as pathways.

To protect the fields, the Konso maintain their cattle, sheep and goats in stalls and feed them by hand or supervise their grazing.

The revised nomination has provided a map of the overall nominated area showing the percentage of the land area that is under terraced cultivation. Apart from the river valleys, the coverage of the hillsides by terraces varies between around 50% to over 80 % depending on the steepness of the slopes.

The newly nominated western terraces extend the nomination beyond the regions of Fasha and parts of Karate (within the Konso *wereda* or administrative area) into parts of the Kulme region. Although the new boundaries follow geographical features, it is not clear what the relation is for the new boundaries in terms of cultural units.

#### *Fortified Settlements - paletas*

In the north, eastern and southern part of the nominated area the settlements are walled and fortified. Known as *paletas*, these towns are all on flat or mainly flat land on or near the summits of hills. There are enclosed by between one and six concentric walls of basalt boulders.

The nominated area contains the following walled towns. The first twelve were in the original nominations, the last eight have been added in the revised nomination (as shown on the new maps) and some details have been provided for only two of these:

- Gamole, 3 walls
- Gocha, 1 wall
- Mechelo, 3 walls
- Lower Dokatu, 6 walls
- Burquda, 1 wall
- Hulme, 1 wall
- Dara, 6 walls
- Olantu, 4 walls
- Mecheke, 1 wall
- Burjo, 1 wall
- Gaho, 1 wall
- Busso, -1 wall
- Nalaya Segen, number of walls not known
- Jarso, number of walls not known, but multiple
- Lehaite, number of walls not known
- Gume, number of walls not known
- Gera, number of walls not known
- Un-named town south-west of Gera, not known
- Gesergio, not known
- Un-named town in south-east, not known

The walls reflect it seems a response to population increase, with the inner walls being the oldest, and in most case the highest, reaching up to 4 metres in height and in places 2.5 metres wide.

It is stated that the most heavily fortified towns with multiple rings of heavily built stone walls. (e.g., Doketu, Gamole, Derra, Jarso, Olanta, Gamole) are considered to be the oldest but also furthest to the east of the nominated area, while towns with only one wall are further west (e.g., Mecheke, Burjo, and Gaho) and may have been developed later.

The outer walls of each of the towns have two or more exit gates leading to water sources, farms or markets.

Each town is governed by an autonomous council of elders and divided into smaller administrative neighbourhoods or wards known as *kantas*. Each member of the community will belong to one of the *kantas*.

Within the towns, the Konso live in individual compounds surrounded by wood and stone fencing. The compound is divided into two halves: the upper part for people and the lower for animals and storage. Usually there are 5 or 6 thatched structures, including the house, stores and granary, a grinding space with a stone mortar, often in the lower part of the granary, and a cattle kraal.

Within each of the towns are several *moras*, large open communal and ceremonial spaces. There can be up to seventeen *moras* in a *paleta*, located at the centre of the main central wall and at different locations within the towns. There might be one or two outside of the walls. Paths lead from gates to *moras*. Paths also connect one *mora* to another.

Some *moras* have tall round thatch-roofed structures, known as *paftas*. These are larger and more ornate versions of ordinary houses, with stone slab seating areas and thatched roofs supported by stout juniper posts. They are the practical and ceremonial centres of daily life. They are used for meetings, games etc, and used to be as bachelors' dormitories, associated with ceremonies related to the transfer of power to the younger age groups but this ceremony now only takes place in Doketu.

These *paftas* are a reflection of communal pride and serve as the show-pieces in each village. They may be surrounded by 'generation' trees, *ulahitas* dead junipers up to 40 feet high transported from the forests, monolithic stone stele, *daga-hela*, reflecting the success of warriors, oath taking stones and ritual spear sharpening stones.

Within each town, one or two central *moras* occupy the highest status. These have higher stone walls, larger *paftas*, larger and more generation trees, and up to 5 or 6 stele.

In the original documentation provided it was not clear how many *paftas* existed or where they were. Annotated maps have been provided for each of the towns originally nominated which show the position of the *paftas*.

The fortified settlements once contained all the houses within their walls which were accessed by two or more main gates. Today these gates no longer need to be guarded or actively defended (and side entrances through the outer wall may now substitute), and the distinction between the enclosed, densely settled 'town' and the surrounding terraced cultivation has been blurred in several instances, as families are preferring to site their homes outside the enclosing wall or along the road.

There is also a growing tendency for households in the walled *paletas* (and those who have built outside the walls) to reconstruct their dwelling houses in rectangular shape convenient for roofing with corrugated metal sheets. These metal roofs catch the eye from afar.

However, in those compounds where metal roofing has been introduced, it is usually confined to the main house alone, and the layout and function of the other structures and spaces has not been radically affected.

The individual *paletas* for which information is provided are as follows:

#### Gamole

Gamole walled town has three dry stone walls with the outer wall approximately 1,300 metres long. The inner wall is the oldest and encloses what is believed to be the original settlement. Gamole has eight *Moras*. The *dina* woodland around the town is mostly destroyed due to population and development pressures.

#### Gocha

Gocha has one stone wall around 1,700 metres long with five gates. The walls are, however, mostly destroyed and few families live in the town. There are five *moras* within the town and one outside. Outside the line of the walls is a small *dina*, with decaying *wakas* (burials). In recent years the community has failed to maintain this area.

#### Mechelo

Mechelo is considered with Gamole and Gocha to be one of the oldest walled towns. It has three walls, the external walls covering around 1,700 metres. The average height of the inner wall is nearly two metres but it rises to just over four metres in places. Mechello has seventeen *Moras*. These have *Daga-dirumas* and *Olayta* trees rather than *paftas*. Mechelo is one of the few towns to keep part of its *dina*. Around 2,500 sq metres survive with thirteen grave markers.

#### Dokatu

Dokatu is the collective name for three walled towns, Lower Dokatu, Burquda and Hulme. The main Konso-

Jinka road passes between Burquda and Hulme and all three are near the growing urban area of Karat. Generally the towns of the Dokatu cluster collaborate together during rituals and to combat fire accidents.

Lower Dokatu has six walls with an outer length of around 1,600 metres. In contrast to other towns, the outermost walls are the highest rising to just over 3.5metres. The town is large covering 158,293 sq. metres. There are 6 gates and 19 *moras*. Its two sister towns have their own *moras* too. Nevertheless, some of the *moras* in the three towns provide services to all three communities during common rituals such as the Kara ceremony.

No descriptive details are given for Burquda and Hulme. Each has one wall.

#### Dara

Dara has six walls with the outer wall extending to just over a 1,000metres. Some of the walls reach to 4.5metres in height. There are four gates and nine *moras*, one being outside the walls.

#### Olanta

Olanta has four walls, the outer around 1,000 metres in length. There are three gates and 15 *moras* with nine *paftas*.

#### Mecheke

Mecheke has one wall running to 1,300 metres. There are five gates and eleven *moras*.

#### Burjo

Burjo is a small town with a single wall, around 800 metres long. There are four gates and four *moras*.

#### Gaho

Gaho also has a single wall extending to around 800 metres. There are six gates and nine *moras* with *paftas*.

In both Burjo and Gaho the walls are lower than in other towns – perhaps reflecting their central position which might be associated with fewer threats. In the two towns there is a tradition of supporting small storage buildings on a single vertical log.

#### Busso

Busso is not fully encircled by a wall as it is protected by natural terrain and walls were only constructed on the flat areas. There are six gates and sixteen *moras*. There are 31 erected stones outside the main gate. There were formerly many *wakas* but these have been stolen or are decayed.

The following eight towns have been included in the revised nomination – for these there is no description and no plan is provided to show the walls, but statistics for the height of walls and numbers of *moras* and *paftas* have been given for Jarso.

#### Nalaya Segen

This town is said to be one of the earlier ones with multiple walls but the number is not given.

#### Jarso

This town is said to be one the earlier ones with multiple walls but the number is not given. However the walls are said to rise to a height of 5.6 metres – which must make them the highest. It has eight *moras* and eight *paftas*.

#### Lehaite (not marked on map but mentioned in Annex)

##### Gume

##### Gera

Un-named town south-west of Gera

##### Gesergio

Un-named town in south –east

#### Unfortified settlements

An extensive area of terraced landscape in the west of the enlarged property contains scattered settlements. No details have been provided of these other than that none of these are as large as the towns in the east and none are fortified. However it is not clear whether they contain similar round thatched houses to the fortified towns. It is said that *moras* are located in central spaces that are easy to access for all, and sometimes on major tracks.

#### Daga-hela stone stele

The Konso people have an age grading system through which every generation takes responsibility to protect the well being of its community. This system is linked with a tradition of erecting a generation marking stone called Daga-hela. This is freshly quarried piece of columnar basalt reaching some three metres in height and transported and erected through a ritual process called Kara. Generations who have served the community well, based on the views of their elders could have the honour of having their generation marker stone Daga-Hela erected near the most prestigious Mora, as a witness for their good work.

Less successful generations have their stones erected elsewhere in the town or outside the walls. The latter are usually smaller in size.

#### Forests

There are three main sacred Poqolla forests in the Konso areas, Kala (196,430sqm), Bamale (105,338sqm) and Kufa (45,066sqm). The generation trees erected in the *moras* are cut from these forests.

Kala is the best preserved and most actively used. Priests reside near this forest and are buried within them with elaborate *wakas* erected beneath shelters of wood and thatch. It contains several ritual spots such as the Shila Genda or ritual mourning stone, a large basalt block next to two open spaces. One, Kenota, is where young males stay for two months during initiation before they go back in to the Gamole walled town to get married. The other space called Koltoma is reserved for young females. The initiation takes place only once every 18 years. Another block of basalt, called Shila Saga, is where the *Fora* or ritual fight dance takes place.

The scarification for the harvest and conflicts are also arbitrated at Shila Saga and at a nearby block for different communities.

The Bamale sacred forest covers an area of 105,338 square metres. The ritual leader holds the same name, Bamale and lives near the forest with his family. The graves of the earlier Bamales are located at the center of the forest. Unlike the Kala, there are no Wakas placed in the forest. Formerly the trees were mainly Juniperus, but the Derg Government (1974 until 1987) cut much of them for timber. Eucalyptus has since been re-planted. However, since 1991 there has been some regeneration of indigenous species.

The Kufa sacred forest covers an area of 45,066 square metres. The Poqola or priest resides near the forest but there are no recent wakas in the forest. There are ancient graves of ancestors of the present Poqola at the centre of the forest.

Near many of the towns there is a dense grove of euphorbia and finger cactus between the towns and the fields. Known as *dina*, these woods provide firewood and were also used as a burial ground for the towns' artisans who did not have their own land. In spite of their social and cultural functions, many of these areas are now neglected and partly deforested.

#### *Waka (wooden statue) and Daga-diruma (erected stone) Burial markers*

The Konso are notable for the erection of *wakas*, memorial statues to respected members of the community. These large, stylised anthropomorphic statues, usually made of juniper wood, are arranged in groups, representing the man, his wives and particularly heroic events.

Formerly these were erected near the *mora* or near the gates. Latterly they have been put up beside major paths. Many are now neglected.

Farmers were buried in their farms and simpler *wakas* erected, while artisans without land were buried in the *dinas*.

#### *Hardas*

These are water reservoirs located within or near forests. They are also found close to every walled town and dispersed in the landscape and dispersed. They collected rain water for cattle. Some *hardas* are as long as 60 metres and their retaining walls can be up to 13 metres in height. The Dokatu Harda at an altitude of 1,420 meters is among the oldest water reservoir still in use.

The number and location of these are not provided.

### **History and development**

Knowledge of the history of the Konso landscape comes from oral traditions and linguistic analysis and some limited archaeological investigations of a few

settlements, but so far no reliable dates have been obtained.

Oral traditions suggest that the Konso migrated to the present area from the east and north around 21 generations ago – approximately 400 years ago. This is approximately confirmed by the number of incised rings on the generation batons erected on the tombs of the Poqola of the Kala, the earliest ritual chief, the first Kala lived 21 generations ago.

In the management plan more details are provided and it is suggested that the Konso originally came from the east and the west. The eastern group constitutes those who migrated mainly from Liben (Borena) and also those from the Burji areas. People in the western group, reportedly came from the highlands of Dirashe, Mashile, Gewada, and from the Tsemay area etc. Almost all of the local informants agree that migrants from the east were the first settlers of the Konso land. They also confirm that people from the west reached the area shortly after the former, but at almost the same time.

There appears to be no oral traditions associated with the building of the terraces.

The compact village tradition and the agricultural system, and also the history of the internal developments which must have occurred century by century, deserve testing through surveys and possible archaeological excavations. Abandoned plots within the existing villages, and more particularly villages long deserted, several of which remain recognisable in the farmland, their walls now modified as cultivated terraces, could be investigated. Research along such lines would bring a new understanding to Konso and its culture.

ICOMOS notes that the nomination dossier acknowledges this need.

Until the incorporation of Konso land into the Ethiopian empire by Menelik II towards the end of the 19<sup>th</sup> century, each Konso traditional town enjoyed an autonomous status and used to be administered by traditional institutions. Councils of elders were placed on top of these institutions and although some resistances was reported in Jarso, Guyle and Dokatu, this resistance came to an end with the fall and destruction of Dokatu town.

Until the 1970s, Konso was administrated within the Gamo-Gofa Region, and before the end of the 1980s, under Semen (Northern) Omo Administrative Region. Currently, under the country's federal structure, it has become one of the Special Woredas (districts) under the South Nations, Nationalities and Peoples' Regional State (SNNPRS). Its capital is Karat (formerly Bekawile).

### 3 Outstanding Universal Value, integrity and authenticity

#### Comparative analysis

The comparative analysis does not systematically compare the Konso landscape with other inscribed landscapes in order to show whether there is room for it on the World Heritage List. It mentions Sukur Cultural Landscape, Nigeria (1999, criteria (iii), (v) and (vi)) and the Rice Terraces of the Philippine Cordilleras, Philippines (1995, criteria (iii), (iv) and (v)), both of which are said to be comparable to Konso.

Comparisons are also made with other inscribed 'megalithic' sites, such as Stone Circles of Senegambia, Senegal – Gambia (2006, criteria (i) and (iii)), and sites that demonstrate clan structures, such as the Sacred Mijikenda Kaya Forests, Kenya (2008, criteria (iii), (v) and (vi)).

ICOMOS considers that a case could have been made for consideration of the property on the List had any comparison been made between the overall attributes of the Konso landscape – that are considered to give Outstanding Universal Value – and other sites on the List. This would have shown that the combination of extensive terraces and fortified towns is not otherwise represented on the World Heritage list; even though there are terraced landscapes such as the Sukur Cultural Landscape in Nigeria on the List, these do not demonstrate the complexity of settlement patterns.

Furthermore, in respect of the second part of the comparative analysis which should show whether there are other similar sites that could be nominated, ICOMOS considers that, although there are examples of intensive and highly specialised agricultural communities, both existing and archaeological, in Ethiopia and those mentioned include the Burji and Amaro regions to the east of Konso, the Zala in Gamo country to the north, and elsewhere in eastern Africa, and in part of West Africa. None of these other landscapes exhibits the degree of continuity, or the visual impact offered by Konso, nor particularly the combination of terraces and fortified towns that reflect a very specific response to environmental and social constructs. The combination of terraces and complex walled towns is not paralleled elsewhere.

Within Ethiopia, in Dawro country, there are extensive stone walls in multiple rows remaining from the 18<sup>th</sup> century post-mediaeval Dawro state and these are reported to reach 176km in length – but these linear fortifications are quite different from those of Konso.

Within the Konso area, there are more walled towns that those in the area nominated. The nomination dossier mentions, for instance, that some of the earliest towns are Patangalto, Idigile and Gandma, not in the nominated area. However no comparisons are offered between these and the nominated towns.

---

ICOMOS considers that the comparative analysis as set out justifies consideration of part of this property for inscription on the World Heritage List – that part that contains the walled towns and associated terraces but not the terraces on their own. However what has not been fully justified is which walled towns should be included within the boundaries.

---

#### Justification of Outstanding Universal Value

The nominated property is considered by the State Party to be of Outstanding Universal Value as a cultural property for the following reasons:

- The Konso landscape is an extraordinary cultural landscape that reflects a combination of unique architecture, land use, space planning and management, resource mobilization, and ritual practices, in an otherwise hostile environment.
- The compact walled towns with their multi-layered defensive systems, hundreds of thousands of kilometres of long dry stone terraces that are engineered to manage rain water and control soil erosion and that extend over virtually the whole landscape of the Konso hills, bear a striking witness to an intense resilient land use forged by very specific communal social and cultural systems that were an extraordinary response to the area's aridity and unpredictable rainfall.
- In this restricted landscape of rugged mountains and hostile environment, the people of Konso for 500 years have come to learn, understand, appreciate and utilize the available resources to a maximum degree but within a sustainable way and manner.
- The Konso Cultural landscape is therefore, an outstanding example of the human urge to understand and appreciate his environment, whatever constraints it may pose and to use it to the best of his knowledge and capacity applying good practice.

ICOMOS agrees with this statement but stresses that it is the combination of walled towns and terraces that makes the landscape exceptional.

#### Integrity and authenticity

##### Integrity

In the first nomination the proposed boundaries set out to contain the key tangible attributes of terraces, walled settlements, sacred groves and shrines, but excluded some areas that appeared to share similar attributes. The boundaries also did not define geo-cultural units, they cut across the landscape, did not relate to the coherent cultural or social units that sustain the communal farming activities, and did not relate to recognised visual features.

The revised boundaries have addressed these issues. The new boundaries coincide with natural features such as rivers, or roads, or are mark the edge of the densely terraced landscape. A map showing the intensity of

terracing in the Konso areas, based on multiple transects of the area has helped to define the new limits.

However very few details have been provided of the extensive new areas and in particular the terraces and settlements. And in the absence of a mission, no condition report is available. It is therefore not known whether any of these areas are vulnerable or under any specific threats. Nor is it clear how they relate to the landscape of terraces and fortified towns.

In terms of known threats to the area of the original nomination, the greatest threat to integrity is the dispersal of fortified settlements, with houses being built outside the town walls, thus breaking down the clear, distinctive, landscape patterns of settlements, farmland and forest. Other attributes such as the sacred forests, *dina* woodland, traditional house-building techniques, are also to a degree vulnerable.

#### Authenticity

In terms of the original nominated area, the pattern of the overall landscape and what it reveals of the way it has developed over time, in terms of the arrangement of settlements, terraces, forests and shrines is without doubt authentic. As are the continuing, agricultural, social and cultural processes that maintain and sustain this landscape. ICOMOS cannot comment on the extensive new areas that have been included in the revised nomination.

ICOMOS considers that some attributes of the landscape in the original area are vulnerable from lack of maintenance such as forests, woods and grave markers. Others are vulnerable to the changes in materials, or developmental threats (see below) that interrupt the relationship between the walled towns and their landscape. These vulnerabilities could increase unless further structures are put in place and could impact adversely on the overall authenticity of the property.

---

ICOMOS considers the condition of integrity appears to have been met in terms of the boundary encompassing all the key attributes of walled towns and terraces, although it is not clear how the extensive new area contributes to the attributes. ICOMOS cannot comment on the vulnerability of the extensive landscape that has been included within the enlarged boundary of the revised nomination. The condition of authenticity has been met for the original area but this has a degree of vulnerability that needs to be addressed, if the overall landscape is to be sustainable. ICOMOS cannot comment on the authenticity of the large area of landscape that is included in the revised boundaries.

---

#### Criteria under which inscription is proposed

The property is nominated on the basis of cultural criteria (iii), (v) and (vi).

*Criterion (iii): bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared;*

This criterion is justified by the State Party on the grounds that the Konso landscape is constituted by the most spectacularly executed dry stone terrace works in the world which are still actively in use by the people who created it. This extraordinary terrace work is a witness of the struggle of man to harness a hostile environment and is today a major human achievement. The landscape also demonstrates the megalithic tradition of stele erection which together with the funerary system that involves the tradition of mummification of their ritual leaders and the carving and erection of anthropomorphic wooden statues represents an exceptional living testimony to traditions that are on the verge of disappearance.

ICOMOS considers that what is being nominated is the overall Konso cultural landscape, and the issue is how this reflects a specific cultural tradition in an exceptional way. ICOMOS considers that the dominant aspects of the landscape that have been nominated are the stone terraces and the fortified towns in their midst. The funerary traditions are an integral part of the cultural traditions associated with the settlements. ICOMOS considers that it is the associations between terraces and the fortified towns that make this landscape so exceptional.

In the first nomination the boundary of the landscape that was nominated did not adequately respect the terrace formation and cut across the cultural and geographical features. The boundaries do now respect geographical features but, from the information provided, ICOMOS is not able to say how far the new boundaries can be said to aligned with the cultural traditions that created the towns.

Further assessment is needed of the proposed revised boundaries which unfortunately ICOMOS has not been able to undertake in the absence of a mission.

---

ICOMOS considers that this criterion has not been justified at this stage.

---

*Criterion (v): be an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change;*

This criterion is justified by the State Party on the grounds that the dry stone walls demonstrate an adaptive strategy to the dry environment and that the overall landscape of terraces and the highly organised towns with multiple defence systems demonstrate a strong tradition of common values, social cohesion and engineering knowledge.

ICOMOS considers that the overall Konso landscape, particularly its terraces and associated walled towns, can be seen as an outstanding example of a resilient land use, forged by very specific social and cultural systems that were an extraordinary response to the area's aridity and unpredictable rainfall.

In the first evaluation, ICOMOS considered that the attributes (both physical features and processes) of that system need to be better defined and more carefully mapped in order to set out more appropriate boundaries that respect the morphology of the area and its cultural and social units. The current revised nomination has greatly increased the boundaries to include an expansive area of terraces in the west. This area has perhaps the greatest concentration of terraces but does not have walled towns. ICOMOS has not had the opportunity to assess this area that increases the size of the nominated areas fourfold. However it notes that it has changed the emphasis away from the dominance of the walled towns.

ICOMOS considers that this criterion could be justified for a smaller coherent area that reflects the extraordinary conjunction between terraces and walled towns.

---

ICOMOS considers that this criterion has not been justified at this stage.

---

*Criterion (vi): be directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance;*

This criterion is justified by the State Party on the grounds that the Konso belief system, social organisation, rituals and art (*wakas*) are testimony to traditions of megalithic societies.

ICOMOS considers that the justification provided does not demonstrate how these beliefs are of universal significance in relation to megalithic societies in general, or how the overall cultural landscape reflects these beliefs in an outstanding way.

---

ICOMOS considers that this criterion has not been justified.

---

---

ICOMOS does not consider that the criteria and Outstanding Universal Value have been justified at this stage.

---

#### **4 Factors affecting the property**

##### **Development pressures**

One of the main trends identified by the State Party is for new houses to be built outside the enclosing town walls and for old plots to be left abandoned. This trend is not yet undermining the social fabric and functioning of the

villages; but if the process of moving out and leaving abandoned plots continues, this could have a detrimental impact on the value of the spatial organisation and overall social structures of the towns. There is also pressure for schools, clinics, flour mills, churches and modern burials. There appear to be no policies or planning currently that can control these processes adequately so that new buildings respect the patterns of the landscape.

In several villages, the positioning of the water tanks, standpipes and latrine blocks in front of the main entrance, or original gate seems to have been chosen without necessary consultation.

To the north-east, the boundary encircles Karat town, which is an exclusion zone. The population of Karat has doubled in the past ten years and the town is undergoing rapid infrastructural development. To the east and west are the three towns that collectively are called Dokatu. All three are right up against the property boundary with the threat of development in Karat immediately outside. Measures have been now taken to control this interface - see below.

The expansion of the town of Bekawle (the Konso administrative center), had also threatened the terraces that lie in Dokatu, Hulmie, Olanta, and Dara territories. But it is now accepted that the town can only expand toward NE and E directions, outside of the nominated area.

Currently electricity is not connected to all the villages. If the lines continue from those in the existing towns, this could lead to a plethora of overhead lines in the landscape. ICOMOS notes that there has not so far been consideration of whether this can be avoided and how consultation might take place.

It is noted new road constructions has cut across the terraces

##### **Lack of development**

The lack of water supplies and of adequate sewage disposal is a negative factor in terms of encouraging families to stay in the towns and villages.

##### **Dams**

To the south-west of Konso there are projects, apparently going ahead, for a series of dams on the Omo river to supply hydroelectricity to the country's grid (and maybe adjacent countries too). It appears that the approved route for the high-voltage power line is not parallel with the tarmac road through the middle of Konso, but to the east of the nominated area.

ICOMOS considers that assurances need to be given on this point.

##### **Changing agricultural practice**

Sufficient availability of labour for the myriad of tasks necessary to keep the overall agricultural terrace system



functioning is absolutely crucial. Traditionally many of these were apportioned to youths or children, such as promptly repairing damage to walls and drains after storms or scaring birds and monkeys from the ripening grain. Now, with a weakening of the age-grade institutions and communal obligations, strains in maintaining the agricultural cycle are likely to manifest themselves.

#### Demographic changes

Only around 20% of Konso people now live in the heart land of Konso country – that is the nominated villages. It appears that many families have moved to lower ground where it is easier to farm and there are less social constraints. Although they keep links with their ancestral villages, there must be a danger that, unless farmers in the nominated areas can in some way add value to their produce, they will become marginalised and the fortified villages the residences of older people.

#### Tourism pressures

There is clearly a wish to increase tourism but there is also a risk that this could lead to a museumification. The newly inaugurated Konso Museum could play a central role, liaising with other museums and institutions and scholars generally, in providing more sophisticated information (rather than on the traditional terraces and town walls) of the persistent and resilient agricultural and cultural systems and raise awareness within the community, as well as with visitors, of the dynamic social and cultural landscape.

One of the main current adverse impacts of tourism is a rash of lodges, some labelled 'eco-lodges', on prominent sites, directly overlooking villages. The lodges are thatched imitating authentic Konso style – but in entirely unauthentic situations.

It is not clear how permission for these was given but ICOMOS understands that the aim is to provide clearer scrutiny of such proposals in the future.

#### Theft

There is particular concern for the safety of the carved funerary effigies, *wakas*, commemorating senior clan-heads and heroes, since they are subject to decay (as they always were) but also, having acquired some fame and monetary value in the ethno-art world, and are thus now vulnerable to theft. In some villages action has been taken to move *wakas* from their original grave-marking positions to safer ones inside the walls, and to protect them from the elements by erecting shelters of metal sheeting. Others are said to be hidden away and are expected to reappear soon in the safe refuge of the new Konso Museum where there will be suitable conditions (and treatment facilities) for permanent conservation.

#### Environmental pressures

##### Building materials

Customary materials and labour for repairing terraces, town walls and houses, are increasingly being seen as

having a price. The nomination dossier mentioned the cost of thatching grass, for the *paftas* as well as for individual homes, indicating the scarcity of grass in this intensively cultivated landscape, as well as the continuing need for fodder for the stalled cattle.

These factors are exacerbated by the pressure of an increasing population upon all natural resources (and perhaps the reluctance of people to fulfil customary obligations without payment).

Where roofs have been changed from thatch to tin, although this change of style requires an outlay of cash, it may prove in the long run cheaper in terms of the labour (and reciprocity obligations thereby incurred) than obtaining thatching grass and regularly maintaining the roof.

Any policy to sustain traditional roofing will have to find a solution to the scarcity (and expense) of thatching grass.

#### Forestry

IUCN notes that: *'The natural values of the landscape have been heavily degraded and little is left of the original vegetation across much of the area. The sacred forests, which provide some protection to forest remnants, continue to be degraded and cut down. These forests, while small, preserve some natural values, as well as having sacred significance in a number of cases. There has been replacement of some species with exotic Eucalyptus which is reported to exacerbate problems of water management.'*

*'The implementation of a reforestation programme, initially for firewood, could be considered priority in the property. Protecting the last remnant natural forests and restoring them is more difficult, but should be attempted in order to retain natural values within the landscape.'*

#### Natural disasters

The property has a degree of vulnerability to earthquakes and to storms which produce flash floods that could inflict considerable damage on the terraces.

#### Impact of climate change

The landscape is clearly vulnerable to changes in rainfall patterns, although during past famines the areas has managed better than other parts of the region. IUCN notes: *'In an already dry environment, climate change is a threat to the values of the landscape and mitigation and adaptation measures should be important components of site management.'*

---

ICOMOS considers that the main threats to the property are changes in traditional practices, related to building construction and forestry, community obligations, resources, a potential over-reliance on tourism, and development pressures from Karat.

---

## 5 Protection, conservation and management

### Boundaries of the nominated property and buffer zone

The area within the boundary covers approximately 230 sq. Km.

The original boundaries were somewhat arbitrary with long straight lengths cutting across the landscape and not coinciding either with recognisable landscape features or cultural or administrative units. The revised boundaries follow natural and cultural landscape features and include the upper watersheds that feed the irrigation systems.

No buffer zone has been designated as it is stated that the wider landscape is also managed by traditional law.

ICOMOS considers that the larger nominated area gives much more effective protection to the west but the landscape near the cluster of walled towns to the east is still vulnerable to what happens immediately outside the boundary in Karat town and its environs. This landscape does need protection from some form of buffer zone.

---

ICOMOS considers that the boundary of the nominated property as revised relate it more clearly to topography and cultural and social units and in so far as it can judge without a site visit, are adequate from the point of view of protection; however either a buffer zone needs to be put in place or planning policies that protect visually contiguous areas that form the setting of the property in the north and east.

---

### Ownership

All land is owned by the State as is the case throughout Ethiopia. Terraces are owned by individual members of the community. The forests are 'owned' by the *Poqolla* and members of their family, a status that is defined by traditional law. The walled towns are collectively owned by the community members.

### Protection

#### Legal Protection

The regional Konso proclamation, which came into force in 2010, gives protection by the Southern Nations, Nationalities and Peoples Government to the nominated area and specifically to the area and attributes of the 12 walled towns of the original nomination which are listed. The boundaries of these towns are set out.

Specific protection is also given to the towns adjoining Karat. The legislation has placed posts as the limits of the traditional towns, and no construction is to be conducted within the 50 metres space outside the external walls of the traditional towns.

ICOMOS notes that the nomination dossier makes reference to existing Federal Law No. 209/2000

governing the protection of archaeological, ethnographic and cultural sites and artefacts. It is not clear how under decentralisation, specific enforcement under federal law, and prosecution where necessary, will be initiated.

The *Rural Land Administration and Utilization Proclamation No.53/2003* makes provision for customary laws and communal protection and this provides the framework within which the Konso proclamation has been drafted.

#### Traditional Protection

Almost the entire management, maintenance and conservation of the nominated property is carried out by traditional measures. These are supported by the Proclamation mentioned above.

#### Effectiveness of protection measures

However effective traditional practice is, it has the capacity to be highly vulnerable to demographic and social pressures.

ICOMOS considers that traditional management needs to be supported through legal protection or planning measures and encouraged through incentives if it is to survive. These constraints and incentives need to be robust enough to support the living communities of the Konso area in a sustainable way, allowing them opportunities for improved standards of living based on the economy of the terraces rather than from an over-reliance on tourism.

IUCN also notes that: *'The basis for protection of the area is customary law. IUCN questions whether this will be sufficient to guarantee the protection of the nominated property, especially the natural values, over time. It is also of concern that the management plan for the site does not carry legal weight and may not be entirely consistent with customary law. Ideally, governance set-ups integrate customary and formal protection and management in a complementary and consistent fashion.'*

---

ICOMOS considers that the legal protection in place is has now been strengthened through the Konso Declaration. Although the traditional protection arrangements currently in operation are admirable, they need active support and constraints to ensure they are resilient in response to social and economic changes. ICOMOS considers that the current protective measures for the property need to be augmented and strengthened to support the communities in their massive conservation responsibilities.

---

### Conservation

#### Inventories, recording, research

As part of the nomination process, community members have participated in data collection and have led a

mapping process within their respective territory, supported in part by external funding.

As a result, town stone walls have been measured, the *moras* have also been measured, their use and related data recorded, and sketch drawings prepared for two representative *moras*. Sample homesteads have been documented; data on the extent of terraces has been collected through car and foot transects; and a sample terrace area measured systematically. Three major traditionally protected forests and associated cultural manifestations have been documented.

The nomination dossier has however not provided details of all the evidence collected. For instance there are no specific details of the town walls, apart from their plan, nor details of numbers and locations of the *moras*.

Several of the villages, with ward boundaries, *moras* and wall configurations plotted, would serve as an excellent base for more revealing surveys – involving student teams, say – undertaken homestead by homestead (both occupied and abandoned), wherever that can be undertaken without undue intrusion.

#### Present state of conservation

The structures of the landscape that need conservation are extensive: the town walls, wood-and-thatch houses, granaries, stock-stalls within the compounds, the *paftas* in the *mora* spaces, as well as the footpaths, walls, surviving gates etc of every town, and outside, the *dina* woods, graveyards, sacred forests, stone reservoirs, *hardas*, and the vast extent of stone-walled terracing.

Some variation from traditional practice has been noted, in particular the substitution of metal sheets for roofing of houses and the overall positioning of new buildings. Overall the state of conservation of the town walls is fair although some gates are no longer maintained. Some of the *pafta* buildings have been restored with outside funding. There is a problematic lack of maintenance of the *dinas* and *wakas* and thus their state of conservation is poor. There are difficulties with the conservation of the sacred forests where much of the original juniper stands were felled, where there has been replanting with eucalyptus and there is currently little regeneration.

The conservation of the field terraces is good and reflects the need for these terraces as a vital part of the Konso subsistence economy. Features such as the *harda* reservoirs could suffer from neglect if they are rendered redundant by new water supplies.

#### Active Conservation measures

Conservation is governed, up to a point, by local traditional practices and sanctions; but in view of modernising pressures, there is no guarantee that traditional work will continue.

ICOMOS notes that this is acknowledged in the nomination dossier.

In recent years, partly in tandem with the preparation of the nomination dossier, some financial support for conservation has been forthcoming (in particular from the Christensen Fund in USA) through local NGOs. This has brought some valuable results, in particular for the maintenance of village walls, repairing of *moras* and their *paftas* with necessary re-thatching, protective measures for surviving tracts of forest (with appropriate emphasis on the virtue of biodiversity), and reviving of communal cultural events.

The success of this will depend not only on agreement to certain standards but the viability of the overall economic system.

It is difficult to say whether this conservation work would continue if the moral encouragement of a modicum of funding were to be lacking.

The surviving pockets of traditional forests need active conservation. ICOMOS understood that the team preparing the nomination dossier has made special efforts to strengthen or revive the traditional control and management of these forest relicts, and to raise public awareness of the importance of their conservation in the villages around. But if these efforts are to be effective and lasting, ICOMOS considers that a system of constant vigilance, at district as well as local village level, will be essential.

#### Maintenance

Maintenance cannot be separated from conservation in terms of the elements of the Konso landscape.

#### Effectiveness of conservation measures

There is a great reliance on the strengths of the traditional community system with its complex obligations. ICOMOS is concerned that this system is not resilient enough to counter the social and economic forces for change, to the extent that key attributes are conserved, and considers that more proactive engagement is needed at regional and national level.

---

ICOMOS considers that conservation approaches need to be better supported at regional and national level.

---

#### Management

Management structures and processes, including traditional management processes

The Konso area is a *wereda* or single administrative unit within the Southern Nations, Nationalities and Peoples Region/loa State. As a nationality, the Konso have the right to make their own policies.

The nominated area include some of the Konso *wereda* – the Fasha region in the centre, a small part of Karate to the east, including Karat town the main urban area, and part of Kulme region to the west.

The management of the property is based on traditional structures. These are set out in detail in the management plan in terms of Clans, Age and Priestly groups, their sub-groups and functions.

A Management Committee has been agreed at the regional level to include concerned governmental administrative offices, community members including traditional leaders, youth and women representatives. Committees have also been formed at the community level. Although no details are provided as to the responsibilities of these committees.

The involvement of regional and national authorities is confined to inspection. The Konso Office of Culture and Administration inspects the property on a quarterly basis. They can then take any necessary enforcement action. The representatives of the regional government conduct two monitoring missions each year. Both of these are reactive rather than pro-active measures. The national Authority for Research and Conservation of Cultural Heritage (ARCCH) has no officer of its own in the district.

There is also the issue of potential conflicts between conservation and income from new development and tourism projects.

Policy framework: management plans and arrangements, including visitor management and presentation

A management plan was submitted with the Nomination. This, as outlined above, sets out the current structures and explains how the Konso community, through its recognised village committees and the district management committee, will endeavour to ensure the necessary standards of conservation and handle contraventions. It also sets out the activities of the partners but does not suggest any policies or action plans.

There is a need for the plan to address the presentation of the property, generally and through the new museum, and an overall strategy for visitor management.

Risk preparedness

There is no modern system of risk preparedness in place. Nevertheless, the Konso traditional system has its way of dealing with natural disasters. The terraces, ponds, walls and communally owned properties are conserved by the community work groups.

The community members of the generation in power are alert and sleep together, at night, in the *Pafta* within the *Mora* space to put out fires. Every walled town plants euphorbia and finger cactus in the *Dina* that they use to extinguish fires.

Involvement of the local communities

Local communities underpin this nomination and are at the centre of the management of the area.

Resources, including staffing levels, expertise and training

Overall resources are lacking, as noted in the nomination dossier. All the Agencies are trying to provide support but what is available is considered to be insufficient. Some limited funds are available to support tourism projects.

External support from NGOs in recent years has been used to foster community engagement on the repair of features such as walls, *moras* and *paftas*. Whether the level of effort in conservation could be maintained if, for some reason, the external source of these modest funds were to be withdrawn, and if the local organizations dependent on them for core finance and salaries were to suffer as a result it is difficult to ascertain.

There appears to be an unarticulated assumption that revenue from increased tourism will come in after inscription to fill any gaps. This may be related to the setting up of a World Tourism Organization Konso Information office.

Overall there is a need for supportive funds, perhaps through international cooperation with other similar properties.

Effectiveness of current management

The management of this complex cultural landscape needs resources and skilled people to support the commitment and skills provided by local communities. Currently this management support is not in place to a degree that would ensure that the values of the property are sustained over time.

For the property to be sustainable, there will be a need to foster ways for farmers to 'add value' to their produce and for them to benefit from visitors.

---

ICOMOS considers that a major effort is needed to bring in support for the traditional management of the property to ensure that it is robust and resilient enough to provide long term conservation.

---

## 6 Monitoring

Various monitoring mechanisms have been put in place to capture the work that needs undertaking such as terraces and walls that need maintenance, degradation of *wakas*, houses that need conservation. However there is currently little response that can be put in place to these needs. The monitoring is effective in identifying need rather than the effectiveness of conservation measures. The monitoring also needs to be related to

more detailed inventories or documentation of the key attributes.

---

ICOMOS considers that the monitoring is identifying problems but without any real resources to address those problems.

---

## 7 Conclusions

The compact walled towns, with their multi-layered defensive systems, and the maintained terraced fields, extending over the surrounding landscape of the Konso hills, bear striking visual witness to an intense, resilient land-use forged by very specific communal, social and cultural systems that were an extraordinary response to the area's aridity and unpredictable rainfall.

The nomination is to be commended for the way it has been developed from community level and harnessed the resources of the community to undertake surveys and provide documentation for the dossier.

What has been nominated in the revised nomination dossier is a vast area encompassing the heart of the Konso area, within which the terraces are at their most dense and the traditions of walled towns most prominent, and a much larger area to the west with terraces and scattered unfortified villages. ICOMOS has not been able to visit and view the large new area that extends the original nomination some four-fold. This very extensive area of terracing is in many ways quite distinct from the area around the walled towns, in terms of its settlement patterns and organisational structure. However few details have been provided of its landscape or its settlements.

It is not clear what the rationale is for the new boundaries in cultural terms as they cut across the Kulme region.

In the original evaluation, ICOMOS considered that management of this terraced landscape would present challenges in terms of sustaining traditional practices and managing the interface with development needs. This challenge is multiplied four-fold with the new boundaries.

ICOMOS considers that a great effort has been made to re-consider the boundaries of the re-nominated area in order that they reflect geographical features and to put in place through the Konso declaration a measure of protection for the nominated area and particularly for the original twelve walled towns.

Unfortunately in the very short time since the Committee considered this nomination, it has not been possible to augment the nomination file to reflect the additional 175 sq kilometres now added within the boundaries, or to fully justify the new boundaries in terms of how they relate to the walled towns.

It is a highly ambitious project to revise the boundaries in this extensive way.

However, the original nominated area had coherence in terms of encompassing the areas of Konso where the walled towns, set within their terraced landscape were the most dense. Also in terms of the Outstanding Universal Value, ICOMOS considered that the combination of terraces and walled towns were not paralleled elsewhere. With the newly extended boundaries, the emphasis has shifted towards the overall terraced landscape and terraced landscapes on their own are found in several other areas.

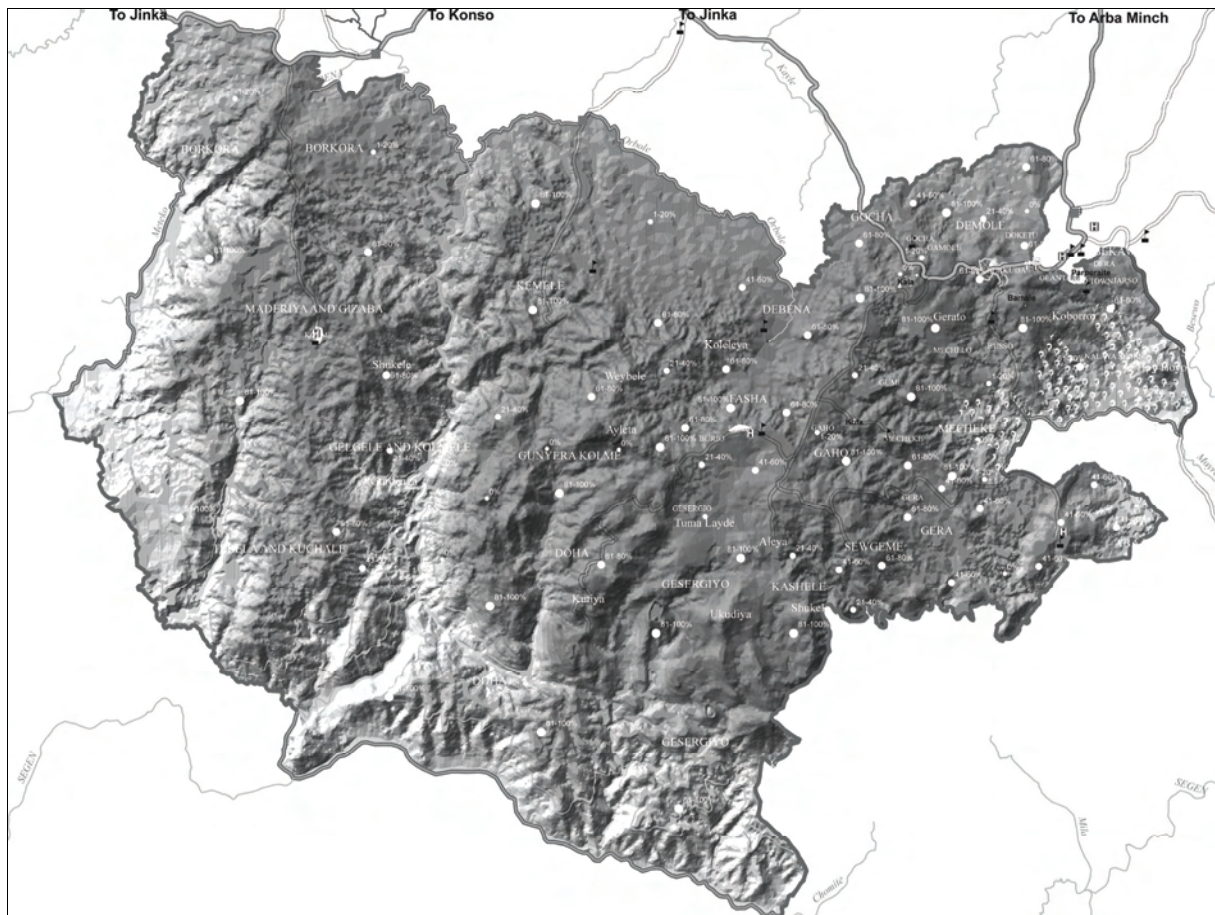
ICOMOS reluctantly considers that it is not possible to evaluate adequately the very large additional area included in the revised nomination without more details being provided of the landscape, settlements, additional walled towns, and without a mission to consider the state of conservation of this very extensive and potentially highly vulnerable terraced landscape and how it will be managed. However on the basis of the information provided, it does appear that the large western extension does not add to the attributes of potential outstanding universal value.

