

# ICOMOS

2016

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

**ICOMOS Report for the World Heritage Committee**  
40th ordinary session, Istanbul, 10 - 20 July 2016

WHC/16/40.COM/INF.8B1







**UNESCO**

World Heritage Convention  
World Heritage Committee

**2016**

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

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40th ordinary session, Istanbul, 10 – 20 July 2016

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# World Heritage List Nominations 2016

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## **World Heritage List Nominations received by 1<sup>st</sup> February 2016**

See Addendum (WHC/16/40.COM/INF.8B1.Add), which includes minor modifications to boundaries and creations of buffer zones.



# I Introduction

## ICOMOS Analysis of nominations

In 2016, ICOMOS was called on to evaluate 37 nominations.

They consisted of:

22 new nominations  
2 deferred nominations  
1 extension  
12 minor modifications/creations of buffer zone

The *geographical spread* is as follows:

### **Africa**

Total: 1 nomination, 1 country  
1 new nomination  
(1 mixed property)

### **Arab States**

Total: 1 nomination, 1 country  
1 new nomination  
(1 mixed property)

### **Asia-Pacific**

Total: 8 nominations, 9 countries  
8 new nominations  
6 minor modifications/creations of buffer zone  
(12 cultural properties, 2 mixed properties)

### **Europe and North America**

Total: 12 nominations, 15 countries  
10 new nominations  
2 deferred  
6 minor modifications/creations of buffer zone  
(17 cultural properties, 1 mixed property)

### **Latin America and the Caribbean**

Total: 3 nominations, 4 countries  
2 new nominations  
1 extension  
(3 cultural properties)

ICOMOS regrets the underrepresentation of certain Regions in the submission of nominations and in particular Africa.

## **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 wishes to point out that the Resource Manual *Preparing World Heritage Nominations*, of which an electronic version is available on its website and on the World Heritage Centre website, is at the disposition of States Parties to help them prepare nomination dossiers. Thanks to the World Heritage Capacity-Building programme, the manual is available in several languages (Arabic, English, French, Portuguese and Spanish).

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 on the basis of the information provided in the nominations (i.e. the dossiers), and on the basis of on-the-spot assessment and additional studies. 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 World Heritage 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 States Parties, whatever the final recommendation proposed.

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

The answers provided by States Parties have in many cases confirmed, or contributed, to the adoption of the final recommendations made by ICOMOS.

## 3. "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.

## 4. "Minor" modifications to boundaries

The number of such requests has greatly increased. 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 States 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 States Parties to submit a separate request complying with the procedures set out in the *Operational Guidelines for the Implementation of the World Heritage Convention* (annexe 11) 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 World Heritage Committee that this provision should be consistently and rigorously applied.

ICOMOS suggests moreover that an extension of the calendar for the evaluation of such requests should be considered, to bring it into line with the calendar in force for new nominations, which would open up the possibility of dialogue and exchange of information with the States Parties.

## 5. Serial nominations and extensions

ICOMOS wishes to point out that the *Operational Guidelines* of November 2011 (paragraph 137)



validated a change in the approach to serial properties. Serial nominations should not consist merely of a catalogue of sites, but should instead concern a collection or ensemble of sites with specific cultural, social or functional links over time, in which each site contributes substantially to the Outstanding Universal Value of the serial property as a whole.

ICOMOS wishes to encourage States Parties to give consideration to the implications of this change when preparing serial nominations.

This year, ICOMOS has examined 14 serial nominations, including 232 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.

ICOMOS explicitly informs in its evaluation 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.

## 6. Development projects

To address the need to identify development projects within World Heritage properties during the evaluation cycle, ICOMOS has included in its letters to the States 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 World Heritage 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 its *Guidance on Heritage Impact Assessments for cultural World Heritage properties* can be consulted on its website. This Guidance has been translated into several languages and ICOMOS urges States Parties to make use of it. In addition, a research work has been undertaken in order to better understand Heritage Impact Assessments and ICOMOS encourages States Parties to incorporate a Heritage Impact Assessment approach into the management system of their nominated properties, so as to ensure that any programme, project or legislation regarding the property be assessed in terms of its consequences on the Outstanding Universal Value and its supporting attributes.

## 7. New initiatives

As part of a process of reflection launched about mixed properties, ICOMOS and IUCN have developed a project with financing from the *Christensen Fund* entitled "Connecting Practice", to explore a truly integrated approach to the natural and cultural heritage in the context of the World Heritage Convention. The outcomes of this project has been presented at the 39<sup>th</sup> session of the World Heritage Committee (June 2015) and its second phase has just been launched.

At the request of the World Heritage Centre, a preliminary follow-up to the Gap Report (*The World Heritage List: Filling the Gaps: an Action Plan for the future*) has been carried out and one-day workshop was held at ICOMOS Headquarters on 11 December 2015 to review the preliminary outcomes of the analysis and to discuss the issues arising.