### Recommendations with respect to inscription

ICOMOS recommends that the examination of the nomination of the Konso Cultural Landscape, Ethiopia, to the World Heritage List be **deferred** in order to allow the State Party to:

- Re-consider the boundaries to reflect the exceptional combination of walled towns and terraces within a coherent area;
- Augment the nomination dossier to include details of the eight extra walled towns, including their conservation;
- Provide details on how the whole nominated area will be managed;
- Define and put in place a buffer zone to protect the property from urban development around Karat town;
- Strengthen the planning processes to ensure that the spatial planning of the walled towns is conserved;
- Ensure more active involvement of regional and national authorities in the management and conservation.

ICOMOS considers that any revised nomination would need to be considered by an expert mission to the site.



Map showing the revised boundaries of the nominated property





Aerial view of Gamole town



Terraces near Dokatu





*Harda* (water reservoir) near Busso town



*Mora* (communal space) with *pafta* (thatch-roofed structure) at Gamole town





---

## **Fort Jesus, Mombasa (Kenya) No 1295rev**

---

### **Official name as proposed by the State Party**

Fort Jesus, Mombasa

### **Location**

City of Mombasa  
Coast Province  
Kenya

### **Brief description**

Fort Jesus, Mombasa, was built by the Portuguese in 1593 as part of a system of coastal forts to exploit African resources and transcontinental trade, at a time of political and economic domination by the West. The refined layout and structure of Fort Jesus, Mombasa, reflect the characteristics of Renaissance military architectural theory, and its basic design and structure have remained intact, despite frequent bombardment and several changes of ownership. Fort Jesus, Mombasa, controlled a larger area than most of the coastal forts - the East African Coast, including the Arabian Peninsula, and the Far East.

### **Category of property**

In terms of categories of cultural property set out in Article 1 of the 1972 World Heritage Convention, this is a *monument*.

## **1 Basic data**

### **Included in the Tentative List**

25 June 1997

### **International Assistance from the World Heritage Fund for preparing the Nomination**

2004

### **Date received by the World Heritage Centre**

28 January 2009

31 January 2011

### **Background**

This is a referred back nomination (34 COM, Brasilia, 2010).

A first nomination dossier for Fort Jesus, Mombasa was examined by the World Heritage Committee at its 34<sup>th</sup> Session (Brasilia, 2010). At the time, ICOMOS recommended to defer the examination of the nomination.

The World Heritage Committee adopted the following decision:

Decision 34 COM 8B.12:

*The World Heritage Committee,*

1. *Having examined Documents WHC-10/34.COM/8B and WHC-10/34.COM/INF.8B1,*

2. *Refers the examination of the nomination on the basis of cultural criteria of Fort Jesus, Mombasa, Kenya, back to the State Party to allow it to:*

- a) *Further develop the nomination to demonstrate that the nominated property possesses outstanding universal value;*
- b) *Expand the comparative analysis to include other relevant fortresses and go beyond the Portuguese context;*
- c) *Amend the designation notice so as to eliminate the discrepancy between the sizes of the conservation area and the buffer zone;*
- d) *Include the guidelines for the conservation of the Old Town (1990 Conservation Plan) in the bylaw so as to strengthen protection and facilitate management;*
- e) *Revive the Mombasa Old Town Planning Commission and provide means for its functioning;*
- f) *Reinforce the Mombasa Old Town Conservation Office (MOTCO) in terms of human resources and clarify its role;*
- g) *Establish a holistic management structure for the Old Town that involves all the stakeholders, and, in particular the local community, the municipal council, and the managers of the nominated property;*
- h) *Establish rigorous monitoring of the erosion of the coral rock that forms the foundations of the Fort;*
- i) *Consider the inclusion of the underwater archaeological remains in the nominated property;*

3. *Recommends that the State Party give consideration to the following:*

- a) *Relocating the car/bus parking area for visitors outside the moat for reasons of visual and functional integrity and authenticity;*
- b) *Adding maintenance concerns to the Management Plan, including regular documenting of the state of conservation of the Fort.*

The State Party supplied on February 2011 the following new information:

- A revised nomination dossier, with an expanded comparative analysis;
- Copy of the revised Management Plan for Fort Jesus, dated January 2010;
- two maps:
  - the revised boundaries for the nominated

- property and its buffer zone, expanded to include part of the seawaters in front of Fort Jesus and Mombasa Old Town;
- o the extract from the Survey of Kenya Map sheet 201/9/9NE1, scale 1:2,500, with boundary outline of Fort Jesus.
- two articles from the newspapers.

The additional information provided has been carefully considered by ICOMOS in the relevant sections of this report.

### Consultations

ICOMOS has consulted its International Scientific Committees on Fortifications and Military Heritage and on Shared Built Heritage. ICOMOS consulted also independent experts.

### Literature consulted (selection)

Boxer, C.R., and de Azevedo, C., *A fortaleza de Jesus e os Portugueses em Mombaça 1593-1729*, Centro de Estudos Historicos Ultramarino, 1960 Lisbon.

Freeman-Grenville, G.S.P., The Portuguese on the Swahili Coast: buildings and language, in *Studia* N° 49, pp. 235-53, 1989, Lisbon.

Hinawi Mbarak Ali, *Al Akida and Fort Jesus, Mombasa*, East African Literature Bureau, 1950, Nairobi, Kenya.

Kirkman, J., *Fort Jesus: a Portuguese fortress on the East African coast*, Oxford University Press, 1974, London.

Nelson, W.A., *Fort Jesus of Mombasa*, Canongate Press, 1994, Edinburgh.

Pearson, M.N., *Port cities and intruders: the Swahili Coast, India and Portugal in the Early Modern Era*, The Johns Hopkins University Press, 1998, Baltimore and London.

### Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the property from 17 to 21 August 2009. As this is a referred back nomination, no further mission has been undertaken.

### Additional information requested and received from the State Party

None

### Date of ICOMOS approval of this report

10 March 2011

## 2 The property

### Description

Fort Jesus, Mombasa, is situated in the town of Mombasa, a port city on the east coast of Kenya. The nominated property covers 2.36ha. It includes the Fort, the rock on which it stands, the immediate area surrounding it, including the moat, and an area to the south with archaeological material uncovered during

recent archaeological research. Mombasa Old Town forms the buffer zone to the Fort, occupying a further 31ha.

Fort Jesus, Mombasa, lies at the southern edge of Mombasa Old Town, close to the coastline, its main gate opening towards the main road of Mombasa Old Town.

Because of its strategic location, Mombasa grew in importance over the centuries and soon became a major trading port and a military strongpoint, along with other city- states, i.e. Lamu, Malindi, Pate, Kilwa, Zanzibar. The town was renowned from the 13<sup>th</sup>-14<sup>th</sup> centuries onwards and the beauty of its architecture was described by the Arab traveller Ibn Battuta, who visited East Africa in 1331 and gave vivid accounts in his writings of the towns of this region.

Fort Jesus, Mombasa, was erected in 1593-96 to the designs of Giovanni Battista Cairati by the Portuguese when they gained control over Mombasa, to protect its port, which became a stop-over along the trade routes throughout the Indian Ocean. Cairati was an Italian military architect and engineer who designed several fortresses for the Portuguese colonies in Asia. However, Cairati apparently never went to Mombasa: he only produced the drawings for the fortress and sent them to the master builder in Mombasa.

The Fort was given a form that was roughly human, inspired by the architectural theories of the Renaissance which were developed one century before the construction of the nominated property, in 15<sup>th</sup> century, by, among others, Filarete or Francesco di Giorgio Martini and expressed in several anthropomorphic sketches of architectural elements and buildings.

In addition to the influence of Renaissance architectural theories, and in the light of the fact that the founders belonged to the Order of Christ, the image of the martyred Christ has also been read in the plan of the fort.

The Fort is organized around a central courtyard with four bastions, one at each corner, while the side towards the sea is interrupted by a rectangular gun platform. The landward bastions (São Filipe and São Alberto) were built with re-entrant angles facing one another in order to provide gun positions, whilst the seaward bastions (São Matias and São Mateus) were square in plan, although today São Matias also has one slightly re-entrant angle for protecting the Main Gate. A wooden bridge (now filled with sand to create a causeway) ran across the ditch to connect the gate with the exterior. Above it is the gatehouse, with upper and lower rooms. Two subsidiary gates, used to receive goods delivered by boat, open out from the projecting structure towards the sea. These were connected to the inner court by a sloping passage and a staircase.

Other features of the Fort are the parapet walks, firesteps, watchtowers and gun ports, barrack rooms on

both north and south sides, and guardrooms leading off the main gate. The fortress included facilities such as a chapel, a cistern, a well, and the Captain's house, but among these only the cistern and an L-shaped building survive.

The base of the defences is solid coral cut back to the line of the walls. On the landward side the walls were 4.27m thick with a parapet 2.75m wide and 1m high, backed by a wall walk and firestep. A dry moat encircles the three landward sides of the Fort, to ensure that it could not be attacked from the rising slope beyond the landward bastions. The height of the scarp, including the 5m deep and wide moat, is c 17m. The Fort is well above sea level and the moat provided protection during a retreat.

The original construction materials of the Fort were coral, lime, sand, and clay. The facades are finished with a pigmented yellow ochre plaster.

### **History and development**

The East African coast between Somalia and Mozambique has been inhabited by different peoples over several centuries. The location and geomorphology of this part of the African coast was favourable for independent city states to flourish, trading in gold, silk, ivory, and skins with merchants from as far away as Persia, Arabia, Syria, India, and China. Kilwa, Mombasa, Malindi, Lamu, and Pate were all in competition with one another to gain supremacy over the area and the trade routes.

Portugal succeeded in opening up a sea route to the East Indies at the end of the 15<sup>th</sup> century, when Vasco de Gama sailed around the Cape of Good Hope to reach India and visited several prosperous port towns in Mozambique, Tanzania, Kenya, and Somalia. These cities were capable of providing good intermediate bases for ships sailing to and from India, and for this reason Portugal sought to gain control over the area. The Portuguese were obliged to compete with established groups such as the Omani Arabs, and domination over towns such as Mombasa or Malindi was not secured without ruthless clashes. By 1509 the Portuguese controlled tracts of the East African coast between Sofala in Mozambique to the south and Socrata to the north.

Nevertheless, control of the area continued to be contested by other groups, who tried repeatedly to replace the Portuguese in dominating the area. The Turks, for example, succeeded in building a fort in Mombasa by the sea during a brief period of control over the entire coastal region at the end of the 16<sup>th</sup> century.

The Portuguese reaction was not long in coming and by 1596 a new fortress, more strategically positioned and designed according the most advanced principles for constructing fortifications, was completed only three years from when work began and was named Fort Jesus, Mombasa.

The Fort became the new Portuguese headquarters on the East African coast, with a permanent garrison of a hundred soldiers. Smaller supporting forts were built on the island, the ruins of some of which are still visible at Mama Ngina Drive Heritage Site, about 1.5km south of the Fort, and at Makupa, 3km to the west.

The building of the fortress attracted Portuguese settlers and traders in large numbers and the Fort expresses the Portuguese's successful attempt to stamp its authority on an area that had formerly been under the influence of eastern civilisations.

Portuguese control of the area was challenged in particular by the Omani and the Turks, who encouraged the local population to revolt against the occupiers, as well as by other European powers, which had, by the end of the 16<sup>th</sup> century, made their appearance in the competition to obtain their share of the Indian Ocean trade.

This restless history is reflected by the numerous transformations that Fort Jesus, Mombasa, has witnessed over its existence.

The first improvements to the Fort date back to 1634-39 when, following a revolt, curtain walls were built on the landward side, and new walls were built on top of three of the bastions (São Filipe, São Alberto, and São Matias) and provided with new gun-ports, the curtain wall to the west was strengthened and the gaps were filled in to protect the foundations of the bastions on the coral reef, the main gate was protected by adding an elliptical bastion to the existing one and creating an additional gate connected to the first one by a covered passage. Two gun platforms were built, one to cover São Mateus bastion and the other to protect São Alberto bastion and the south curtain wall. Turrets were built to protect the projection located on the seaward side.

Having become aware of declining Portuguese control, the Omani raided their possessions on the East African coast from 1652 onwards and repeated attacks were launched until 1696 when the Omani Arabs besieged Fort Jesus, Mombasa, and eventually drove out the Portuguese. Further modifications were then made to repair and reinforce the damaged fortress. They filled in the outer rooms to create a larger platform at the level of the Portuguese walls and protected it with musket slits and gun-ports.

Despite repeated attempts, it was not until 1728 that the Portuguese reoccupied the Fort, and then only for 18 months.

Apparently, although the 18<sup>th</sup> and 19<sup>th</sup> centuries are not fully documented in the nomination dossier, the Omani Arabs maintained control over the coastal settlements until the area was colonized by the British in 19<sup>th</sup> century. Under British rule, in 1895, the Fort was converted to a prison until 1958. In this period additional buildings were built inside, such as the kitchen and a gallows up against

the re-entrant angle.

In 1958 Fort Jesus, Mombasa, was declared a National Park, and in 1960 it was restored, a site museum, a conservation laboratory, and an administration block were built on the foundations of the former barracks. The new status of the Fort led to archaeological excavations and research which yielded a great deal of information about the construction phases, as well as a number of artefacts that were housed in the museum.

### **3 Outstanding Universal Value, integrity and authenticity**

#### **Comparative analysis**

The comparative analysis made by the State Party in the revised nomination dossier expands the previous analysis presented in 2010 and includes also examples from other geo-cultural regions, although for the most part related to the Portuguese presence throughout the world. The analysis aims to highlight the specificity of the nominated property within a selected group of fortresses that, although erected according to the Renaissance military architectural principles, were built in non European contexts.

The rationale of the comparison is based on the reasons underlying the construction of these forts (control of the coast or the hinterland and of trade routes), similarities in planning and in the building materials, retention of the initial design, history of the nominated property and its buffer zone, and the present state of conservation.

The properties examined in this comparative study are principally World Heritage Sites: the Fortress of the Portuguese City of Mazagan - El Jadida (Morocco, 2004, (ii), (iv)), the Forts in Elmina, part of the serial World Heritage property of Forts and Castles, Volta, Greater Accra, Central and Western Regions, Ghana (1979, criterion (vi)), which are among the earliest example of fortified buildings in the tropics. They also influenced the design of later fortifications, such as James Island and Related Sites, Gambia (2003, criteria (iii), (vi)), the Fortaleza de São Sebastião in the World Heritage fortified city of the Island of Mozambique (1991, criteria (iv), (vi)), the Ruins of Kilwa Kisiwani in Tanzania (1981, criterion (iii)), the Red Fort Complex (India, 2007, (ii), (iii), (vi)) and the City of Valletta (Malta, 1980, (i), (vi)).

Among properties inscribed on the tentative lists of the State Parties, the State Party has selected for comparison the Fortress Kambambe (Angola). Further properties reputed relevant for the comparison were the Forte dos Reis Magos (Fortress of three Wise Men, Brazil), the fort of Mannar (Sri Lanka) and Fort Aguada, in India

Fort Jesus, Mombasa, is considered to be more intact than the Fortress of Mazagan in that it has lost one of its five bastions, whilst the nominated property has retained all its parts, thanks to its superior design as a military

structure. Additionally the nominated property is said to have been built to control a larger area and along its history more powers contended to take over the fort. In respect to the Forts in Elmina, Fort Jesus was built to control the sea trade, whereas the Forts in Elmina were created in order to oversee routes in the interior, and also because it has retained its original design over the centuries while the design of the Forts in Elmina has been overlaid by the subsequent Dutch modifications.

The Fort on James Island was only partially stone-built, the utility buildings being of wood and thatch. After a long period of turmoil it was restored in the 18<sup>th</sup> century, when its initial design was substantially altered.

The Fortaleza de São Sebastião is said to be similar in a number of ways to Fort Jesus in terms of design, but it is less regular than the nominated property and the construction is reputed not to follow fully the principles prescribed for achieving the highest level of defence. The Fort was built not only to defend the trade routes to India but also to secure inland routes to gold mines. The Fortaleza de São Sebastião has been restored several times and has also suffered from heavy cyclone damage. However, it is worth mentioning that both Elmina and São Sebastião forts have been built before Fort Jesus, Mombasa and predated this fort.

Kilwa Kisiwani was built before Fort Jesus, Mombasa, but they share a similar history, since they both were built by Portuguese power and were subsequently taken over by Omani Arabs. Kilwa Kisiwani, however, was mostly destroyed by the Portuguese when they abandoned the fort only a few years after it was built, and so today only a fraction of the Portuguese fortress survives.

The Red Fort is said to be different from Fort Jesus for a number of reasons: the civilization that built it – the Moghul in the Indian subcontinent, the cultural influences that may be found in its fabric - Islamic, Timurid and Hindu - and the functions for which it was built, residential instead of military.

The city of Valletta and Fort Jesus are said to share several similarities. Both were erected according to architectural Renaissance principles, both are associated to religious orders (the former to the Military Order of the Knights of St. John, the latter to the Order of the Knights of Christ). However, differently from Fort Jesus, the fortress of Valletta was part of a system of fortifications around the town that were functional to the effective defence of Valletta. On the other hand, Fort Jesus is said to have been built as the main stronghold to protect itself, the surrounding town of Gavanna (today Mombasa Old Town) and the Indian Ocean trade routes. This would demonstrate the different role played by Fort Jesus.

The Fort of Mannar in Sri Lanka is said to differ from Fort Jesus for two reasons: it was smaller in size and re-built completely by the Dutch when they superseded the



Portuguese in the control over Sri Lanka.

Forte dos Reis Magos, Brazil would share a number of similarities with Fort Jesus: both were built on the top of a coral reef promontory, both had five bastions, but the nominated property is reputed to have a superior design, that allowed the Portuguese to maintain control over the fort and their economic interest in the Indian Ocean.

Fortress Kambambe is considered different from Fort Jesus, in that the first was built mainly to control the Portuguese penetration into the Angolan inland and as a base for the slave trade and goods storage, whereas the nominated property was meant purely for defensive reasons, to secure the coast and the Indian Ocean trade routes. Finally, Kambambe fell in ruins, whilst Fort Jesus is still intact.

Fort Aguada (India) was built at the beginning of the 17<sup>th</sup> century in Goa and is reputed one of the best examples of the Portuguese forts in this town. Fort Aguada is located, like Fort Jesus, Mombasa, on a rocky cliff but today it is almost in ruins.

In summary, according to the State Party, the comparison would show that Fort Jesus is an outstanding witness of the new principles and conception for military architecture, applied in a particular geo-cultural and historic context, as well as of the exchanges of influences among European, African, Arabian and Asian cultures. Thanks to its design, it has preserved its original design and structures, despite several changes of control.

ICOMOS observes that, although expanded, the comparative analysis has failed to consider vital examples for the comparison. Even when limiting the analysis to the Portuguese colonial context e.g. the Fortresses of São Miguel in Luanda, Angola, which is still an imposing and still standing fort, or the Fortress of the World Heritage Site of Cidade Velha, (Capo Verde, 2009 (ii), (iii), (vi)), should have been included. Further relevant examples against which to compare the nominated property and not examined by the State Party are Muxima, and Massanganu in Angola, the Fort of the Wise Men in Goa and the Fortress of São Sebastião de Baçaim (India), and the Fortresses of Ormuz (Bahrain), and of Muscat (Oman), as well as the Fort of São Filipe de Setúbal (Portugal).

ICOMOS further notes that the revolution in the conception and design of military architecture in the 16<sup>th</sup> century, following advances in weapon technology and in military strategy, as well as the application of certain architectural design principles derived from the Renaissance, were a general phenomenon that touched all European powers and so, for a robust comparative analysis, fortifications built not only by the Portuguese but also by other European powers could have been examined.

Additionally, ICOMOS observes that the expanded

comparative analysis has focussed only on typological aspects of the fortification and, in this regard, the comparison has not made a systematic use of the shared reference criteria adopted for studying fortifications, i.e., size, plan, layout, articulation of the bastions, location, etc.. On the other hand, the comparison has overlooked the cultural interchange witnessed and reflected by the nominated property and other similar properties.

In this regard, ICOMOS underlines that almost all fortresses that have been used for comparison and are inscribed on the World Heritage List are part of larger properties comprising the towns or settlements that are associated to them and contribute to reflect and convey the intercultural exchange values that were claimed for sustaining their inscription. This is true, i.e., for the Portuguese City of Mazagan - El Jadida, fortified city of the Island of Mozambique, the City of Valletta, Cidade Velha.

In summary, ICOMOS considers that the comparative analysis, as it has been expanded by the State Party, has not been able to support the values that are claimed for the nominated property. At the same time, the new comparison provided has limited its scope to one set of values claimed for the property, overlooking the cultural interchange dimension of Fort Jesus, Mombasa.

---

ICOMOS considers that the comparative analysis does not justify consideration of this property for the World Heritage List at this stage.

---

#### **Justification of Outstanding Universal Value**

The nominated property is considered by the State Party to be of Outstanding Universal Value as a cultural property for the following reasons:

- Built in a period and in a region, which were at the centre of the emerging political, commercial and cultural globalisation, Fort Jesus, with its imposing structure, is an exceptional witness to the first successful attempt by the western civilisations to control the east-west maritime routes and to the interchange of cultural values among peoples of African, Arab, Turkish, Persian and European origin.
- Fort Jesus, Mombasa, exemplifies a new type of fortification, resulted from the innovations in the military and weapon technology occurred in the 15<sup>th</sup> and 16<sup>th</sup> centuries. It also bears testimony to the philosophical debate that underlay the Renaissance architectural theory. Its layout granted Fort Jesus a complete protection from attacks and contributed to the retention of its original design throughout the centuries and several changes of hands and uses. Fort Jesus is reputed to represent the best surviving example of 16<sup>th</sup> century Portuguese military fortification of its kind in the world.

ICOMOS observes that the cultural interchange among

the different civilisations that came in contact and fought to dominate the region and the Indian Ocean commercial routes was undeniably witnessed by Fort Jesus, Mombasa but this argument has been mainly stated and only meagrely articulated in the nomination dossier. Struggle, conflicts and contestation to gain control over them, is the common destiny of most fortifications, as demonstrated by the comparative analysis, whilst the cultural interchange that occurred in the nominated property, and its significance, would be better understood and its relevance assessed, when posed in relation to its buffer zone, Mombasa Old Town, and to the regional pattern of development of coastal settlements of East Africa. This aspect of Fort Jesus' significance would need to be strengthened through a more detailed argumentation robustly related to its history and its subsequent transformations and framed within the larger geo-historical context of the Indian Ocean trade routes.

On the other hand, the claim of the importance of Fort Jesus, Mombasa, as one of the finest examples of military architecture reflecting the innovations in weapon technology and warfare strategies and embodying Renaissance architectural theories has not been substantiated by the expanded comparative analysis proposed by the State Party.

### **Integrity and authenticity**

#### **Integrity**

The State Party holds that the boundaries of the nominated property have been selected to ensure that the functional and visual integrity of Fort Jesus is retained. The boundaries have been delineated so as to include the underwater archaeological remains adjacent to Fort Jesus that are integral to its historical context.

The property is said to be in good conditions and not encroached upon. Minor changes inside the fort bear witness to its history and do not threaten its integrity.

The State Party has informed that the car park that occupied part of the moat has been relocated in another place, outside the nominated property.

ICOMOS observes that the boundaries for the nominated property as redefined in the revised documents include the elements strictly necessary to express its value as a fortification built following Renaissance architectural design principles in a remote context, as a stronghold for exploration and territorial control, as several other cases documented in Africa.

ICOMOS notes that the State Party has included the area where the underwater archaeological remains lie in the nominated property and in the buffer zone. However, it is not understandable the rationale of the development of the expanded boundaries in the sea area, nor is it clear how the boundaries can be physically traced and identifiable in their marine side.

In this regard, ICOMOS recommends modify the perimeter of the boundaries of the marine area, to facilitate demarcation, in absence of physiographic features, according to straight lines that might be marked through buoys.

ICOMOS considers that the fabric of the nominated property is in relatively good condition, it is well maintained, and it is not encroached upon by permanent structures.

Minor changes to the building and its uses reflect its turbulent history. These alterations are well explained in the documented history and cannot be said to have damaged its integrity.

ICOMOS notes that the State Party has mentioned the relocation of the car/bus parking area for visitors to a site outside the nominated property. ICOMOS expresses its satisfaction for this decision; however, it would be important to know whether and how this part of the moat has been reclaimed after the removal of the park.

#### **Authenticity**

The State Party considers that, on the basis of archival and published records, Fort Jesus, Mombasa, still conforms with its original design. The nominated property retains its initial architectural and aesthetic values. The ramparts, for instance, or the surrounding moat have not been changed and the same materials used by the Portuguese in building the Fort have been used in subsequent developments, which for their part have not altered the overall shape of the initial fortress. The function of the Fort, although it is no longer a military installation, respects its aesthetic form and value and the modifications that have been made necessary by the current use do not diminish its unity, form, and original layout.

ICOMOS considers that Fort Jesus, Mombasa, has retained its form, design, and construction materials, despite a number of modifications, which in fact bear witness to the turbulent history of the nominated property. Changes of use and function over time have not damaged the important elements of its fabric nor have they introduced incompatible materials or techniques.

---

ICOMOS considers that the nominated property could have the capacity to meet the conditions of authenticity and integrity if further work is done to better justify the proposed outstanding universal value and the selected criteria, strengthen the comparative analysis in order to justify the proposed Outstanding Universal Value.

---

#### **Criteria under which inscription is proposed**

The property is nominated on the basis of cultural criteria (ii) and (iv).

*Criterion (ii): exhibit an important interchange of human values, over a span of time or within a cultural area of*

*the world, on developments in architecture or technology, monumental arts, town-planning or landscape design;*

This criterion is justified by the State Party on the grounds that the Fort marked a milestone in 16<sup>th</sup> century fortress design, as a stronghold for the safeguard of Portuguese interests not only on the East African coast but also along the trans-Indian Ocean trade. The successful design of Fort Jesus, Mombasa, led to the adoption of some of its strategic aspects to improve other forts in Africa. Fort Jesus, Mombasa, is also said to symbolize the struggle for freedom, as it became a field for resistance against domination by any power. The Fort is also claimed to be a landmark of social cohesion as it is used by people of diverse cultures while still retaining the characteristics of its previous functions.

ICOMOS considers that the interchange of human values and cultures as well as the struggle over the Fort between local and foreign powers is illustrative not only of the history of Fort Jesus but also of all East Africa, as it is demonstrated by several forts and fortified settlements scattered along the coast of this side and in general of all Africa. This interchange is, however, only sparingly reflected in Fort Jesus' spatial and architectural expression over time, as its initial concept has proved to be so strong that any modifications remain subordinate. The cultural interchange of the nominated property could be better understood when it is considered in close relation to its buffer zone, Mombasa Old Town, which clearly reflects in its urban and built fabric its multi-cultural past and with the other fortresses and fortified settlements that punctuate the African coast.

Similarly, the claim that Fort Jesus is a landmark of social cohesion is not sufficiently articulated in the nomination dossier in relation to either the history of the fort or its physical fabric.

The expanded comparative analysis has not scrutinized the selected properties with reference to the set of values related to this criterion but has limited its scope only to the architectural and typological aspects.

---

ICOMOS considers that this criterion has not been demonstrated at this stage.

---

*Criterion (iv): be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history;*

This criterion is justified by the State Party on the grounds that Fort Jesus, Mombasa, is held to be the best surviving 16<sup>th</sup> century Portuguese military fortification in the world, which in its layout and form reflected the Renaissance ideal that perfect proportions and geometric harmony are to be found in the proportions of the human body, while at the same time meeting the functional needs of a modern and well defended fortification. No other fortress is said to

illustrate better than the nominated property reference to the human body as the model for its layout. This layout, though simple, ensured the complete protection of the Fort and allowed it to survive almost unchanged over centuries of continued occupations and reoccupations.

ICOMOS considers that the articulation of the justification for this criterion has not been developed sufficiently to substantiate the State Party's claims. The expanded comparative analysis has not been able to support the claims that have been put forth by the State Party to demonstrate this criterion.

---

ICOMOS considers that this criterion has not been demonstrated at this stage.

---

ICOMOS considers that the nominated property meets the conditions authenticity, while the conditions of integrity will be met when the rationale for the delimitation of the boundaries will be made clear. In this regard ICOMOS suggests that the delineation of this part of the boundaries be revised along straight lines, for purpose of unambiguous physical demarcation. ICOMOS does not consider that the criteria and Outstanding Universal Value have been demonstrated at this stage.

---

#### **4 Factors affecting the property**

##### **Development pressures**

The State Party states that no development pressures affect the nominated property, since it is a designated national monument and its buffer zone is a conservation area.

ICOMOS considers that development pressure does not affect the nominated property. However, it does concern the buffer zone, Mombasa Old Town and it is likely to increase in case of inscription on the List, as this is a common trend, due to various factors (i.e., increase of tourism, of land and property values). ICOMOS therefore notes that the consequences of an increased pressure may lead to social tensions in the short term and a loss of the qualities of the Old town due to foreseeable increase of tourism and related urban transformations.

Uncontrolled development in Mombasa Old Town may also nullify the additional protection that the buffer zone is meant to give to the nominated property. In Mombasa Old Town land values have increased and this may encourage local inhabitants to sell, leave, or redevelop their properties, despite the protective measures in place.

ICOMOS also recommends that the infrastructure of the town should be upgraded, in order to improve the living conditions in the Old Town.

#### Tourism pressures

The State Party estimates that 70% of the tourists visiting the coast of Kenya go to Fort Jesus, making it one of the most visited cultural sites in the country. A visitor management system has been put in place.

ICOMOS considers that these pressures are well managed through a visitor-management strategy that takes account of carrying capacity and the distribution of visitors across various trails and sites. Although, in the buffer zone tourism pressures may be more serious in its final effects and difficult to hold down, resulting in uncontrolled transformation.

#### Environmental pressures

In the section of the nomination dossier relating to environmental pressures the State Party discusses the consequences of climate change.

ICOMOS considers that unpredictable weather events and floods might be included among the environmental pressures related to climate change.

#### Natural disasters

The State Party considers that the Fort site is not at risk from fire or flooding. The staff is well trained and equipped to respond to fire, and recent drainage works have further reduced the risk of flooding. The site is not in an earthquake zone.

ICOMOS considers that the measures in place to counteract the threat from fire are adequate and that the efforts undertaken to improve the drainage system and its maintenance are helpful in addressing the issue of flooding within the nominated property.

#### Impact of climate change

The State Party is of the opinion that, owing to the global environmental changes that have caused a general rise in sea levels, tidal currents have been damaging the coral rock base of the Fort. This may over time undermine the built fabric of the nominated property.

ICOMOS considers that erosion of the coral rock on which the Fort is built is the principal threat. In 2008 a small section of rock on the northern section of the seashore collapsed. ICOMOS recommends that the highest priority be given to rigorous monitoring of this phenomenon and measures undertaken to address this issue as soon as possible.

---

ICOMOS considers that the main threats to the property are possible future development pressures on the urban buffer zone and the erosion of the Fort's coral rock foundations.

---

## 5 Protection, conservation and management

### Boundaries of the nominated property and buffer zone

Care has been taken in the definition of the boundaries of the nominated property so as to include the Fort, the moat, an adjacent area for potential archaeological research as well as the area where underwater archaeological remains are located. The terrestrial boundaries coincide with distinct physical limits, such as the road to the north, the hill to west and south, and the sea to the east.

The buffer zone includes the Old Town and the old administrative area, designated a Conservation Area in 1990, because of its concentration of high-quality 18<sup>th</sup> century buildings and its historic and social links to the Fort. It is delimited for the most part by main roads, except on the north, where ICOMOS considers that markers for clarification to the public are needed.

Also the boundaries of the buffer zone have been expanded to include the marine area where underwater archaeological relicts have been detected.

ICOMOS observes that no information has been provided by the State Party about the amendment to the Gazette notice required by the World Heritage Committee to eliminate the discrepancy in the size of the designated Conservation Area (13ha) compared with the size of the buffer zone (31ha) – which are stated to be the same. The State Party has provided the text of the Gazette notice n.2092 (1990) through which Mombasa Old Town has been protected as a conservation area but the map attached to the Gazette Notice (ref Map 537/6) has not been provided by the State Party. At this stage, it is not clear whether the buffer zone in its entirety is covered by a layer of protection or not, as required by paragraph 104 of the Operational Guidelines for the implementation of the World Heritage Convention.

ICOMOS recalls its previous recommendation that the designation notice be amended as soon as possible in order to eliminate this mismatch and ensure that the entire buffer zone is granted the restrictions necessary to provide an added layer of protection to the nominated property, which, in this specific case, is particularly relevant considering that Mombasa Old Town possesses a cultural significance that is integral to the nominated property.

ICOMOS also notes that figures of the nominated property and its buffer zone sizes provided by the State Party in the nomination dossier has not been updated according to their expansion to include the underwater archaeological relicts. The figures provided are actually the same as those exposed in the 2010 Nomination Dossier.

Additionally, it is not clear the reason for the articulated boundaries delimiting the nominated property and the buffer zone in the sea area, nor is it explained how they will be identified or physically materialised.

In this regard, ICOMOS suggests that the delineation of this part of the boundaries be revised along straight lines, for purpose of unambiguous physical demarcation.

---

ICOMOS considers that the terrestrial boundaries of the nominated property and of the buffer zone are adequate, but recalls its previous recommendation to amend the gazette notice so as to eliminate the discrepancy between the size of the designated conservation area and that of the buffer zone. ICOMOS also recommends that markers are installed to clearly identify the northern as well as the marine boundaries of the buffer zone.

---

### **Ownership**

The property is owned by the Government of Kenya through the National Museums of Kenya (NMK).

### **Protection**

#### Legal Protection

Fort Jesus, Mombasa, was originally designated a National Park in 1958 to protect the Fort and a 100m strip around it. Today it is protected under the National Museums and Heritage Act 2006.

This Act clearly defines the functions and powers of the NMK, along with measures for the protection of designated areas. The NMK keeps collections and individual items of scientific, cultural, technological and human interest, conducts research and disseminates knowledge in these fields, identifies, protects, and conserves the cultural and natural heritage of Kenya, and promotes the cultural resources of the country. To accomplish its objectives, the NMK can acquire and exchange movable and immovable property for purposes connected with those of the NMK, erect or upgrade buildings, obtain revenue through the properties in their ownership, accept donations and bequests, establish and maintain research institutions, conduct environmental impact assessments, and enter into associations with other bodies or organizations in order to achieve its institutional goals and functions.

Areas protected under the National Museums and Heritage Act may be set aside or their use restricted in order to ensure that any monument or property is not damaged. These areas may be put under the control of the NMK and steps to ensure their maintenance can be taken by the NMK. Monuments are inspected, documented, and repaired by NMK staff or by persons authorized by the NMK.

The Environmental Management and Coordination Act (EMCA) 1999 and the National Museums and Heritage Act 2006 ensure that *'Environmental Impact Assessments are undertaken on sites earmarked for*

*development projects and whose implementation threatens the survival of heritage resources of some kind among other components of the environment.'*

The proposed buffer zone was declared a Conservation Area in 1990 and confirmed by designation in 1991. Today it is protected by the National Museums and Heritage Act 2006. Mombasa Old Town was protected because of its high concentration of 18<sup>th</sup> century buildings and the quality of its architecture and urban fabric, and also because it is historically and socially linked to the development of Fort Jesus, Mombasa. A Conservation Plan for Mombasa Old Town has been developed since 1990 and the Agency responsible for its implementation is the Mombasa Old Town Conservation Office (MOTCO), a department of the NMK. At the municipal level exists the Mombasa Old Town Planning Commission which cooperates with the NMK.

Additional information provided by the State Party on February 2011 explains that the Commission has been in operation since it has been gazetted in 2009 (gazette notice n. 2660). It includes members of the Municipal Council, interest groups from the local community, special interest groups and the NMK, providing technical expertise.

The revised nomination dossier reports that by-laws subject the area to development control measures, which are drawn from the conservation guidelines for Mombasa Old Town, namely buildings are not allowed to be built with more than three storeys; all buildings must retain their historical character and features, in particular with reference to doors and windows as well as their design and proportions; advertising signs should use hand-carved boards.

As part of its development strategy, the Government has produced a medium-term Development Plan for Mombasa District for the period 2008-2012.

ICOMOS considers that the existing legal provisions to ensure the protection of the nominated property and its buffer zone are adequate. ICOMOS however stresses its previous recommendation concerning the issue of the discrepancy between the size of the conservation area and of the buffer zone and recommends that is resolved as soon as possible.

#### Traditional Protection

Traditional material and local craftsmen are used for all repairs.

#### Effectiveness of protection measures

The nominated property is under the responsibility of the NMK. Any project concerning the Fort is developed by the Site Manager and then reviewed internally, final authorization being given by the Head of the Department responsible for sites and monuments.

In Mombasa Old Town all construction projects need authorization at the municipal council level and are subject to restrictions in terms of size and appearance. Signage must also be in accordance with the character of the town. Furthermore, development projects within Mombasa Old Town must be approved by the NMK, on the basis of the bylaws establishing building regulations.

The Mombasa Old Town Conservation Office (MOTCO) has been set up to monitor and control urban development and thus to protect the Fort from uncontrolled development or neglect.

Additional information provided by the State Party on February 2011 explains the internal structure of MOTCO, which includes a head of the office, an office messenger, a secretary, a community education officer, two building inspectors and a draft man.

In 2010, ICOMOS observed that, although MOTCO cooperates with the Municipal Planning Office, the Mombasa Old Town Planning Commission had ceased functioning since 2007.

The additional information provided by the State Party regarding the reactivation of the Commission is reassuring, although it would be important to know how it has been functioning after its legal establishment in 2009 (i.e., their responsibilities and tasks, periodicity of meetings, etc.). Consultation among the bodies responsible for the Old Town is indispensable to grant coordination in issuing building permits, thereby reducing the time necessary to the authorities in dealing with undesirable situations and focus on assisting the community to conserve the Old Town better.

ICOMOS considers that, although the existing administrative structure may ideally ensure effective protection, it would be important to understand how the Mombasa Old Town Planning Commission actually functions and to give it the means to function properly thus ensuring better coordination between MOTCO and the municipal planning office. Furthermore, MOTCO should be strengthened in terms of human resources.

---

ICOMOS considers that the existing legal protection for the nominated property is appropriate, whilst, at this stage, it is not clear whether the buffer zone is entirely covered by a layer of protection, as required by paragraph 104 of the Operational Guidelines. ICOMOS recommends that the State Party provides a clear description with maps of the areas subjected to formal legal protection, as well as with a description and explanation of the functioning of Mombasa Old Town Planning Commission. ICOMOS also recommends that the Commission be given the means to allow it to function properly. Furthermore, Mombasa Old Town Conservation Office (MOTCO) should be strengthened in terms of human resources.

---

## **Conservation**

Fort Jesus, Mombasa, underwent a substantial intervention in 2000-2001. The works included the complete replastering of the external walls, where much plaster had fallen off, and landscaping of the immediate surroundings of the Fort. Conservation for this property therefore relates principally to regular maintenance, with occasional special projects.

ICOMOS considers that the efforts of the NMK in preserving the nominated property have been successful, but that there is a need to ensure ongoing maintenance in order to avoid rapid deterioration of the structures.

ICOMOS observes also that the NMK, together with the general respect and concern of the community for the conservation of the special landscape of Mombasa Old Town, has ensured, until present, the retention of the general skyline and urban layout of the historic town. Nevertheless, there is a need to focus the initiatives of local stakeholders, which may be done through the establishment of the holistic management of pilot interventions carried out with the joint technical support of the municipality and MOTCO.

Inventories, recording, research

The most recent records and inventories date back to 2001.

The inventory, records, and archives are held at the National Museums of Kenya in Nairobi, in Fort Jesus Museum in Mombasa, and in the National Archives and Documentation Centre in Nairobi.

Present state of conservation

Fort Jesus, Mombasa, is in a fairly good state of conservation and is benefiting from recent efforts, starting in 2001, to improve its state of conservation and ensure regular maintenance. Marked improvements were noted on site in 2009 when compared with the state of conservation in 2001 in the management plan attached to the nomination.

On the other hand, the 2003 survey of the Old Town stated that 25% of the urban fabric is in a bad condition. Additionally, there is a tendency to rebuild and renovate rather than to maintain and repair the existing heritage fabric. This is threatening the significance of Mombasa Old Town and undermines the ability of the buffer zone to contribute to the understanding of the nominated property and its values and to provide it an additional layer of protection.

ICOMOS recommends that MOTCO make an additional effort to sensitize and inform the community and the municipal technical officers about the conservation guidelines and ensure their effective implementation.

ICOMOS further recommends that waste-management and sanitation should be improved.

#### Active Conservation measures

A project includes the plastering of the curtain wall.

#### Maintenance

The nominated property is maintained regularly. The foreman inspects daily and reports to the chief curator for action if necessary. Traditional materials and local craftsmen are used for all repairs. There is a team on site (masons, carpenters, electricians, etc) for daily maintenance.

ICOMOS considers that there is an overall approach to maintenance. Funds are secured and skills are available, trained, and promoted. The revised Management Plan includes a Maintenance Plan for the period 2009-2019 with a detailed articulation of the needs for each building component of the Fort.

#### Effectiveness of conservation measures

The existing conservation measures for the nominated property are effective, whilst the measures for the buffer zone need reinforcement in implementation in order to ensure that the buffer zone continues to provide a meaningful additional layer of protection to the nominated property.

---

ICOMOS considers that the nominated property's state of conservation and current maintenance practices are satisfactory, but notes that the current trends in the buffer zone may in the medium term undermine the additional protection that Mombasa Old Town is meant to provide to the nominated property. ICOMOS therefore recommends that MOTCO make an additional effort to sensitize and inform the community and the municipal technical officers about the conservation guidelines and ensure their effective implementation. ICOMOS also recommends that waste management and sanitation should be improved.

---

#### Management

Management structures and processes, including traditional management processes

The Fort is managed by a chief curator, who heads the departments of public programmes, collections, administration, finance, and sites. He also administers the Mombasa Old Town Conservation Office, coastal archaeology, coastal sites and monuments, the Swahili cultural centre, and some additional south coast sites.

The buffer zone is managed by the municipality through its technical offices but, since it is a designated protected area, the NMK has to approve all developments. The Conservation Plan of Mombasa Old Town implements the guidelines for the management and development of the designated conservation area. The Mombasa Old Town Conservation Office is responsible for its implementation.

Policy framework: management plans and arrangements, including visitor management and presentation

The 2010 revised Fort Jesus Management Plan is based on the plan developed in 2001 on the occasion of the 3<sup>rd</sup> Africa 2009 regional course on the conservation of immovable cultural heritage and is extended to 2014. The Plan lays down strategies to improve the conservation and management of the property over a ten-year period and has been revised, including consultations with stakeholders.

The Management Plan contains a description of the management framework, identifies a set of guiding principles and the main areas of interest of the Plan: legal and management framework, management resources, state of conservation, interpretation and presentation.

The plan contains a SWOT analysis which identifies a number of fields of action and specific short, medium and long term objectives. The five key areas to be tackled with are the following: establishing a sustainable funding system, site presentation and interpretation, conservation works, promotion and tourism, education and research and for each area specific objectives are identified.

The 2010-2014 Action Plan select the priority objectives in the five areas, articulated in short (2010-2011) and long term (2010-2014). The action plan relates to general goals identified for the National Museums of Kenya, namely, developing an institutional marketing and development strategy, and to local ones, i.e., addressing the conservation issues related to the decay caused by salty air and by tidal currents, and elaborating a presentation/ interpretation of the nominated property.

An interpretation plan for the Fort is being prepared, starting in 2009, to present it as a military landscape and to improve understanding of its significance through better signage, better presentation of movable and immovable heritage, and enhanced surroundings with various trails.

The immediate surroundings of the Fort were refurbished in 2008 with parking, benches, and access to the sea. Parking was moved to free the main entrance to the Fort. Future plans will reorganize the access to Fort Jesus and the Old Town, create new facilities, and transfer the parking lot to a site beside the Swahili cultural centre.

Visitor management in the Old Town began in 2009, with a brochure, maps, and information panels on significant buildings. Guides have been trained - interns in the Fort and twenty guides from the community in workshops - to provide information on Fort Jesus, for customer care, and for internal organization.



To balance visitor and handling capacities, alternative trails are planned within the Fort, in its immediate surroundings, in the Old Town, and in the coastal region. Visitors are redirected to other major heritage coastal sites. Collaboration with the French Embassy has produced brochures on coastal trails and these are distributed to travel agencies, hotels, and tour operators.

ICOMOS considers that the revised Management Plan has identified the guiding principles for the care and the stewardship of the nominated property, as well as the issues, the weaknesses and the opportunities for the nominated property. The key areas of the management plan appear appropriate and the specific objectives identified coherently reflect the problems that need to be addressed, although ICOMOS recommends to give priority to programmed maintenance over restoration, based on the 2009-2019 Maintenance Plan included in the Management Plan.

ICOMOS finally recommends that the presentation of the archaeological features illustrating the occupation of the Fort should be improved so as to show how different occupying cultural groups have left indications of their influence on the Fort and to include in the presentation all facets of the rich history of the property.

#### Risk preparedness

The State Party asserts that the Fort is equipped to deal with any fire disaster and the staff is trained in fire fighting as well as in reactions to possible flooding.

ICOMOS considers that any risk-preparedness plan and training should also take into account the buffer zone, which is densely inhabited (300,000 persons in 31 ha).

#### Involvement of the local communities

The community has a direct impact on the management, conservation, and presentation of the Fort. The National Museums of Kenya (NMK) ensures participation in management, through regular stakeholder meetings at which they present details of planning for the Fort (e.g. during preparation of the nomination and the interpretation plan). The NMK wishes to ensure indirect benefits for the surrounding community. The new presentation plan addresses the training and management of community guides. The NMK, through MOTCO, seeks to improve the presentation of the Old Town to the public and to create opportunities for the community.

#### Resources, including staffing levels, expertise and training

The Fort employs a staff of 104, of whom seven are professionals and eleven technicians in the fields of architecture, conservation, archaeology, musicology, and management. The remainder is engaged in maintenance. Four education officers prepare school and community programmes.

Fort Jesus generates funds for maintenance of the Fort through entrance fees. Part of this revenue is for daily maintenance and part for planned major works (e.g. plastering the curtain wall, to be done in 2009). It also receives a small annual government grant.

External funding has made various projects possible in the past, such as the financing of the restoration of the Fort and establishment of the museum in 1960 by the Calouste Gulbenkian Foundation or the 1990s excavation funded by the Omani Government, with restoration of a house in the Fort to house an exhibition of the cultural traditions of the Omani people.

#### Effectiveness of current management

Fort Jesus, Mombasa is managed by the National Museums of Kenya as a museum site. ICOMOS considers that the management framework, the plan, and actions developed or programmed are all moving in the right direction.

However, ICOMOS considers that effective management of the nominated property cannot ignore the management weaknesses of the buffer zone, Mombasa Old Town, since their negative consequences will affect also Fort Jesus and its significance.

---

ICOMOS considers that the management system for the nominated property is at present adequate for the protection, conservation, and presentation of the nominated property. However, to ensure the effectiveness of the added layer of protection that the buffer zone is meant to provide to the nominated property, ICOMOS recommends that the Mombasa Old Town Planning Commission be provided with the financial, institutional resources and conditions to function properly, that a holistic management structure for the Old Town be developed, that close cooperation among MOTCO and the municipal council and technical offices be established, and that the role of MOTCO be clarified and its staff increased.

---

## 6 Monitoring

The Directorate of Museums, Sites and Monuments is responsible for monitoring the condition of the property and the Department of Coastal Sites and Monuments monitors archaeological material found in its vicinity.

In 2010 ICOMOS observed that the key indicators identified (lintels, timber frames, wall plaster, and mould on walls) do not include erosion of the coral rock, which has been identified as the most dangerous threat to the property.

Additional information provided by the State party informs that the coral rock – monitoring issue has been addressed.

ICOMOS nevertheless observes that the highest priority be given to the monitoring of the erosion speed.

ICOMOS further considers that the transformations in Mombasa Old Town should be monitored, since the buffer zone is closely related to the nominated property by virtue of both their related history and their physical relationship.

---

ICOMOS considers that an overall regular monitoring system should be established within management, with indicators expanded and monitoring programmes specified both for the nominated property and for Mombasa Old Town.

---

## 7 Conclusions

### Recommendations with respect to inscription

ICOMOS recommends that the examination of the nomination of Fort Jesus, Mombasa, Kenya, to the World Heritage List be **deferred** in order to allow the State Party to:

- Further develop and articulate the nomination to substantiate the proposed outstanding universal value, with specific consideration of the role played by the nominated property within its broader geographical, historical, political and economic context and in relation to other properties that share a similar pattern of evolution;
- Expand the comparative analysis in order to examine all sets of proposed values, with special regard to the cultural interchange dimension of the nominated property in relation to its wider geo-historical context;
- Amend the designation notice so as to eliminate the discrepancy between the sizes of the conservation area and the buffer zone and /or ensure that the entirety of the buffer zone is protected so that the additional layer of protection to the nominated property is effective;
- Modify the boundaries in the marine area so that they follow straight lines for purposes of easier physical demarcation, install markers to clearly identify the northern as well as the marine boundaries of the nominated property and of the buffer zone and also provide the figures of the amended size of the property and its buffer zone after their expansion;
- Provide a description and explanation of the functioning of Mombasa Old Town Planning Commission;

- Give the Mombasa Old Town Planning Commission the financial and institutional means to allow it to function properly;
- Strengthen Mombasa Old Town Conservation Office (MOTCO) in terms of human resources and its role, so that MOTCO is enabled to make an additional effort to sensitize and inform the community and the municipal technical officers about the conservation guidelines, thus improving their effective implementation and ensure that the buffer zone effectively acts as an additional layer of protection to the nominated property;

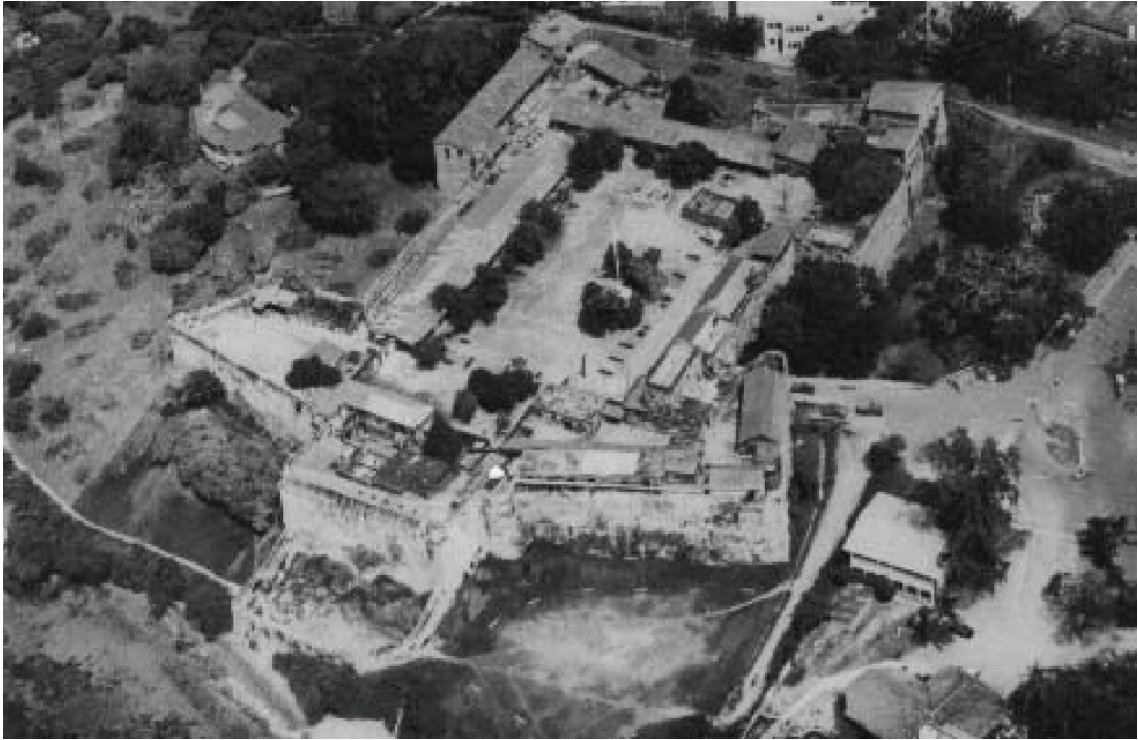
ICOMOS considers that any revised nomination would need to be considered by an expert mission to the site.

ICOMOS also recommends that the State Party give consideration to the following:

- Give the highest priority to rigorous monitoring of the rock erosion and to undertake measures to address this issue as soon as possible;
- Improve waste management and sanitation in Mombasa Old Town;
- Develop a holistic management structure for the Old Town that involves all the stakeholders, and in particular the local community, the municipal council, and the managers of the nominated property;
- Give priority to programmed maintenance over restoration, based on the 2009-2019 Maintenance Plan included in the Management Plan.



Map showing the revised boundaries of the nominated property



Aerial view of the Fort



The perimeter wall





View of the interior of the Fort



The museum building

---

# Le Morne Cultural Landscape (Republic of Mauritius) No 1259

---

## 1. Basic data

### State Party

Republic of Mauritius

### Name of property

Le Morne Cultural Landscape

### Location

Black River District

### Inscription

2008

### Brief description

Le Morne Cultural Landscape, a rugged mountain that juts into the Indian Ocean in the southwest of Mauritius was used as a shelter by runaway slaves, maroons, through the 18th and early years of the 19th centuries. Protected by the mountain's isolated, wooded and almost inaccessible cliffs, the escaped slaves formed small settlements in the caves and on the summit of Le Morne. The oral traditions associated with the maroons, have made Le Morne a symbol of the slaves' fight for freedom, their suffering, and their sacrifice, all of which have relevance to the countries from which the slaves came - the African mainland, Madagascar, India, and South-east Asia. Indeed, Mauritius, an important stopover in the eastern slave trade, also came to be known as the "Maroon republic" because of the large number of escaped slaves who lived on Le Morne Mountain.

### Date of ICOMOS approval of this report

10 March 2011

## 2. Issues raised

### Background

In 2008, during the evaluation process, the State Party agreed to ICOMOS's request that the buffer zone should be extended in the south-east part of the property in order to better preserve one of the main visual perspectives of the property. However, the village of Le Morne did not form part of the buffer zone finally adopted.

In 2010, during a mission for the cadastral monitoring of the property boundaries, carried out to demarcate the boundaries of the property and its buffer zone, discrepancies in the geodesic coordinates were observed on some of the 27 reference points on the boundaries of

the property and buffer zone. The discrepancies ranged from 0.5 m to 30 m.

It was thus observed that the CD and FG demarcation lines of the original property, in the south and south-west, passed through two private houses (CD) and an aerial installation (FG). The mission also noted that 12 houses in the village of Le Morne were inside the buffer zone, whereas the initial plan indicated that the whole village was located outside the buffer zone.

### Modification

The State Party therefore has proposed a new table of the geodesic coordinates of the 27 reference points demarcating the boundaries of the property and the buffer zone (Annex 2).

In order to allow for the actual boundaries of the private properties, the property boundaries have been slightly adjusted around the former lines CD and FG. The first line becomes a set of three broken lines CC1, C1C2 and C2D, which skirt round the houses (Annex 5). The second line, FG, is moved a few metres to the north-east in order to allow for the aerial installation plot (Annex 5).

In all, the property's area is increased by 0.6 hectares, from 349 ha to 349.6 ha. The private owner affected by these two changes has given his agreement.

In order to comply with the actual boundaries of the village and its cadastral plan, the boundaries of the buffer zone to the north-east of the village are modified as follows (Annex 6):

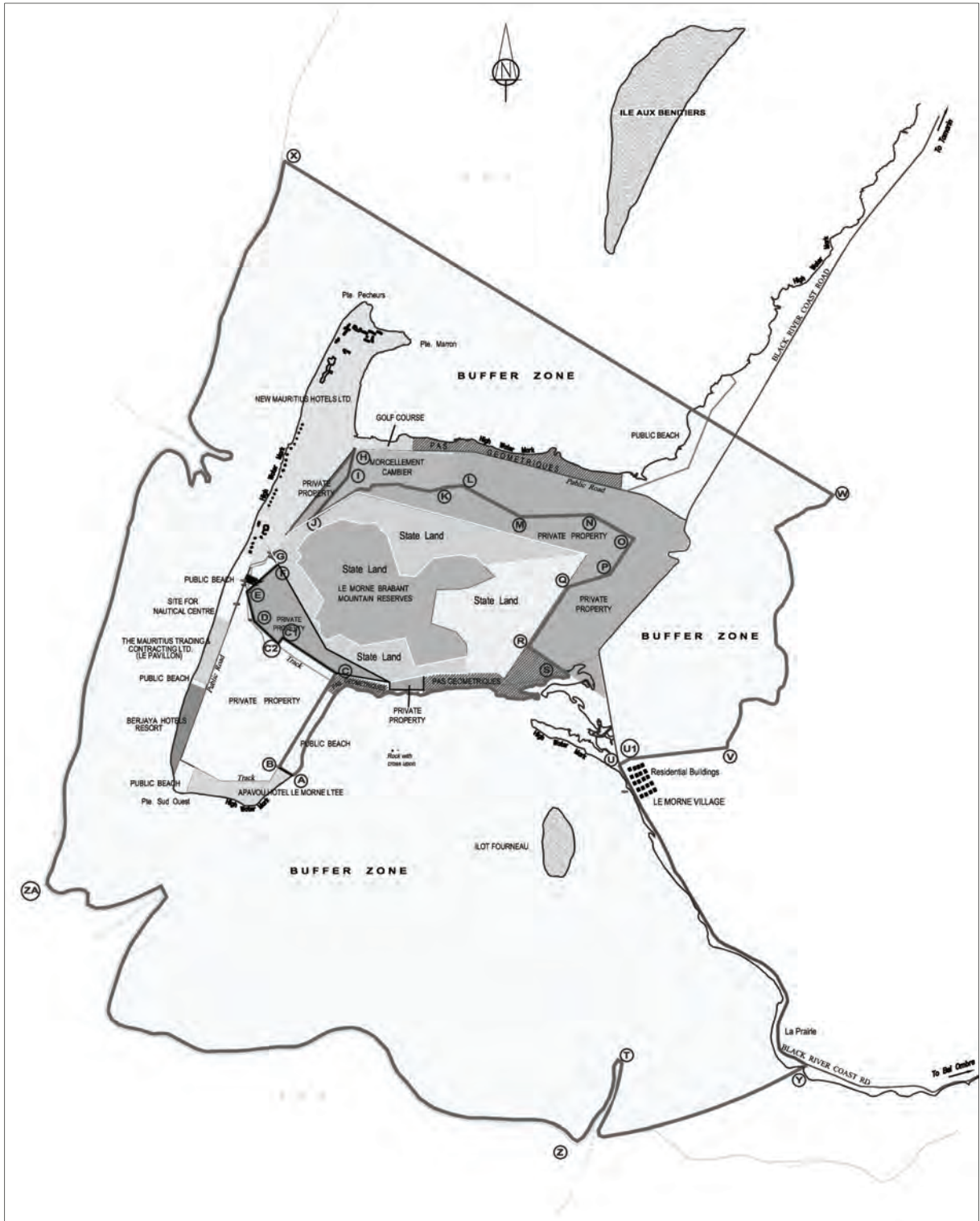
- demarcation point U has been shifted 30 m to the north, following the coastal road, in order to be opposite the path forming the northern boundary of the village;
- demarcation point U1 is created at a distance of approximately 100 m, on the northern path; the boundary UU1 follows the path;
- the boundary follows the new line U1V.

The area of the buffer zone is reduced by 2 hectares, from 2407 ha to 2405 ha.

## 3. ICOMOS recommendations

### Recommendations with respect to inscription

ICOMOS recommends that the proposed minor modification to the boundaries of Le Morne Cultural Landscape, Republic of Mauritius, be **approved**.



Map showing the revised boundaries of the property



---

## Ancient City of Damascus (Syria)

### No 20

---

#### 1. Basic data

**State Party**

Syrian Arab Republic

**Name of property**

Ancient City of Damascus

**Location**

Damascus

**Inscription**

1979

**Brief description**

Founded in the 3rd millennium B.C., Damascus is one of the oldest cities in the Middle East. In the Middle Ages, it was the centre of a flourishing craft industry, specialising in swords and lace. The city has some 125 monuments from different periods of its history – one of the most spectacular is the 8th-century Great Mosque of the Umayyads, built on the site of an Assyrian sanctuary.

**Date of ICOMOS approval of this report**

10 March 2011

#### 2. Issues raised

**Background**

In cycle (I) of the periodic reporting, carried out in 2000, the buffer zone issue of the Ancient City of Damascus is referred to twice. Firstly, the State Party indicates that buffer zones have been introduced “in regions where there are not yet any buildings”, but without providing any mapping or administrative details; secondly, the State Party recognises the importance of protecting the view from the outside of the ancient city’s historic ramparts, which mark the limits of the property. Lastly, there are several ancient quarters which are situated *extramuros*, and thus outside the property, but which are extremely important in historic terms.

During the decade which began in 2000, the various mission reports and reporting records refer on a number of occasions to the need to geographically delineate an overall buffer zone, and to define specific regulations for it, in view of urban development pressure.

Decision 31COM 7B.58 (Christchurch, 2007) included a request that the State Party should “define the boundaries of the proposed buffer zone and (...) officially provide a map of this zone to the World Heritage Centre for approval by the Committee”. Meanwhile, the development of a

major urban planning project, near the city wall in the north, made this measure particularly urgent. The joint UNESCO/ICOMOS mission, sent out in 2008, noted the lack of any effective buffer zone, and the undesirable impact this was having on the management of the property’s urban environment. The importance of the ancient historic quarters and the important need to precisely defining the buffer zone boundaries were reasserted in decision 32COM 7B.63 (Quebec City, 2008).

In 2008, the State Party set up a Conservation Committee to set up concertation between stakeholders, study urban planning projects and carry out a thorough study to define the various parts of the buffer zone and the appropriate forms of regulation. The suggestions were submitted to the city’s governor, and were approved on 28 January 2009.

The World Heritage Committee decision 33COM 7B.63 (Seville, 2009) reiterated its request to the State Party to “complete the establishment of the buffer zone to be submitted for approval to the World Heritage Committee”.

**Modification**

The state of conservation report sent by the State Party in January 2011 refers to decision n° 37A of 26 January 2010 concerning the definition and regulation of the buffer zone. Its boundaries are defined by the blue line on the map provided in the annex.

The management of the zone includes several levels of regulation linked to the situations of various parts of the city outside the city walls:

- The historic districts to the north and west of the property (violet zones) are protected by the Antiquities Law, and as such benefit from the same level of protection as the property itself *intramuros*, particularly as regards any restorations.
- The historic monuments (red) will be studied individually by the Protection Committee and specific regulation will be defined for each one, depending on its individual context.
- Zones A and B (green), which are directly linked to the southern and south-eastern parts of the city walls, will be specifically studied with the assistance of the Antiquities Authority.
- The other parts of the buffer zone (white) ensure that protection is continuous over the whole length of the city walls of the ancient city. Their regulation depended up to now on the general provisions of the city’s Urban Plan. The development plans will be reviewed quarter by quarter, and they will now be subjected to the stricter general regulation applying in the buffer zone. New constructions may be authorised in these areas, but their height must not exceed three stories, and their architectural design must offer a high degree of compatibility with the values of the property and its landscapes, under the control of the Antiquities Authority.

- The River Barada and its natural environment will be covered by a specific programme, with the assistance of the Antiquities Authority.

The buffer zone thus defined by the General Directorate of Antiquities and Museums was approved by ministerial decision n° 27 of 26 June 2010.

The property has an area of 82.13 ha, and the buffer zone has an area of 42.60 ha.

### **3. ICOMOS recommendations**

ICOMOS considers the fact that a duly mapped buffer zone has been officially approved by the State Party is a positive step. The buffer zone includes protective elements which refer explicitly to the outstanding universal value of the property and the importance of its conservation. The general provisions are supplemented by the announcement of projects affecting specific quarters or zones. ICOMOS considers that the World Heritage Committee should be kept regularly informed about the progress of such projects.

While the whole of the city walls which define the limits of the property are now surrounded by a clearly defined buffer zone, a significant proportion of the historic quarters outside the walls are not included in the zone, even though the Committee has on many occasions drawn the State Party's attention to their importance, and to the need to link them with the property itself. ICOMOS therefore considers that the proposed buffer zone is an important step in the protection of the immediate environment of the property and its landscapes, but that the State Party must continue its efforts and reflection in this matter.

#### **Recommendations with respect to inscription**

ICOMOS recommends that the proposed buffer zone for the Ancient City of Damascus, Syrian Arab Republic, be **approved**.

ICOMOS further recommends that the State Party give consideration to the following points:

- Consider extending the buffer zone as currently defined so as to ensure a better connection between the historic quarters of the ancient city and the inscribed property;
- Continue the regulation and control efforts, either currently under way or announced, for the various parts of the buffer zone, and to keep the World Heritage Committee up to date with progress in this matter.



Map showing the boundaries of the proposed buffer zone

---

# Melaka and George Town (Malaysia)

## No 1223

---

### 1. Basic data

**State Party**

Malaysia

**Name of property**

Melaka and George Town, Historic Cities of the Straits of Malacca

**Location**

Melaka, State of Melaka  
George Town, State of Penang

**Inscription**

2008

**Brief description**

The historic cities of Melaka and George Town have developed over 500 years of trading and cultural exchanges between East and West in the Straits of Malacca. The influences of Asia and Europe have endowed the towns with a specific multicultural heritage that is both tangible and intangible. With its government buildings, churches, squares and fortifications, Melaka demonstrates the early stages of this history, originating in the 15th-century Malay sultanate and the Portuguese and Dutch periods beginning in the early 16th century. Featuring residential and commercial buildings, George Town represents the British era from the end of the 18th century. The two towns constitute a unique architectural and cultural townscape without parallel anywhere in East and Southeast Asia.

**Date of ICOMOS approval of this report**

10 March 2011

### 2. Issues raised

**Background**

In the evaluation of 2008, when the property was inscribed, the ICOMOS report recommended a revision of the buffer zone boundaries at Melaka to include the Butik China cemetery zone.

The inscription decision 32 COM 8B.25 (Quebec City, 2008) asked the State Party to "submit a comprehensive conservation plan dealing with all the buildings and its schedule for implementation in both cities".

Decision 33 COM 7B.78 (Seville, 2009) requested that the State Party should submit to the World Heritage Centre, by 1<sup>st</sup> February 2011, a report on the progress made in the

implementation of the recommendations and the drawing up of a conservation management plan.

**Modification**

In the general context of the measures taken by the State Party in order to meet the various recommendations concerning the management, protection and conservation of the property, a series of minor modifications are proposed for the urban property of the City of Melaka and its buffer zone. They form chapter 2 of the report on the state of conservation of the property and chapter 2 of the property conservation management plan submitted by the State Party at the end of January 2011.

With respect to the boundaries of the property, the proposal is that they should be brought into line with clearly identified cadastral boundaries in the case of six situations which up to now have been somewhat confused; in five cases, they correspond to an extension of the property, and in one case a reduction. The proposals are as follows:

- N° 8, Melaka Tengah Police Station district, western zone of Jalan Kota: until now, the property has consisted only of the main buildings; it is proposed that the property should be extended up to the district boundaries.
- N° 9, Melaka Tengah Police Station district, eastern zone of Jalan Banda Kaba: this zone, where the former Portuguese fort is located, was mapped very approximately; it is proposed that the property should be extended up to the district boundaries.  
The whole of the Melaka Tengah Police Station district will be included in the property.
- N° 10, Kampung Ketek is a residential zone with homogeneous morphological characteristics, of which only one part was inside the property; it is proposed that the property should be extended to include the whole of this quarter, by following the main streets which mark its boundary, and to include a street of shops, Jalan Kampung Hulu.
- N° 11, Kubu Fire Station is adjacent to the previous quarter, on the west side; a simplification of the boundaries is proposed, consisting of extending them up to the main streets which mark the boundary of the quarter, in continuity with the previous quarter.
- N° 12, Dataran Pahlawan Mall; the property included part of the Mall, and cut through various plots; it is reduced to the cadastral boundaries to the north of the Mall, which is excluded from the property.
- N° 13, Jalan Laksamana 5; this is the south-west boundary of a traditional trading zone, Jalan Tun Tan Cheng Lock, in which attempts had been made to establish the boundaries of the plots of individual properties; this definition has turned out to be inoperative, as a result in changes in land ownership; it is proposed that the property should be extended up to the boundary of the street Jalan Laksamana 5.

For the boundaries of the buffer zone, the proposed modifications are of two types: substantial extensions for purposes of better protection (N° 1 and N° 2) and

rectifications to follow clearly identified cadastral lines, which means limited extensions of area in some cases (N° 3 and N° 4) and limited reductions in other cases (N° 5, N°6 and N°7).

- N° 1, Bukit China cemetery forms a large zone in the north-east of the property which is proposed as an extension, in accordance with the ICOMOS recommendation of 2008.
- N° 2, in front of the outlet of the Melaka river estuary into the straits, an extension is proposed; it forms an angle which extends the buffer zone in a seaward direction, over a distance of 1 km; the aim is to protect the vision cone of the entry of the estuary from the straits, and the view of the straits from the property, against any possible programmes to extend artificial land or construct new buildings.
- N° 3, the buffer zone is extended to include all the land of Malacca High School, following the detection of an error in the cadastral record.
- N° 4, the boundary in the Jalan Tangkera quarter is extended to the north-west so as to include the whole district.
- N° 5, the buffer zone boundary near Hang Tuah stadium and the University of Technology is moved to come into line with the cadastral boundaries, which means the exclusion of a strip of land.
- N° 6, following the cadastral boundaries in the Jalan Merdeka quarter results in the exclusion of a strip of land.
- N° 7, following the cadastral boundaries in the Jalan Munshi Abdullah quarter results in the exclusion of a strip of land.

As a result of these changes, the area of the property is increased from an initial 38.6 hectares to 45.3ha; the buffer zone area is increased from an initial 134.0ha to 242.8ha.

### 3. ICOMOS recommendations

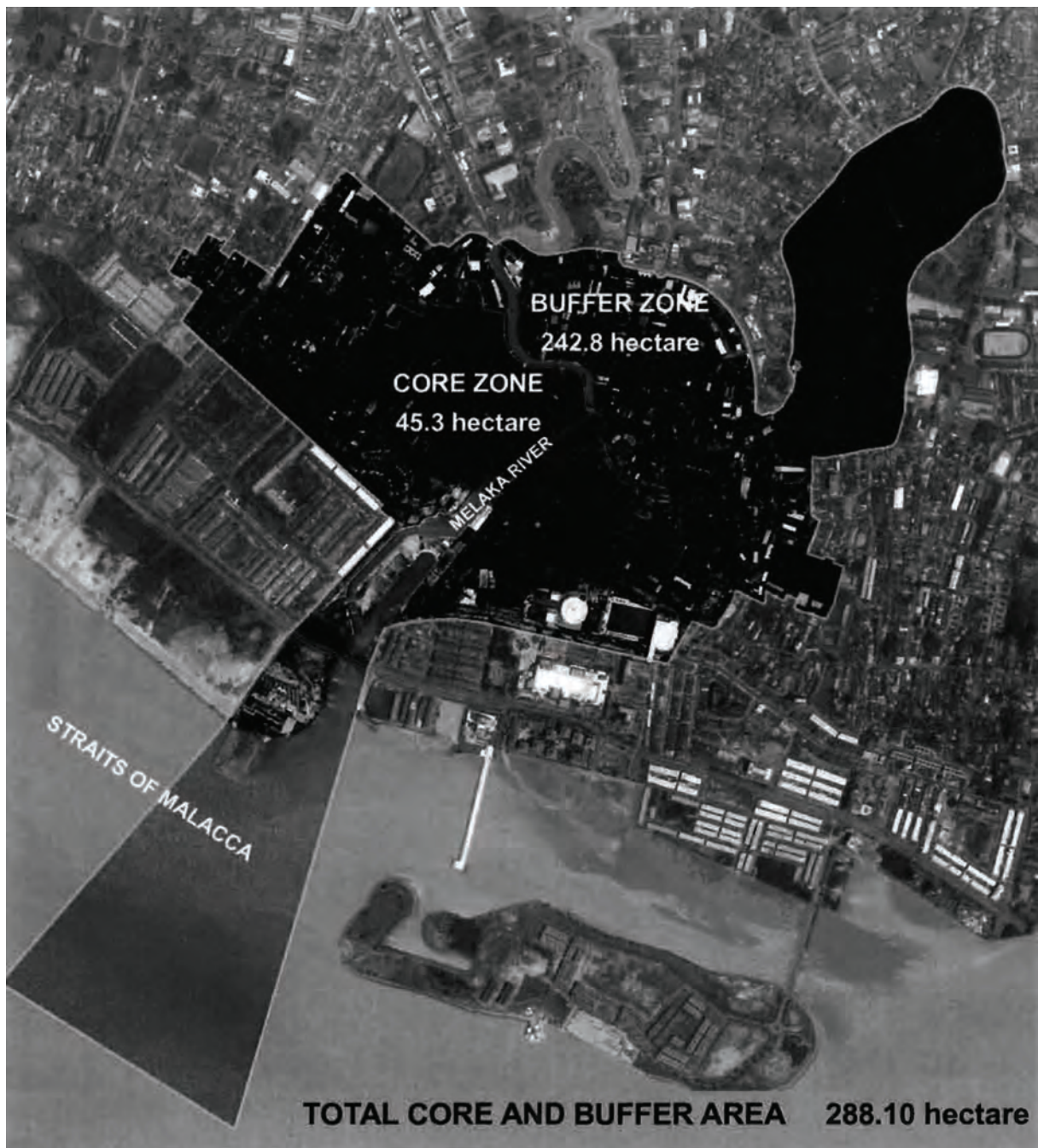
ICOMOS considers that all the proposed modifications to the boundary of the property, and most of the proposed modifications to the boundary of the buffer zone, are adjustments of limited scope, intended to correct imprecise definitions of boundaries or small mapping errors, and make sure the cadastral boundaries are simple and suitably identified.

The substantial modifications (N° 1 and N° 2) of the buffer zone consist of two fully justified extension proposals: the first takes into account a space with significant cultural value, and the second ensures visual protection when viewed from the sea, at the entrance to the estuary.

### Recommendations with respect to inscription

ICOMOS recommends that the proposed minor modification to the boundary of Melaka and George Town, Historic Cities of the Straits of Malacca, Malaysia, be **approved**.





Map showing the revised boundaries of the property

---

## Causses and Cévennes (France) No 1153rev

---

### Official name as proposed by the State Party

The Causses and the Cévennes, Mediterranean agro-pastoral Cultural Landscape

### Location

Gard, Hérault and Lozère departments  
Languedoc-Roussillon Region  
Aveyron department, Midi-Pyrénées Region

### Brief description

The shale and granite Cévennes mountain chain, interspersed by wide deep valleys, rises above the plains of Languedoc and the Mediterranean and is the southern end of the Massif Central. Its dispersed farms on the mountain slopes, oases of green set amidst deep terraces and thick woodlands of chestnut and pine, are linked by high level tracks across the undulating plateaux of the mountain summits. In distinct contrast are the limestone uplands of the Causses to the west and granite uplands of Mont Lozère to the north. Both are open almost treeless expanses of grazed grassland supporting scattered farms, the limestone areas dissected by deep gorges which carry the torrents of the western Cévennes down to the Mediterranean.

### Category of property

In terms of the categories of cultural property set out in Article 1 of the 1972 World Heritage Convention, this is a *site*.

In terms of the *Operational Guidelines for the Implementation of the World Heritage Convention* (January 2008) paragraph 47, it is also a *cultural landscape*.

## 1 Basic data

### Included in the Tentative List

1<sup>st</sup> February 2002

### International Assistance from the World Heritage Fund for preparing the Nomination

None

### Date received by the World Heritage Centre

25 January 2005

27 January 2009

31 January 2011

### Background

This is a referred back nomination (30 COM, Vilnius, 2006 and 33 COM, Seville, 2009).

The original nomination was submitted in 2005 and considered by the Committee at its 30<sup>th</sup> session in 2006. At that time ICOMOS recommended that “*the examination of The Causses and the Cévennes, France, be deferred to the World Heritage List to allow the State Party to consider further the qualities of the property.*”

The World Heritage Committee chose to refer the nomination back to the State Party without any recommendation and adopted the following decision:

Decision 30 COM 8B.44:

*The World Heritage Committee,*

1. *Having examined Documents WHC-06/30.COM/8B and WHC-06/30.COM/INF.8B.1,*
2. *Refers the nomination of The Causses and the Cévennes, France, back to the State Party.*

A supplementary nomination was submitted by the State Party on 27 January 2009. This related to the same boundaries as the original nomination, but set out a new justification based on a new comparative analysis.

ICOMOS recommended that the examination of the nomination of The Causses and the Cévennes, France, to the World Heritage List be **deferred** in order to allow the State Party to provide:

- A more detailed inventory of the attributes of the property that relate to agro-pastoralism, in order to:
  - Justify the boundary of the property;
  - Provide a basis for managing and sustaining the attributes, including processes and practices, that relate to agro-pastoralism.
- Provide an overall nomination dossier that reflects the revised focus on agro-pastoralism and its manifestations.

ICOMOS considered that any revised nomination would need to be considered by a mission to the site.

The World Heritage committee adopted the following decision:

Decision 33 COM 8B.32:

*The World Heritage Committee,*

1. *Having examined Documents WHC-09/33.COM/8B and WHC-09/33.COM/INF.8B1.Add,*



2. Refers the nomination of *The Causses and the Cévennes, France*, back to the State Party in order to allow it to:

a) Provide a more detailed inventory of the attributes of the property that relate to agro-pastoralism, in order to:

- i) Justify the boundary of the property;
- ii) Provide a basis for managing and sustaining the attributes, including processes and practices, that relate to agro-pastoralism;

b) Provide a nomination dossier that reflects the revised focus on agro-pastoralism and its manifestations;

### Consultations

ICOMOS has consulted its International Scientific Committee on Cultural Landscapes.

### Literature consulted (selection)

Extensive literature on many aspects of the landscape such as transhumance, archaeology, history, the Templars, vernacular buildings, silk production etc; Transhumance and Biodiversity in European Mountains. Report from the EU-FP5 project Transhumant. Edited by R.G.H.Bunce, M. Pérez Soba, R.H.G. Jongman, A. Gómez Sal, F. Herzog and I. Austad.

### Technical Evaluation Mission

A joint ICOMOS/IUCN mission visited the property from 18 to 23 September 2005. As this is a referred back nomination, no further missions have been undertaken.

### Additional information requested and received from the State Party

None

### Date of ICOMOS approval of this report

10 March 2011

## 2 The property

### Background

In its evaluation of the 2005 nomination, ICOMOS noted that the nominated area was large and diverse and its three natural units have led to the development of quite different traditional practices, reflected in grasslands shaped by agro-pastoralism and wooded valleys shaped by chestnut and mulberry cultivation. It further noted that the area was an interesting example of where there is great local support for sustaining the landscape and trying to reverse the trend in movement of farmers away from the area.

ICOMOS considered that what had not emerged clearly from the nomination was the rationale for nominating the area as a whole and how the property might be perceived as an entity nor why it should be considered to have outstanding universal value.

In its evaluation of the 2009 nomination dossier, ICOMOS noted that the supplementary information provided had re-focused the justification for inscription on the persistence of agro-pastoralism and the way this has shaped the landscape. ICOMOS supported this new approach and considered that agro-pastoralism was the force that binds together the quite different faces of the overall mountain areas – the north-west facing shale and granite and the south-eastern limestone uplands. Moreover this system has been shown as an outstanding example of a regional variant of Mediterranean pastoralism, through the workshop organised by the State Party on agro-pastoralism in the Mediterranean area and in the revised comparative analysis.

ICOMOS did not consider that the manifestations of this agro-pastoral system on the landscape had been sufficiently clearly identified in terms of specific features and attributes in the large and diverse nominated area. Many other features besides those associated with agro-pastoralism – such as those associated with silk and chestnut production and semi-urban areas that have not been shown to have tight associations with agro-pastoralism - were evident in parts of the landscape.

ICOMOS considered that there was a need to define more clearly the attributes of agro-pastoralism and to relate these to the boundary and to management.

The original nomination dossier had been supplemented with new information on the agro-pastoralism aspects of the landscape but without withdrawing any of the initial information. ICOMOS considered that there was a need for an overall coherent nomination dossier that sets out in more detail the manifestations of agro-pastoralism and provided a clear focus on its history, development and attributes.

The State Party submitted a revised nomination dossier on 31<sup>st</sup> January 2011. This changes the name to: *The Causses and the Cévennes, Mediterranean agro-pastoral Cultural Landscape*, and defines a smaller area within new boundaries.

### Description

The Causses and Cévennes, together form a large upland region in the southeast of the French Massif Central.

The area is made up of two opposites: the north-western granite and shale slopes that face towards the Atlantic to which their water drains, and the southeast limestone slopes of the same uplands that face towards Mediterranean.

Yet the development of these areas has been marked by ceaseless relations between these two slopes, based on a system of agro-pastoralism that slowly shaped the unity of the Causses and Cévennes landscape over the last millennium. The uplands with their farming culture are now quite distinctive from the surrounding comparatively

urbanised plains. Nevertheless the uplands and the lowlands still have a symbiotic relationship with cattle and sheep moving up into the grazed uplands in the summer months along *drailles* or drove roads that criss-cross the area.

The smaller nominated area has been defined to encompass that part of the Causses-Cévennes where landscapes are the most highly representative of the relationship between the various agro-pastoral systems and the local biophysical environment and where the attributes of the agro-pastoral system are most dense, including the *drailles* or drove roads. The new boundaries reflect detailed ground surveys.

The nominated area covers parts of the *Parc national des Cévennes* (PNC), the *Parc naturel régional des Grands Causses* (PNR), and the *Causses méridionaux* and *Centre permanent d'initiatives pour l'Environnement des Causses méridionaux* (CPIE), in all an area of 302, 319 hectares with a buffer zone of 312, 425 hectares.

The nature of the precipitation in the uplands – much in winter and a shortage in summer led to the need to collect and store water. A mastery of water management was a pre-condition of settled agriculture and this is reflected in a range of different solutions and complex solutions for channelling and storing water.

High level roads passing along the summits of the mountains mark out the drove roads that in many cases followed even more ancient track ways.

The shale and granite Cévennes mountain chain, interspersed by wide deep valleys, rises above the plains of Languedoc to the south and is clothed in dense woodlands of chestnut and pine. The villages and substantial stone farmhouses perched on deep terraces midway down the valleys reflect the organisation of the large abbeys of Languedoc and Ardèche from the 11<sup>th</sup> century, particularly in water irrigation, and the later prosperity brought by intensive chestnut and then silk cultivation, between the 16<sup>th</sup> and early 19<sup>th</sup> centuries. To the north around Mont Lozère the more open granite landscape supports cattle and sheep farming and is one of the last places where summer transhumance is still practiced.

In contrast the Causses to the west is a high altitude grazed grassland steppe of karst limestone, one of the largest expanses in Europe. The area is sharply dissected by steep often wooded valley with Gorges that channel the water from the western Cévennes to the Mediterranean Coast. On the grasslands, substantial stone-built farm complexes support sheep farming, their sitting and boundaries reflecting the development of large-scale agro-pastoralism by the Knights Templars and then the Hospitalers between the 12<sup>th</sup> and 14<sup>th</sup> centuries, made possible as in the Cévennes by the control of water. The Causses became the centre of trade between the Mediterranean and the flat lands to the north.

Both the Cévennes and the Causses landscapes reflect wars, pestilence, periods of high level prosperity followed by rapid decline and most markedly the migration of people away from the hills in the 19<sup>th</sup> and 20<sup>th</sup> centuries. Between 1846 and 1975 the area lost two thirds of its inhabitants.

Like many uplands areas of Europe, the Cévennes and Causses were discovered in the 19<sup>th</sup> century first by scientists, in this case geologists and geographers recording distinctive gorges, 'swallow-holes' and caves, and then by writers and tourists appreciating picturesque features. Robert Louis Stevenson's book of his travels with a donkey at the end of the 19<sup>th</sup> century brought the Cévennes landscape to wide attention.

In detail the nominated property consists of the following:

Structures related to water collection and management

The influence of Abbeys which controlled many valleys of the Cévennes in the 11<sup>th</sup> and 12<sup>th</sup> centuries transformed the landscape from small-scale, isolated, subsistence farmers into a well ordered and structured landscape of mixed farms with irrigated terraces growing grain, hay and chestnuts, and with chickens, goats, sheep and cattle grazed on the high pastures and pigs and bees kept in the forests.

The water flowing off the mountains was directed into conduits or underground mined channels, which when they reached the farm branched into feeder channels for steep stone walled terraces. Below the farmhouse these terraces were used for grain and hay; above for chestnut trees, pollarded to keep them to a manageable height. The summits of the mountains above the tree line were grazed by sheep and cattle.

In the Causses the Knights Templars provided the organisational impetus for the development of agro-pastoralism in the 12<sup>th</sup> century, systematically exploiting the resources of the areas over which they gained control. Huge quantities of grain were produced, in stone walled fields, and then stored in towers such as at Tour du Viala du Pas de Jaux. Water resources were organised for large farms – roof cisterns and ponds - and for the vast flocks of sheep which moved to into the Causses pastures in the summer months from the plains and traversed back again on the autumn along *drailles* or drove roads.

*Drailles* or Drove roads

The northern part of the Cévennes National Park encompasses the grazed granite uplands around Mont Lozère. Here year round cattle farming is supplemented on the good summer grazing by large flocks of sheep travelling north from farms to the south of the National Park in Languedoc near the coast, a system of transhumance that has persisted since the 12<sup>th</sup> century and is still worked by a few farmers today.

300 kilometres of drove roads criss-cross the area. These high level routes are said to be related to early high level Bronze Age tracks, which later were developed into an extensive network linked to monastic establishments in mediaeval times. There is now a somewhat simplified network based on three main drove roads: Aubrac, Margeride and Gévaudan, which link together subsidiary routes for 28 major mountain pastures and are used by 125 stockbreeders and their 25,000 ewes when they move to summer pastures.

#### Sheep housing

The vast flocks of sheep keep on the Causses were in the winter housed in long low stone buildings known as *les Jasses*. Often more than 10 metres in length and containing water tanks and hay stores, they have come to be seen as the emblematic buildings of the Causses. Milk from the sheep goes largely to the making of Roquefort cheese – outside the nominated area to the west.

#### Forest

The grazed areas have been created over millennia through the clearing of forests. In the east of the area, remnants of beech forest survive as well as considerable areas related to chestnuts and later mulberry cultivation. Some areas in the Cévennes landscape reflect the impact of recent small plantations of exotic species. In other areas indigenous species have been planted over larger areas, resulting in an incongruous monoculture. In recent years attempts have been made to introduce mixed-species planting in order to achieve landscapes that are closer to the natural forest cover in appearance and species diversity.

In the 20<sup>th</sup> century, there has been limited reforestation of the Causses. In the Causse Méjean, in particular, there are stark, rectilinear plantations of conifers.

#### Farmhouses

The traditional buildings of the southern Cévennes are characterised by dry rubble shale stone construction plastered on the inside and sometimes on the outside too. Roofs are of shell-shaped slates with rows of slates interlocking to protect the ridge. To the north around Mont Lozère the granite buildings are built of shaped square stones and are much squatter in character. Barley straw was widely used on roofs until the 17<sup>th</sup> century when it was replaced by slate.

The wide open Causses landscape has some remarkable examples of fine stone farmhouses such as the farm complexes of Les Monziols. Farmhouses and farm buildings were built of dry limestone blocks plastered both inside and outside. They are characterised by dressed stone lintels and door jambs and by the use of fine stone arches over doors and to support roofs in houses. The vaulted ground floors of houses often contained water storage cisterns.

#### Villages

Villages in the Cévennes reflect their founders: many names begin with Saint reflecting the various Abbeys that owned land in the 12<sup>th</sup> and 13<sup>th</sup> centuries. The houses cluster together along narrow streets.

The limestone of the Causses has resulted in the impressive medieval military architecture of the Templar and Hospitaler towns such as La Cavalerie, La Couvertorade, and Sainte-Eulalie de Cernon.

#### Chestnuts cultivation

In the 16<sup>th</sup> century a rapid expansion of chestnut farming led to the creation of many new terraces rising up the hillsides sometimes at considerable distances from their farms. Trade in chestnuts contributed to an increasing prosperity in the area, reflected in the re-building of more substantial farmhouses and two-storey buildings for drying the shelled nuts. For around 150 years, chestnuts were the main cash crop. The creation of new terraces, the improvements to farmhouses and the creation of buildings for processing the chestnuts all contributed to establishing the bones of the Cévennes landscape as they exist today.

#### Silk cultivation

After a particularly severe winter in 1709 which decimated many of the chestnut trees, many farmers change to growing silk worms and planted their terraces with mulberries, particularly in the warmer valleys that faced south to the Mediterranean Sea. Mulberries were the last addition to the landscape, together with the large multi storey buildings, *magnaneries*, with regular rows of windows and many chimneys constructed to grow and process the silk worms. These were often built as extensions to the existing farm complexes.

#### History and development

During the Bronze Age there appears to have been large-scale clearance of the forest to create pastures for sheep and cattle. Roman rule touched the areas comparatively lightly. The Romans did not impose social organisation on the small scale farmers. However the landscape was exploited for its resources, minerals and particularly timber and the breeding of cattle and sheep. During Roman rule much of the Causses was cleared of its pine trees. Pliny mentions cheeses from the area being marketed through Nîmes along trade routes across the summits of the hills, probably of much earlier origin and which have by and large persisted to the present day.

The end of Roman rule heralded hostile incursions from Visigoths and then the Franks in the 6<sup>th</sup> and 7<sup>th</sup> centuries which seem to have prompted the development of settlements in areas that could be defended readily.

The fundamental changes to the landscape that can still be perceived today took place between the 12<sup>th</sup> and 14<sup>th</sup> centuries when several monastic orders, including

Benedictines, Hospitalers and Knights Templars gained control of extensive lands and put in place strong social systems in order to harness water supplies and exploit more systematically the forests and particularly grazing lands.

In the Causses, the landscape structures put in place in the 12<sup>th</sup> and 13<sup>th</sup> centuries are still reflected in the commune boundaries of today. By the 16<sup>th</sup> century trade in sheep and cloth put the area at the centre of trade between the plains to the south and north.

The golden age of the Cévennes economy, was between the 16<sup>th</sup> and 18<sup>th</sup> centuries when prosperity first from chestnuts and sheep and then later also silk fostered the building of large farmhouses and established trade and permanent relations with the plains, the valley of the Rhone and the Mediterranean. In the 1840s the longest railway line of the time connected Grand Combe to Beaucaire. Silk production brought another boom era at the end of the 18<sup>th</sup> and beginning of the 19<sup>th</sup> centuries. By 1810 the number of peoples living in the region reached its apogee. The re-distribution of land after the Revolution of 1789 to the farmers added to the economic impetus: new techniques were introduced and successful farms absorbed others, leading to the demise of many smallholdings.

Boom was quickly followed by decline: disease amongst the silk worms in the mid 19<sup>th</sup> century started migration away from the mountains to the towns. Between 1856 and 1914, Cévennes lost 40% of its population to the urban centres and the mines. The war of 1914-1918 accentuated the demographic loss and this continued after the armistice. 20% of the men and 25% of the women between 20 and 40 years old left the area to find work in the cities. Sericulture and silk production finally came to an end in the 1950s.

By 1975, at the end one hundred twenty-five years of decline, only around 11,500 inhabitants remained - a loss of two thirds, the losses being most strong on the Atlantic slopes. Ruins invaded the territory, and many hamlets died.

Gradually the trend is reversing: in the last thirty years people have slowly begun to move back to some areas and reclaim the lands.

The traditional transhumance of vast flocks of sheep seasonally from the plains of Languedoc to the uplands of the Causses and the Cévennes has now dwindled drastically. However there is now a determined move to support agro-pastoralism which is beginning to have a marked effect on its revival.

### **3 Outstanding Universal Value, integrity and authenticity**

#### **Comparative analysis**

The property is compared with three inscribed properties: The Laponian Area, (Sweden, 1996) Pyrénées - Mont Perdu, (France, Spain, 1999), and the Orkhon Valley Cultural Landscape (Mongolia, 2004). These properties are all considered to be examples of pastoralism, rather than agro-pastoralism and thus none compare with Causses and Cévennes.

The nominated property is then compared with sites representative of agro-pastoralism around the Mediterranean – none of which are inscribed. These are grouped into four areas: South-west Europe with sites in Spain, France, Andorra, and Italy; the Balkan Peninsula with sites in Croatia, Bosnia, Montenegro, Kosovo, Albania, Greece, and Turkey; the Eastern Mediterranean with sites in Turkey, Syria, and Libya; and fourthly the Maghreb with sites in Tunisia, Algeria and Morocco.

The comparison covers climate, religion, aspects of agro-pastoralism and the vitality of the systems. In terms of agro-pastoralism, the Causses and Cévennes are seen to cover all the various types of agro-pastoralism present around the Mediterranean apart from nomadic pastoralism. Furthermore the property still has active transhumance and a landscape that reflects – visibly and through its organisational structures - both ancient agro-pastoralism (from relict aspects of the landscape) and what is called the traditional agro-pastoralism that has evolved over the past millennium.

Comparing this to what persists in the other areas and regions, it is suggested that in the Maghreb, the pastoralism was defined more by nomadic and semi-nomadic systems with more recently integration with agriculturalists. The area has been subject to intense population pressure since the 19<sup>th</sup> century and although the mobility of the pastoral system has survived, it is highly vulnerable.

In Albania, where livestock and pastoral practices date back to Roman times, there are similarities with the landscape and systems of the Causses and Cévennes. However in Albania the system was dislocated by the Soviet practice of collectivisation and although pastoralism has recovered, there is a loss of traditions and memory and the system is not supported by government policies.

By contrast, the Causses and Cévennes have not been subject to population pressure, they have resisted invasion, and agro-pastoralism is still flourishing. It is therefore considered that the property constitutes and exceptional reflection of Mediterranean agro-pastoralism.

ICOMOS notes that these comparisons are based on the conclusion of expert meetings on agro-pastoralist cultural landscapes of the Mediterranean region held at the property in September 2007 and in Albania in 2009.

These meeting defined a Mediterranean agro-pastoralism as a discrete system of land management based on the Mediterranean climate, (dry summer with very dry, soft winter cold); soil of relatively low productivity, changes in altitude that allowed transhumance, proximity to the sea; system largely based on sheep but also associated with cattle and in place camels and other animals, and shaped by monotheistic religions and the common use of resources. The system has high immaterial values and delivers high environmental values. It also has considerable diversity within different areas.

The analysis suggested that Mediterranean agro-pastoralism is one of the great agro-pastoral systems of the world, the others being:

- the nomadism of the tundra, based on reindeer;
- the civilizations of Central Asia, which have domesticated the horse;
- transhumance in semi-arid context of the Mediterranean basin and the Middle-East;
- Bedouin civilization of the Saharan desert and Arabia based on the camel;
- the nomadism of sub-Saharan Africa;
- Short transhumance such as in the Alps, the Pyrenees, Tatras, Carpathians;
- Andean pastoralism;
- Ranching of the New World, e.g. US, Australia, New Zealand;
- Small scale distinctive pastoralism in discrete areas e.g. Scotland; Hungary or with distinctive animals such as the two-humped camel.

The Causses and the Cévennes is seen as part of the southwest of Europe which includes areas of Spain, North Africa, France and Italy. In comparison with other areas, the landscape of the Causses and the Cévennes, shows well the evolution of the system, there is a vitality to the agro-pastoral system in comparison to many other areas, local sheep breeds persists, the architectural legacy is well represented in drove roads, water management, buildings, etc. The landscape also has aesthetic qualities that are highly valued.

Currently there are no sites inscribed on the List that reflect large-scale agro-pastoralism of the Mediterranean region.

ICOMOS considers that the comparative analysis sets out well the rationale for considering Mediterranean agro-pastoralism as a major type of pastoralism within which there are significant variations. It also shows that in many parts this agro-pastoralism is extremely vulnerable. The Causses and the Cévennes can be seen to represent one specific response. It is a response that is still viable and crucially is reflected in the landscape.

On the issue of other sites that might be nominated in the future, ICOMOS considers that there would be room on the List for other properties that might be exemplars of other variations of Mediterranean pastoralism - which reflect distinctive and outstanding cultural responses.

---

For these reasons, ICOMOS considers that the comparative analysis justifies consideration of this property for the World Heritage List.

---

### **Justification of Outstanding Universal Value**

The nominated property is considered by the State Party to be of Outstanding Universal Value as a cultural property for the following reasons:

- The upland landscapes of the Causses have been shaped by agro-pastoralism over three millennia. In the Middle Ages, the development of cities in the surrounding Mediterranean plains, and especially the growth of religious institutions, prompted the evolution of a land structure based on agro-pastoralism, the basis of which is still in place today.
- Too poor to host cities, too rich to be abandoned, the landscape of Causses and Cévennes are the result of the modification of the natural environment n by agro-pastoral systems over a millennium.
- The Causses and Cévennes demonstrate almost every type of pastoral organisation to be found around the Mediterranean (agro-pastoralism, silvi-pastoralism, transhumance and sedentary pastoralism). The area has by a remarkable vitality as a result of active renewal of the agro-pastoral systems.
- This area is a major and viable example of Mediterranean agro-pastoralism. Its preservation is necessary to deal with threats from environmental, economic and social issues that such cultural landscapes are facing globally.
- On a historical note, the Causses and the Cévennes retain numerous testimonies of the evolution over several centuries of its pastoral societies. Its important built heritage, landscape characteristics and intangible associations that reflect traditional pastoralism will be preserved by the contemporary revival of agro-pastoralism.

ICOMOS supports this justification of the cultural landscape forming an exceptional testimony to Mediterranean agro-pastoral systems within the structure of water management and building traditions put in place by the monasteries in the late Middle Ages.

### **Integrity and authenticity**

The revised nomination dossier provides a single section for both Integrity and Authenticity and the concepts are not separated.

#### **Integrity**

In terms of how the boundaries encompass all the attributes necessary to demonstrate outstanding universal value, ICOMOS can only comment from the

point of view of studying the maps provided. As this is a referred nomination, no further mission has been possible and thus ICOMOS has not been able to study the new boundaries on the ground.

Since the previous nomination considerable effort has been made to identify the attributes of agro-pastoralism and to identify those areas where the system is most highly represented and the attributes most dense.

The boundaries have now been reduced with the towns around the edge being excluded and the area included being the heartland of the upland areas. This is still a comparatively large area, but more coherent than the previous territory that encompassed areas where agro-pastoralism was not the dominant activity.

The wholeness or intactness of the cultural landscape is related to the survival of the forces that shaped the landscape as well as to the symptoms that those forces produced. The aim is to maintain these through the perpetuation of traditional activities and the support of those activities through Park staff and external grants.

In many places the landscape is almost relict – particularly the terraces in the Cévennes, where only a fraction are actively managed. In some places, the systems of transhumance along drove roads barely survives – only a few flocks make the long journeys each year and many of the tracks are beginning to be covered with scrub. However there is now increasing attention being paid to supporting and reviving these processes. The water systems that once were the lifeblood of the fields and bergeries are now only maintained in places.

Where integrity has been compromised is in the peripheral areas of the PNC, where new building has impacted on the farmed landscape and it is these areas that have now been removed from the revised boundaries.

#### Authenticity

The key structures of the landscape: buildings, terraces, walls and watercourses retain a high degree of authenticity in terms of their built fabric, but many particularly the terraces need conservation. Less of these are now within the nominated area of the Cévennes.

As for the authenticity of the agro-pastoral processes that shaped the landscape, these are surviving, and although vulnerable, and in the hands of very few farmers (no more than 100) are the subject of a renaissance through the combined of local and national authorities and local communities.

---

ICOMOS considers that the conditions of integrity and authenticity have been met.

---

#### Criteria under which inscription is proposed

The property is nominated on the basis of cultural criteria (iii) and (v).

*Criterion (iii): bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared;*

This criterion is justified by the State Party on the grounds that the traditions of agro-pastoralism over thousands of years have generated a landscape in the Causses and Cévennes whose structure and attributes reflect a mastery of agronomic practices that have had a role in history and reflect a particular religious, scholarly and popular culture.

ICOMOS considers this the nominated areas of the Causses and the Cévennes, manifest, an outstanding example of one type of Mediterranean agro-pastoralism. This cultural tradition, based on distinctive social structures and local breeds of sheep, is reflected in the structure of the landscape, especially the patterns of farms, settlements, fields, water management, *drailles* and open grazed common land and what it reveals of the way this has evolved, in particular since the 12<sup>th</sup> century. The agro-pastoral tradition is still living and has been revitalised in recent decades.

---

ICOMOS considers that this criterion has been justified.

---

*Criterion (v): be an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change;*

This criterion is justified by the State Party on the grounds that living cultural landscape of the Causses and Cévennes is an outstanding example of the "combined works of man and nature" that has endured for three millennia with its ability to adapt to its natural environment, and to political, economic and social development. The distinctive and still dynamic landscape is an exceptional response to contemporary changes recorded in south-west Europe. Encompassing in large part a biosphere reserve and a national park, Causses and Cévennes show that pastoral activity is a factor in maintaining biodiversity, and a fine example of sustainable development.

ICOMOS considers that the Causses and the Cévennes, can be seen as an exemplar of Mediterranean agro-pastoralism and specifically to represent a response common to the south-west of Europe. The nominated areas of the landscape manifest exceptional responses to the way the system has developed over time and particularly over the past millennia.

---

ICOMOS considers that this criterion has been justified.

---

---

ICOMOS considers that the nominated property meets criteria (iii) and (v) and conditions of authenticity and integrity and that Outstanding Universal Value has been fully demonstrated.

---

## 4 Factors affecting the property

### Development pressures

#### Construction

The area has recently come under greater pressure for development as a result of the greater access permitted by the construction of a “meridian” highway, the A75.

#### Farming regression

The farming community has declined over the past half century, particularly in the Cévennes area. Many properties are now only inhabited in summer months as holiday homes. Some farmers are moving back but the long-term stability of farms is in question. The income of many farmers has been supplemented by grants for landscape maintenance. The wide ‘morale’ support demonstrated currently by the different authorities might not be sufficient in the future to ensure the maintenance of activities which sustain the cultural landscape with its richness and diversity.

In the Causses farming depends on the existence of cheese making companies (Roquefort, Feta, etc) which collect the milk from more than 1,600 family farms. The dependence on a few big external (to the region) owned and commercially orientated companies constitutes also a risk; a slight change in the marketing condition could lead to a large scale abandonment of the traditional activities with severe consequences for the landscape and the rich biodiversity.

In the Causses, the sheep farmers still manage to survive largely through supplying ewes’ milk for Roquefort cheese production. There has however been a marked increase in the size of farms needed to create viable units and this means there are many less people per hectare to manage buildings and the landscape generally. In places in the Causses, some land is turning back to scrub and trees where transhumance paths are no longer used or the land has been acquired for hunting. As with the Cévennes, the economy of sheep farmers is fragile. The nomination of the property for World Heritage status is seen as a way to boost tourism particularly in the Causses. It is also seen as a way to strengthen the resolve to sustain the agro-pastoral traditions.

The transhumance system involves animals coming from outside the area into the Causses and Mont Lozère in the summer months and then heading back to the southern plains of Languedoc in the winter. This system is therefore to a degree outside the control of those working in the nominated area. There is also the movement of sheep within the nominated areas, particularly in the north, up to summer pastures.

### Afforestation

In certain areas extensive planting of exotic species by private landowners has introduced a discordant note. In others indigenous species have been planted over large areas, resulting in an incongruous monoculture. In recent years attempts have been made to introduce mixed-species planting in order to achieve landscapes that are closer to the natural forest cover in appearance and species diversity. The more limited reforestation of the Causses, has followed a similar development. The Causse Méjean, in particular, with its stark, rectilinear plantations of conifers, is less pleasing aesthetically and equally unacceptable in terms of biodiversity.

### Wind energy

Threats from large-scale windfarms have been identified in the supplementary information.

### Tourism pressures

World Heritage recognition might lead to a significant increase of visitors in some parts of the sites which are already overcrowded in summer for instance St Guilhem, Gorges du Tarn, etc.). Measures might need to be taken to control car and visitor flows, which might prove to be quite unpopular. The public transportation system is almost non-existent within the site, and this has not been addressed in the nomination file.

### Natural disasters

Forest fires are a threat to all parts of the nominated area, but particularly the coniferous plantations in the Cévennes. The large areas of chestnut trees that are no longer maintained and thus cleared at ground level are also vulnerable. Since 1995 a fire prevention plan has been put in place to minimise fires and contain those that do break out.

---

ICOMOS considers that the main threat to the property is farming regression, but there is a concerted effort to encourage and support farming activities through a structured approach.

---

## 5 Protection, conservation and management

### Boundaries of the nominated property and buffer zone

The precise boundaries for the revised nomination have been defined as a result of detailed studies on the attributes of agro-pastoralism and with the benefit of site surveys of the landscape. It now follows clearly defined geographical features and is a logical reflection of the way the land is worked.

---

ICOMOS considers that the boundaries of the nominated area and buffer zone are satisfactory.

---



## Ownership

Around three-quarters of the property is in private ownership. The rest is in the public domain.

## Protection

### Legal Protection

The whole of the nominated areas is protected either for natural or cultural heritage but only the core of the Cévennes National Park is protected for both. This is a weakness as outside the core area of the park there is less control over changes to buildings and new development.

The totality of the nominated area is protected in a variety of different forms, but only part is protected for cultural attributes. The *Parc national des Cévennes* (PNC), with its headquarters at Florac, is a public national administrative body (*établissement public national à caractère administratif*) created in September 1970 under the provisions of the Law of 22 July 1960. There are 117 *communes* within its 321,380ha. It has been a biosphere reserve as part of the UNESCO Man and the Biosphere programme since 1985. In the core area of the park, cultural property is protected and no new building is allowed. In the peripheral area there is no protection for cultural property.

The *Parc naturel régional des Grands Causses* (PNR) was founded in 1995 under the provisions of the Law of 5 July 1972 which established the category of Regional Natural Parks. At 315,949ha and covering 94 *communes* it is almost as large as the PNC. Its status and powers are broadly comparable with those of a national park. Its policies are determined by a *Syndicat de collectivités*, a public body which brings together *communes* and other entities with the objective of carrying out works and providing services for the communities involved. The park exists to protect natural attributes.

The *Centre permanent d'initiatives pour l'Environnement des Causses méridionaux* (CPIE), set up in accordance with 1901 legislation and representing 28 *communes* in the *Départements* of Gard and Hérault, is a body which enables these collectivities to prepare and implement policies and activities of common interest.

These regulations do not extend to all private property, which represents some three-quarters of the area nominated for World Heritage inscription. Landowners in France have virtually absolute rights over the development and management of their own properties, unless these are covered by specific legal instruments such as the *classement* of historic monuments which override the rights of private landowners

The Gorges du Tarn and de la Jonte, which extend over some 29,000ha, were classified as protected sites on 29 March 2002, as a result of which any proposed changes in their condition or character must be approved by the relevant Minister or by the Prefect of Aveyron. At the

present time active consideration is being given to the designation of this site as one of the *Grands Sites de France*. This initiative has three objectives – the creation of a sustainable and autonomous management policy, restoration from the ecological and landscape point of view, and ensuring that any measures that are adopted will benefit local development. This designation would supplement existing ones.

In addition, a large number of historic buildings and architectural ensembles are protected under the provisions of the 1913 historic monuments legislation. (these are listed in the revised nomination dossier.) A number of architectural groups and small villages are designated as *Zones de protection du patrimoine architectural, urbain et paysager* (ZPPAUP).

There are also a considerable number of measures for the protection of areas of special natural interest.

The supplementary information acknowledges the need for tighter protection for the overall landscape in response to the shift in emphasis of the nomination and the identified threats and sets out a range of complementary measures to coordinate and strengthen existing protection. This will be put in place by 2015.

---

ICOMOS considers that the legal protection in place is weak in parts in terms of protecting the cultural attributes. This is acknowledged by the State Party who has initiated complementary protective measures for the property to be put in place over the next 6 years.

---

## Conservation

Inventories, recording, research

The property is well researched from the point of view of stock-breeding. It is acknowledged that more research is needed on physical aspects of the landscape such as prehistoric remains in the Cévennes and also field structures in order to have more precise understanding of landscape history. The Strategic Plan (see *below*) sets out a programme to record the material and immaterial attributes of the agro-pastoral system.

The Cévennes National Park and Regional Park Causses have undertaken a program of inventorying the drailles or drove roads.

Present state of conservation

As ICOMOS has not undertaken a mission to the property since 2005 and as then it was considering a much larger area than is now nominated, it cannot comment on the present state of conservation of the property that is now nominated.

The following is what is presented in the revised nomination.

The Causses and the Cévennes constitutes the largest area of semi-natural grassland in France. This managed grassland – managed by grazing – is rich in biodiversity. Within the National Park, some 90% lie within 22.5% of the area – that is the grassland, rocks and wetlands. The state of conservation of the grassland is said to be good, although the areas of grazing has decreased by 2,000 ha between 1988 and 2000.

In its previous evaluation, ICOMOS commented that with the gradual disappearance of transhumance many of the ancient driveways (*drailles*) are now barely visible, but certain stretches that are still in seasonal use are well cared for. In the revised nomination, the main *draille* paths are said to be in good condition and also used by hikers.

For the Cévennes terraces, ICOMOS noted in its previous evaluation that the decline of population has led to the decline in traditional active management of terraces, watercourse and chestnut trees. Many of the terraces are now not maintained at all: walls are beginning to crumble, water course channels are little maintained and the chestnut trees suffering from lack of pruning. As a result of this, and the resulting natural processes of recolonization, terrace systems are difficult to discern, except where they have been brought back into active use for growing chestnut trees and in the few green areas around farmhouses where some are used for hay and grazing. Maintenance of the terraces presents a huge conservation problem. The active encouragement given to farmers to return to this area has helped with the maintenance of the landscape associated with the farms still farmed, but this is a very small proportion of the whole. Sustaining the traditional farming practices with so few people and with comparatively low prices being paid for farm products makes maintaining the landscape increasingly difficult to achieve.

In the revised nomination it is stated that although the terraces were largely abandoned in the 20<sup>th</sup> century, the chestnuts are beginning to be conserved as part of a habitat directive, while there are initiatives to encourage re-use and repair of the stone terraces – for instance 30 farmers are growing sweet onions.

No details are provided in the revised nomination for the state of conservation of buildings or structures associated with water management.

On the more open, flatter *Causses*, field boundaries dating back to the Middle Ages (and in some cases even earlier) are well maintained and still in use. Similarly, the ancient pools known as *lavognes* (some natural, some man-made) used for watering stock are for the most part kept in excellent condition by local communities working collectively or by individual landowners.

Many of the medieval and early modern buildings and settlements within the nominated site have been

maintained or conserved with care and respect for their historic values.

There have been some new recent interventions in this area and also notably along the Gorges du Tarn, where tourism over the past half-century has led to the appearance of hotels, restaurants, and the like along the roads linking the small towns and villages.

Steps are being taken in parts of the proposed site: for example, the *Conseil d'Architecture, d'Urbanisme et de l'Environnement du Gard* (CAUE 30) selected the Rieutord Valley in 2000 as a case-study for developing detailed practical recommendations regarding the conservation of the architecture and the landscape.

#### Active Conservation measures

The conservation of the landscape is encouraged through support for the farmers who are its custodians.

#### Maintenance

Maintenance of drove roads, water storage ponds, walls etc is largely the responsibility of farmers. In the case of protected buildings, grant aid is available for some aspects of their repair. More details on materials and methods of maintenance need to be collected – as envisaged in the Strategic Plan – see below.

#### Effectiveness of conservation measures

The effectiveness of the conservation measures is difficult to comment on without a mission. At the time of the first mission there was no detailed inventory of attitudes associated with pastoralism. More details are now available but ICOMOS has not been able to view the property to allow an understanding of their current conservation or how they are being conserved. It appears that several initiatives have flourished since the previous mission in 2005 but it has not been possible to assess their impact.

The nomination dossier states that the 30 000 hectares of land in the high Cévennes owned by the State is a major conservation challenge – but no details are provided as to how this will be addressed.

---

In its previous evaluation, ICOMOS commented that the overall conservation of the agro-pastoral landscape relies almost entirely on the farming community and that its effectiveness and targeted support need to be more clearly defined and monitored in more detail. This revised nomination provides this definition, and the basis for monitoring.

---

#### Management

Management structures and processes, including traditional management processes

With the objective of preparing the nomination to the World Heritage List, and following the successful

precedent established by the Val de Loire in 2001, an *ad hoc* structure was set up, known as the *Conférence Territoriale*, to oversee the preparation of the nomination. Under the chairmanship of the *Préfet* of La Lozère (the *Préfet coordonnateur*), its membership consisted of the presidents of the relevant *Conseils généraux* and *régionaux*, the presidents of the PNC and the PNR *des Grands Causses*, and representatives of the CPIE, the *Grands Sites*, the association of mayors, and the four *villes portes*. Specialist advice was provided by the *Comité d'Orientation*, made up of experts in a wide variety of fields, whilst the *Préfet coordonnateur* headed the mission responsible for setting up the partnerships and contracts between the different stakeholders.

The PNC is governed by a *Conseil d'Administration* of 52 people (civil servants, representatives of local administrations, and specialists). It employs some sixty staff, working either from its Florac headquarters or around the Park. The PNR is governed by a *Syndicat Mixte* made up of representatives of collectivities, the state, and private property owners. Its management team is divided into six sections, including heritage and landscape, maintenance of the rural environment, and socio-economic development. Analogous but smaller structures exist for the CPIE and the *Grands Sites*. All these bodies have structure plans of some kind governing their actions in the short and medium term.

While these three main authorities (PNC, PNR, CPIE) have a very good collaboration, they have a limited power on land use and even cultural heritage conservation, most of the land being private property. Even on nationally owned land, the Park has not been able to prevent re-forestation with exotic species for wood production. In some areas, particularly the outer zone of the national Park in the nominated area there is evidence of development with houses being constructed on former fields for tourism purposes.

Many of the key built features of the landscape such as buildings terraces, stone walls and the water distribution systems, based on numerous dams and lengthy underground channels (known as *béals*) need continuous maintenance and reconstruction, and this work is carried out not by a central authority but by the communities whose needs they serve. As the communities are now much reduced from their numbers a century ago, it is not possible to maintain more than part of what remains.

The same applies to many of the natural aspects of the landscape such as chestnut trees.

The management structure put in place is a collaborative one bringing together the key main players from all the main organisations to allow coordination and shared aims and objectives.

The management structure is as follows:

A **local conference**, a decision-making organ that defines the site's management guidelines based on a commitment charter. Its recommendations rely on the advice of a **steering committee**, a consultative body in which all the players-elected officials, professionals, technicians, scientists, grass-roots organisations and government agencies-can express themselves. A **technical mission** is in charge of leading the partnership created in the Causses and Cévennes by implementing the operational action plan developed by all the players.

This structuring of shared responsibilities in coordination with local governments and State services takes advantage of the presence of an active network of experienced players throughout the area: Cévennes National Park, the organisation that manages the national park and the biosphere reserve; Grands Causses Regional Natural Park (RNP); the Permanent Centre of Initiatives for the Environment of the Southern Causses (CPIE); the joint association for the Grand Site of the Tarn, Jonte and Causses Gorges; and the joint association for the Grand Site of Navacelles. French law gives these various structures an effective role as operator and manager. For example, Cévennes National Park implements local agro-environmental measures involving the European common agricultural policy within its boundaries.

Lastly, the *Association de Valorisation de l'espace Causses et Cévennes* (Association for the Improvement of the Causses and Cévennes Area, AVECC), by putting forth the nomination of the Causses and Cévennes for inclusion on the World Heritage List, is implementing the information and awareness-raising actions necessary for sharing the property's values with the various players.

Policy framework: management plans and arrangements, including visitor management and presentation

A management plan was drawn up for the original nomination with the support of the five principal stakeholders and with the agreement of the others. This has the following main objectives:

- Conservation, restoration, and management of the cultural and natural heritage;
- Making this heritage available for the benefit of the general public;
- Contributing to the social and economic development of the area;
- Coordination of the work of the various authorities involved in the management of the area;
- Creating a management structure for this purpose.

For the revised nomination this has been supplemented to identify the characteristics of the pastoral landscape. These are seen as:

- Valley and gorges
- Landscapes of the high plateau
- Landscapes of the peaks and summits

However these are only defined in very general, visual terms rather than in relation to how the agro-pastoral system, in a specific way, has shaped these areas and thus what needs to be managed in physical terms as well as through sustaining the agro-pastoral way of life.

#### Risk preparedness

The threats are said to be:

- pressure of construction and installation;
- demise of agricultural and pastoral life;
- development of new energy landscapes.

The response to these threats is through the structures listed above: no detailed action plan has been provided but an action plan for 2006-8 sets out the progress so far.

However a Strategy for 2007-2013 has been drawn up which encompasses key themes related to improving and sharing knowledge, promoting an understanding of the living landscape and encouraging the participation of all the key players. The Strategy includes completing an atlas of the landscape, drawing up an inventory of attributes of the landscape; developing knowledge of the landscape; acquiring a common language for the landscape; developing a decision-making tool for the restoration and the management of the landscapes; and identifying emblematic sites of the cultural landscape.

This Strategy should deliver, through the necessary research, the much needed detailed knowledge of the agro-pastoral landscape, its structures and intangible heritage, as a basis for defining the boundary, for restoration and protection, and for monitoring this large complex, and in some respects vulnerable, landscape to ensure its value is being sustained.

#### Involvement of the local communities

There is huge involvement and support of the local farming communities in sustaining the agro-pastoral landscape.

Resources, including staffing levels, expertise and training

The Strategy for 2007-2013 anticipates EU support funding of up to 7 million Euros over its five years duration.

Training and research take place within the nominated area or nearby. For example, Montpellier SupAgro (an agricultural grande école and research centre) manages

the Domaine de la Fichade, located in Florac, an experimental teaching farm growing crops and breeding livestock in the context of sustainable agriculture, experimentation and the hosting of trainees, students and researchers.

#### Effectiveness of current management

Implementation of the Strategy is urgently needed to underpin the whole rationale for identification, protection and management of the agro-pastoral landscape.

---

ICOMOS considers that currently the management system for the property lacks the level of knowledge necessary to define clearly what needs to be protected, managed and monitored. Such knowledge will emerge from the Strategy and this should form the basis for a more targeted management system.

---

## 6 Monitoring

Major projects that might impact on the project are monitored by a coordination service established under the local authority of Lozère. No detailed monitoring indicators are set out for the agro-pastoral attributes of the landscape and these needs to be put in place.

---

ICOMOS considers that more detailed monitoring needs to be developed based on inventories of the attributes.

---

## 7 Conclusions

The revised nomination addresses the concerns of the Committee at its 33<sup>rd</sup> session and has provided a more detailed inventory of the attributes of the property that relate to agro-pastoralism, as a basis for revising the boundary to encompass a smaller area where those attributes are at their strongest; and has revised the nomination dossier to reflect a focus on agro-pastoralism and its manifestations.

ICOMOS applauds the work that the State Party has undertaken to re-focus this nomination, on the basis of two international workshops convened to consider agro-pastoralism in the Mediterranean region, and to continue to support the revival of agro-pastoralism in the Causses and Cévennes.

As this is a referred nomination, ICOMOS has not had the opportunity to carry out a mission to allow it to consider the logic of the new boundaries or the state of conservation of the property. As it last visited the property in 2005, it does not consider that it has an up to date view on its conservation. It should also be pointed out that on its first mission, ICOMOS was considering a much larger area and one nominated for different value.

ICOMOS regrets that in the absence of a mission, it has not been possible to visit the property to consider the rationale of the reduced boundary. Even though it considers that the boundaries as outlined on the revised map look reasonable, it cannot give a firm statement on integrity.

Similarly, ICOMOS cannot comment on the current conservation of the property, or on its authenticity, or judge progress made in engendering support for the revitalisation of the traditional agro-pastoral processes and traditions.

ICOMOS considers that this property should in due course be inscribed on the World Heritage list for its particular reflection of Mediterranean agro-pastoralism. However, ICOMOS regrettably is not in a position to recommend a statement of outstanding universal value, as key parts of this statement cannot currently be drafted.

ICOMOS considers – that there would be room on the List for other properties that reflect distinctive and outstanding cultural responses related to different variations of Mediterranean pastoralism.

**Recommendations with respect to inscription**

ICOMOS recommends that the nomination of The Causses and the Cévennes, Mediterranean agro-pastoral Cultural Landscape, France, be **referred back** to the State Party in order to allow a mission to visit the property to consider its revised boundaries and its state of conservation.







Village in the Cévennes



Roof in shell-shaped slates





Cros Roux – Causse Méjean



Cistern roof (Saint Jean de Balme)



---

# The architectural work of Le Corbusier (France, Argentina, Belgium, Germany, Japan, Switzerland)

## No 1321

---

### Official name as proposed by the States Parties

The architectural work of Le Corbusier: an outstanding contribution to the Modern Movement

### Location

Stuttgart (Germany)  
La Plata (Argentina)  
Antwerp (Belgium)  
Éveux-sur-Arbresle  
Firminy, Marseille  
Neuilly-sur-Seine  
Paris, Pessac, Poissy  
Ronchamp  
Roquebrune-Cap-Martin  
Saint-Dié (France)  
Tokyo (Japan)  
Corseaux, Geneva  
La Chaux-de-Fonds (Switzerland)

### Brief description

The nineteen sites reflect the architect Le Corbusier's work over his entire career between the 1910s and the 1960s and cover six of the eight different functional types of building with which he was associated:

- the artist's residence and studio
- the individual house
- the standardised house
- the apartment block
- religious architecture
- large standardised buildings

The nominated sites are located in six countries and three continents. They have been chosen to represent the whole of Le Corbusier's output, and to be exemplars of his creative genius. Each site is seen to have a supra-national dimension and together they are said to provide, in terms of architecture and urban planning, a complete and coherent answer of global dimensions to the challenges of the new world of the 20<sup>th</sup> century.

### Category of property

In terms of categories of cultural property set out in Article I of the 1972 World Heritage Convention, this is a serial nomination of 11 *monuments* and 8 *sites*.

## 1 Basic data

### Included in the Tentative List

Argentina: 1 June 2007  
Belgium: 4 April 2005  
France: 31 January 2006  
Germany: 1 February 2007  
Japan: 14 September 2007  
Switzerland: 28 December 2004

### International Assistance from the World Heritage Fund for preparing the Nomination

None

### Date received by the World Heritage Centre

1 February 2008  
31 January 2011

### Background

This is a referred back nomination (33 COM, Seville, 2009).

A first nomination dossier for The Architectural and Urban Works of Le Corbusier was examined by the World Heritage Committee at its 33rd session (Seville, 2009). At the time, ICOMOS recommended that the nomination be deferred in order to allow the State Party to:

- *Reconsider the basis of the nomination in order to focus attention primarily on the buildings and urban plans rather than their architect;*
- *Consider nomination of a limited selection of individual buildings, rather than a large global serial nomination, that could be said to be outstanding in terms of architectural form and their influence or inspiration as part of the Modern Movement;*
- *Improve the delineation of buffer zones in relation to topography and visual parameters, and provide adequate protection;*
- *Put in place management systems and/or management plans to give greater guidance to owners and to draw local authorities and local communities into the management processes.*

*ICOMOS would also like to encourage the States Parties to continue work on the global coordination mechanism between the sites associated with Le Corbusier, as being beneficial whether or not these sites are inscribed on the World Heritage List.*

*ICOMOS considers that any revised nomination with revised boundaries would need to be considered by a mission to the site.*

The World Heritage Committee adopted the following decision:

Decision 33 COM 8B.19:

*The World Heritage Committee,*



1. Having examined Documents WHC-09/33.COM/8B and WHC-09/33.COM/INF.8B1,

2. Refers the nomination of *The Architectural and Urban Work of Le Corbusier, Argentina, Belgium, France, Germany, Japan, and Switzerland, back to the States Parties in order to allow them to:*

- a) Strengthen the justification of the Outstanding Universal Value to demonstrate the influence of the works of Le Corbusier on the architecture of the 20th century and the Modern movement,
- b) Improve the delineation of buffer zones in relation to topography and visual parameters, and provide adequate protection,
- c) Put in place management systems and/or management plans to give greater guidance to owners and to draw local authorities and local communities into the management process;

3. Considers that a revised nomination need not include all 22 of the component parts currently proposed, however, inclusion of any additional component parts in the series would require a new nomination;

4. Invites the States Parties to strengthen cooperation in order to ensure appropriate protection and management of the property by focusing attention on the buildings and urban ensembles;

5. Encourages the States Parties to continue work on the global coordination mechanism between the sites associated with Le Corbusier, as being beneficial whether or not these sites are inscribed on the World Heritage List.

#### Consultations

ICOMOS consulted its International Scientific Committee on 20<sup>th</sup> Century Heritage and DoCoMoMo.

#### Literature consulted (selection)

Baltanas, J., *Le Corbusier, parcours*, Parenthèses, Marseille, 2005.

Benton, T., *The Villas of Le Corbusier, 1920-1930*, 2007.

Cantacuzino, S., *Great Modern Architecture*, 1966.

Cohen, J.-L., *Le Corbusier, la planète comme chantier*, Zoé, Paris, 2005.

Evenson, N., *Le Corbusier: The Machine and the Grand Design (Planning Cities)*, 1969.

Gans, D., *The Le Corbusier Guide*, 2006.

Janson, A. & Krohn C.: *Unité d'habitation, Marseille*, 2008.

Jenger, J., *Le Corbusier Architect of a New Age*, 1996.

Le Corbusier, *Vers une architecture*, 1923.

Monnier, G., *Le Corbusier, qui suis-je ?*, Éditions de la Manufacture, Lyon, 1987.

Pauly, D., *The Chapel at Ronchamp*, 2008.

Ruegg, A., and Spechtenhauser K. (eds.), *Maison Blanche: Charles-Edouard Jeanneret / Le Corbusier*, 2007.

Samuel, F. *Le Corbusier in Detail*, 2007.

Sbriglio, J., *The Villa Savoye*, 2008.

Vedrenne, É., *Le Corbusier*, Paris, Assouline, 1999.

Vege sack, A. von (ed.), *Le Corbusier, The Art of Architecture*, 2008.

#### Technical Evaluation Mission

20–23 August 2008 / 2–12 September 2008 / 3–6, 8–9, 11 September 2008 / 22–26 September 2008 / 22–26 October 2008.

As this is a referred back nomination, no further missions have been undertaken.

#### Additional information requested and received from the States Parties

During the evaluation of the original nomination, ICOMOS sent letters to the States Parties on 16 October 2008, 23 October 2008, and 19 December 2008. The first letter raised the issue of the basis of the selection of the sites that comprise the serial nomination and the extent of additional sites to be nominated in future years, if the property is inscribed. The second and third letters were related to two new projects planned within the nominated area of the site of Chapel of Notre-Dame-du-Haut, Ronchamp.

Information amounting to 140 pages was received from the States Parties on 27 February 2009 in relation to management, new projects at Ronchamp, alterations to the boundaries of the museum in Tokyo, future proposals for restoration and better protection of a number of sites in the serial nomination. Considerable extra material on the description and justification for Firminy-Vert was also submitted.

#### Date of ICOMOS approval of this report

10 March 2011

## 2 The property

The revised nomination

This is a large (around 1,600 pages), and virtually new nomination, as the way the sites are presented has changed since the first nomination. The justification for outstanding universal value has been re-worked, as have the considerations of integrity and authenticity and the comparative analysis.

In brief, the differences between the original nomination and the new material submitted by the States Parties are as follows:

- The name of the serial property has been changed to "The architectural work of Le Corbusier: an outstanding contribution to the Modern Movement";
- The number of sites has been reduced from 22 to 19 (Maison Schwob, La Chaux-de-Fonds, Switzerland, Maison Cook, Boulogne-Billancourt, France, and Cité de refuge de l'Armée du Salut, Paris, France have been omitted), and some parts have been excluded from the site of Firminy;
- The urban planning dimension of Le Corbusier's work has been omitted;
- The component sites that comprise the nominated series are no longer classified according to seven themes but are submitted in chronological order, to demonstrate the evolution of Le Corbusier's work;
- The comparative analysis has been expanded to cover comparisons with the whole series not just individual sites;
- The buffer zones have been improved; and,
- The local management plans have been reviewed and action plans at international, national and local levels have been established.

This evaluation considers these revisions in the light of the World Heritage Committee's decision at its 33<sup>rd</sup> session.

### History and development

Charles-Édouard Jeanneret-Gris, better known as Le Corbusier (a pseudonym he used from 1920 onwards), was born at La Chaux-de-Fonds in Switzerland in 1887 and died at Roquebrune-Cap-Martin in France in 1965. Self-taught after his studies at the art school of his native town, he was an architect and town planner, an architectural theoretician, and a writer on subjects including town planning, painting, the decorative arts, furniture, and land-use planning (he wrote some forty books), and was also a painter, sculptor, and creator of furniture and tapestries.

His career can be divided into four phases:

#### 1 Initiation (1887–1917)

When only 17 years old, Le Corbusier worked with the architect René Chapallaz (1881–1975) on the design of the Villa Fallet at La Chaux-de-Fonds in 1906–1907. The next ten years were devoted to travel in Central Europe, Greece, and Turkey, together with spells in Paris, Vienna, and Berlin, where he met architects including Tony Garnier and Josef Hoffmann, and was active in the workshops of Auguste Perret and Peter Behrens. In the construction of the Maison Schwob (1916) he applied the DOM-INO principle, a concrete construction system consisting of a simple framework of posts supporting the floors, based on cubic foundations, the framework of which permits the free composition of facades and plans.

#### 2 The development of a new architectural language (1917–28)

After moving to Paris, Le Corbusier met in 1918 the painter Amédée Ozenfant (1886–1966) who initiated him into Purism. He applied the aesthetic principles of

Purism, combined with the DOM-INO system, in the Ozenfant residence and studio (Paris, 1922). He began to write articles and books about architecture, setting out his conception of a new architectural language. In 1922 he opened a workshop and formed an association with his cousin Pierre; together they designed and built a series of individual houses and artist's residences in and around Paris, and also outside France, including the Maison La Roche and the Maison Jeanneret (Paris), the Maison Guiette (Antwerp), the house of their parents on Lake Geneva, the Villa Savoye (Poissy), and the Maison Cook (Boulogne-Billancourt). They designed the theoretical project of the Maison Citrohan (a reference to the name of the car manufacturer André Citroën), designed as a machine for living, by analogy with industrial production. Their ideas were put into practice in the Pessac houses (1924–27) and the Weissenhof houses (Stuttgart, 1927). Le Corbusier then published *The Five Points of Modern Architecture* (pilotis or columns, roof garden, free plan, strip windows, free facade), the founding text of architectural modernism. The Utopian project of a city of three million inhabitants was presented at the Salon d'Automne in 1922, and the 'Voisin' plan for Paris in 1925, sparking off controversy and debate. More than 200 trainees worked successively in Le Corbusier's workshop from 1922 up to his death, in addition to several collaborators, who helped disseminate the architect's thought and expanded the international influence of his work.

#### 3 International recognition (1928–40)

In 1930 Le Corbusier opted for French nationality and married. His reputation led to public commissions: the Centrosoyuz building (Moscow, 1928), the Cité de refuge de l'Armée du Salut (Paris, 1929), the Pavillon Suisse at the Cité Universitaire (Paris, 1930), and the Immeuble Clarté condominium (Geneva, 1930). He gave lectures outside France and published new books on architecture, including the first volumes in the series of his complete works. His unsuccessful participation in the competition for the design of the League of Nations centre resulted in him assuming the role of spokesman for modernism against academicism. In 1928 he founded the CIAM (International Congresses of Modern Architecture), and in 1933 drew up the Athens Charter town-planning manifesto (living, working, recreation, circulation). Many town planning projects that were never constructed but were nonetheless influential date from this period. World War II interrupted Le Corbusier's work in association with his cousin.

#### 4 Large standardised buildings (1944–65)

In 1944 Le Corbusier chaired the Urbanism Commission of the Front national des architectes, a body which originated from the Resistance movement. In 1945 he was awarded the commission for an apartment block (*Unité d'habitation*) for Marseille, La Cité radieuse, which was completed in 1952 and the prototype of a series: the apartments are provided with collective facilities (a 'street' with shops, a school, a gymnasium, and amenities in the roof area). During the period of reconstruction, he drew up plans for La Rochelle-La

Pallice, for Saint-Dié and for the extension of Saint-Gaudens. None of these plans was realised as a result in some cases of opposition from residents and local authorities. It was at Chandigarh in India that his theories were confronted with reality, from 1950 until his death, with the construction of the new capital of the Punjab and particularly three major buildings – the Palace of Justice (1952), the Secretariat (1953), and the Palace of the Assembly (1955).

In demand all over the world for his designs, conferences, and consultations, he sometimes neglected the follow-up of his projects. During this period, he built the House of Dr Curutchet in Argentina (1949), the Musée National des Beaux-Arts de l'Occident in Tokyo (1957), two houses, the Palais des Filateurs (Millowners Building) and the Town Museum at Ahmedabad (1951), the Carpenter Center for Visual Arts at Harvard, Cambridge (1961), and an exhibition pavilion in Zürich.

In France, he built a factory at Saint-Dié (1946–50) and the two Maisons Jaoul at Neuilly (1951), which illustrate a new movement known as Brutalism. Religious buildings date from this period: the Notre-Dame-du-Haut Chapel at Ronchamp (1950), the Sainte-Marie-de-la-Tourette Monastery near Lyon (1953), and the design of the Church of Firminy, which was built after the architect's death. Also at Firminy, he built the Maison de la Culture and the Stadium (1956).

Le Corbusier created sculptures from 1946 onwards, and tapestry patterns from 1948 onwards.

A new system of proportions and measurements, the Modulor, was developed after 1945; applied to the Unité d'habitation in Marseille, its theory was set out in 1950.

After the death of his wife in 1957, Le Corbusier made many designs, including a computer centre for Olivetti, the Palais des Congrès in Strasbourg, the French Embassy in Brasilia, and the Venice Hospital in 1965.

Several construction projects underway when Le Corbusier died in 1965 were completed by collaborators, and other projects were constructed, such as the Pavillon de Zürich in Switzerland (1963–67) and the Church of Firminy, which was completed in 2006.

Today, most of the buildings he designed have retained their original function. Some are now devoted to the memory of his work.

### Description of the Serial Nomination

The initial nomination of 22 properties was based on a typological approach:

- artist's residence and studio
- individual house
- standardised house
- apartment block
- religious architecture
- large standardised buildings

- town planning.

In the revised nomination of 19 sites, the typological approach has been replaced by a chronological justification for the selection of the sites. The analysis specifically omits consideration of the town planning works of Le Corbusier, and three previously included sites have been excluded:

- 1916 *Maison Schwob, La Chaux-de-Fonds, Switzerland*
- 1926 *Maison Cook, Boulogne-Billancourt, France*
- 1929 *Cité de refuge de l'Armée du Salut, Paris, France*

The 19 sites included in the new submission are proposed chronologically, for what they contributed toward the architect's development. These are:

- 1912 *Villa Jeanneret-Perret, La Chaux-de-Fonds, Switzerland*
- 1923 *Maisons La Roche et Jeanneret, Paris, France*
- 1923 *Petite Villa au bord du lac Léman, Corseaux, Switzerland*
- 1924 *Cité Frugès, Pessac, France*
- 1926 *Maison Guiette, Antwerp, Belgium*
- 1927 *Maisons de la Weissenhof-Siedlung, Stuttgart, Germany*
- 1928 *Villa Savoye and gardener's House, Poissy, France*
- 1930 *Immeuble Clarté, Geneva, Switzerland*
- 1930 *Pavillon Suisse à la Cité universitaire, Paris, France*
- 1931 *Immeuble locatif à la Porte Molitor, Appartement L.C., Paris, France*
- 1945 *Unité d'habitation, Marseille, France*
- 1946 *Manufacture à Saint-Dié, Saint-Dié, France*
- 1949 *Maison du docteur Curutchet, La Plata, Argentina*
- 1950 *Chapelle Notre-Dame-du-Haut, Ronchamp, France*
- 1951 *Maisons Jaoul, Neuilly-sur-Seine, France*
- 1951 *Cabanon de Le Corbusier, Roquebrune-Cap-Martin, France*
- 1953 *Couvent Sainte-Marie-de-la-Tourette, Eveux-sur-Arbresle, France*
- 1954–59 *National Museum of Western Art, Main Building, Tokyo, Japan*
- 1953–65 *Centre de récréation du corps et de l'esprit de Firminy-Vert, Firminy, France*

### Selection of the serial nomination

The nominated sites have been chosen to represent the whole of Le Corbusier's output, and to reflect the way his work developed during his lifetime, with sites chosen as prototypes of architectural ideas, or as the first of a series of replications. These two approaches are to a degree contradictory.

1912 *Villa Jeanneret-Perret, La Chaux-de-Fonds, Switzerland*

The *Villa Jeanneret-Perret, La Chaux-de-Fonds, Switzerland*, was the first building to be completed by Le Corbusier when he was still known as Charles-Edouard Jeanneret. Also called the White House, this small house in the form of a compact cube with a hipped roof displays neo-classical details in contrast to later work. It was built in six months in 1912 for his parents. Set on sloping ground against a forest, it has broad views over the town. It allowed the architect to test all his architectural ideas when built and with the modifications made up to 1919 when the house was sold. It was restored between 2004 and 2005.

1923 *Maisons La Roche et Jeanneret, Paris, France*

The *Maisons La Roche et Jeanneret, Paris, France*, are a pair of semi-detached houses built at the same time in 1923 at right-angles to one another. The normal domestic arrangements are turned upside down, with the garden on the roof, living rooms on the top floor, and bedrooms beneath. Their construction reveals the full potential of the DOM-INO system, with fenestration running the length of the frontages. Within, the plans were open and fluid and the surfaces decorated with a range of strong colours, punctuated by black and complemented by white, which underlined the sequences of the 'architectural walk'. Since 1968 the two houses have belonged to, and been the centre of, the Foundation Corbusier. They have been the subject of many restorations in the intervening years. Most recently the original colours have been restored and some managed public access arranged.

1923 *Petite Villa au bord du lac Léman, Corseaux, Switzerland*

The *Petite Villa au bord du lac Léman, Corseaux, Switzerland*, is a small, narrow one-storey house, built for the architect's mother in 1923. Constructed partly of roughcast breeze blocks, the front facing the lake and the Alps beyond has a window running its whole length. Within, the space is organised to meet precisely the needs of its inhabitants in a minimalist way, as a small 'machine to live in'. In 1931 one side was clad with zinc-coated sheets; subsequently in the 1950s when the house was repaired, the southern elevation was clad with aluminium sheets. The house was lived in by the family until 1972, when it was acquired by the Foundation Corbusier which restored it in 1975. It is now a museum.

1924 *Cité Frugès, Pessac, France*

The *Cité Frugès, Pessac, France*, was the result of a commission from the Bordeaux industrialist, Henry Frugès, for a garden city in Pessac, comprising 130–150 houses with shops. The aim was to show the relevance of prefabrication and of a certain form of standardisation. At Cité Frugès de Pessac, Le Corbusier started with a basic module of 5 square metres and developed four different ways of grouping them and many individual variations. One of the most striking features of the Cité

Frugès was the use of polychromy on the exterior facades in order to, in Le Corbusier's own words, 'sculpt the space through the physical quality of colour – bring forward some volumes while making others recede. In short, compose with colour in the same way as we have composed with form. This is how architecture is transformed into urbanism.' After many technical and financial difficulties, the work was completed in 1926, but the houses remained empty until 1929. Their new owners immediately began modifying them. The city was damaged by bombs in World War II and suffered from lack of maintenance until 1973, when restoration work was started. After many years of research and a combination of public and private interventions, a coherent management framework was put in place in 1998. One house is now a museum and the rest are lived in; around half retain their original colours.

1926 *Maison Guiette, Antwerp, Belgium*

The *Maison Guiette, Antwerp, Belgium*, was built in 1926 on a long narrow plot, typical of the urban grain of Belgium. Together with its neighbouring Weissenhof-Siedlung villas, it was considered to be amongst the first innovative expressions of a new architectural language, where Le Corbusier applied his five points of architecture. The Maison Guiette is thus seen to reveal an emblematic phase in the development of the Modern Movement in Belgium, where it is Le Corbusier's only building. Maison Guiette is still lived in as a house and there is no public access.

1927 *Maisons de la Weissenhof-Siedlung, Stuttgart, Germany*

The *Maisons de la Weissenhof-Siedlung, Stuttgart, Germany*, were constructed as part of an estate of working class housing created for the *Deutscher Werkbund* exhibition of 1927. Its 33 buildings comprising 63 dwellings were designed by seventeen architects, under the artistic direction of Mies van der Rohe. The exhibition was seen as the first architectural manifestation of what was to become known as the International Style. Although the estate was said to be a blueprint for future workers' housing, the budget was far beyond the reach of most workers.

Le Corbusier built three houses at the edge of the city. The house at Bruckmannweg is in strictly cubist form, on piles and with a roof terrace. The pair of symmetrical semi-detached houses at Rathenaustrasse were conceived on the model of the 'transformable house' with great flexibility in the interior spaces. Sliding doors and bed cupboards allowed the bedroom space to be incorporated into the living space during the day.

At the end of the exhibition the houses were let to tenants and the semi-detached ones were considerably modified. Parts of the estate were bombed in World War II, but Le Corbusier's buildings survived. In the 1980s the houses were restored and many of the main alterations were reversed. In 2002 the Municipality acquired the semi-detached houses and they now house a museum.



1928 *Villa Savoye and gardener's House, Poissy, France*

The *Villa Savoye, Poissy, France*, is an exact counterpart of the proposal for minimum housing made by Le Corbusier and Pierre Jeanneret at the second congress of the CIAM (*Congrès internationaux d'architecture moderne*) in Frankfurt in 1929. Raised on piles, the villa sits in a large meadow originally surrounded by trees and overlooking the River Seine. It demonstrates all of Le Corbusier's five points: piles, long horizontal windows, freely designed facade, roof terrace, and fluid interior spaces unencumbered by load-bearing walls. It is seen as emblematic of his work at this date and demonstrates what might be called 'radical purism'.

The flat roof caused problems from an early date. By the end of World War II the house had fallen into ruin. In 1965 it was saved from destruction by a public campaign. Since then there have been three restoration programmes. The exterior is now painted white, although originally it may have been tinted in several colours. In the revised dossier it is stated that further research will be carried out between 2011–2015 on the polychrome walls, with the aim of partial restitution.

Nearby is a small gardener house built contemporaneously and this reflects the standard plan for minimum housing displayed at the CIAM exhibition. Le Corbusier saw the two houses as reflecting a 'certain common bond between the dwelling of the rich person and that of the poor.' The two houses belong to the French State and the *Villa Savoye* is open to the public.

1930 *Immeuble Clarté, Geneva, Switzerland*

The *Immeuble Clarté, Geneva, Switzerland*, constructed in 1930, is a nine-storey block of 50 apartments, constructed for rental as middle-class housing. It is seen as Le Corbusier's most important work in Switzerland. The apartments have balconies – for the 1<sup>st</sup>, 3<sup>rd</sup>, and 5<sup>th</sup> floors on the south side and for the 2<sup>nd</sup>, 4<sup>th</sup>, and 6<sup>th</sup> floors on the north side. In order to maintain the unity of the elevations, tenants were obliged to have standard curtains. The construction was based on 'dry' construction around metal frames. Threatened with abandonment in 1970, the block was purchased and repaired by two architects between 1975 and 1977.

1930 *Pavillon Suisse à la Cité universitaire, Paris, France*

The *Pavillon Suisse à la Cité universitaire, Paris, France*, was constructed in 1930 as a hall of residence at the University City, which had been founded for foreign students. The Pavillon was endowed by the Swiss community. Like other halls it provided cheap minimal housing for the students. The four-storey main building is raised on piles – not slender like the *Villa Savoye*, but robust with a figure-of-eight cross-section to withstand wind. Adjoining the main block at four points there is a curved building sitting on the ground, the stairs lit by large areas of glass blocks. It accommodated the public spaces. The whole hall was conceived as an industrial unit as opposed to the artisanal quality of the *Villa*

*Savoye*. It tested the idea of a 'house box' constructed as 'bottles in a wine rack'.

In 1953 the south front was remodelled by Pierre Jeanneret to provide blinds and double glazing and to blank out the lower part of the glazing. Le Corbusier re-designed the interior polychromy in 1957 in sharper colours. Restoration has been carried out in stages since 1976.

1931 *Immeuble locatif à la Porte Molitor, Appartement L.C., Paris, France*

The *Immeuble locatif Porte Molitor apartments, Paris, France*, were constructed for middle-class clients in 1931 on an exceptional site on the Bois de Boulogne. Restricted by the restrained pale stone buildings of the neighbourhood which it adjoins, the building, with its narrow 13m frontage of iron, concrete, and glass bricks, does not set out to shock. On the top floors Le Corbusier built a studio apartment for himself which was his Paris base until his death. While Le Corbusier was still alive, the building suffered from water ingress.

1945 *Unité d'habitation, Marseille, France*

After World War II, with Europe's housing problems worse than ever, Le Corbusier put his urban theories into practice with the construction in 1945 of the *Unité d'habitation, Marseille, France*, a synthesis of four decades of his thinking on collective living. Seventeen storeys high and designed to house 1,600 people, the *Unité* incorporates various types of apartment, as well as shops and communal rooms, all connected by raised 'streets.' It is now a popular address for Marseille's middle-class professionals. The *Unité* was designed as a prototype intended for mass production.

Convinced of the urgency to answer the question of how to house the greatest number, Le Corbusier designed and built ten apartment blocks for clients with varied social profiles – social housing, emergency housing, residences for students, and residences for the upper middle-class. He brought original thinking based on the idea that to achieve a successful collective apartment block, each individual cell had to be perfectly designed. His huge apartment block, *Unité d'habitation, Marseille*, built in 1945, was seen as the culmination of four decades of thinking and became a model that was copied around the world. Ultimately this form of mass housing was to gain a notoriety that was without precedent.

1946 *Manufacture à Saint-Dié, Saint-Dié, France*

The *Manufacture à Saint-Dié, Saint-Dié, France*, is the only factory to be built by Le Corbusier. He was invited in 1946 to design a new factory for a hosiery business, the old one having been partially destroyed in World War II. Completed in 1950, the factory was based entirely on modular lines. Consisting of three storeys raised on piles, it resembles externally an apartment block with windows shielded by sun-screens. The factory was designed as a 'green' factory where workers could experience 'harmony' as opposed to the unsatisfactory

working conditions of old 'black' factories. It is the only example of his work where the new building adjoins existing structures, in this case the remains of the old factory. The building is still in use as a textile factory. Windows and some structural elements are in need of restoration.

1949 *Maison du docteur Curutchet, La Plata, Argentina*

The *Maison du docteur Curutchet, La Plata, Argentina*, is set on a narrow plot on an avenue that forms one of the monumental axes of La Plata. The three-storey building, built in 1949, provided domestic space and consulting rooms for the doctor. The house demonstrates the five points and also includes curved walls, a ramp between the different levels of the two distinct blocks, and elements reflecting adaptation to the local environment such as *brise-soleil*. Le Corbusier did not visit the site and oversaw the work through letters. This created difficulties and towards the end of 1951, he was replaced by Simón Ungar, who completed the work introducing some modifications. The house was lived in for only a short time and then declined for almost thirty years. It was restored in 1987 and is now rented by the Order of Architects of the Province of Buenos Aires, which uses it for cultural events. It is open to visitors.

1950 *Chapelle Notre-Dame-du-Haut, Ronchamp, France*

The *Chapelle Notre-Dame-du-Haut, Ronchamp, France*, is quite unlike any other of Le Corbusier's work in terms of its sculptural quality – the billowing roof, inspired by a crab carapace, surmounting thick, curved walls pierced with tiny windows that bring patterns of light into the interior.

The enthusiasm of Le Corbusier for the dramatic site on Ronchamp hill, which had housed a church since at least the 13<sup>th</sup> century, and the freedom the commission gave him, all contributed to create the ideal conditions for his work, which combined all his talents as architect, painter, sculptor, and engineer. As well as the church, Le Corbusier also built two other low buildings, a house for the guardian, and a house for pilgrims which included a restaurant and two dormitories. The work was completed in 1950.

1951 *Maisons Jaoul, Neuilly-sur-Seine, France*

The *Maisons Jaoul, Neuilly-sur-Seine, France*, are two small family houses, built in 1951, adjoining at right-angles, with one fronting the street and entrances off a shared patio. Their accommodation is conventionally laid out with living rooms on the ground floor, and a garage below ground level. Three load-bearing brick walls support brick 'Catalan' vaults and concrete beams. The bricks and concrete beams are left exposed on the exterior, making these buildings an early example of Brutalist architecture of the 1950s. The houses were restored in 1991. They are privately owned and not open to the public.

1951 *Cabanon de Le Corbusier, Roquebrune-Cap-Martin, France*

The *Cabanon, Roquebrune-Cap-Martin, France*, is a very small cottage at the edge of the sea, extending to no more than 15m<sup>2</sup> and lit solely by two windows. Built in 1951, Le Corbusier used it for holidays. It was laid out to reflect the minimum standardised dwelling. Both the walls and the furniture were constructed of prefabricated pieces.

1953 *Couvent Sainte-Marie-de-la-Tourette, Evieux-sur-Arbresle, France*

The *Couvent Sainte-Marie-de-la-Tourette, Éveux-sur-Arbresle, France*, was inspired directly by Cistercian models. Sited on a steep slope, it has three above-ground storeys and two below ground, and provides a church and domestic buildings for the monastic community, including 104 cells.

1954–59 *National Museum of Western Art, Main Building, Tokyo, Japan*

The *National Museum of Western Art, Main Building, Tokyo, Japan*, was built in 1954–59 to house the Matsukata collection, 370 works of art restored to Japan after World War II. The two-storey building on piles has a flat roof, ramps between floors, and plenty of natural light. The Tokyo museum is one of three realisations of the concept of the 'museum of unlimited growth' (the other two are in Chandigarh and Ahmedabad, India) developed by Le Corbusier which featured growth portals where new wings could be added. It is the only one characterised by a spiral circulation route within a rectangular plan. To the west, set back from the main façade, was an auditorium building, part of Le Corbusier's designs but not realised until 1964–65. This has since been demolished, to be replaced in 1979 by a large new extension which wraps round the building to the north and west. A second extension has also been added. Neither is linked to the growth portals. The terrace, stairs, and forecourt have been largely reconstructed, but still maintain their original form and function.

A restoration programme for the museum is being developed.

1953–65 *Centre de récréation du corps et de l'esprit de Firminy-Vert, Firminy, France*

Le Corbusier was a friend of the Mayor of Firminy, a small industrial and mining town in the Loire valley. The Mayor developed plans to modernise the city through the creation of a new area of residences and parks. These plans were inspired by Le Corbusier's ideas but designed by other architects. The scheme was realised in part between 1953 and 1965 when the city was renamed Firminy-Vert to signal its move away from what had been called its 'black' past.

In the first nomination, the town planning elements were included. The revised nomination includes only the House of Culture, the Municipal Stadium, St. Peter's Church, a theatre and an outdoor swimming pool with

which Le Corbusier was involved to varying degrees. The House of Culture (1955–69) was designed and mainly built by Le Corbusier; the Municipal Stadium (1955–68) was designed by Le Corbusier and building started before his death in 1965 and was continued afterwards by his collaborators; the Church of Saint-Pierre (1960–65 and 1968–2006) was designed by Le Corbusier (only as sketches) and built entirely after his death by his successor; and the Swimming Pool (1966–69) was designed in the spirit of Le Corbusier by André Wogensky.

### **3 Outstanding Universal Value, integrity and authenticity**

#### **Comparative analysis**

The initial nomination proposed sites as exemplars of seven of the eight functional categories of Le Corbusier's work. Overall the series was said to reflect the way Le Corbusier provided, in terms of architecture and town planning, a complete and coherent answer of global dimensions to the challenges of the new world of the 20<sup>th</sup> century.

The revised material by contrast suggests that the slightly smaller series of sites is an exceptional contribution to the Modern Movement as it reflects the work of the principal founder of the Modern Movement, and represents the entire course of Le Corbusier's work.

It recognises that the formation of the Modern Movement is not the act of one man and involved a few dozen mainly European architects, of whom, the major figures include Alvar Aalto, Walter Gropius, Le Corbusier, Adolf Loos, Ludwig Mies van der Rohe and Frank Lloyd Wright. However, it suggests that the architectural work of Le Corbusier occupies a special place because it covers the different phases of development of this movement over fifty years.

The comparative analysis needs to determine first whether such a combination of value and attributes is already represented on the World Heritage List; and, if not, whether other comparable series might be nominated in the future. As a serial nomination, it also needs to justify the selection of sites.

#### **Comparison with inscribed sites**

The initial nomination only provided comparisons for individual sites under various typologies. The revised nomination does consider the idea of comparing the whole series with other properties whether on the World Heritage List or not.

The conclusion, however, is that the property covers three continents and six countries as Le Corbusier was the first architect to have reached this dimension in the history of mankind, and his output was without equal.

The analysis also compares aspects of the series such as standardisation and industrialisation. It suggests that

while Le Corbusier's approach in this area is substantially the same as that of his colleagues, the nominated series is characterised by obsession and renewed attempts (to overcome setbacks). Le Corbusier also aimed to define types of projects or standard buildings that might be replicated. It is suggested that neither of these facets is represented on the World Heritage List, where, particularly for the 20<sup>th</sup> century, inscriptions have reflected unique and singular sites, unrelated to their potential for reproduction over time.

Overall, it is suggested that the series has no comparators on the World Heritage List.

ICOMOS notes that while the ideas behind some of the nominated buildings were subject to replication, such as in the factory and apartment blocks, others were not, such as those associated with Ronchamp and some of his early work. Furthermore, the idea of replication or replicability has not been put forward as part of the nominated outstanding universal value.

ICOMOS also considers that there are similarities between the approach of Le Corbusier in defining standards that could be applied widely, and the work of the Bauhaus, which aimed to revolutionise architectural and aesthetic concepts and practices. Similarly, Mies van der Rohe's Tugendhat Villa was seen not just as an isolated creation, but was part of the overall Modern Movement and the diffusion of ideas on the use of industrial materials. It was not copied directly but it inspired other architects. Like Le Corbusier's buildings, it had a profound impact around the world.

ICOMOS considers that replication is only part of the overall influence of a building or series of buildings that needs to be considered in relation to its value. Many modern movement buildings were influential even though they were not directly copied.

The comparative analysis also compares the series to 33 properties on Tentative Lists. It suggests that the series is really comparable in nature, if not in the precise way it contributes to the Modern Movement, to the series on the work of Frank Lloyd Wright, currently on the US Tentative List.

The analysis also considers other individual sites reflecting the architectural heritage of the 20<sup>th</sup> century.

The revised nomination sets out in tabular form which of Le Corbusier's buildings were considered and which were rejected. The sites excluded were those considered not to be exceptional or to be lacking adequate protection, authenticity, or conservation. Thus of the two other museums of unlimited growth, the one in Ahmedabad, India, was seen to be exceptional, but not to have adequate protection. In its original evaluation, ICOMOS requested further comparisons between the museum in Japan and these two others but this has not been provided.

It can be questioned whether the works designed in Le Corbusier's formative years such as the villa Jeanneret-Perret (before he decided to call himself Le Corbusier) can be considered essential for the representation of his *overall work*. A further question arises at the other end of his professional career as to whether projects completed after his death, such as the Church of Saint-Pierre, part of Firminy-Vert, could be considered as essential for the series or not.

The comparative analysis demonstrates that there is room on the World Heritage List for sites that are exceptional representatives of the influence and creative genius of the Modern Movement. However it does not justify how the series of 19 sites by Le Corbusier can be seen as a unique testimony to the Modern Movement rather than a smaller number of his individual buildings, considered one by one, or by buildings from other architects. Nor does it fully justify how the series can be seen to demonstrate that the entire course of Le Corbusier's work is somehow exceptional over and above the exceptional influence that a few of his buildings had individually.

ICOMOS considers that the comparative analysis suggests that there are three buildings within the nominated series that stand out as being incomparable: the *Unité d'habitation*, Marseille, the *Villa Savoye*, and the *Ronchamp chapel*.

- The *Unité d'habitation*, Marseille as a manifestation of concept, was – for better or worse – hugely influential in shaping apartments in towns and cities around the world.
- The iconic Purist *Villa Savoye*, although not directly copied, was nevertheless a piece of architecture that came to be seen as inspirational in the same way as Mies van der Rohe's Tugendhat Villa.
- The *Ronchamp chapel* can only be described as outstanding as a sculptural piece of architecture that achieved a dynamic synthesis between art, architecture, and landscape. It has no parallel, but it did prove inspirational in encouraging other Modern Movement architects to design religious buildings.

The National Museum of Western Art, Tokyo, is said to have been hugely inspirational in terms of impact on Japanese post-war architectural development. However, in the revised nomination dossier, no further material has been presented for this site to demonstrate its influence beyond Japan or to show more detailed comparisons with the two museums in India designed by Le Corbusier.

---

ICOMOS considers that the comparative analysis does not justify consideration of this serial property for the World Heritage List, but does justify consideration of three individual buildings as reflecting different aspects of the influence of the Modern Movement.

---

### **Justification of Outstanding Universal Value**

According to the States Parties, the 19 nominated sites illustrate the profound transformation of contemporary architecture and the architectural profession in the twentieth century. They belong to the same historico-cultural group, the Movement Modern, which was avant-garde in the first three decades of the twentieth century, before establishing itself as the dominant architecture of the second half of the century.

The architectural work of Le Corbusier is directly associated with this revolution of ideas, in terms of shapes, spaces and technology, which has had an outstanding universal influence that is still felt today.

Almost all of the sites:

- Attest to the ability of Le Corbusier to invent a new aesthetic and a new architectural language;
- Reflect research and innovation including the use of colour and technical innovation;
- Are innovative and radical proposals to meet the challenges of standardization, and building industrialization;
- Reflect the issue of housing rights as a fundamental social issue of contemporary society;
- Ensure balance between people and the community;
- Illustrate the exceptional Utopia of the Modern Movement in terms of improving the human condition.

ICOMOS notes that this Justification is not quite the same as stated on other parts of the dossier which is related to the way the individual sites in the series are chosen to reflect "a unique contribution to the Modern Movement's values and to represent the entire course of the architect's work", nor is it totally consistent with the proposed justification for the criteria.

ICOMOS considers that the Justification is very general in terms of associating the series with various facets of the Modern Movement in general and could be applied to the work of other architects of the Modern Movement: it is not specific to this series.

### **Integrity and authenticity**

#### **Integrity**

As a world-wide serial nomination, integrity refers to whether the component parts of the nomination sufficiently cover the attributes needed to demonstrate the outstanding universal value suggested by the States Parties. Integrity thus relates to the ability of the 19 selected sites to represent not the 'whole of Le Corbusier's creative work', as in the first nomination, but 'a unique contribution to the Modern Movement's values and to represent the entire course of the architect's work'.

The overall conceptual interpretation needs examination to see how far this has been achieved.

ICOMOS considers that the significance of the sites that are included in the series is highly variable in terms of their contribution to 20<sup>th</sup> century architecture, and in comparison with works by Le Corbusier that are not included in the nomination, and with the works of other Modern Movement architects.

Although the nomination sets out to represent the milestones in the chronological development of Le Corbusier's architectural work, it omits what might be considered significant buildings designed by Le Corbusier, such as the Centrosoyuz office building in Moscow and his work in countries such as India, the USA, and Tunisia.

The States Parties have suggested that the serial nomination could be extended in the future to cover more of the architect's buildings. This raises questions about the existing selection of the series, and ultimately, how many buildings might be needed to 'represent' the creativity and influence of one architect.

Given the large number of sites that could ultimately be included, and the precedent that this might create for future nominations, ICOMOS considers that the choice of sites should be much more selective, and provided strong advice to the World Heritage Committee in this respect when the original series was evaluated. This is further discussed under *Comparative analysis* above.

ICOMOS considers that the integrity of the series as a whole has not been demonstrated because the selection of sites does not sufficiently support the justification of the outstanding universal value of the series as proposed by the States Parties in response to the World Heritage Committee's earlier decision.

First, if the series were adequately to reflect the contributions to the Modern Movement it would need to include the work of other notable architects who equally played fundamental parts in this movement.

Further, ICOMOS notes that the Modern Movement spanned at least half a century and many countries, and considers that the nomination does not adequately explain why such an important movement should be represented on the World Heritage List by a single serial nomination of the works of one architect.

Second, ICOMOS considers the objective of reflecting the entire course of an architect's work to be problematic within the context of the World Heritage List and its threshold of Outstanding Universal Value (as discussed below). However, even if this approach was to be supported, the series would need to include other work of Le Corbusier, such as those associated with his urban planning.

There appears to be a fundamental incompatibility between the two justifications put forward: how the series can represent a unique contribution to the achievements of the Modern Movement (and thus be an

outstanding contribution to it) while at the same time demonstrating how Le Corbusier evolved as an architect.

#### Integrity of specific sites

For each individual site, integrity relates to the completeness and coherence of sites in relation to their ability to display their contribution to the nominated value. For most of the sites that comprise the nominated series, the integrity is good. The sites where there is some loss of integrity are as follows:

*La Tourette Monastery*: not all attributes significant for expressing the value of the property have been included in the property boundary, such as the monastic cemetery (in the south-west direction), the main entrance alley, and the planning axis (Allée Cavalière).

*Cité Frugès, Pessac*: new buildings on the site of three destroyed standardised houses by Le Corbusier within the nominated property are inconsistent with the architect's concepts. In the revised nomination it is stated that one of them has already been bought by the municipality, and the other two are in an area of pre-emption. The goal is for these three houses to be bought and for them to be managed to 'enhance the authenticity and integrity of the City'.

*Villa Savoye* and the adjacent gardener's house: integrity is partly compromised by the Lycée and sports fields built on three sides of the original meadow that surrounded the villa in the 1950s. High trees form a visual barrier between the Lycée to the west and the villa, but the upper parts of the new building are visible from the terrace of the villa. A sports field now lies immediately behind the villa on the side facing the River Seine.

Identifying common values between the nominated sites in terms of their association with Le Corbusier's ideas has in a few instances meant that the full values of the sites are not reflected. This is the case for *Ronchamp*, where Le Corbusier's structure overlaid a centuries-old pilgrimage site. The integrity of the site relates to a wider area than the one nominated and should take in the pilgrim path and gate. A major project for a new visitor centre and nunnery near the chapel (see below) presents risks to the integrity of the site through irreversible interventions that could impact on the values of the site (including its spiritual value).

*National Museum of Western Art, Main Building, Tokyo, Japan*: There is insufficient clarity about how development of the land to the east of the NMWA will be managed and this presents a risk to the site's integrity.

Integrity of context and setting is an issue for the *Maisons de la Weissenhof-Siedlung, Stuttgart*. Owing to war-time destruction and post-war reconstruction, the collective integrity of the model settlement is affected by the loss of ten houses out of twenty-one.

There is an overall need to provide much stronger management for the settings of many of the properties in order to ensure high buildings or other new constructions do not impact adversely on the setting.

---

ICOMOS considers that the integrity of the whole series has not been justified; and that the integrity of the individual sites that comprise the series is good in most cases, but with some losses and vulnerability.

---

#### Authenticity

Authenticity of the whole serial property relates to the ability of the sites as a group to convey the outstanding universal value as nominated. Authenticity of the individual sites relates to their ability to exhibit their initial design and conception in terms of their built form, setting, and use in relation to the overall outstanding universal value.

The key issue is how far the series as a whole can be said to convey a unique contribution to the Modern Movement's values, by its principal founder, and represent the entire course of Le Corbusier's work'. As set out above under *Comparative analysis*, the series includes some buildings that individually might be seen as outstanding examples of the Modern Movement but each of these reflects different aspects of that movement. What is not clear is how these buildings along with the others nominated can be said to convey a 'unique contribution' to the movement – as this contribution is not defined in a way that allows understanding of how each of the sites contributes.

The series as a whole does not appear to demonstrate more than the individual contributions of the most significant buildings do on their own. Moreover the series does not clearly show how Le Corbusier was the 'principal founder' of the Modern Movement, as the series spans his whole life's work and it has not been shown how he kept the initiative, over and above other architects, throughout his whole life.

In terms of whether the series represents the entire course of Le Corbusier's work, the series contain some milestones in the development of the architect's work, but not all, and some works of genius, for which he has come to be known the world over. However the series by no means conveys the whole picture of Le Corbusier's work as it excludes his urban planning work and what are seen as seminal buildings in the Russian Federation and other countries.

Furthermore many of the architectural works attributed to Le Corbusier are the result of collaboration with others, (in addition to his cousin and practice partner Pierre Jeanneret), who were often involved as supervisors on the construction site. In other cases the buildings were significantly modified from their original designs, either at the time they were built or later. For example, in the case of the Weissenhof-Siedlung at Stuttgart, Le Corbusier's contribution was only one in an essentially collective

demonstration of the New Building or Modern Movement in architecture in which fifteen other architects played an equally important role in the other related buildings. Other examples of this problem are discussed below.

Because the series is comprised of some works of undisputed 'genius', together with lesser works and works that involved other architects,; and because the selection omits other buildings that could be considered more favourably (in countries not presently involved in the transnational cooperation), and some entire facets of Le Corbusier's work, ICOMOS considers that the authenticity of the series as presented by the States Parties in the revised material submitted in 2011 is problematic in relation to how they convey the entire course of Le Corbusier's work.

ICOMOS also considers that the series is problematic in terms of how it might be seen to convey a unique contribution to the Modern Movement that is greater than the individual contributions of the three most outstanding buildings.

#### Authenticity of individual sites

For each individual site, authenticity relates to how well the attributes of the site can be said to reflect the overall outstanding universal value of the series. For most of the sites, the authenticity is good. The sites where there is some problem with authenticity are the following.

In the case of *Firminy-Vert*, of the three nominated buildings within the town, only one, the House of Culture, was designed and mainly built by the architect.

In terms of reflecting the entire course of Le Corbusier's work, authenticity is also an issue for those individual houses where there was significant input from others such as *Maison du docteur Curutchet*, or where the original designs were significantly modified either when they were built or subsequently, such as the *Cité Frugès*.

A third problematic category is the buildings substantially built or substantially altered after the architect's death. For example, the *Church of Saint-Pierre* has a long and complicated building history and there is insufficient documentary evidence for the authorship and clear attribution of this structure to Le Corbusier's work.

The issue of authenticity for the plan and structure of some individual buildings is also problematic, because many have been restored and partly reconstructed in recent years, after previous stages of neglect or disfigurement. In some cases changes have been reversed, in other cases they have not. However, comparing the nominated houses to other inscribed 20<sup>th</sup> century houses (the Masters' houses of Kandinsky/Klee at Dessau (Germany), the Villa Tugendhat at Brno (Czech Republic), Rietveld Schröder House in Utrecht (The Netherlands)) reveals that these also share the partly diminished levels of authenticity.

Although many of the nominated sites are still used for their original purposes (contributing positively to their authenticity), in some cases, such long-term use can exert an impact on interior details and lead to more fundamental changes.

Authenticity of materials is an issue raised in the nomination dossier. Modern architecture is technically difficult to maintain in terms of some specific details, such as single glass panes in finely profiled steel frames, which can be susceptible to steel corrosion or the cracking of large sheets of glass. New windows have been inserted in many of the buildings (often with double-glazed panes and sometimes new profiles) although most of these are close to the original details. The exterior cladding of many of the buildings has caused problems of moisture and dampness, and, in some instances, such as *Maison Guiette*, the new surface is finished with white plaster which is slightly different from the original. The *Villa Savoye* suffered a roof collapse because of structural problems and modifications had to be made to keep the overall form.

In a number of buildings, evidence for their original exterior colours is lacking, such as the *Villa Savoye*.

In the case of the *Immeuble Clarté*, Geneva, the building is currently undergoing restoration to repair defective details and to reverse previous damaging interventions. Uncertainty about the details and final appearance, in particular the original transparency of the elongated window strips that provided the name Clarté, hinders a final judgment about authenticity of the exterior.

---

ICOMOS considers that the authenticity of the overall series has not been fully demonstrated, and that while significant challenges have been identified by the States Parties, the authenticity has been demonstrated for most of the individual sites.

---

ICOMOS considers that the conditions of integrity and authenticity for the series have not been fully justified; and for individual sites, the conditions of authenticity and integrity have been partly met.

---

#### **Criteria under which inscription is proposed**

The property as a whole is nominated on the basis of cultural criteria (i), (ii), and (vi).

*Criterion (i): represent a masterpiece of human creative genius;*

This criterion is justified by the States Parties on the grounds that the architectural work of Le Corbusier, is a masterpiece of human creative genius because he demonstrates its ability to transcend reality, to deny precedents, and to liberate artistic conventions from several centuries of creation.

It is a work of research and innovation. It marks a break with architecture styles of previous centuries. Although it belongs to the Modern Movement with its innovative

forms that will revolutionize architectural forms, the architectural work of Le Corbusier is a unique creation.

ICOMOS considers that criterion (i) must be applied to sites not people. However innovative Le Corbusier's ideas undoubtedly were, in World Heritage terms they need to be judged by how they are manifest in sites, and whether these individually or collectively can be said to be works of genius.

ICOMOS considers that some of the sites that comprise the nominated series, such as the *Villa Savoye* and *Ronchamp*, justify criterion (i) as works of creative genius, but hesitates to consider that the wide range of buildings nominated can collectively manifest this creativity to the same required level. Criterion (i) is generally used sparingly for those properties that undoubtedly manifest themselves as being masterpieces of human creative genius. ICOMOS does not consider that the application of Le Corbusier's principles across such a wide canvas can be said to deliver in all the nominated properties outstanding creativity.

---

ICOMOS considers that this criterion has not been justified for the whole series but could be individually justified for two parts.

---

*Criterion (ii): exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town planning or landscape design;*

This criterion is justified by the States Parties on the grounds that the architectural work of Le Corbusier was the source of considerable interchanges of influences across the globe for half a century. It made an outstanding contribution to the way the Modern Movement met the major challenges of the twentieth century such as through the invention of a new architectural language, standardization and industrialization of buildings, housing for a modern society, and the balance between the rights of private spaces and technology placed at the service of society in the process of globalization. Through projects, writings and lectures, Le Corbusier became the spokesperson for this new architecture, its achievements and for the transmission around the world of utopian ideas to reform society through architecture.

ICOMOS considers that it is the property that needs to manifest the interchange of ideas rather than the architect. Le Corbusier was undoubtedly one of the key figures of the Modern Movement and probably its most influential spokesperson, although his was not the only voice. Within the framework of the World Heritage Convention, the key issue is how his buildings demonstrate these ideas in an exceptional way and reflect the way that the ideas have since been adopted around the world.



ICOMOS considers that some of Le Corbusier's key buildings could justify this criterion individually, as exemplifying in an exceptional way the key aspects of his work that had the most lasting influence. These are the Villa Savoye and the Unité d'habitation, Marseille. The National Museum of Western Art in Japan might also have the potential to demonstrate substantial influence, although the submitted material has yet to demonstrate this adequately (as discussed in *Comparative Analysis*).

ICOMOS does not consider that all 19 nominated sites, and possible others that might be nominated later, can be said to demonstrate as a series an outstanding interchange of ideas, as they cannot as a group be seen as demonstrating the Modern Movement in an exceptional way. The buildings are interesting essays that allow us to understand the architect and how his thinking developed, but they cannot be said as a series to have reached the threshold of exceptionality required for inclusion in the World Heritage List,

---

ICOMOS considers that this criterion has not been justified for the whole series, but could be individually justified for two sites and possibly a third.

---

*Criterion (vi): be directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance;*

This criterion is justified by the States Parties on the grounds that the architectural work of Le Corbusier is an essential contribution to the Modern Movement, whose ideas and achievements have outstanding universal significance. The property embodies a new spirit that reflects the intersection of architecture, painting, and sculpture. The transnational series gives built form to the revolutionary proposals of the International Congresses of Modern Architecture (CIAM), as well as the ideas of Le Corbusier himself through his many books, read worldwide, and his extensive travels and lectures around the globe.

ICOMOS notes the CIAM, held in Switzerland in 1928 – later than four of the buildings in this series – was over the years it existed until 1959 highly influential. However this influence stemmed not just from Le Corbusier's ideas but from the collective thoughts of many of the notable names of the Modern Movement, and its influence covered not just architecture but also urban planning.

ICOMOS considers that the Modern Movement, through the work of CIAM and in many other ways did promote ideas of universal significance. Le Corbusier's ideas, alongside those of other proponents of the Modern Movement, contributed to that global spread of ideas. The key issue is how far this influence was generated by his writings or by his buildings, and which buildings manifest and demonstrate that influence to an outstanding degree.

ICOMOS considers that the Villa Savoye and the Unité d'habitation, Marseille, and possibly the National Museum of Western Art manifest Le Corbusier's fundamental thoughts or ideas that became most widespread to an outstanding level. The remaining sites can be perceived as some of the stepping stones on the way (some of his early houses), or incomplete creations (buildings completed by others after his death or his only partly realised town planning schemes), or, in the case of Ronchamp, a spectacular individual buildings that paid respect to the Modern Movement but was not part of the mainstream.

---

ICOMOS considers that this criterion has not been justified for the whole series but could be justified for two parts and possibly a third.

---

---

ICOMOS considers that the serial approach and the selection of the series have not been justified.

---

---

ICOMOS does not consider that the criteria and the Outstanding Universal Value have been demonstrated for the series at this stage.

---

#### **4 Factors affecting the property**

There are no generic factors facing all elements of the nomination. The factors are specific to individual sites.

As ICOMOS has not been able to undertake missions to the sites, following the submission of the revised nomination in 2011, it has not been able to update fully this section.

In the revised dossier, it is stated that at five sites - Cabanon, Maison Guiette, Villa Savoye, Molitor and Ronchamp - there are projects in the sites or their settings, which could have an impact on their integrity, but that these were the subject of studies, dialogue, debate, or interventions that have reduced considerably, or even eliminated, any negative impact.

##### **Development pressures**

In the first evaluation, it was noted that the most substantial and imminent proposed development was at *Ronchamp* where there are designs by the architect Renzo Piano for two major projects constructed within the Boulémont hill on which the Chapelle Notre-Dame-du-Haut stands, and thus within the nominated site. These will provide a new entrance facility with auditorium/exhibition space, a new nunnery for nine nuns, and an oratory for thirty people at the western edge of the hill. There will also be a new paved road for cars. These projects are commissioned by the proprietor association with the aim of improving the reception facilities for visitors and reinforcing the spiritual atmosphere around the whole site by providing accommodation for pilgrims.

Currently the site is only equipped with very basic facilities, and proceeding on foot uphill towards the chapel is part of the spiritual experience, taking in the scenic qualities of the place and the overwhelming effect of Le Corbusier's creation.

The revised dossier explains how the owners of Ronchamp sold part of the site the Association of Friends of St. Colette, owners of the Monastery of St. Claire Besançon, in order to develop the nunnery. Although two of the new structures will be invisible, constructed into the hill, they do come to within 60 meters of the chapel.

Large new buildings in such close proximity, even if they are subterranean to a considerable extent and designed by a distinguished architect, will create a tension with the delicate atmosphere of the Chapel and its surroundings simply because of their presence and the activities that will take place there. The architectural language of the proposed units is defined by orthogonality, repetition, flat roofs, and a combination of steel, glass, zinc, and wood.

There have been many objections to the scheme, including from the Corbusier Foundation, on the grounds that there is not room on this sensitive site for more than one architectural statement, that the interventions will be 'felt' even if not seen, and that the proposed structures should be located much further away from the Chapel.

In the first evaluation, ICOMOS considered that modified plans, although scaled down from the original, and with some vertical elements removed, would still impact adversely on the integrity of the site, and that the proposed buildings need to be at a greater distance away from the Chapel than is currently projected. ICOMOS communicated these continuing concerns about the proposal to the State Party in a letter sent on 19 December 2008.

The proposals were given permission in March 2008 and in the original dossier it was said that this permission remains valid for two years. The plans were also said to have been approved by the French Ministry of Culture on 5 February 2009. In the revised dossier it is stated that the new constructions are part of the 'programme Ronchamp 2008-2010' – but the status of the project was not made clear.

However, press reports and photographs show clearly that the project is under construction. ICOMOS considers that this is greatly regrettable.

In the original evaluation it was noted that at the *Villa Savoye, Poissy, France*, an extension of the A104 road to connect Roissy and Saint-Quentin-en-Yvelines will pass within 800m of the Villa, in a small valley to the west, before crossing the Seine to the north-west by a 800m viaduct. An impact assessment has concluded that there should be no visual impact on the villa, or on views from the villa which look more towards the Plaine de Carrières than the Vallée de Villennes where the viaduct will be sited.

In the original evaluation, it was stated that a new visitor reception building is being considered for the villa but it is acknowledged that it could be difficult to construct a new building without creating a 'tension' with the work of Le Corbusier. In the revised dossier it is stated that work on a new building of around 500 sq metres is still being planned in order to allow all the rooms in the Villa and gardener's House to be viewed by the public. No details are provided as to where this might be sited.

ICOMOS considers that such a project needs to be considered in principle before the design stage, as the surroundings of the villa have already been compromised by a lycée and a sports field.

In the first evaluation it was stated that a sports stadium located opposite the *Pavillon Suisse à la Cité universitaire, Paris, France*, that existed in 1925 is to be completely redeveloped to double the number of spectators to 20,000. The demolition of the current installations was planned for the end of 2009. It was stated that the setting of the *Pavillon* will be respected in terms of the height of the new building and uses of the spaces at ground level. No further information has been provided, although it is stated that the site is not under any development threat. A new Master Plan has been prepared for the site that is integrated into the local PLU Paris plan.

In the first evaluation it was stated that at the *Maison Guiette, Antwerp, Belgium*, there are proposals for the extension of a tram line and associated park and ride car park and access road. This will impact on the park next to the house. A study is being undertaken to minimise the impacts. In the revised nomination it is stated that this will go ahead and that the tram will impact on the side and front of the house.

In the first evaluation it was stated that the principal threat to the *Maison du docteur Curutchet, La Plata, Argentina*, is the pressure of the dynamic urban context. Many of traditional houses have been replaced with new high buildings, especially downtown. A further danger is the lack of engaged owners. The Curutchet descendants are the owners of the house, but they seem to lack a strong awareness or interest in the building's heritage significance. The present tenant, the Association of Architects of Buenos Aires Province, rents the house for two years at a time and thus has no security of tenure and is not encouraged to maintain the building.

Although there are no immediate risks to the *Petite Villa au bord du lac Léman, Corseaux, Switzerland*, the site could be threatened by future development in the vicinity.

In the first evaluation it was stated that there was a risk that there will be insufficient money to complete the full restoration of *Le condominium Clarté, Geneva*, and there are concerns about the forced sale of some units (partly forced by bankruptcy), without any conservation

constraints being in place. In the revised dossier it is stated that the restoration has been completed.

#### Tourism pressures

The existence of architectural guidebooks, websites, and guided tours indicate that there is already great professional, educational, and tourist interest in visiting the architectural achievements of Le Corbusier. The numbers of visitors are increasing, but the tourism pressure varies from site to site. This depends on the accessibility of the interiors for the general public, and not all properties are open to visitors, and some only very occasionally. For instance, the Maisons Jaoul are only open on Monuments Day.

Public buildings are the Villa Savoye (open to the public since 1997), the apartment of Le Corbusier and the Maisons La Roche and Jeanneret, both owned by the Le Corbusier Foundation. The Pavillon Suisse is also open daily and the interiors that can be visited are the entrance hall, the salon, and the studio preserved in its original state.

There is a need for the number of visitors to be monitored and managed and for there to be shared approaches to the servicing of visitors, as part of the overall management system. At the Villa Savoye the increase in visitor numbers has meant that certain parts of the house have to be repainted more frequently. Some type of visitor control is needed and a need for a new building to help with this process has been identified, although its siting is problematic.

Currently, tourism management seems to be a matter for individual sites. At Ronchamp there is clearly a view that the community could benefit from increased numbers of visitors, but there is not yet in place a plan for sustainable conservation of the whole site in combination with spatial and infrastructural development, and the promotion of cultural tourism.

There is a need for a visitor management plan to be included in the overall comprehensive management plan for the whole property (which is still to be prepared) to address issues of access and visitor management.

#### Environmental pressures

No adverse environmental factors have been identified.

#### Impact of climate change

No implications of climate change have been identified.

---

ICOMOS considers that the main threats to the property are development pressures. There is currently no overall coordinated response to these types of pressures across the property – see below.

---

## 5 Protection, conservation and management

### Boundaries of the nominated property and buffer zone

#### France

In the first dossier, generally speaking, the boundaries of each of the nominated sites in France followed those of existing protected zones or areas. Each of the six nominated sites had buffer zones. These were of two types:

- a. Boundaries defined by 500m zone(s) of protection around designated Historic Monument(s): l'Unité d'habitation, Marseille; Cabanon de Le Corbusier; Monastery of Sainte-Marie-de-la-Tourette; Ronchamp Chapel; Maisons La Roche et Jeanneret; Villa Savoye, Maison Cook, Maisons Jaoul, and Saint-Dié Manufacture.
- b. Boundaries of the buffer zone defined on the basis of ZPPAUP protection zone (*Zone de protection du patrimoine architectural, urbain et paysager*): Firminy-Vert, Cité Frugès.

The first type does not respect topography and is in places inflexible as a means of protection, cutting across buildings, road networks, parks, etc. The second type of buffer zone is drawn in relation to the topography and other features of the environment in which each site is located.

ICOMOS considered that it would be very desirable to establish ZPPAUP protection for all sites.

In the revised dossier, some properties have been provided with extended buffer zones defined to reflect their protection needs, these are Villa Savoye, Pavilion Suisse, Maisons La Roche et Jeanneret L'Unité d'habitation, Marseille, Cabanon de Le Corbusier, Maisons, Jaoul (although for limited extent between 4 and 12 metres), Pavilion Suisse, Immeuble locatif à la Porte Molitor, Manufacture a Saint-Dié, Ronchamp Chapel, and Monastery of Sainte-Marie-de-la-Tourette.

However within these enlarged buffer zones, national protection only extends to the 500m perimeter. Beyond that the buffer zones are protected by planning mechanisms in local plans. In the case of Villa Savoye, the buffer zone is currently partly protected by a 500m zone and partly by a ZPPAUP protection zone and there are proposals to extend the latter.

Only Maisons Jaoul now has a 500m zone of protection.

In the revised nomination the boundary of Firminy-Vert has been reduced and now only includes buildings in the central zone (*Centre civique*) with the Stadium, House of Culture, and Church of Saint-Pierre, and excludes the zone of the Unité d'habitation. The central zone corresponds to the initial Le Corbusier project.

The site of the *Manufacture à Saint-Dié* includes all elements related to the value of this industrial property, including several old industrial buildings, although these are not protected and their status is therefore unclear. ICOMOS considers that the extent of the boundaries is satisfactory.

The *Cité Frugès* includes 51 elements of four different types of standardised housing, but also three buildings that have been redeveloped and have nothing in common with the architect's principles. ICOMOS considers that, as this site is proposed to reflect housing rather than urban planning, the boundaries could be altered to exclude buildings not associated with Le Corbusier.

The nominated area of the *Villa Savoye and gardener House* covers the plot of land on which the two buildings stand (1038ha) and a 500m buffer zone. In the revised dossier, it is stated that a modification of the buffer zone beyond the 500m has been put in place that extends across the river, in order to create better protection for views from the property – such as might allow the restoration of views towards the Seine. This addresses concerns by ICOMOS in the first evaluation.

#### Switzerland

In the original dossier, the three sites in Switzerland all had buffer zones of 100m radius and are given national protection as the settings of protected monuments. These did not respect local topography. In the revised dossier, extended buffer zones have been delineated to take account of the points made by ICOMOS in the original evaluation. Beyond the 100m radius, the revised buffer zones have local protection.

#### Belgium

In the original dossier, ICOMOS considered that the circular buffer zone around the *Maison Guiette* with a radius of 100m should be reconfigured. The revised dossier shows an enlarged buffer zone but the protection given to this extended area is not set out.

#### Germany

ICOMOS considers that the boundaries of the *Maisons de la Weissenhof-Siedlung* and their buffer zone are well considered and clearly defined. This zoning has proven to be effective for the control of development on the former *Messe* site opposite the *Weissenhof-Siedlung*.

#### Argentina

The boundary of *Maison du docteur Curutchet* only includes the house and not the adjoining buildings. In the original dossier, ICOMOS considered that the buffer should be amended to consider views to and from the house to the park and avenues which were part of the concept for the house. This has been proposed in the revised dossier and has been given specific local protection in a law of 2009.

#### Japan

In the original nomination dossier for the *National Museum of Western Art, Main Building, Tokyo*, the nominated site was only the building and not its adjoining terrace, stairs, and forecourt, which have been reconstructed. In the revised nomination dossier, the site has been extended to include these and thus respect the whole ensemble.

In the revised dossier it is stated that the buffer zone has been established on the basis of visual analysis and it is protected by planning regulations. The buffer zone is however the same as in the first dossier and extends to the north, west and south of the site, but only a short way to the east, where potential development, such as at the Ueno Railway station, could impact on the property. This area to the east is subject to agreement to preserve a quality environment between the State Agency for Cultural Affairs, the Metropolitan District of Tokyo, Taito-ku district of the company and JR East (East Japan Railway Company), and guidance and advice has been provided.

The visual analysis from three viewpoints is incorporated as an annex of the revised dossier. No analysis is provided of the important inward views to the site from the park entry near the station. There is still a lack of clarity about how development of the land to the east of the site will be managed and thus there is a risk to the integrity of the nominated site.

---

ICOMOS considers that the boundaries and buffer zones are adequate for most of the properties but the setting to the east of the *Museum of Western Art, Main Building, Tokyo*, needs strengthening and the buffer zone of *Maisons Jaoul* (currently a 500m zone of protection) should be reconsidered to relate to the topography of its setting.

---

#### Ownership

Most of the nominated properties are privately owned. Three belong to the Foundation Le Corbusier (*Maisons La Roche* and *Jeanneret* in Paris, *House on Lake Geneva*, *Le Corbusier's apartment in Paris*).

The *Villa Savoye* at Poissy, the *Weissenhof* houses in Stuttgart, the *Cabanon* at Roquebrune, the *Museum* in Tokyo, and elements of the site at Firminy belong to the respective States Parties or to public authorities.

#### Protection

##### Legal Protection

##### France

As set out above under boundaries, where the buffer zones have been extended they have a combination of national and local protection.

The *Maisons La Roche and Jeanneret* are both protected according to the Historic Monuments Act

(*classement*), including the exterior and interiors. The national protection includes a buffer zone of 500m.

The *Villa Savoye and gardener House* are both protected according to the Historic Monuments Act (*classement*), including the exteriors and interiors. The national protection includes the surrounding garden and a buffer zone of 500m. The areas facing the River Seine are protected as Sites et Monuments Naturels by the decision of the Ministry of Environment.

The exteriors of the two *Maisons Jaoul*, including the facades and the roof, are protected according to the Historic Monuments Act (*inscrit*). The protection includes a buffer zone of 500m. The interiors are not protected, but it is indicated that inscription would provide the opportunity to extend protection to the interiors.

The *Pavillon Suisse à la Cité Universitaire* is protected according to the Historic Monuments Act (*classement*). The national protection includes a buffer zone of 500m. The Cité Universitaire is also a protected site.

The exterior (facade and roof) and the public spaces of the *Immeuble locatif à la Porte Molitor-Appartement Le Corbusier* are protected according to the Historic Monuments Act (*inscrit*). The apartment of Le Corbusier is protected (*classement*). The protection includes a buffer zone of 500m. It is indicated that protection of the interior will be considered.

The *Unité d'habitation, Marseille*, is protected according to the Historic Monuments Act (*classement*) for the facade, upper terrace, and entrance porch, parts of the inner communications, entrance hall, elevators' lobby, and apartments 643 and 50 (with its total original design and buffer zone).

The *Cabanon de Le Corbusier, Roquebrune Cap-Martin*, is protected according to the Historic Monuments Act (*classement*) for the nominated property and buffer zone.

*Firminy-Vert* is protected according to the Historic Monuments Act (*classement*), including the House of Culture and Stadium, and the Church of Saint-Pierre.

The *Monastery of Sainte-Marie-de-la-Tourette* is protected according to the Historic Monuments Act (*classement*). The land surrounding the monastery is only nationally protected up to the 500m zone of protection.

The *Manufacture à Saint-Dié* is protected according to the Historic Monuments Act (*classement*), including the facades, upper terrace including structural concrete elements, the office, and the buffer zone.

The *Cité Frugès, Pessac*, is protected according to the Historic Monuments Act (*classement*). Ten individual buildings are being considered for protection.

At *Ronchamp*, the *Chapelle Notre-Dame-du-Haut*, the pilgrims' house and concrete tables, chaplain's house, commemorative pyramid, cave, and campanile are all listed and nationally protected as historic monuments. Each of the monuments is surrounded by a 500m zone of national protection which acts as the buffer zone. No indication has been provided of specific land-use plans (or other measures of spatial/environmental planning) existing or envisaged, that reinforce the protection of visual, functional, cultural, historical, and scenic relations between the hill and the key sites for pilgrimage, or the surrounding panorama of the 'four horizons'.

In general it is recommended for all the nominated sites in France that the monuments now registered only as *inscrit* should be protected as *classé* in order to provide protection for interiors as well as exteriors.

#### Switzerland

The *Villa Jeanneret-Perret*, with its garden and interior, is protected as a historic monument under the Cantonal law of Neuchâtel. The property is also protected under the Federal law on the protection of nature and landscape.

The *Petite Villa au bord du lac Léman*, with its garden and interior, is protected as a historic monument under the Cantonal law of Vaud and is also protected under the Federal law on the protection of nature and landscape.

The *Condominium Clarté, Geneva*, is protected as a historic monument under the Cantonal law of Geneva and also the Cantonal law on the protection of nature and landscape. In the revised nomination dossier the property it is stated that the property is also now protected by Federal law.

#### Belgium

The *Maison Guiette* is protected as a historic monument and monitored by the administration of the Flemish Community, both for its exterior and its interior.

#### Germany

The *Weissenhof-Siedlung, Stuttgart*, are protected as historic monuments of special value and as parts of an ensemble (*Sachgesamtheit*) of special value, together with the eleven other remaining houses of the Weissenhof-Siedlung, under the law of Baden-Württemberg. At the local level, a protective land-use plan controls spatial and functional developments in the settlement in such a way that the special site values (buildings, views, green, etc.) will remain recognisable or reinforced.

#### Argentina

*Maison du Docteur Curutchet* is protected as a National Monument. Only part of the buffer zone is protected as a national monument. As set out above, the rest of the buffer zone has local protection.

#### Japan

The *National Museum of Modern Art, Main Building, Tokyo*, is protected as an Important Cultural Property,

Class A. Procedures have been initiated under the Law of Cultural Property to extend this protection to cover the enlarged site (to include terrace, stairs, and forecourt). This was confirmed in the revised nomination dossier. The buffer zone is mainly protected as 'park' under urban design legislation. There is an absence of clarity about how development of the land to the east of the Museum will be protected and managed.

#### Effectiveness of protection measures

Given the importance of detail and setting for these 20<sup>th</sup> century buildings, it is crucial that their protection should be sufficiently encompassing and sensitive to allow for protection of interiors, exteriors, context and setting. In only a few cases does ICOMOS consider that this complete protection is in place.

---

ICOMOS considers that the protective measures for the property are adequate.

---

### Conservation

#### Inventories, recording, research

The work of Le Corbusier has been a subject of university research and scientific publications over more than half a century.

The personal archives of Le Corbusier (35,000 plans and 500,000 written documents, in addition to thousands of photographs) are an exceptionally useful source. The Bibliothèque de la Ville de La Chaux-de-Fonds holds papers relating to the early work of the architect – before 1917, while the Foundation mostly holds documents for after 1917.

#### Present state of conservation

Site visits during ICOMOS evaluation missions in 2008 revealed some conservation problems related to corroded or rotten window frames; water penetration of roof terraces (especially in Saint-Dié, La Tourette); and some problems of control over interior residential spaces; and management of service infrastructure. However, in all cases these issues are being addressed or are part of future plans.

The state of conservation varies from site to site, but is generally fair to good for those with recent restorations that are all documented. Sites undergoing restoration are the Condominium Clarté and the Maison La Roche; sites with planned restoration are the gardener's House, Villa Savoye. Sites where restoration is needed are the Pavillon Suisse à la Cité universitaire. In the original dossier it was stated that inscription would provide the opportunity to accelerate programmes for restoration work at this last site.

In the revised dossier it is reported that at Villa Savoye between 2012-2015 a scientific survey will be undertaken to assess the state of structures, coatings, and services. Also in 2012 a study will continue on the terraces to

establish their original condition and their water penetration to inform possible remedial work.

#### Active Conservation measures

In most of the sites, conservation measures are appropriate and are based on long-standing conservation experience and methodology. Conservation work is programmed and entrusted to specialists with high levels of skill and expertise.

Conservation treatment is combined with regular maintenance, including the involvement of inhabitants, local communities, and public associations.

In the case of the Condominium Clarté, where a major restoration project was completed in 2010, there is uncertainty over whether conservation guidelines for the occupants of the apartments and other units will be implemented.

For the National Museum of Western Art, Japan, more details are needed as to how the aim to 'return the building to a more original condition in order to highlight Le Corbusier's work' will be translated into action.

Materials pathology research is under way concerning buildings from the Brutalist phase, using bare concrete. Some restoration projects are useful in providing an experimental laboratory.

---

ICOMOS considers that generally the state of conservation is fair to good, and several restoration projects are on-going or planned. However these would benefit from a coherent approach to conservation on matters such as intervention, materials, and replacement of features as part of the overall management system.

---

### Management

Management structures and processes, including traditional management processes

For serial nominations within one country, the *Operational Guidelines*, paragraph 114, specifies that 'a management system or mechanisms for ensuring the co-ordinated management of the separate components is essential and should be documented in the nomination'.

For transnational serial nominations, (paragraph 135), it is highly recommended that the States Parties concerned establish a joint management committee or similar body to oversee the management of the whole of a transnational property'.

A paper on serial nominations (WHC-08/32.COM/10B) to the 32<sup>nd</sup> session of the Committee underlined these points and set out that for effective management, the following needed to be in place:

- An agreed concept of management as a coordinated system based on common principles and management objectives (e.g. to share common vision and practices of conservation, development of tourism with a similar approach, share the same environmental management approach, the same idea of sustainable development);
- Effective arrangements for bilateral and multilateral collaboration for the joint control, protection, management and monitoring of the state of conservation of the components forming the serial property, scientific development and knowledge management via the institutions that are linked to the proposed properties (e.g. cooperation of educational and research entities, interpretation centres and museums linked to the properties). There is still not an active structured overall management of the 19 nominated sites in six countries. In the revised nomination file there is a proposal for the establishment of a Permanent Conference. The aim of the conference would be to take into consideration both the individual monuments and the whole serial property. The revised nomination dossier provides information on the establishment of a Joint Action Plan by the Standing Conference responsible for coordinating management;
- Establishment of a common vision by States Parties with respect to the approach to conservation and restoration;
- Establishment of management plans for each site; the implementation of these management plans has been coordinated by the Foundation Le Corbusier and the Association of Sites of Le Corbusier. A meeting of a group of international experts, elected by the participating States Parties convened with the Le Corbusier Foundation on 2 February 2009 and agreed to establish an International Conference as a tool for international coordination in order to develop common approaches to protection, conservation and management as well as to diffuse good practice.

The Conference will be made up of a delegation for each State Party and will have a rotating Presidency. The Le Corbusier Foundation will act as the secretariat. The Conference may meet once a year and will be funded by participating States Parties. It is intended to bring this Conference into being four months after the serial transnational property is inscribed on the World Heritage List.

The Action Plan which will be developed by the States Parties for 2011-2014 consists of:

Updating the management plan, Joint Monitoring, General Meetings, Web Platform, Concept Joint Communications, Mediation / Conflict Management, and Assessment of the Standing Conference.

For the sites in France and Switzerland coordinating committees have been set up to oversee the sites in those countries.

Since 2003 the Le Corbusier Foundation has tried to build closer contacts between owners of Le Corbusier's buildings. The Foundation also has a large archive concerning recent world-wide correspondence with private property owners and governmental organisations. The nomination process has strengthened the exchange of information between partners involved. In the supplementary information provided by the States Parties, the intention to employ a full-time architect is indicated as well as planned improvements to the Foundation's data collection to form an observatory.

The proposed establishment of the International Committee and the French and Swiss National Committees, both in collaboration with the Le Corbusier Foundation, are very helpful first steps. However, given the extreme complexities of managing 19 sites in six countries on three continents as a single property, ICOMOS is concerned that management structures have not been active at a much earlier stage and certainly before the nomination was submitted.

In order to manage the nominated 19 sites as a single entity in any meaningful way, there would need to be in place a much more complex management system than is currently planned, which could encompass amongst other things an urgently needed agreed approach to conservation, restoration, use of materials, reversing previous interventions, and establishing limits of change (see below). Such a system would require much greater collaborative efforts and resources than are currently being envisaged.

Policy framework: management plans and arrangements, including visitor management and presentation

The revised nomination provides details of basic management plans that have been put in place for some of the nominated sites. These have been instigated with the support of the Le Corbusier Foundation. These set out all the basic details for the sites, including the key management partners and the sources of advice and funding.

What is lacking in the Plans is the use of the attributes of Outstanding Universal Value as the starting point. It is said that indicators for monitoring will be developed once the Standing Conference is operational. But there is a clear need to show how these plans will be sustaining the value of the sites.

These Management Plans are a very good step forward. However given the complexities of the conservation tasks that face most of the sites, in terms of materials and their urban environment, there is a need for much more structured approach to conservation, restoration, use of materials, reversing previous interventions, or establishing the limits of change. Given the very difficult choices that have to be made in dealing with many of these buildings, in relation to replacing materials, repairing structures that are defective in some way,



deciding on how to update interiors, or reacting to development proposals in their settings, all of which might impact on authenticity and/or integrity, there is an urgent need to provide stronger overall guidance. It is therefore very important to develop an overall management plan/approach as well as clear statements about how agreed overall approaches are respected for each site.

The exception is the National Museum of Western Art, Japan, where a plan has been prepared and submitted. A new Plan of Conservation and Management 2010 is incorporated in the revised dossier which appears to establish mechanisms to check and balance proposals for works. The revised dossier notes that organisational responsibilities for this work still need to be established to consider and arbitrate on solutions.

At *Firminy-Vert* a specific plan of management is under development, and a steering committee will be created to implement the plan, while for Ronchamp the supplementary information provided by the State Party details the intention to create a management plan which will include defining a buffer zone and protected views and visitor management issues.

Elsewhere management is in the hands of owners and the system is not documented. In Belgium/Flanders, France, Germany/Baden-Württemberg, and the Cantons of Switzerland the general rule is that the private owners of legally protected historic buildings have primary responsibility for maintenance and conservation, while the national or regional authorities have overall control and are obliged to ask for permission for intended alterations.

Involvement of the local communities

Almost no involvement of local communities is mentioned in the revised nomination dossier.

Resources, including staffing levels, expertise and training

Very little information is provided on this.

---

ICOMOS considers that the management system for the overall serial property is still inadequate, given the high complexity of the large serial property. Consideration must be given to putting in place a shared management approach across all sites that provides clear guidance about how the outstanding universal value will be sustained. ICOMOS also considers that management plans and systems need to be strengthened at almost all of the individual properties so that management is based on a clear understanding of the attributes that relate to value.

---

## 6 Monitoring

Monitoring will be developed by the Standing conference when this becomes fully functional.

---

ICOMOS considers detailed indicators linked to value need to be developed. ICOMOS also considers that the responsibility for monitoring will require coordination and recommends that this aspect be directly addressed.

---

## 7 Conclusions

The States Parties have produced a very substantial and detailed new dossier in response to the World Heritage Committee's decision at its 33<sup>rd</sup> session to refer back the previously nominated series of sites associated with Le Corbusier.

In response to the initial nomination and evaluation by ICOMOS the Committee requested the State Party to address these issues through strengthening the justification of Outstanding Universal Value in order to demonstrate the influence of the works of Le Corbusier on the architecture of the 20th century and the Modern Movement.

The revised nomination has been evaluated by ICOMOS in the context of the Committee's decision.

In the view of ICOMOS, the key issues in considering this new material are:

- i) how the Modern Movement that evolved over eighty years and became a global phenomenon can be represented on the World Heritage List;
- ii) how the role of individual architects such as Le Corbusier might be represented as being part of that movement, and
- (iii) how the ensemble of Le Corbusier's work relates to the contributions of other Modern Movement architects.

The revised nomination has excluded urban structures – of which there was only one in the first nomination, *Firminy*, and has shifted the focus of Le Corbusier's work from his 'Architectural and Urban Works' to simply his 'Architectural Works'. As discussed further below, ICOMOS considers that this necessarily constrains the ability of the series to represent the entire course of Le Corbusier's work, as proposed by the States Parties.

The Committee's decision indicated that the series might comprise a smaller number of sites, and the States Parties have submitted new material to justify the inclusion of 19 rather than the original 22 nominated sites. However, ICOMOS considers that the States Parties have provided insufficient justification for the selected buildings.

In the original nomination the sites were selected and justified within a thematic/typological framework with each of the sites seen to contribute to a type of building that the architect worked on.

In response to the discussions of the World Heritage Committee, the States Parties have revised the basis of the selection of sites from the typological approach to one that is essentially chronological, reflecting the sequence of development of Le Corbusier's work. However, ICOMOS considers that this approach has resulted in the selection of buildings which are unexceptional, other than in their association with their architect. This undermines the justification of the serial approach.

According to the States Parties, the justification for the selection of the sites comprising the series, and for its outstanding universal value is that the ensemble of Le Corbusier's work is a 'unique contribution to the Modern Movement's values and represents the entire course of the architect's work'. However, as the nomination acknowledges, there is no founding date, nor is there a single founder of the Modern Movement. The birth of the Modern Movement was a long process that had its roots in the late 19th century and acquired its attributes in the early 20<sup>th</sup> century. As an approach to architecture, based on research and innovation, it continued to evolve and diversify into the 1970s. The nomination dossier also recognises that the formation of the Modern Movement is not the act of one man; rather it involves a few dozen, mainly European, architects, of whom the major figures are Alvar Aalto, Walter Gropius, Le Corbusier, Adolf Loos, Ludwig Mies van der Rohe and Frank Lloyd Wright.

The revised material suggests that the architectural work of Le Corbusier occupies a special place in the evolution of the Modern Movement because it covers the different phases of development of this movement over fifty years: born in 1887 and dying in 1965, Le Corbusier lived through the genesis and development of the Movement. ICOMOS considers this to be insufficient basis for the nomination of this serial property to the World Heritage List.

The revised nomination has provided further comparative analysis – comparing the series as a whole which had not been done in the first nomination - and considering the contribution of what are seen as the major architects of the Modern Movement, as listed above. However, ICOMOS notes that what has not been set out are the key characteristics of the Modern Movement and how it came to be so influential (and how the series as a whole contributed to that influence, rather than the personality and chronology of the life of Le Corbusier).

In terms of the Modern Movement as an approach to architecture, ICOMOS considers that the influence of that approach cannot be limited to individual buildings – urban planning and ideas of urbanism were inseparable

from ideas for individual buildings as components of urbanism, in the scope of the Modern Movement and in its influence. It is difficult to comprehend the influence of the movement – both good and bad – without this urban dimension. Any nomination that sets out to encapsulate the influence of the Modern Movement ought to encompass this dimension, particularly as outstanding exemplars do survive such as Chandigarh (India).

If urban works are excluded, then the scope is limited to individual buildings, houses, factories, apartment blocks and churches. ICOMOS does not consider that such an ensemble of different types of buildings can adequately provide an outstanding reflection of the Modern Movement.

The selection of buildings in the revised material submitted for this serial nomination has been chosen not necessarily on the basis that they are individually exceptional, or that each had a major impact in steering the course of the Modern Movement but rather that as a series they represent the entire course of Le Corbusier's output, and reflect the way his work developed, with individual sites being seen as prototypes of architectural ideas, or the earliest example of a type that was later replicated.

The chronological approach adopted in the revised nomination has anchored the sites to stages in the architect's career. It has therefore strengthened the link between the buildings and their architect.

However, what has not been set out is a justification for the nominated series of Le Corbusier's work alone being considered as an outstanding reflection of the Modern Movement, why the 19 sites might comprise that reflection of the movement, and why all 19 sites are needed.

ICOMOS would like to recall, as set out in its first evaluation, that the World Heritage Committee has on several occasions (for instance, at the time of inscription of the Rietveld Schröder House and the Sydney Opera House) stressed the need for properties relating to 20<sup>th</sup> century architecture to be inscribed rather than their architects and for the properties to clearly manifest how they are outstanding, whether as masterpieces, or for certain specific characteristics that were influential, etc.

ICOMOS does not therefore consider that the only link between the sites in a series can be an architect. The individual buildings, combined as a series, need to be able to convey architectural attributes that collectively can be seen as outstanding, separate from the architect that created them but reflecting his association.

The series needs to show how these buildings are collectively, an outstanding manifestation of the Modern Movement. ICOMOS does not consider that this case has been made for the series, despite the very substantial efforts that have been made by the States Parties to re-work the justification for this series.

Within the World Heritage context, it is buildings or sites that can proclaim ideas, or influence. In the case of Le Corbusier, it is a question of how his buildings might be seen as proclaiming ideas that encapsulate their influence on the Modern Movement or their influence as part of the Modern Movement in an exceptional way.

ICOMOS considers that one of the difficulties lies in the fact that it was the ideas, knowledge, creative or intellectual capital of Le Corbusier that were so important and that did in fact change the world in notable ways, and these, are encapsulated in a few of his buildings, but not in his entire opus, nor in buildings that reflect stages on a journey.

Le Corbusier was not alone; other architects of the Modern Movement could be raised to the same level too. Indeed it was perhaps the combined influence of so many architects all working within the context of industrial production, and all with profound ideas not only on individual buildings but on the wider urban environment, that allowed the movement to deliver such a global impact.

ICOMOS also considers that, in the case of Le Corbusier, there *are* individual buildings that he designed that can be said to be exceptional, but each is exceptional in a slightly different way. In this sense, ICOMOS considers that a number of Le Corbusier's buildings undoubtedly meet this standard of Outstanding Universal Value individually. The issue is whether a serial nomination of these along with a dozen or so others that are clearly not exceptional, as they serve as milestones on an architectural journey can be seen as an ensemble that merits inscription on the List.

ICOMOS considers that the masterpieces that Le Corbusier created, that can truly be seen as exemplars deserve inscription on the World Heritage List on their own rather than part of a serial property. The key buildings that ICOMOS identified in its first evaluation – Villa Savoye, Unité d'habitation, Marseille, and Chapelle Notre-Dame-du-Haut, Ronchamp, (and possibly the National Museum of Western Art, Main Building in Tokyo), are such exemplars, and influential in quite different ways.

ICOMOS appreciates the enormous effort that has gone into preparing this revised nomination of over 1,600 pages, as well as the detailed work in the original nomination. ICOMOS notes that the issues identified by the World Heritage Committee concerning the buffer zones and management of the nominated sites have been addressed by the States Parties and appreciates the substantial commitment and coordination required to propose a serial property comprised of sites in six countries and three continents.

Nevertheless, ICOMOS considers that this nomination presents issues in relation to serial properties that need resolution in order to allow a clear way forward for the

nomination of other 20<sup>th</sup> century properties that are currently being considered on Tentative Lists.

ICOMOS considers that as this is a key strategic issue, and the decisions taken will have a bearing on the way future nominations are submitted. There is a need for greater reflection on the way 20<sup>th</sup> century buildings are acknowledged on the World Heritage List. For example, the nomination of the Paimio Hospital, Finland, by Alvar Aalto raised similar issues. After it was withdrawn by the State Party, an international meeting was convened to begin a debate on this issue.

#### **Recommendations with respect to inscription**

In formulating its recommendations, ICOMOS has examined the new material received from the States Parties in light of the previous Committee decision.

ICOMOS commends the efforts to date by the States Parties for improving the protection of the settings, the management of the individual sites, and the coordination of the overall series.

While ICOMOS notes that the number of sites that comprise the series has been reduced from 22 to 19, it is considered that the justification of the serial approach has not been demonstrated.

For the reasons explained above, ICOMOS considers that:

The revised nomination dossier has not sufficiently strengthened the justification of the series of 19 sites for it to be seen as an exceptional manifestation of the influence of Le Corbusier on the architecture of the 20<sup>th</sup> century and the Modern Movement;

Nor does ICOMOS consider that the series has demonstrated Outstanding Universal Value as a representation of the 'entire course of Le Corbusier's work'.

ICOMOS recommends that the architectural work of Le Corbusier: an outstanding contribution to the Modern Movement, France, Argentina, Belgium, Germany, Japan, Switzerland, ***should not be inscribed*** on the World Heritage List as a series according to the approaches proposed by the States Parties (in either this revised nomination or the original nomination).

ICOMOS considered the possibility of recommending inscription of three of the sites as individual properties:

- Villa Savoye and gardener's House, Poissy, France on the basis of criteria (i), (ii) and (vi);
- Unité d'habitation, Marseille, France, on the basis of criteria (ii) and (vi);
- Chapelle Notre-Dame-du-Haut, Ronchamp, France, on the basis of criterion (i);

but without prejudice to other individual sites from the series being considered for nomination in the future,

subject to further research and comparative analysis that might support justification of their outstanding universal value.

However, the World Heritage Centre has advised that such recommendation would not comply with the *Operational Guidelines for the Implementation of the World Heritage Convention*.

ICOMOS thus encourages the State Party of France to consider submitting individual nominations for Villa Savoye and gardener's House, Poissy, Unité d'habitation, Marseille, and Chapelle Notre-Dame-du-Haut, Ronchamp.

ICOMOS further recommends that the State Party of France give consideration to the following:

- Submit details of proposals to develop a visitor service building at Villa Savoye to the World Heritage Centre for evaluation by ICOMOS and consideration by the World Heritage Committee before any approvals are given, in conformity with Paragraph 172 of the *Operational Guidelines for the Implementation of the World Heritage Convention*;
- Improve the visual relationship between Villa Savoye and the river landscape;
- Submit details of the landscaping plan associated with the development of monastic cells, oratory and visitor centre at Chapelle Notre-Dame-du-Haut, to the World Heritage Centre for review by ICOMOS and consideration by the World Heritage Committee before any commitment is made, in conformity with Paragraph 172 of the *Operational Guidelines for the Implementation of the World Heritage Convention*;
- Put in place a Conservation Plan for each of the three properties that sets out the overall approach for the conservation of the fabric and the evidence on what this is based;
- Strengthen the three Management Plans so that they are underpinned by attributes of Outstanding Universal Value, and put in place monitoring indicators.



Map showing the location of the nominated properties



Guiette House - ground floor living room after restoration, 1998 - Belgium



Weissenhof-Siedlung Houses - general view, 2005 - Germany





Villa Savoye - north-western and south-western façades - France



Clarté Building - interior view of a duplex apartment – Switzerland





Unité d'Habitation in Marseille - view of east and south façades - France



Chapel of Notre-Dame-du-Haut - view of east and south façades – France





National Museum of Western Art - main façade and exhibition courtyard - Japan



Firminy-Vert - aerial site view, 2006 - France

---

## The Triple-arch Gate at Dan (Israel) No 1105

---

### Official name as proposed by the State Party

The Triple-arch Gate at Dan

### Location

Upper Galilee region

### Brief description

The nominated property is the archaeological remains of a gate formed of three arches in sun-dried mudbrick. The arches are semicircular and have a span of 2.5 metres. They form part of city rampart fortifications dating back to the 18th century BCE, i.e. the Middle Bronze Age. Amongst the earliest known arches, they are the most complete with the largest span. The arches make partial use of the voussoir system.

### Category of property

In terms of the categories of cultural property set out in Article 1 of the 1972 World Heritage Convention, this is a *monument*.

## 1 Basic data

### Included in the Tentative List

30 June 2000

### International Assistance from the World Heritage Fund for preparing the Nomination

No

### Date received by the World Heritage Centre

28 July 2003

1<sup>st</sup> February 2007

27 January 2009

20 February 2010

### Background

The nomination was examined by ICOMOS in 2005 and withdrawn by the State Party before the 30<sup>th</sup> session of the World Heritage Committee (Vilnius, 2006).

The State Party submitted a new nomination dossier on 1<sup>st</sup> February 2007. The nomination was examined by the 32<sup>nd</sup> session of the World Heritage Committee (32 COM, Quebec, 2008) and by the 33<sup>rd</sup> session (33 COM, Seville, 2009).

The ICOMOS recommendation was as follows:

*ICOMOS recommends that the Triple-arch Gate at Dan, Israel, should be inscribed on the World Heritage List on the basis of criterion (ii).*

The World Heritage Committee adopted the following decision (32 COM 8B.34):

*The World Heritage Committee,*

1. *Having examined Documents WHC-08/32.COM/8B and WHC-08/32.COM/INF.8B.1;*

2. *Recognizes that the nomination entitled "Triple Arch Gate at Dan" brings to the attention of the Committee one of the elements of a technological innovation that has Outstanding Universal Value on the basis of criterion (ii);*

3. *Refers the nomination entitled "Triple Arch Gate at Dan, back to the State Party to present further information and legal and technical data to enable its formal inscription by the Committee at its 33rd session in 2009.*

The State Party submitted additional information on 27 January 2009.

The Committee adopted the following recommendation:

Decision 32 COM 8B.34:

*The World Heritage Committee,*

1. *Having examined Document WHC-09/33.COM/8B, recognizes that the nomination entitled "Triple Arch Gate at Dan"(Israel) brings to the attention of the Committee one of the elements of a technological innovation that has Outstanding Universal Value on the basis of criterion (ii), and more particularly the fact that the "Triple Arch Gate at Dan" bears testimony to the early diffusion of the architectonic principle of the vault and the voussoir arch, in the Middle East during the Middle and Late Bronze Age, and in particular its developed version including trapezoidal bricks for significant spans;*

2. *Notes the fact that the World Heritage Centre has received information presented by the State Party relating to legal and technical data, in accordance with Decision 32 COM 8B.34;*

3. *Requests the World Heritage Centre to facilitate the obtaining of the information which could enable the formal inscription of the property by the Committee at its 34<sup>th</sup> session.*

The State Party provided technical documentation concerning the management and conservation of the property dated 20 February 2010.

### Consultations

ICOMOS has consulted its International Scientific Committee on Archaeological Heritage management.

## Literature consulted (selection)

Oates, D., *Early Vaulting in Mesopotamia*, in D. E. Strong, ed. *Archaeological Theory and Practices*, 1973.

Sauvage, M., *La brique et sa mise en œuvre en Mésopotamie des origines à l'époque achéménide*, Paris 1998.

Van Beek, G.W., "Pre-classical developments in domical construction", *Domes from Antiquity to the present*, 1988.

## Technical Evaluation Mission

4-8 September 2007. As this is a referred back nomination, no further mission has been undertaken.

## Additional information requested and received from the State Party

None

## Date of ICOMOS approval of this report

17 March 2010

## 2 The property

### Description

The triple-arch gate is at the south-eastern end of the fortified ensemble of Tel Dan dating from the Middle Bronze Age. This is a large tell where there was a settlement over a long period at the start of historic time, but this settlement was not continuous. The fortified ensemble constituted the Canaanite town of Laish or Leshem, which is mentioned on several occasions in the Bible. It is surrounded by a region made naturally fertile by the presence of water.

Tel Dan is at the foot of Mount Hermon and the Golan Heights, near one of the three sources of the River Jordan, in the upper valley of the river, forming part of the Syro-African Rift Valley.

Nowadays, the Tel Dan site as a whole has a near-rectangular shape with rounded corners, with a basically oblong crater-like interior, a shape that is the result of the early fortifications that are underground for the most part. The total dimensions of the tell are roughly 400 m x 500 m.

The nominated property consists solely of the triple-arch gate and the immediately adjacent area. The gate is situated in a corner of the ramparts. Its own overall plan is close to a square (external dimensions: 15 m x 13.5 m), two sides of which join it to the ramparts. The two other sides consist of thick walls, one facing outside and the other inside the town, through which two great access arches have been opened up. They are set back from the main walls, whose four corners form defensive salients. A third arch passes through an inner separating wall. The span of the arches allowed a passageway of about 2.5 metres in width, which is considerable, and about 2.5 metres high to the top of the arch, and the thickness of the arches is around 2 metres. The built structure of the gate also contains four inner chambers.

The three arches have a massive appearance, and their shape is a slightly flattened half-circle. They are made up of three arcs of sun-dried mudbricks on top of each other, which pass on the loading to the piers. The bricks are sun-dried clay mud bricks. Two types of brick are present on the site. One is whitish because of the presence of calcareous aggregate, and the other is brownish. The shape, hardness and constructive use differ depending on the type of brick, and so does the state of conservation. The built structure of the gate probably had a roof, and thanks to the arch system it ensured the continuity of the fortified enclosure.

The imposing earthen ramparts that encircled the town were built on foundations consisting of basalt boulders; above them was the sun-dried mudbrick wall. A large part of these fortifications still exists: two short sections next to the gate are included in the nominated property. The rest of the fortifications are located in the buffer zone.

From the outside, the gate was approached by twenty basalt steps rising from the plain. On the town side, a short cobbled way led to stone steps descending towards one of the town's cobbled streets.

Excavations revealed the presence of the gateway (see below). None of the three arches has been entirely exposed in the interest of conservation. No evidence survives for the structure of the roof, which could have been either of cedar beam or of mud brick vault construction, overlain with mud plaster. Traces of mud and lime plastering on the wall surfaces have been found and remains of a thick layer of plaster that covered the cobblestone floor. These traces provide compelling evidence that the gatehouse was originally plastered and painted.

### History and development

The land known as Canaan was situated in the territory of the southern Levant, in what is now Israel, the Palestine Authority, Jordan, Lebanon and south-western Syria. The inhabitants of Canaan were never ethnically or politically unified as a single nation. They did, however, share sufficient similarities in language and culture to be described together as "Canaanites."

City-states developed in Syria-Palestine around 3100, serving as mediators between the cultures of Mesopotamia and Gerzea in Egypt. At this time the dominant town was Ebla. Texts from the Egyptian Middle Kingdom (2040–1786) show that Egypt exercised a degree of political control over the area between 2040 and 1786 BCE, ruling through local vassal kings. This led to much dislocation and a decline in urban settlements.

The Golden Age of Canaan was between 1800 and 1450 BCE when strong urban centres were re-established, towns such as Hazor, Qatna, and Ugarit flourished as centres of power in the region and the Canaanites became famed as traders across the Near

East, particularly for purple dye obtained from sea-molluscs found along the Mediterranean coast.

The gate and ramparts of Tel Dan were constructed, it is now believed, in the 18th century BCE, when Canaan was at the height of its power and influence.

A second period of Egyptian control between 1450 and 1365 BCE preceded the break-up of the Egyptian Empire that enabled the Hebrew invasion into the land of Canaan around the 12<sup>th</sup> century BCE and, in time, the creation of the ancient Kingdom of Israel. According to Biblical evidence, Laish was conquered and renamed by the Hebrew tribe of Dan. Tel Dan flourished as the northernmost city of ancient Israel and is mentioned many times in the Old Testament. Excavations have been carried out on the northerly part of the site.

Laish (Dan) was strategically situated on the road from Damascus, in Syria, to Tyre on the coast of the Mediterranean Sea. The north-south route from Hazor to Lebanon passed through Abel-beth-maachah, just west of Dan. At the northern end of the upper Jordan Valley, Dan was sited in one of the most productive parts of the region where there is abundant rainfall. At the foot of the tell mound are extensive springs that represent one of the sources of the River Jordan.

Tel Dan was destroyed when the city was captured by Tiglath Pileser, king of Assyria, in 732 BCE. It was partially restored, but never regained its former importance. By the 4th century BCE it was described by Eusebius as being a village (*Onomasticon* 369).

Rescue excavations began at Tel Dan in 1966 by the Israeli Department of Antiquities and Museums, as there was a potential threat from military activities because of proximity to the Syrian frontier. Excavations in the south-east sector did not begin until 1977, and the top of the first arch was discovered in 1979. The two other arches, and then the passageways were uncovered in the ensuing years.

The excavations were then developed into a full research project, which continued until 1999, covering both the gate of the Canaanite town and the later "Biblical" city. After more than 30 years of work, less than 10% of the site has been excavated. The digs were interrupted in 2006 because of the war between Israel and Lebanon. They were scheduled to restart in 2008.

### **3 Outstanding Universal Value, integrity and authenticity**

#### **Comparative analysis**

The key elements at the heart of the nomination are the three arches of the gate, which constitute a very ancient and technically accomplished example of the true arch. These are the rationale for the nomination.

The true arch differs from corbel arches and other older types of arches in that its arch-shaped structure converts

the naturally downward pressure of gravity of the upper built structure into lateral thrust against the piers, solely by compression exerted on the construction elements.

The oldest examples of primitive vaults and arches appeared in the 4th millennium BCE in Mesopotamia during the Uruk period (Tepe Gawra about 3300 BCE). They are also present in the first dynasty in Egypt, c. 3000 BCE and under the fourth dynasty, c. 2580-2560 BCE. The true arch was found in the development of the city states of the Middle East during the 3rd millennium, for openings, vaulted ceilings, tombs, etc.

A move towards a more accomplished architectural form, the true semi-circular vault, took place as early as the 3rd millennium ceramic relief in Tell Asmar, period Ur I). Vaults and arches made of square or rectangular hewn brick, with mortar in the extrados, were quite widely present at the start of the 2nd millennium in the Middle East (Tell el-Rimah).

Simultaneously, the semicircular arch was improved by the voussoir system (trapezoidal bricks made to fit together); this is sometimes referred to as the true radial vault. The first genuinely accomplished vaults and arches of this type have spans of 0.8 m to 1 m, and the function of supporting the weight of the superstructure is fully expressed.

Some authors (Heinrich, for example) consider that true arches were built over gates from the end of the first dynasties in Egypt, and above the gates of cities and temples from ancient times in Babylonia.

The construction technology of the three large arches at Tel Dan is relatively sophisticated and expert, rather than experimental. The openings and elevations are large. This suggests the existence at the same period of other arches, probably in a relatively large perimeter from Mesopotamia to Egypt, which have either been destroyed or are as yet undiscovered.

One similar arch does exist at Ashkelon, Israel, from the same period (Middle Bronze Age IIA), but this is damaged and less complete. It also forms part of a fortification system, and was rebuilt twice during the Middle Bronze Age. No absolute dating has been achieved for the Dan arches or for the Ashkelon arch, but the arches at both sites appear to be very close in period. In the case of Dan, the gatehouse is linked to the city's 18th century BCE defence system.

Two arch gateways, built of brick and forming part of a fortification system, also exist at Mumbaqt in Syria. They too date from the Middle Bronze Age, but their construction technique is slightly different.

ICOMOS considers that, in the light of the above, the arches of Tel Dan do not represent the earliest example of the true radial arch or the earliest example of the brick voussoir type arch. However, in the current state of archaeological excavations, the Tel Dan arches are the

largest early arches and demonstrate an early use of the voussoir type arch.

---

ICOMOS considers that the comparative information known about vestiges of the earliest true radial arches and vaults justify consideration of the inscription of the property as an outstanding example of the diffusion and flourishing of a construction technique at the start of the 2nd millennium.

---

#### **Justification of Outstanding Universal Value**

The nominated property is considered by the State Party to have outstanding universal value as a cultural property for the following reasons:

- The three arches of the gate at Tel Dan are the only complete arches forming part of a fortification system known at the present time for the Middle Bronze Age (18th century BCE).
- They bear witness to a knowledge of the principles of construction of true radial vaults at the period in question in the Middle East.
- Their span is exceptionally large (2.5 metres).
- They bear witness to the apogee of the art of massive earthen fortifications during the Middle Bronze Age II, including sophisticated gateways with arches, and to the urban development of this period.

ICOMOS considers that the Triple Arch Gate at Dan bears testimony to great mastery of the technique of the true radial vault and arch, using sun-dried mudbrick. Fragile from a conservation viewpoint, it is at present the unique testimony of the diffusion of this type of highly innovative construction during the Middle Bronze Age in the Middle East.

#### **Integrity and authenticity**

##### **Integrity**

The built part of the gate is complete. It includes in particular the three true arches on which its value is founded. Despite the lack of superstructure, even in the form of archaeological traces, the gate's overall integrity has been maintained, both in terms of its architectural plan and elevation views.

Sun-dried mudbrick constructions are furthermore relatively fragile over time, and a process of deterioration of the immediate built environment of the arches (spandrel and side walls) has begun since they were uncovered by the excavations. For about 25 years now this has raised significant conservation problems. The integrity of the construction has been affected at certain points, as the natural elements (water, wind, sun) have removed portions of material and made the structure fragile to the north-east. (See 5, conservation).

With regard to the integrity, in the sense of completeness, of the nominated property, a question is also raised concerning the relationship of the gate to its

environment of fortifications; the fortifications are in the buffer zone but not in the nominated property zone.

ICOMOS recommends that the State Party should give due consideration to this aspect, particularly bearing in mind that another later gate exists inside the archaeological ensemble included in the buffer zone.

In its additional documentation of 20 February 2010, the State Party declares that it has examined this recommendation, and has reached a negative conclusion for the time being. Firstly, the other parts of the fortifications linked to the triple arch gate are of less interest and have no direct link to the technological value of the nominated property, and secondly, they are under the natural protection of the layers of earth which it considers it is preferable not to remove. Finally, they are under the legal protection of the buffer zone which guarantees their conservation and their monitoring.

##### **Authenticity**

The authenticity of the excavated arches is not in doubt. However the precise dating of the gate is based on indirect elements. Many vestiges have been found in the excavations of the tell settlement area, near to the gate. They provide evidence of dates going back to the 18th century BCE. Furthermore, the use as an urban passageway gate of the three arches seems to have been limited in time. The gate was blocked up with earth, to ensure the continuity of the ramparts, which in fact ensured its conservation up until the contemporary excavations.

Furthermore, for the arches to be fully authentic, their immediate architectural environment must also be fully authentic, which again raises the issue of the recent process of decay and how to overcome it. Elements of reinforcement for the structures undergoing decay have been applied, taking care to ensure reversibility. Elements of restoration have also been considered.

The main challenges in the future will be to keep interventions to a minimum, without any significant reconstruction, to ensure the authenticity of the gate and the arches.

In its documentation of 20 February 2010, the State Party provided information about the permanent monitoring of decay in the built environment close to the triple arch and about the measures taken to keep the processes of decay under control (see Conservation).

---

ICOMOS considers that the conditions of integrity and authenticity have been met.

---

#### **Criteria under which inscription is proposed**

The property is nominated on the basis of cultural criteria (i), (ii) and (iv).

*Criterion (i): represent a masterpiece of human creative genius.*

For the State Party, although the three arches of the gate at Tel Dan are not the earliest known examples, they are the first example of a complete true arch. They meet all the criteria of this principle of construction. They are an exemplary representation of human creative genius in the technical and architectural mastery of the true radial vault and arch.

ICOMOS considers that the three arches of Tel Dan demonstrate complete mastery of the true arch technique, using the combined method of rectangular bricks and trapezoidal bricks, in the context of massive fortifications and the urban development of the Middle Bronze Age or slightly later.

The three arches of Tel Dan demonstrate how man adapts to his environment by the use of sun-dried bricks, made of mud and clay.

However, this technical expertise is neither unique at the time nor the earliest known. Clearly the earliest examples of voussoir arches were built earlier than at Tel Dan, in the 3rd and 4th millennia, in Egypt and in Mesopotamia. It seems that the arches of Tel Dan are not the oldest example of a complete true radial arch, nor the oldest example of a voussoir arch. The dating of the Tel Dan gate moreover is indirect, and its monumental and defensive use seems to have been of short duration.

---

ICOMOS considers that this criterion has not been justified.

*Criterion (ii): exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design.*

For the State Party, the three arches of Tel Dan represent a new architectural principle originating from Mesopotamia and largely disseminated in the Mediterranean and the Middle East. As there is no complete architectural example in Mesopotamia, it is the Tel Dan site which is the most significant example of mastery of this architectural principle and its dissemination. More generally, most mudbrick arches collapsed and disappeared as early as the Iron Age.

Since this initial dissemination of which Tel Dan is an example, the architectural principle of the true radial arch has been widely adopted in the Mediterranean world and in Western civilisation.

ICOMOS considers that Tel Dan bears witness to the early diffusion of the architectonic principle of the vault and the voussoir arch, in the Middle East during the Middle and Late Bronze Age, and in particular its

developed version including trapezoidal bricks for significant spans.

The integrity of the arches is however threatened by the intrinsic difficulty of conserving sun-dried mudbrick architecture for future generations, particularly for a structure as elaborate as an arch. The initial excavation periods, which re-exposed the edifice to the elements, did not fully allow for this consideration and have compromised chances for conservation in the long term.

In its additional documentation of 20 February 2010, the State Party presents an overview of conservation efforts made since the discovery of the triple-arch gate, focusing on the results achieved. The results suggest that the efforts should enable the long-term conservation of the property (see Conservation).

---

ICOMOS considers that this criterion has been justified.

*Criterion (iv): be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history.*

In the view of the State Party the Tel Dan gate is the only conserved example of gates of massive fortifications, a defensive system that was used during the development of the civilisation of the city-states of the Middle Bronze Age. It is a unique example of a very important feature of civilisation, which is widely encountered in the Middle East.

In the view of ICOMOS, the nominated property is the triple-arch gate alone; the fortified ensemble is not nominated and its outstanding universal value does not seem to be justified. The nominated property does not present all the characteristics of the feature of civilisation referred to, i.e. the flourishing of fortified city states in the Middle Bronze Age in the Middle East.

---

ICOMOS considers that this criterion has not been justified.

---

ICOMOS considers that the nominated property meets criterion (ii) and that outstanding universal value has been demonstrated.

#### **Description of the attributes**

- The Triple-arch Gate at Dan bears witness to great mastery of the technique of building a true arch with a significant span (2.5 metres) during the Middle Bronze Age or slightly later.
- It was built using sun-dried mudbricks, with the arch bricks making partial but unquestionable use of the innovative voussoir system.
- In the current state of archaeological knowledge, it constitutes a unique example of a gate with three complete arches, each with three



successive arcs of brick, both for its early date and its state of conservation.

- Through its integration in massive fortifications, it bears witness to the importance of the move towards urbanisation in the Middle Bronze Age and to its technical advances.

#### 4 Factors affecting the property

##### Development pressures

Economic development is not exerting any pressure on the Tel Dan site. All projects must moreover be authorised by INPA, the Israeli Nature and Parks Authority. There are no inhabitants either in the nominated property zone or in the buffer zone.

In response to the request by ICOMOS, the State Party has given guarantees that the area (about 6 hectares) of the buffer zone that does not form part of the natural reserve will be used exclusively for agricultural purposes.

##### Military risk

Situated close to the border with Lebanon and the border with Syria, the Tel Dan region could be affected by war risk.

##### Tourism

Up to now tourism has been kept well under control, and relatively limited numbers of tourists have visited the three-arch gate itself. Tourism could grow significantly inside the Reserve, without posing a particular threat to the archaeological site.

Any risks of vandalism are prevented by the presence of wardens on the archaeological site and the physical protection of fragile or dangerous archaeological elements. Routes inside the Reserve are indicated and signs are installed to encourage good behaviour. The real quantitative limit at the moment is the capacity of the parking area (up to 1,000 visitors at any one time). The annual average number of visitors for the Reserve is around 200,000, but only 80 days a year are considered to be peak days for visits.

##### Natural factors and impact of climate change

The main natural risk threatening the nominated property is torrential rainfall. There is also a certain degree of earthquake risk in this zone. In view of the dominant vegetation cover, a brush fire could, in the dry season, spread as far as the site. It is not however directly exposed to this risk as vegetation is cleared away on the approaches to the site. There is no pollution in the site environment, and there are no climatic particularities.

---

ICOMOS considers that the main threats to the property are torrential rainfall, possibly combined with the action of the wind and sun.

---

#### 5 Protection, conservation and management

##### Boundaries of the nominated property and buffer zone

###### Nominated area:

The nominated property consists of the triple-arch gate and its immediate surroundings: the connections to the north and south-west rampart wall, and the external and internal gate access staircases. The property boundary is a rectangle of approximately 4,800 sq.m. around the gate.

###### Buffer zone:

The Tel Dan archaeological site forms part of a protected nature reserve that represents the bulk of the buffer zone. Since the 2005 nomination and the ensuing recommendations, the buffer zone has been extended to the south-east beyond the nature reserve zone, to include an agricultural zone belonging to the Snir kibbutz, to a depth of at least 150 metres. The total area of the buffer zone is 37.2 hectares.

---

ICOMOS considers that the boundaries of the nominated property are adequate. ICOMOS considers that the revised buffer zone boundaries are adequate.

---

##### Ownership

The nominated property is owned by the State of Israel. It is situated in the nature reserve of Tel Dan. It therefore has the legal status of a nature reserve and an archaeological site.

##### Protection

###### Legal Protection

The nominated property is defined and protected by the following legal texts:

- The Israel Lands Administration Law of 1960.
- The 1965 Planning and Building Law and its amendments.
- The 1978 Antiquities Law and the 1989 Antiquities Authority Law (IAA).
- The 1963 National Parks, Nature Reserves, National Sites and Memorial Sites Law, amended in 1992.

Under the law of 1960, the property is governed by the powers of the state vested in the Nature Reserves Authority (Act of 18 September 1987), and the confirmation of a 49-year transfer of rights dated 7 May 2006.

###### Buffer zone:

Most of the buffer zone (84%) is under the protection of the natural reserve. The rest is a zone exclusively reserved for open-field agricultural activities. All requests for a waiver from this allocation rule (e.g. for a building)

have been made impossible in view of the guidelines for the implementation of land use planning.

ICOMOS considers that the buffer zone protection measures are adequate.

#### Effectiveness of protection measures

The legal measures taken to protect the nominated property seem to be adequate.

---

ICOMOS considers that the legal protection in place is adequate.

---

### Conservation

#### Inventories, recording, research

The archaeological study has been underway since the late 1970s. The archaeological documentation thus gathered on the site is considerable. It consists of several types of documents:

- Excavation reports for each campaign.
- The Tel Dan reserve annual report, published since 2001. This is a sort of log book compilation of all actions and observations on the site.
- The site dossier, which brings together all basic documents, plans and decision relating to the site. It is regularly updated.

The IAA/Getty Report provides an in-depth study of the archaeological situation of the property and any changes in its state of conservation since the property was uncovered at the start of the 1980s. It provides a solid technical basis for the updating and improving of the property's conservation plan.

#### Present state of conservation

This monument is made of sun-dried mudbricks, which by their very nature are fragile, and the state of conservation of the arches and the mural elements of the gate confirm that constant attention is essential. Its survival since its creation was only possible because the site was buried quite rapidly, probably in the 8th century BCE. Once the structure was uncovered, in around 1980, it began to deteriorate because of the nature of its material of construction.

Recent excavations show the very probable presence of plastering on the surface of the joints between the bricks, and perhaps over the whole of the facades. This again attests that this construction was sophisticated and well mastered, rather than being a still experimental construction.

#### Active conservation measures

Following the uncovering of the gate in the late 1970s and early 1980s, an initial shelter was constructed above the gate in 1982. This protection however turned out to be only partial and inadequate. From 1985 to 1988

moreover, the protective roof deteriorated, and water penetrated into the north-east tower.

In 1992 the western facade and the interior of the gate were filled in, as a preventive conservation measure. A new and more complete roof was built in 1993, and another layer of protective fill was added.

From 1997 to 1999, the IAA (Israeli Antiquities Authority) and the Getty Conservation Institute drew up documentation of the archaeological structure, and analysed its conservation. Their report was completed in 2000. It provides a detailed chronology of the deterioration, with some examples of serious losses on the north-east tower. The report draws a distinction between intrinsic factors (linked to materials and construction technology) and extrinsic factors (recent preservation history). This report is comprehensive, and provides a thorough analysis of the causes and rates of deterioration of the monument.

The report suggested some reburial, some areas filled with sandbags to prevent access, some parts to be covered with geo-fabric textile, and basalt stones to provide support in some places.

In response to this report, in 2000-2005, discrete structural support elements were designed, in accordance with international reversibility standards, as appropriate for a monument of such fragility. Some structurally supportive reconstruction in limited areas, especially to the East tower or the gate, was undertaken. Discussions are under way about the replacement of the present shelter structure with a more minimal one, and then by a complete system in future years.

This programme however illustrates the current difficulties, at an international level, of recommending long-term conservation methods for sun-dried mudbrick structures.

In its additional documentation of 20 February 2010, the State Party reports on the results recently obtained in the conservation of the most fragile elements of the structure. It refers to the restoration of the upper parts of the edifice, where the traditional techniques used have produced a result which is historically authentic and a stabilisation which appears to be solid and lasting. The detachment of the east wall, which had threatened to collapse, has been dealt with using a gradual mechanical process put in place in 2008. Today completed, it has resulted in a return to the original position and a re-attachment which is considered to be both satisfactory and lasting. Furthermore, roofs are currently being extended or modified, particularly on the east side, for more extensive and effective protection against rainwater. Work on sun protection structures is also under way. Processes of deterioration by damp have been halted.

A long-term conservation plan has been put in place, in line with the recommendations made in the ICOMOS

evaluation of 2008. It brings together the efforts of two national authorities: the parks authority (INPA), which manages the property, and the antiquities authority (IAA). It also brings together the expertise of well-known international institutions (Getty, CRATerre) and independent experts in the field of earthen architecture conservation.

In addition to observation of the state of the property, the everyday surveillance of the site by guards involves the checking of water drainage during rainy weather, and the action of the protective roof.

ICOMOS, in its 2005 evaluation, stated that the conservation measures undertaken at the time were inadequate. The technical appraisal mission in 2007 indicates that substantial progress has been made in this area. Work is in progress to put in place structural support and stabilising elements; the work is carried out with great care, paying attention to issues of quality and possible reversibility.

ICOMOS, in its 2008 evaluation, recommended that a very stringent conservation plan should be put in place, in line with the best international standards for the preservation of sun-dried mudbrick architecture. The changes occurring in the structure remain however partly unpredictable, and call for a flexible and adaptable action plan, without sacrificing scientific rigour.

ICOMOS considers that recent efforts concerning the scientific and technical management of the processes of decay of the sun-dried mudbrick architecture of the nominated property have been substantial, and in some cases exemplary. In addition, scientific monitoring and a long-term conservation plan are today in place and functioning, and the results obtained suggest that the long-term conservation of the property can thus be ensured.

ICOMOS considers that the conservation of the property has steadily improved since 2005, and has today reached a satisfactory level.

## **Management**

Management structures and processes, including traditional management processes

The three-arch gate of Tel Dan is managed as part of the Natural and Archaeological Reserve of Tel Dan. It is the responsibility of the Israeli Nature and Parks Authority (INPA), in accordance with its hierarchical organisation chart: national directorate, professional divisions, Northern District and Golan Region, and finally the Tel Dan Reserve echelon.

The site is managed in accordance with several national plans and programmes. As a result funding and personnel are allocated to the Nature Reserve.

The Israeli Council for the Preservation of Monuments and Archaeological Sites is also involved, and cooperates with the management authority.

All projects for site management and archaeological works are supervised by the IAA (Israeli Antiquities Authority) from a scientific viewpoint.

Policy framework: management plans and arrangements, including visitor management and presentation

Conservation plan: A master research plan for the conservation of the archaeological site was requested when the 2005 nomination was examined. It was presented in 2006 under the name "Conservation Plan". It was to be based on the IAA/Getty evaluation report and on experience gathered during recent work. It will take over from the existing conservation measures, which have moreover improved markedly over the last two years (see Conservation). The plan must however retain a degree of flexibility in order to deal with the unpredictability of changes in the condition of the structure.

Archaeological excavation and visitor presentation plan: After a two-year break in excavations, a master plan for future excavations is to be started up in 2008. It will complement and assist the conservation plan. It has been drawn up by the Gluek School of Biblical Archaeology, in conjunction with the Reserve and the INPA. It also concerns other elements of the fortification wall and the interior of the town. It involves work both for conservation and for presenting the site to visitors.

The Natural and Archaeological Reserve management plan: it manages the organisation of the site and the facilities for accommodating the public, including:

- Daily inspection of the site,
- Annual drainage system maintenance work,
- Seasonal cleaning of vegetation and prevention of bird nesting.

A detailed plan indicating the roads and access paths, the car park and the reception facilities has been provided in response to the request made by ICOMOS.

ICOMOS considers that a detailed site conservation management plan is necessary, while considering that this plan must remain flexible in order to be adaptable to changes in the structure and improvements in conservation techniques (See Conservation).

Following the ICOMOS request in 2008 suggesting that consideration should be given to presenting the three-arch gate in a way more closely linked to the rest of the fortifications and the urban centre of Tel Dan, the State Party examined this proposal. In its reply of 20 February 2010, it indicated that the nearby fortification elements are of limited archaeological interest and have no direct relationship to the essentially technological and

architectural value of the property; furthermore, they are for the most part covered by a layer of earth which protects and conserves them. It therefore seems advisable to maintain the existing situation of the three-arch gate in respect of presentation and value preservation.

The three-arch gate is located in a nature reserve that receives a relative large number of visits and is popular in Israel, but its entrances are strictly controlled. The Reserve is entirely fenced in, and the archaeological site of the gate has an additional protection, with an access gateway. The archaeological site is only accessible to a limited number of visitors at any one time, but this point is basically positive in view of the current state of conservation, excavations and work on the site. It is not however possible for people with disabilities to access to the site.

Routes are proposed to visitors, together with large numbers of signs and interpretation points, with the following objectives:

- Presentation and interpretation of the site's major features;
- Encouragement of good visitor behaviour and protection of the site itself;
- Visitor guidance and safety.

The signs and information are in three languages: Hebrew, English and Arabic. They were completely renewed in 2004, but on the basis of the visit plan drawn up in 1995.

#### Involvement of local communities

There is no institutional programme with local or regional communities. However, the Tel Dan local authority is active in that it organises regular educational visits for school groups, and provides information to the population about the archaeological and natural site.

#### Archaeological research partnerships

As regards the excavations, various educational institutions are in regular contact with the site: the Nelson Glueck School of Biblical Archaeology, the Hebrew Union College of Jerusalem. These institutions play a substantial role in funding excavations and publishing their results.

ICOMOS notes that no management plan is proposed with regard to the nominated property.

However, ICOMOS considers that the property is included in the larger context of a Natural and Archaeological Reserve whose management rules are long-established and well-defined. The measures in place are those of a state organisation whose operation has been tried and tested. They are under the scientific control of the IAA.

Resources, including staffing levels, expertise and training

The Natural and Archaeological Reserve currently has eight full-time employees. Their activities however range over the whole spectrum of tasks required in managing a nature reserve receiving a significant number of visitors, in which the nominated property is only one part among others.

Personnel are all recruited following appropriate academic training. They are given short complementary training at INPA and they are only taken on definitively after a two-year trial period.

Temporary employees are hired during periods of high frequentation.

Workers and contractors are required for maintenance and cleaning work.

At regional and national level INPA has a number of professionals specialising in the various questions that arise in the management and conservation of the site: a scientific director for the site, specialist archaeologists and architects.

Furthermore, the site can call on the national specialists of the IAA.

The IAA provides a 2-year course to professionals recruited by the INPA, who are then put in charge of monitoring sites such as Tel Dan.

As far as earthen architecture conservation is concerned, the IAA specialists have taken international courses at the Getty Institute of Conservation and CRATerre in Grenoble (France).

Depending on the difficulties encountered, external institutes and consultants are called in, as was the case of the Getty Institute to evaluate the structure in the late 1990s.

Architects and conservators specialising in the devising and conservation of architectural vestiges intervene on the site. The reproduction of sun-dried mudbricks was undertaken in this way.

The excavations are guided by archaeologists of national and international reputation, both from the INPA and from the Hebrew Union College (HUC).

ICOMOS considers the training of the personnel with scientific responsibilities to be of a good level, in line with international standards for the subject concerned. ICOMOS recommends however the stepping up of continuing education of the other INPA personnel working in fields related to the nominated property, on the conservation and preservation issues with which they are specifically concerned.

In the documentation it submitted on 20 February 2010, the State Party indicates the levels of competence of its personnel, and the training courses they have taken.

---

ICOMOS commends the measures in place constituting the management plan, and considers that the management system for the nominated property is adequate. ICOMOS recommends that the continuing education of personnel should be extended.

---

## 6 Monitoring

The visual monitoring of the condition of the nominated property takes place at least once a day, and often twice a day, by the Reserve personnel. The personnel is trained for this purpose, as part of the overall surveillance of the site.

The basic monitoring indicators are as follows:

- Observe the appearance of brick debris at the foot of the arches.
- Very rapidly locate incipient signs of damage to the arch surface to prevent them from becoming irreversible.

Under the conservation plan, the INPA team of professionals carries out regular scientific monitoring of the site. This monitoring includes systematic photographs of the gate from fixed points, and regular comparison of the photographs taken. The conservation plan monitoring reports are approved by the INPA and the IAA.

Site water drainage and cleanliness are monitored annually.

In the documentation it submitted on 20 February 2010, the State Party indicates that it has given consideration to the ICOMOS recommendation made in 2008: "In view of the fragility of the property and the speed of changes that can occur, monitoring could be improved by permanent surveillance using a laser theodolite and 3D digital display." A system of this type has been set up with the collaboration of a specialised company. Initial results are currently being considered and methodology is at the development stage.

---

ICOMOS considers that the monitoring of the property is adequate.

---

## 7 Conclusions

ICOMOS recognises the Outstanding Universal Value of the Triple-arch Gate at Dan.

ICOMOS considers that the changes made since the property was first nominated for the World Heritage List in 2005, and since the 2008 evaluation, have been positive, particularly with regard to the enlargement of

the buffer zone and the marked improvements in property conservation work and in the monitoring of the property.

### Recommendations with respect to inscription

ICOMOS recommends that the Triple-arch Gate at Dan, Israel, should be inscribed on the World Heritage List on the basis of *criterion (ii)*.

### Recommended Statement of Outstanding Universal Value

Brief synthesis

The three-arch gate of the Triple-arch Gate at Dan has outstanding universal value:

- It bears witness to great mastery of the technique of building a true arch with a significant span (2.5 metres) during the Middle Bronze Age or slightly later.
- It was built using sun-dried mudbricks, with the arch bricks making partial but unquestionable use of the innovative voussoir system.
- In the current state of archaeological knowledge, it constitutes a unique example of a gate with three complete arches, each with three successive arcs of brick, both for its early date and its state of conservation.
- Through its integration in massive fortifications, it bears witness to the importance of the move towards urbanisation in the Middle Bronze Age and to its technical advances.

**Criterion (ii):** The Triple-arch Gate at Dan bears witness to the early diffusion of the architectonic principle of the true radial arch, in the Middle East during the Middle and Late Bronze Ages, particularly in its most complete version, including voussoir bricks, for wide spans.

Integrity and authenticity

The authenticity of the Triple-arch Gate at Dan is proven. However, the integrity of its sun-dried mudbrick structure raises considerable conservation problems with regard to the presentation of its outstanding universal value in a long-term perspective. A substantial conservation effort has been planned and begun by the State Party to achieve this aim. It must be continued with great determination, in view of the still imperfect state of expertise in the conservation of such constructions.

Protection and management requirements

The legal protection in place is adequate. The site is managed by the authority of the Natural reserve of the Tel Dan Park, which is attached to the governmental organisation for nature and parks (INPA). Conservation management is conducted under the authority of the governmental antiquities organisation (IAA). The set of

measures presented forms a satisfactory management plan for the expression of the property's outstanding universal value.

ICOMOS recommends that the State Party should give consideration to the following point:

- Make sure that an exacting conservation management plan, in accordance with the best international standards for the preservation of sun-dried mudbrick architecture, is implemented.

ICOMOS also recommends that:

- The continuing education of the non-scientific INPA personnel working on the nominated property should be stepped up on the conservation and preservation matters with which they are specifically concerned.



Plan of the gate





The eastern façade



Steps leading up from the city to the gate

---

# Choirokoitia (Cyprus)

No 848

---

## 1 Basic data

### State Party

Republic of Cyprus

### Name of property

Choirokoitia

### Location

District of Larnaca

### Inscription

1998

### Brief description

The Neolithic settlement of Choirokoitia, occupied from the 7th to the 4th millennium BC, is one of the most important prehistoric sites in the eastern Mediterranean. Its remains and the finds from the excavations there have thrown much light on the evolution of human society in this key region. Only part of the site has been excavated, and so it forms an exceptional archaeological reserve for future study.

### Date of ICOMOS approval of this report

10 March 2011

## 2. Issues raised

### Background

The World Heritage property inscribed in 1998 included the archaeological remains excavated from 1977 to 1998 of the Aceramic Neolithic settlement of Choirokoitia, dating from the 8<sup>th</sup> Century BC. The settlement exposed at that time extended along the south-western slope of a peninsular bounded on the north, east and south-east by the Maroni River. It is characterised by circular dwellings constructed of stone, mud brick and rammed earth, and was protected on the west by successive walls with a complex defensive gateway.

Recent excavations to the north of the World Heritage property boundary have exposed parts of a wall following a parallel course to the Maroni riverbed, constituting the northern boundary of the settlement. This confirms that the original settlement was expanded to the north. The new evidence enriches knowledge of the social organization of the settlement as the construction of the extended wall at such length expresses a collective effort that implies a strongly structured social organization.

The proposed modification of the boundary will include the area of recent excavation and coincide with boundaries of Land Survey plots 1124 and 560. It will extend the current World Heritage property area of 1.5ha by a further 0.7 ha. The additional land is owned by the Department of Antiquities (DoA), and is currently covered by a Controlled Zone to the north of the World Heritage property boundary. The Controlled Zone encompasses the World Heritage property and appears to represent a buffer zone. The north boundary of the extension will partly coincide with the north boundary of the Controlled Zone along the line of the Maroni river. The Department of Antiquities plans to acquire more land adjacent to and around the World Heritage property within the Controlled Zone, but this intention does not appear to apply to land on the other (north) side of the Maroni river (Map retrospective inventory #21).

The site is managed by the Department of Antiquities under the Ministry of Communications and Works.

There is no Management Plan for the site. However the site is fenced, the entry is controlled by ticketing and the surroundings well maintained. A number of temporary shelters cover excavated areas pending consolidation of walls and structures, and it is proposed to also cover temporarily the excavations in the extended area. The visitors' pathway will be extended to the new area.

The World Heritage Committee considered the proposed modification at its 34<sup>th</sup> session (Brasilia, 2010) and adopted the following decision:

Decision 34 COM 8B.55:

*The World Heritage Committee,*

1. *Having examined Documents WHC-10/34.COM/8B and WHC-10/34.COM/INF.8B1.Add,*

2. *Refers the proposed minor modification to the boundary of Choirokoitia, Cyprus, back to the State Party to allow it to:*

- a) Consider whether the boundary of the World Heritage property should be extended further, in order to enclose all of the State-owned property of the peninsular bounded by the Maroni river;*
- b) Confirm that the controlled zone is the buffer zone;*
- c) Consider the enlargement of the buffer zone to the north, east and south.*

### Modification

The State Party responded in its letter of 20 January 2011 to the effect that:

There is no intention at present to consider requesting an extension of the boundaries of the inscribed area beyond those parts of the site that contain archaeological remains that have been demonstrated through excavation. In the event that excavation extends

to adjacent plots in the future, similar modification requests will be made.

The Antiquities Law does not allow for 'buffer zones'. However the Controlled Zone and the plots declared as Ancient Monuments are subject to strict controls on development and are in effect equivalent to a buffer zone.

The Department of Antiquities is considering the extension of the Controlled Area to north, east and south in collaboration with other government departments.

ICOMOS considers that the State Party's approach as outlined in (a) above is not in accordance with paragraph 100 of the *Operational Guidelines for the Implementation of the World Heritage Convention*, which states that property boundaries should include those areas which in the light of future research possibilities offer potential to contribute to and enhance understanding of the Outstanding Universal Value of the property. However ICOMOS notes that while the current intention of the State Party is to extend the boundary of the World Heritage property only to those parts of the site that have been exposed by recent excavation, the State Party will request future boundary modifications to cover any future excavations. ICOMOS considers that this is an unsatisfactory, piecemeal approach, giving no certainty for future planning in the surrounding area. Therefore ICOMOS suggests that the State Party should be encouraged to identify the full extent of the site through field survey and geophysics, in conjunction with strategic excavation if necessary.

ICOMOS considers that the future expropriation of additional plots to strengthen the de facto buffer zone will be welcome, together with the proposed extension of the Controlled Area. Therefore ICOMOS suggests that approval of the boundary of the de facto buffer zone should await the result of the State Party's deliberations on the Controlled Area.

### 3. ICOMOS Recommendations

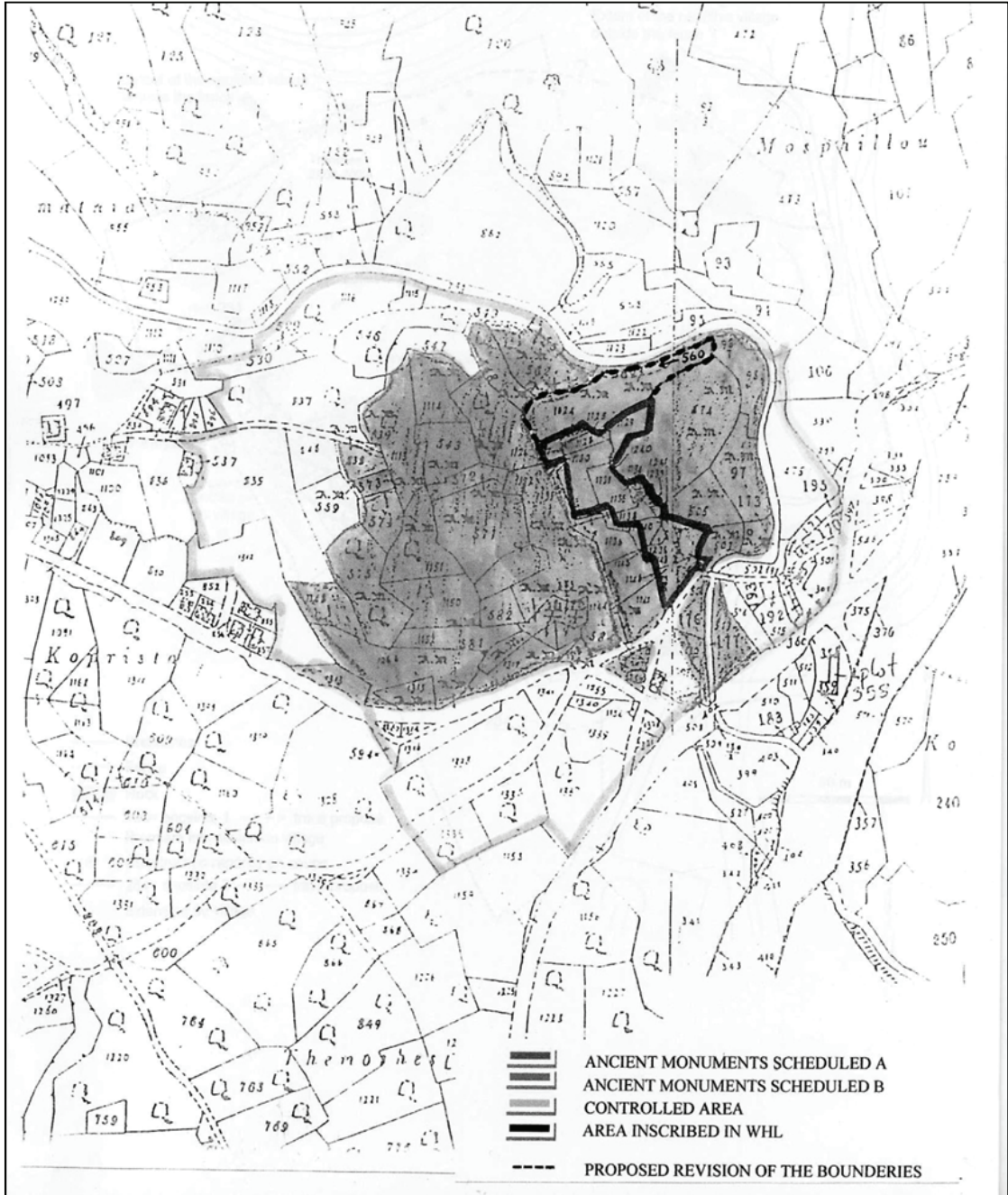
#### Recommendation with respect to inscription

ICOMOS recommends that the examination of the proposed minor modification to the boundary of Choirkoitia, Cyprus, be **referred back** to the State Party in order to allow it to:

- Extend the boundary of the World Heritage property in order to enclose all of the State-owned property of the peninsular bounded by the Maroni river;
- Identify the full extent of the site through field survey and geophysics, and strategic excavation if necessary, as prescribed by paragraph 100 of the *Operational Guidelines for the Implementation of the World Heritage Convention* and amend the boundary of the World Heritage property accordingly;

- Enlarge the buffer zone to the north, east and south and complete negotiations on the final extent of the Controlled Zone.





Map showing the revised boundaries of the property

---

## Historic centre of Naples (Italy)

### No 726

---

#### 1. Basic data

**State Party**  
Italy

**Name of property**  
Historic centre of Naples

**Location**  
Campania, City of Naples

**Inscription**  
1995

#### Brief description

Much of the significance of the Historic Centre of Naples stems from its urban fabric, which represents twenty-five centuries of growth, from the Greek town until Italian unification in 1860. One of the most ancient cities in Europe, Naples retains in its street pattern the many facets of its long history. The original centre contains Greek and Roman remains, testimony to the religious and military edifices of the Norman period, and heritage from the Renaissance and classical periods, while the steady growth of the suburbs has led to the addition of other secular and religious buildings. The current plan of the city perfectly illustrates the relationships between the different zones, and the existence of quarters specifically occupied by people of a given nationality, social level or activity. The port and the city, nestling along the Bay of Naples, have a value which is reinforced by their influence on many parts of Europe and beyond.

**Date of ICOMOS approval of this report**  
10 March 2011

#### 2. Issues raised

##### Background

The Historic Centre of Naples was inscribed in 1995 as a group of buildings, and a serial property consisting of five elements, with no buffer zone. A buffer zone was created at national level after the inscription, but has never been officially submitted to the World Heritage Committee.

In 2005 and 2006, reports on the state of conservation of the property were sent to the World Heritage Centre. A map was submitted, but it was considered to be insufficiently detailed.

In September 2007, in the framework of the retrospective inventory, the State Party was requested to provide a detailed map, and information to enable the delineation of

clear boundaries for the property, an indication of the area of each part in hectares, and an official presentation of the buffer zone.

No reply was received either to the original request, or to the reiterations of the request made in March and October 2008.

In December 2008, an UNESCO/ICOMOS advisory mission was invited by the State Party. The mission issued a report which was examined at the 33<sup>rd</sup> session of the World Heritage Committee (Seville, 2009).

The advisory mission of December 2008 set out recommendations in thirteen points. In particular, in point 5, the mission urged "*the delivery of formal clarifications to the World Heritage Committee, concerning the delimitation of the property, a correct map, an indication of the surface area of each component of the inscribed property in hectares and an official presentation of the recently approved buffer zone as a minor boundary modification.*"

In its decision 33 COM 7B.110 (Seville, 2009), the World Heritage Committee, after examining the report, requested the State Party "*to consider the conclusions of the advisory mission and to take into account the detailed recommendations.*"

##### Modification

In response to decision 33COM 7B.110, in February 2011, the State Party submitted to the World Heritage Centre a report including a request for a minor modification to the property boundaries, and a buffer zone proposal.

The request complies with the directives set out for this type of contact, and contains the answers required.

The minor modification requested results in a 20% increase in area, with an increase from 810 hectares to 1021 hectares.

The modification consists of two groupings, either of elements which were previously separate, or of new elements which were not included in the original boundaries of the property. The first grouping concerns the main element "*Historic centre of Naples*" (numbered 726-001). The "*Villa Emma*" element (formerly numbered 721-006) is integrated into it. To it have been added five other zones (marked a, b, c, e, f) containing outstanding built structures which were not taken into consideration when the property was inscribed in 1995.

The second grouping concerns the elements formerly numbered 726-004 and 726-005, and which now form a single element numbered 726-004.

As a result, the new composition proposed is organised around four elements, and reflects the clear objective of making the property's boundaries more coherent, ensuring better boundary continuity, and strengthening boundary protection. The example of the historic villages of the Casale and Santo Strato districts, which have strong

environmental, social and archaeological characteristics, is particularly significant from this viewpoint.

The modification request stresses the grounds for the insertion of new elements, emphasising their cultural integration with the property as a whole, and their specific value as a key element of the life of the city, in between the hill and the coastline. They are an integral part both of the urban network and the functional complexity of the space.

Each of the additions is described both in historic and heritage terms, with photographs, plans, detail maps, positioning and area (in hectares).

The minor modification request is linked to the sending in February 2011 of the overall property management plan submitted to the World Heritage Committee for approval.

The buffer zone concerns an area of 1350 hectares in contact with the boundaries of the property (termed zone A) and includes, from west to east, eight adjacent urban sectors. It surrounds and unites the inscribed property. It includes green zones such as the regional metropolitan park of the Hills of Naples, areas of archaeological interest, and green spaces.

It guarantees the territorial continuity of protection of the property, and regulates recent construction zones (marked Bb). It takes into account geomorphological aspects and distant perspectives, such as the skyline concept, which is important for such a celebrated bay, with the outline of Mount Vesuvius in the background.

### 3. ICOMOS recommendations

ICOMOS considers that the additions proposed for the Historic Centre of Naples give rise to rational boundaries, and are in line with the recommendations made by the advisory mission of December 2008.

ICOMOS welcomes the fact that clear answers have been provided by the State Party to the Committee's repeated requests, particularly with regard to detailed plans, areas and general plans.

ICOMOS wishes to stress the attention paid by the State Party to taking into account the coastline, inside and outside the port, the underwater archaeological remains, and the landscape and urban dimensions which are inseparable from the property.

#### **Recommendation with respect to inscription**

ICOMOS recommends that the proposed minor modification to the boundary of the Historic Centre of Naples, Italy, be **approved**.

ICOMOS recommends that the proposed buffer zone for the Historic Centre of Naples, Italy, be **approved**.

ICOMOS wishes to draw the attention of the State Party to the recurrent danger, despite its considerable efforts, of giving priority to prestigious built structures and areas to the detriment of modest and fragile urban fabric, the intangible heritage, and traditional economic activities and recommends that the State Party should allocate part of the funding collected to restoring the balance.



Map showing the revised boundaries of the property and the proposed buffer zone



---

# Úbeda and Baeza (Spain)

## No 522rev

---

### 1. Basic data

#### State Party

Spain

#### Name of property

Renaissance Monumental Ensembles of Úbeda and Baeza

#### Location

Autonomous Community of Andalusia  
Province of Jaén

#### Inscription

2003

#### Brief description

The urban morphology of the two small cities of Úbeda and Baeza in southern Spain dates back to the Moorish 9th century and to the Reconquista in the 13th century. An important development took place in the 16<sup>th</sup> century, when the cities were subject to renovation along the lines of the emerging Renaissance. This planning intervention was part of the introduction into Spain of new humanistic ideas from Italy, which went on to have a great influence on the architecture of Latin America.

#### Date of ICOMOS approval of this report

10 March 2011

### 2. Issues raised

#### Background

The property was first assessed in 1989. It was inscribed after a revision of its proposed form and definition in 2003.

#### Modification

The State Party proposes that a new monument should be added, in a third city, to the serial property already inscribed on the World Heritage List, consisting of the monumental ensembles of the two cities of Úbeda and Baeza.

The property proposed as minor modification is the Cathedral of the Assumption, in the heart of the old city of Jaén, the capital of the province. The cathedral is some 40km south-west of the two cities of Úbeda and Baeza. The property proposed as minor modification thus forms a new entity with a new and specific buffer zone.

The Renaissance cathedral was built on the site of a Gothic cathedral which was never completed and had suffered damage. Its design was the work of the architect

and town planner Andrea Vandelvira, who had already been placed in charge of the main monuments at Úbeda and Baeza. Construction began during the 1550s and the main facade was completed in 1688. The building has an almost square floor plan, whose main length is 120m, and whose main facade, flanked by two symmetrical bell towers, is approximately 76m high. Its internal structure has three naves in semi-circular vaults, and it has a dome rising above columns at the crossing of the transept, together with two side chapels and an outstanding sacristy. The State Party claims that its stylistic elements are particularly original and remarkable, and that the ensemble forms a highly accomplished architectural synthesis.

The Cathedral of Jaén is presented as the best preserved and most representative of the Spanish Renaissance, and as a remarkable example of the religious architectural style which was subsequently diffused in the Spanish colonial territories in South America. Reference is also made to its major role in the urban landscape of the historic city of Jaén. The religious and spiritual testimony it provides complements the civic architecture and urban planning already recognised for the cities of Úbeda and Baeza.

A buffer zone has been established, seemingly on the same criteria as those used for Úbeda and Baeza. It corresponds essentially to the historic city and to a "white" area whose characteristics have not been established.

	Property area	Buffer zone
1) Úbeda	4.2 ha	90.3 ha
2) Baeza	4.8 ha	85.4 ha
Total inscribed	9.0 ha	175.7 ha
3) Jaén. proposed extension	0.84 ha	121 ha

### 3. ICOMOS recommendations

ICOMOS considers that the proposed minor modification include a new monument, in a city separate from those of the two entities which constitute the property of Renaissance Monumental Ensembles of Úbeda and Baeza. While the property proposed as minor modification is presented in a brief architectural and historic description, and while it is stated that the values proposed are complementary to those of the two properties already inscribed, the contribution of the proposed modification to the outstanding universal value of the property already inscribed cannot be satisfactorily assessed in the absence of a comparative study and in the absence of an analysis which justifies the integrity and authenticity of the monument and its environment.

More generally, while the importance and influence of Andrea Vandelvira on Latin American architecture and town planning is certain, a far more documented study would be necessary concerning the specific contribution made by the property proposed as an extension.

The request does not contain any description of the property's urban and landscape environment, or of its buffer zone, and provides no indication of management arrangements.

ICOMOS considers that this is not merely a minor modification to the boundary of the property, but this is a proposal for an extension which means that a new dossier is necessary, together with a clearly established management system and an expert appraisal mission.

**Recommendations with respect to inscription**

ICOMOS recommends that the proposed minor modification to the boundary of Renaissance Monumental Ensembles of Úbeda and Baeza, Spain, should **not be approved**.



Map showing the location of Ubeda, Baeza and Jaén

---

## Pilgrimage Church of Wies (Germany) No 271

---

### 1 Basic data

**State Party**  
Germany

**Name of property**  
Pilgrimage Church of Wies

**Location**  
Steingaden town, County of Weilheim-Schongau  
District of Upper Bavaria, Free State of Bavaria

**Inscription**  
1983

**Brief description**  
Miraculously preserved in the beautiful setting of an Alpine valley, the Church of Wies (1745–54), the work of architect Dominikus Zimmermann, is a masterpiece of Bavarian Rococo – exuberant, colourful and joyful.

**Date of ICOMOS approval of this report**  
10 March 2011

### 2. Issues raised

#### Background

The World Heritage inscribed property is located in an exposed and elevated position in the foothills of the Alps, giving it a long-range visual effect and prominence as a pilgrimage destination. The plan provided with the letter and supplementary information dated 7 January 2009 (#79 in the Inventory) in response to the Retrospective Inventory shows the boundary of the World Heritage property, but did not include a buffer zone to protect the surrounding landscape and views towards the church from adverse visual impacts. The information on the property boundary was acknowledged by the World Heritage Committee in Decision 33 COM 8D (Seville, 2009) regarding clarification of property boundaries and sizes. The State Party was requested by the World Heritage Centre in a letter dated 20 January 2010 to provide a map with a bar scale and further documentation concerning the buffer zone.

#### Modification

The State Party has now provided a plan (12 February 2010) showing an enlarged protected area around the property, which encloses the surrounding hamlet and fields, together with an extensive buffer zone designed to protect the property from visual and other interference which would threaten its World Heritage status. The State Party has also provided an amendment to the

Management Plan (as of March 2009) which outlines the protective measures to be applied to the areas within the boundaries shown on the plan. The church itself (the World Heritage property) is shown in blue, the surrounding protected area is hatched in red, and the buffer zone is shown in a green line. The buffer zone extends to the north and south of the property. The map includes a scale and gives the areas in hectares:

World Heritage Property: 0.10ha  
Protected Area: 1.60ha  
Buffer Zone: 6.80ha

The World Heritage property and surrounding protected area is covered by provisions of §35 in the BauGB building code in terms of land use planning, so that competing uses or disturbing projects will be rejected. The property and the buffer zone are further protected by the provisions of the Regional Plan, which assures that the specialist authorities in charge of protection of the World Heritage property will be included in the participation process, not only for the designated areas but also at greater distances. This will ensure that undesirable developments such as zones for wind turbines, broadcast or reception towers, industry and infrastructure facilities, as well as buildings which by their size or form interfere with or damage the effect and view of the Church of Wies, will be avoided.

ICOMOS considers that the Regional Plan for the Oberland region is a very good basis for preserving the visual integrity of the World Heritage property.

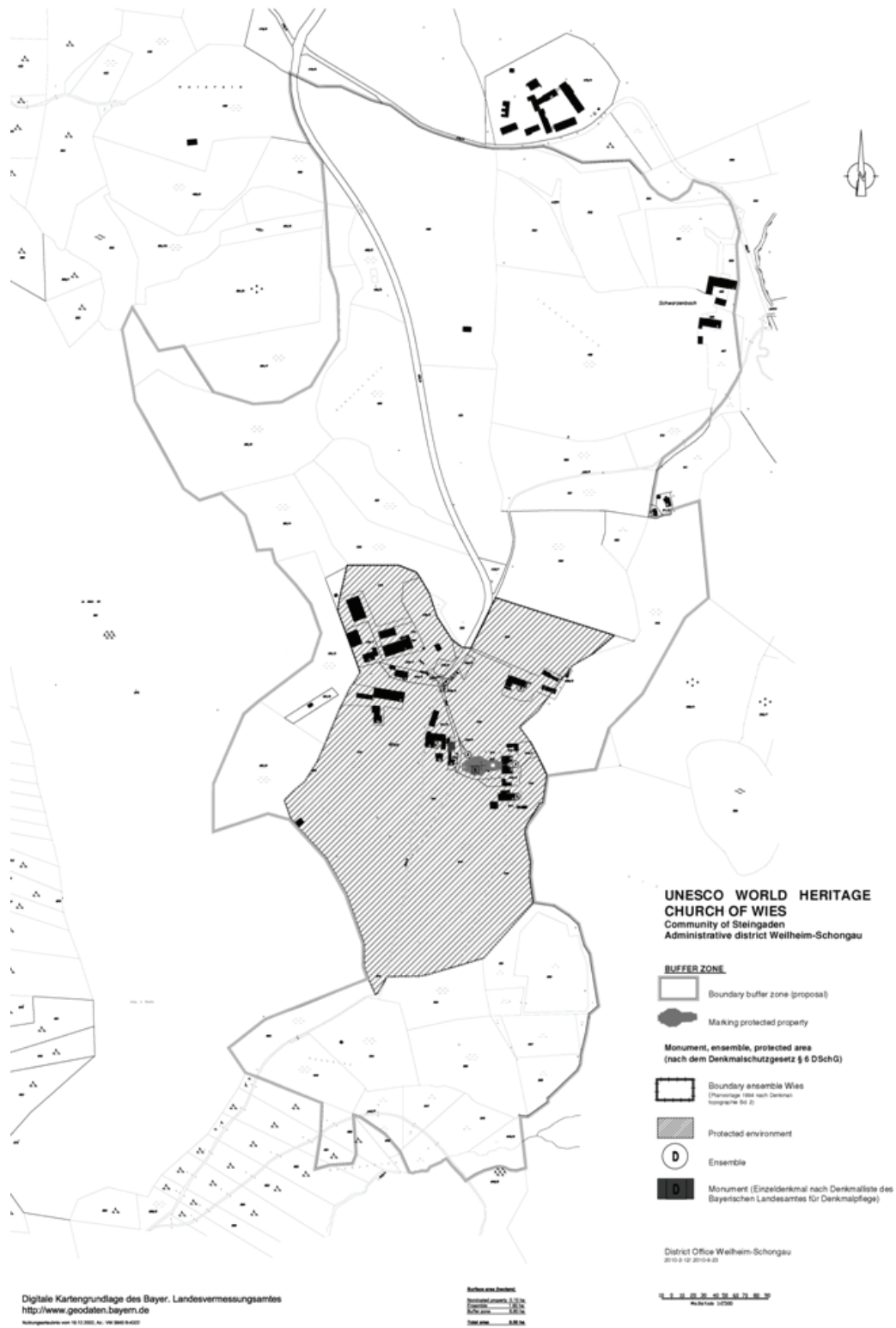
ICOMOS therefore considers that the enlarged protected area around the property and designated buffer zone as protected by the Regional Plan are satisfactory.

### 3. ICOMOS Recommendations

#### Recommendation with respect to inscription

ICOMOS recommends that the proposed buffer zone for the Pilgrimage Church of Wies, Germany, be **approved**.





Map showing the boundaries of the proposed buffer zone

---

# Abbey and Altenmünster of Lorsch (Germany) No 515

---

## 1 Basic data

### State Party

Germany

### Name of property

Abbey and Altenmünster of Lorsch

### Location

District of Bergstrasse, State of Hesse (Hessen)

### Inscription

1991

### Brief description

The abbey, together with its monumental entrance, the famous 'Torhall', are rare architectural vestiges of the Carolingian era. The sculptures and paintings from this period are still in remarkably good condition.

### Date of ICOMOS approval of this report

10 March 2011

## 2. Issues raised

### Background

The World Heritage inscribed property is in two parts: the site and remains of the first monastery founded on the River Weschnitz in 764AD and the site and remains of the second, much larger monastery including the Torhalle, founded 650 metres to the west on higher ground (the dune) only three years later and consecrated in 774AD. The extent of the original area of the first monastery (the Altenmünster) has not been established. The original area of the second monastic enclosure, taken as being the area enclosed within the remaining Abbey wall and its traceable line, has been reduced by about one third with the construction of a road (Nibelungenstrasse) and residential development across its northern part.

The Periodic Report of 2004 noted that the status of the boundary of the World Heritage property was inadequate and that no buffer zone had been defined. Subsequently a cadastral map showing the boundaries of the two parts of the World Heritage property was provided in 2005. This does not include the area of the Abbey site originally enclosed by the Abbey wall and now built over, to the north of Nibelungenstrasse. It encompasses the State-owned Abbey site south of Nibelungenstrasse and municipality-owned green land around it to the east and

south, extending beyond the Abbey wall to cover possible remains of ditch or moat. The Altenmünster site is covered to the extent of the municipality-owned cadastral lot 100/1, encompassing known archaeological remains.

No buffer zone was shown.

The Abbey and Altenmünster of Lorsch Management Plan of 2009 proposes a buffer zone surrounding and uniting the two parts of the World Heritage inscribed property and including the area of the former Abbey site to the north.

The proposed buffer zone will encompass the known area of the second Abbey, including the area of the monastic enclosure now built over, to the north of Nibelungenstrasse. It will then extend north-east along the north side of Nibelungenstrasse and its continuation until it crosses the Weschnitz River (now canalized). It then follows the east bank of the Weschnitz canal, crossing back south of the Altenmünster nominated area along the south-east boundaries of cadastral districts 106 and 77, west along the northern boundaries of cadastral lots 185-7 running due west until it meets the footpath 424/4 when it turns south to Karolingerstrasse, then west along that street, including the built properties along the southern boundary of the Abbey nominated area, to the corner with Römerstrasse. From there it runs north along Römerstrasse to the Marktplatz, including the built properties to the west of the Abbey nominated area, across Nibelungenstrasse and north to proceed around the northern boundary of the original monastic enclosure.

The World Heritage Property and the proposed buffer zone are protected by the Monument Protection Act of the State of Hesse, administered by the Departments of Monument Preservation and Archaeology/Palaeontology and the State Administration of Palaces and Parks of Hesse, and the planning provisions of the Municipality of Lorsch. The Abbey site is partly owned by the State of Hesse and partly by the Municipality of Lorsch; the site of the Altenmünster is owned by the Municipality of Lorsch.

The concerns of ICOMOS have revolved around the need for protection of the archaeological remains of the area of the Abbey site north of Nibelungenstrasse, which was originally included within the Abbey walls, and the need to link the two areas of the property. These concerns are met by the extent of the proposed buffer zone, which also covers a considerable area around the Altenmünster property.

ICOMOS also considered that protection was needed for the important approach view of the Torhalle from the west and for views and the land formerly associated with the abbey in the vicinity of the axis between the Torhalle and the Altenmünster. ICOMOS considered that the red line boundary on figure 8.15 'Protected Areas and Buildings'

in the Management Plan (p.63) would be more appropriate in the latter respect.

The proposed modification was considered at the 34th session of the World Heritage Committee (Brasilia, 2010) and the Committee adopted the following decision:

Decision 34 COM 8B.56:

*The World Heritage Committee,*

1. *Having examined Documents WHC-10/34.COM/8B and WHC-10/34.COM/INF.8B1.Add,*

2. *Refers the proposed buffer zone for the Abbey and Altenmünster of Lorsch, Germany, back to the State Party to allow it to:*

a) *Consider whether the boundary of the proposed buffer zone could be extended to the west of the World Heritage property to protect the important approach view of the Torhall and include Marktplatz and Benedikterstrasse, or whether this view could be protected by other means;*

b) *Consider whether the boundary of the proposed buffer zone could be extended further to the north to protect the line of the central axis connecting the Altenmünster site and the Lorsch Abbey site and enclose the Klosterfeld area on the north side of Alte Bensheimer Strasse;*

3. *Encourages the State Party to keep the World Heritage Committee informed of any development project concerning the property, its buffer zone, and wider setting in conformity with Paragraph 172 of the Operational Guidelines for the Implementation of the World Heritage Convention.*

#### **Modification**

In its response of 14 December 2010, the State Party has stated:

(a) The buffer zone will be extended to the west to protect the important approach view of the Torhalle and include the Marktplatz as well as the Benediktinerstrasse and the buildings surrounding both places. The area is protected by the Monument Protection Act of the State of Hesse as well as by a municipal development plan. The Management Plan will be amended to declare the boundary accordingly.

(b) The central axis connecting the two parts of the Abbey site is not the Alte Bensheimer Strasse as might be misleadingly indicated by the plan, but is within the eastern part of the proposed buffer zone. Therefore it will be protected in accordance with the Management Plan.

ICOMOS welcomes the extension of the buffer zone to the west as proposed in point (a).

In relation to point (b) ICOMOS notes that the proposed revised buffer zone boundary has been extended to the south-east but not at all to the north of Alte Bensheimer Strasse. It does not follow the red line boundary on

figure 8.15 'Protected Areas and Buildings' in the Management Plan (p.63) which extends the northern boundary of the original monastic enclosure to run parallel to the north side of Nibelungenstrasse/Alte Bensheimer Strasse. ICOMOS considers that the piece of land extending along the north-east extension of Nibelungenstrasse from the northern boundary of the original monastic enclosure to meet Alte Bensheimer Strasse needs to be protected from development that might impact on the view of the Torhalle as approached along Alte Bensheimer Strasse from the north-east. This is shown as protected within the red line boundary on figure 8.15 'Protected Areas and Buildings' Buildings' in the Management Plan (p.63). ICOMOS considers that this piece at least should be included in the buffer zone.

The State Party also provided information on the proposed open air museum to be located outside the buffer zone on agricultural land on the north side of Alte Bensheimer Strasse, shown as Land-use Plan 53 on the buffer zone plan provided with the State Party's letter.

### **3. ICOMOS Recommendations**

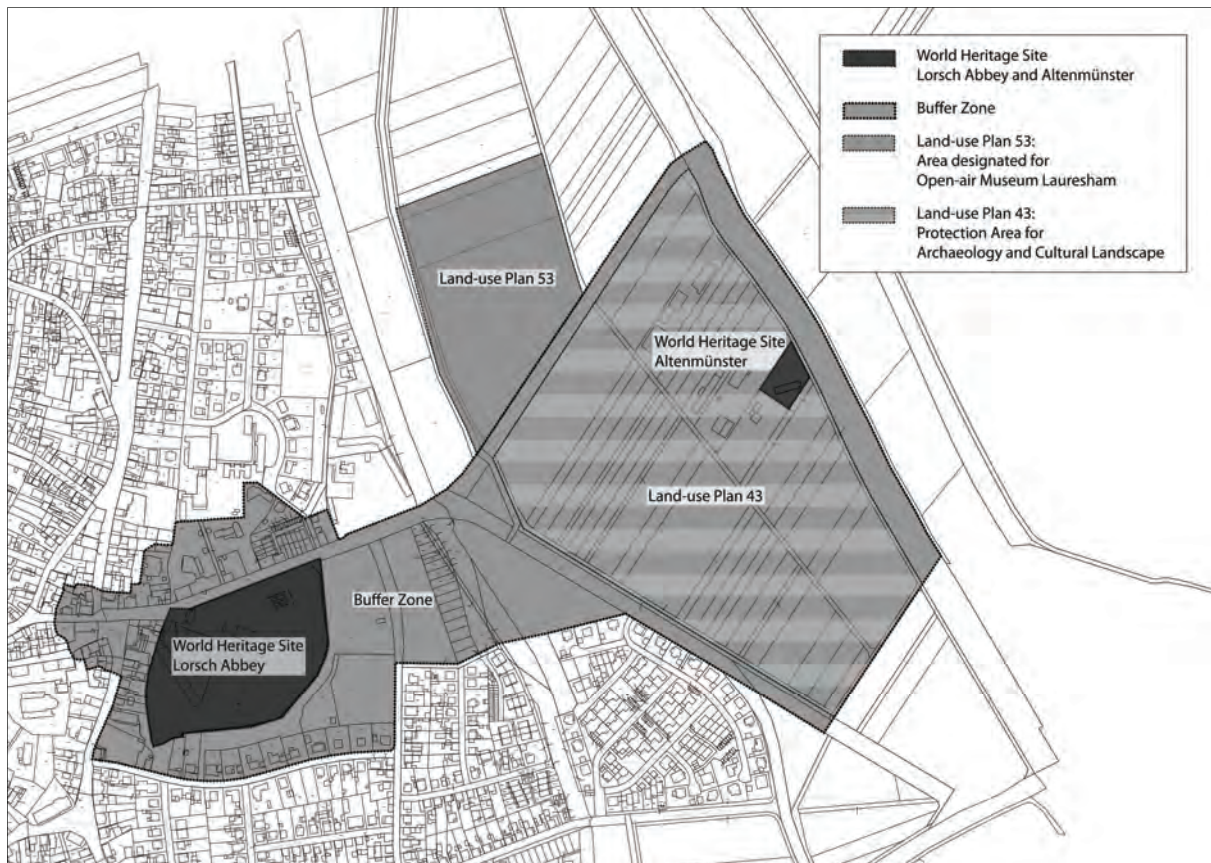
#### **Recommendation with respect to inscription**

ICOMOS recommends that the proposed buffer zone for the Abbey and Altenmünster of Lorsch, Germany, be **approved**.

ICOMOS further recommends that the State Party give consideration to the inclusion of the piece of land extending along the north-east extension of Nibelungenstrasse from the northern boundary of the original monastic enclosure to meet Alte Bensheimer Strasse, in order to protect the view of the Torhalle as approached along Alte Bensheimer Strasse from the north-east.

ICOMOS encourages the State Party to keep the World Heritage Committee informed of the open air museum project in conformity with Paragraph 172 of the *Operational Guidelines for the Implementation of the World Heritage Convention*.





Map showing the boundaries of the proposed buffer zone

---

# Humberstone and Santa Laura Saltpeter Works (Chile) No 1178

---

## 1 Basic data

### State Party

Chile

### Name of property

Humberstone and Santa Laura Saltpeter Works

### Location

Tarapaca Region, Iquique Province

### Inscription

2005

### Brief description

Humberstone and Santa Laura works contain over 200 former saltpeter works where workers from Chile, Peru and Bolivia lived in company towns and forged a distinctive communal Pampinos culture. That culture is manifest in their rich language, creativity, and solidarity, and, above all, in their pioneering struggle for social justice, which had a profound impact on social history. Situated in the remote Pampas, one of the driest deserts on Earth, thousands of Pampinos lived and worked in this hostile environment for over 60 years, from 1880, to process the largest deposit of saltpeter in the world, producing the fertilizer sodium nitrate that was to transform agricultural lands in North and South America, and in Europe, and produced great wealth for Chile. Because of the vulnerability of the structures and the impact of a recent earthquake, the site was also placed on the List of World Heritage in Danger to help mobilize resources for its conservation.

### Date of ICOMOS approval of this report

10 March 2011

## 2. Issues raised

### Background

Lying in the Tamarugal (Pampa) area and containing multiple former saltpeter works, the boundary of the inscribed property encloses an area of 647.28ha (nominated area), with a surrounding buffer zone of 12,055ha.

At the time of inscription, the boundary of the property intentionally coincided with that of the National Monument that bears the same name and encompasses the same site. Now, as very particular situation, the two abandoned main saltpeter works (Humberstone and

Santa Laura) have long been physically separated by existing Route A-16 (a high traffic national road that links the regional capital of Iquique with the country's main Panamerican highway).

This situation is detrimental to the property as it creates a divorce between the two works, and generates interpretation, presentation, and safety problems.

Among other issues, in its decision 30 COM 7A.31 (Vilnius, 2006), the World Heritage Committee noted with great concern that the Route A-16 phenomena was unaddressed by the State Party and, thus, urged the latter to look for an alternate deviation proposal.

The World Heritage Committee requested, among other issues, in decision 33 COM 7A.28 (Seville, 2009) that: "the State Party submit the required documentation for boundary modifications, including appropriate cartography, for approval by the World Heritage Committee" (this being related to the Route A-16 issue).

The World Heritage Committee reiterated its request in decision 34 COM 7A.29 (Brasilia, 2010), to submit the required documentation for boundary modifications.

### Modification

As a result of the World Heritage Committee's recommendations, and after analyzing at least two possible alternatives, the State Party, through its Ministry of Public Works, proposed to solve the problem by deviating Route A-16 through the southern portion of the property, a proposal known as the "South Layout Option".

The southern proposal is also supported by the National Monuments Council (NMC - national authority with legal jurisdiction over heritage sites) and by the Saltpeter Museum Corporation (SMC - local entity in charge of the management and administration the property). Furthermore, the boundaries of the National Monument have already been modified, and locally approved by the NMC and the SMC, in order to adjust themselves to the proposed revision.

In light of all the above, the State Party submitted in January 2011 a request for a minor modification to the boundaries of the property to allow the re-routed A-16 Road to be excluded from the boundary. Since the Route A-16 will now run down and parallel to the south boundary, it is logical to move this boundary slightly upwards, so as to leave the Route A-16 outside the property, thus forming a single compact polygon.

Therefore, the nominated area will be slightly reduced from 647.28ha, down to 573.48ha (a small reduction of 73.80ha, or 11.40%).

ICOMOS considers a map needs to be provided showing the proposed slightly revised boundary and the slightly amended buffer zone.

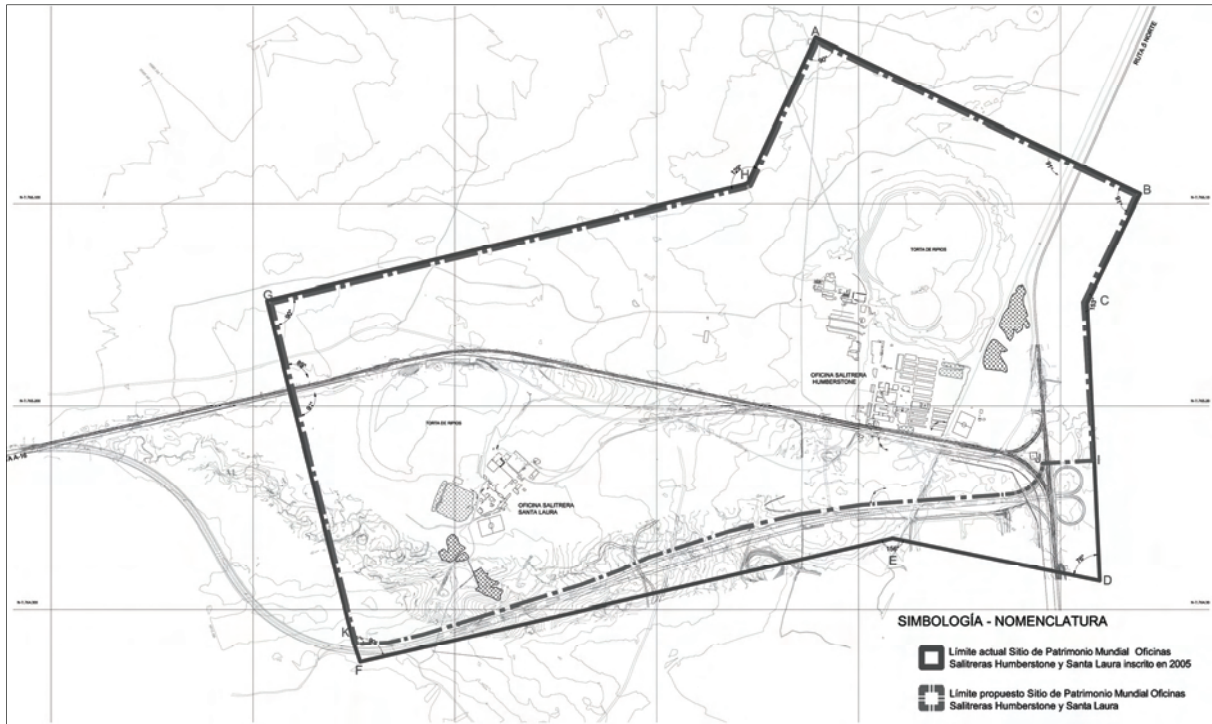
### 3. ICOMOS Recommendations

ICOMOS considers that the proposed minor boundary modification of the property is a direct and logical consequence of the Route A-16 deviation proposal and is appropriate. Its approval however depends on the agreement of the World Heritage Committee on the new line of Route A-16 that should be dealt with in the document WHC.11/35.COM/7A on the State of conservation.

#### **Recommendation with respect to inscription**

ICOMOS recommends that, if the World Heritage Committee agrees on the new line of Route A-16 under item 7A, the proposed minor modification to the boundary of Humberstone and Santa Laura Saltpeter Works, Chile, be **approved**.

ICOMOS further recommends that the State Party provide a map showing the revised boundary and buffer zone. This could be done in a series of 2 maps, using different scales.



Map showing the revised boundaries of the property

---

## Maya Site of Copán (Honduras) No 129

---

### 1 Basic data

**State Party**

Honduras

**Name of property**

Maya Site of Copán

**Location**

Copán

**Inscription**

1980

**Brief description**

Discovered in 1570 by Diego García de Palacio, the ruins of Copán, one of the most important sites of the Mayan civilization, were not excavated until the 19<sup>th</sup> century. The ruined citadel and imposing public squares reveal the three main stages of development before the city was abandoned in the early 10<sup>th</sup> century, A.D.

**Date of ICOMOS approval of this report**

10 March 2011

### 2. Issues raised

**Background**

Copán with its temples, plazas and terraces, comprises a type of architectural complex among the most characteristic of the Mayan civilization. The lengthy inscription on its Hieroglyphic Stairway Plaza is of considerable historical significance. This Mayan city is composed of a main complex of ruins with several secondary complexes encircling it. Also, its complex consists of the Acropolis and important plazas. During the period when Mayan civilization spread across Central America, Copán was the largest and most influential city in the south-eastern sector.

The property (58.95ha in size) was originally defined to coincide with Copán Archaeological Park. However, a proper map of the inscribed property has been lacking since the time of its inscription. Also the precise delineation and area of the buffer zone was also pending since the time of the inscription.

Since inscription, the Copán Archaeological Park has been increased from 58.95ha to 85ha, (a 44% increase) in order to help with the protection and the management of the property. By doing this, the State Party added the

following relevant areas to the Park: (1) two minor extensions to the eastern side of main core; (2) the Sepulturas Residential Area and (3) the Regional Centre for Archaeological Research. Although these areas are not part of the nominated property, they have long been perceived as if they were, both by local people and by all outside visitors and so, they have been managed, administered and protected accordingly.

In decision 33 COM 7B.137 (Sevilla, 2009), the World Heritage Committee urged the State Party, among other issues, to: "officially submit the limits of the World Heritage property and its potential buffer zone, in light of the requirements of the retrospective inventory".

**Modification**

The State Party has submitted in the 2011 SOC report a map of the inscribed property (map No. 1) and a map showing the buffer zone (map No. 3).

The buffer zone will include the area of the Archaeological Park beyond the property boundary and further land beyond. However, some relevant issues remain uncertain and/or unsolved.

The map of the inscribed property and the proposed buffer zone map are missing relevant information and the specific area of the buffer zone remains unknown. No thorough justification of its actual size and delineation has been provided. For instance no justification is provided as to why the buffer zone does not extend across the river to the south.

Additionally, information on the provisions of management and regulatory measures is lacking.

While land use is subject to the Honduran Institute of Anthropology and History (IHAH) approval, no information is provided, except that the State Party allows "low impact" practices within buffer zone. ICOMOS notes that within the buffer zone, land is mainly pastoral (northern & western side) and agricultural (eastern side and between Site and Sepulturas) and, on the southern side, Copán river provides a natural boundary. Nevertheless, the IHAH monitors land use 500 meters inside past the river, which is mainly agricultural land. Beyond the buffer zone, the IHAH monitors potential landscape contamination (mostly caused by commercial communication antennae) on a case by case basis.

### 3. ICOMOS Recommendations

ICOMOS considers that the proposed buffer zone will provide important tools for management and protection of the property as well as for the safeguarding and control of landscape and archaeological remains in its setting.

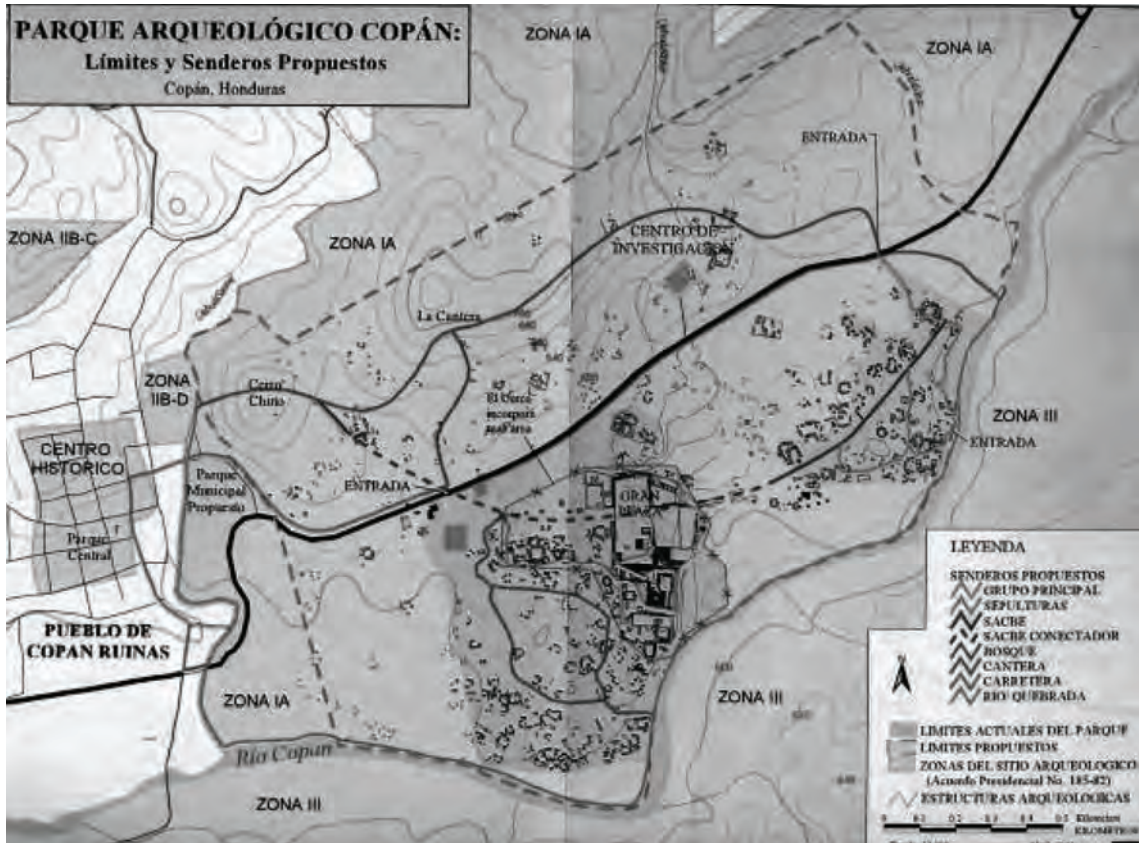
ICOMOS however does consider that some relevant issues remain uncertain and/or unsolved. The technical information in the maps is insufficient, incomplete and unclear. The information regarding management and regulatory measures for the buffer zone is not sufficient.

**Recommendation with respect to inscription**

ICOMOS recommends that the examination of the proposed buffer zone for the Maya Site of Copán, Honduras, be **referred back** to the State Party in order to allow it to:

- Re-submit map No. 1 showing the nominated property and its immediate surroundings. This map should be either topographic or cadastral, presented at a scale which is appropriate to the size in hectares of the property, include title and legend in English and bear a labelled coordinate grid;
- Re-submit map No. 3 showing the proposed buffer zone and the nominated area with the same standards as the ones required for map No. 1.
- Provide justification for the extent of the buffer zone, its delineation and its exact area;
- Provide information on regulatory measures for the protection and management of the property and its buffer zone.





Map showing the boundaries of the proposed buffer zone



# ICOMOS

**2011**

**Addendum**

## **Evaluations of Nominations of Cultural and Mixed Properties to the World Heritage List**

ICOMOS Report for the World Heritage Committee, 35th ordinary session,  
UNESCO, June 2011

WHC-11/35.COM/INF.8B1.Add.Corr



United Nations  
Educational, Scientific and  
Cultural Organization



World Heritage Convention

more systematically the forests and particularly grazing lands.

In the Causses, the landscape structures put in place in the 12<sup>th</sup> and 13<sup>th</sup> centuries are still reflected in the commune boundaries of today. By the 16<sup>th</sup> century trade in sheep and cloth put the area at the centre of trade between the plains to the south and north.

The golden age of the Cévennes economy, was between the 16<sup>th</sup> and 18<sup>th</sup> centuries when prosperity first from chestnuts and sheep and then later also silk fostered the building of large farmhouses and established trade and permanent relations with the plains, the valley of the Rhone and the Mediterranean. In the 1840s the longest railway line of the time connected Grand Combe to Beaucaire. Silk production brought another boom era at the end of the 18<sup>th</sup> and beginning of the 19<sup>th</sup> centuries. By 1810 the number of peoples living in the region reached its apogee. The re-distribution of land after the Revolution of 1789 to the farmers added to the economic impetus: new techniques were introduced and successful farms absorbed others, leading to the demise of many smallholdings.

Boom was quickly followed by decline: disease amongst the silk worms in the mid 19<sup>th</sup> century started migration away from the mountains to the towns. Between 1856 and 1914, Cévennes lost 40% of its population to the urban centres and the mines. The war of 1914-1918 accentuated the demographic loss and this continued after the armistice. 20% of the men and 25% of the women between 20 and 40 years old left the area to find work in the cities. Sericulture and silk production finally came to an end in the 1950s.

By 1975, at the end one hundred twenty-five years of decline, only around 11,500 inhabitants remained - a loss of two thirds, the losses being most strong on the Atlantic slopes. Ruins invaded the territory, and many hamlets died.

Gradually the trend is reversing: in the last thirty years people have slowly begun to move back to some areas and reclaim the lands.

The traditional transhumance of vast flocks of sheep seasonally from the plains of Languedoc to the uplands of the Causses and the Cévennes has now dwindled drastically. However there is now a determined move to support agro-pastoralism which is beginning to have a marked effect on its revival.

### 3 Outstanding Universal Value, integrity and authenticity

#### Comparative analysis

The property is compared with three inscribed properties: The Laponian Area, (Sweden, 1996) Pyrénées - Mont Perdu, (France, Spain, 1999), and the Orkhon Valley Cultural Landscape (Mongolia, 2004). These properties are all considered to be examples of pastoralism, rather than agro-pastoralism and thus none compare with Causses and Cévennes.

The nominated property is then compared with sites representative of agro-pastoralism around the Mediterranean – none of which are inscribed. These are groups into four areas: South-west Europe with sites in Spain, France, Andorra, and Italy; the Balkan Peninsula with sites in Croatia, Bosnia<sup>1</sup>, Montenegro, Kosovo<sup>2</sup>, Albania, Greece, and Turkey; the Eastern Mediterranean with sites in Turkey, Syria, and Libya; and fourthly the Maghreb with sites in Tunisia, Algeria and Morocco.

The comparison covers climate, religion, aspects of agro-pastoralism and the vitality of the systems. In terms of agro-pastoralism, the Causses and Cévennes are seen to cover all the various types of agro-pastoralism present around the Mediterranean apart from nomadic pastoralism. Furthermore the property still has active transhumance and a landscape that reflects – visibly and through its organisational structures - both ancient agro-pastoralism (from relict aspects of the landscape) and what is called the traditional agro-pastoralism that has evolved over the past millennium.

Comparing this to what persists in the other areas and regions, it is suggested that in the Maghreb, the pastoralism was defined more by nomadic and semi-nomadic systems with more recently integration with agriculturalists. The area has been subject to intense population pressure since the 19<sup>th</sup> century and although the mobility of the pastoral system has survived, it is highly vulnerable.

In Albania, where livestock and pastoral practices date back to Roman times, there are similarities with the landscape and systems of the Causses and Cévennes. However in Albania the system was dislocated by the Soviet practice of collectivisation and although pastoralism has recovered, there is a loss of traditions

---

<sup>1</sup> Bosnia and Herzegovina

<sup>2</sup> **Note:** The Secretariat was informed by the Legal Advisor that “The UNESCO Secretariat follows the practice of the United Nations, which considers that the Security Council Resolution 12.44 (1999) continues to be applicable to the territory of Kosovo until a final settlement is achieved”.

# ICOMOS

2011

## Evaluations of Nominations of Cultural and Mixed Properties to the World Heritage List

ICOMOS Report for the World Heritage Committee, 35th ordinary session, UNESCO, June 2011

WHC-11/35.COM/INF.8B1.Corr

This Corrigendum concerns two evaluations:

- ‘Pearling, testimony of an island economy’ (Bahrain)
- Hiraizumi – Temples, Gardens and Archaeological Sites Representing the Buddhist Pure Land (Japan)



United Nations  
Educational, Scientific and  
Cultural Organization



World Heritage Convention

DISCLAIMER CONCERNING THE TEXT OF THE  
EVALUATION OF:

---

**Pearling  
(Bahrain)  
No 1364**

---

**Disclaimer concerning the text of the evaluation of the nomination 'Pearling, testimony of an island economy' (C 1364) presented by the Kingdom of Bahrain**

With reference to the nomination presented by the Kingdom of Bahrain 'Pearling, testimony of an island economy' (C 1364) it should be noted that, according to the United Nations directives of 15 May 1999 (ref.ST/CS/SER.A/29/Rev.1) the term 'Persian Gulf', 'Gulf' and 'Shatt-al-Arab' shall be referred to and used in all documents, publications and statements emanating from the Secretariat as the standard geographical designation of the sea area between the Arabian Peninsula and the Islamic Republic of Iran.

**CORRIGENDUM OF PAGE 227 OF THE EVALUATION TEXT OF**

---

**Hiraizumi**

**(Japan)**

**No 1277rev**

---

- Muryōkō-in Ato – site of temple and buried garden  
This is the archaeological remains of a temple constructed in the late 12<sup>th</sup> century by the 3<sup>rd</sup> lord of the Ōshū Fujiwara family and burned down in the mid 13<sup>th</sup> century. The whole site was rectangular in shape and protected in part by earth mounds and moat. Within, was a highly developed Pure Land garden with a pond and two islands.

Currently the remains of the temple and garden are covered over by rice fields.

- Mount Kinkeisan – sacred mountain  
This small mountain, some 100 metres high, was a central reference point for the development of the city – being directly to the north of Mōtsū-ji and west of Muryōkō-in Ato. The Ōshū Fujiwara family were said to have buried sutras on its summit – and nine such mounds have been identified.

- Yanaginogosho Iseki – site of government offices  
The Yanaginogosho Iseki is the archaeological site of a residence-government office of the Ōshū Fujiwara clan constructed at the end of the 11<sup>th</sup> and early 12<sup>th</sup> centuries. Seventy excavations have been carried out on the site which is seen as the political and administrative centre of Hiraizumi. Part of the site was enclosed by a moat and within has been found remains of 12<sup>th</sup> century road-like structures, fences, building posts and a pond. Outside the moated area are remains of a road leading west to Chūson-ji Konjikidō with evidence for vassals' houses along each side.

All the excavations are to be preserved underground. The pond has been reconstructed on the surface of a protective mound to represent its original form. An overall presentation plan has been developed to be implemented over the next seven years.

A new bypass, bridges and various other development projects have recently been carried out near the site (see below).

Spatial layout of Pure Land gardens that reflects the cosmology of Pure Land Buddhism

Buddhism was born in India and introduced into Japan from China and Korea around the mid 6<sup>th</sup> century. It underwent fusion with traditional Shinto beliefs associated with nature and ancestor worship, particularly manifest in the Tendai sect of Buddhism. In the 8<sup>th</sup> century the Pure Land Buddhism spread to Japan, and by the 12<sup>th</sup> century had become a separate sect. The Pure Land was both Amida Buddha's Pure Land which people aspired to after death and peace of mind in this life. Faith in Amida Buddha's Pure Land in the west in particular, combined with the idea of the built landscape being in harmony with the environment and thus reflecting the Pure Land, spread rapidly in the capital city Kyoto and then throughout Japan.

Today Pure Land is, together with Chan (Zen), the dominant form of Buddhism in China, Korea, Japan, Taiwan of China, and Vietnam.

In the history of Japanese architecture, the period from the 11<sup>th</sup> century to the 12<sup>th</sup> century is characterized by the construction of many Amidadō (Amida halls) throughout Japan as these were seen as 'good deeds' that would help rebirth in the Pure Land in the West. In Hiraizumi, Chūson-ji Konjikidō is an Amida hall of particularly elaborate character.

Gardens were also developed and they in particular are seen to reflect the fusion between Pure Land Buddhism and Shintoism in respecting naturally occurring rocks, trees and mountains. Pure Land Gardens had ponds with curved rocky shores in contrast to the formal rectangular ponds of Buddhist temples in India, or those depicted in sutras or in the mural paintings of the Mogao grottoes, China.

In Hiraizumi the three main temples and gardens are positioned at key points of the city, and were linked to the sacred mountain, Mt Kinkeisan, and Yanaginogosho, the government offices, by axial planning in which directions and orientations had special significance.

There appears to be no contemporary documentary evidence for linking the gardens with Pure Land Buddhism; rather the design and layout of the gardens seems to mirror images in 11<sup>th</sup> and 12<sup>th</sup> century sutras from Hiraizumi, which depict the Pure Land of Ultimate Bliss.

Hiraizumi's temples and gardens served as a model for temples and gardens built elsewhere in Japan, including Yōfuku-ji in Kamakura (1189-1405), Ganjō-ji in Shiramizu (built in 1160 and still extant, in Iwaki city, Fukushima Prefecture), and more.

### History and development

Fujiwara no Kiyohira, the founder of the Ōshū Fujiwara family, transferred his residence to Hiraizumi in the beginning of the 12<sup>th</sup> century and set about constructing a country based on Buddhism. The remains of the city reflect the idea of building in harmony with nature, while the gardens make more specific reference to the focal mountains around the plain and the alignment of water, buildings and the mountain peaks.

The city developed over a period of around 100 years, its prosperity based on wealth accumulated from gold production. A grid pattern system of streets was laid out, aligned north-south and east-west. A port was constructed on the river and guardian shrines placed at the four compass points around the city. In the centre the administration, the main temple and the main residential space were aligned east to west, with the backdrop of Mount Tabashineyama in the east enhanced with the planting of cheery trees –