## 8. Transnational serial nominations

ICOMOS wishes to congratulate the States Parties on the efforts made to prepare transnational serial nominations, and sees in the themes and challenges

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<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.

considered a return to the fundamentals of the World Heritage Convention.

The monitoring of the state of conservation of properties of this type is a considerable challenge, which could enable experimentation with specific tools adapted to such properties.

ICOMOS wishes to stress the importance of involving the Advisory Bodies in the upstream processes for the preparation of nominations of this type, and is available for upstream involvement at strategic development level for these vast and complex transnational serial nominations.

### **9. Historic Urban Landscape (HUL)**

ICOMOS noted the increasing use of the notion of Historic Urban Landscape (HUL) in the draft statements of Outstanding Universal Value. While acknowledging the importance of the UNESCO Recommendation on Historic Urban Landscapes as being “an additional tool to integrate policies and practices of conservation of the built environment into the wider goals of urban development in respect of the inherited values and traditions of different cultural contexts”, there is an agreement that the notion of HUL should be seen as a useful methodological approach that can sustain and strengthen management but cannot be understood as a category of heritage and should not be mentioned as such in justifications for inscription of nominated properties.

### **10. Upstream process**

ICOMOS, at the request of the World Heritage Committee, has contributed to work further on the pilot projects selected in conjunction with the World Heritage Centre.

ICOMOS has extended the length of the ICOMOS World Heritage Panel meeting in order to examine the missions and projects developed by ICOMOS for the purpose of upstream processes.

Terms of reference for the advisory missions have been drawn up by the Advisory Bodies and will be made available to States Parties on the ICOMOS website shortly.

Furthermore, ICOMOS wishes to draw attention to paragraph 122 of the *Operational Guidelines* which invites States Parties to “contact the Advisory Bodies and the World Heritage Centre at the earliest opportunity in considering nominations to seek information and guidance”, and in particular the relevance of this paragraph in connection with the preparation of the nomination dossier for mixed

properties and serial properties.

ICOMOS is prepared to make its expertise available for the development of the upstream process in preparing and following up nomination dossiers, as far as this is possible with the resources available. In this respect, ICOMOS presented a proposal for upstream process in support of new nominations at an early stage.

The activities in which ICOMOS has been involved in this respect (advisory missions, meetings, consultations), organised sufficiently in advance, have already had positive outcomes for some nominations.

# 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* (latest revision in October 2015). This document is available on the ICOMOS website: [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 Evaluation Unit* of the International Secretariat of ICOMOS, in collaboration with the ICOMOS officers responsible for World Heritage and the ICOMOS World Heritage Panel.

The ICOMOS World Heritage Panel, which brings together some thirty persons, is made up of members of the ICOMOS Bureau, of representatives of ICOMOS International Scientific Committees, 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.) and on the basis of geo-cultural balanced representation. TICCIH and DoCoMoMo are also invited to participate in discussions in which their expertise is relevant. To a large extent, Panel members participate by drawing on their own financial resources. The Panel, whose composition and terms of reference are available on the ICOMOS website, 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 States Parties, ICOMOS uses a check box tool, which is included in this volume.

## 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* (July 2015), paragraph 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 40<sup>th</sup> session, around 115 experts provided desk reviews.

*c. Technical evaluation missions.* As a rule, ICOMOS calls on a person from the region in which the nominated property is located. In certain exceptional circumstances, often in cases in which the nature of the property is unusual, the expert may not originate from the region concerned. The objective of the missions is to study the authenticity, integrity, factors affecting the property, protection, conservation and

management (*Operational Guidelines*, paragraph 78).

Experts are sent the nomination dossier (electronic version and copy of the maps in colour), 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).

32 experts representing 24 countries took part in field missions as part of the evaluation of the 25 nominated properties, which in turn represented 28 countries.

Technical evaluation missions were carried out jointly with IUCN for four mixed property nominations.

This year, ICCROM attended the ICOMOS Panel meeting as observer. ICOMOS and IUCN took part in a conference call held during the ICOMOS panel meeting, just before the IUCN panel and ICOMOS attended one skype session during IUCN Panel. ICOMOS and IUCN have also exchanged information about draft recommendations concerning mixed property nominations.

ICOMOS received comments from the IUCN concerning four 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

23 November to 2 December 2015. The Panel defined the recommendations and identified the additional information requests to be sent to the States Parties.

*b. Additional information request.* Additional information requests for some of the nominated properties were sent to the States Parties by 31 January 2016, in accordance with the normal procedure. All documents received by 28 February 2016 were examined by the second World Heritage Panel at its meeting on 10 and 11 March 2016.

*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 UNESCO World Heritage Centre for distribution to members of the World Heritage Committee at its 40<sup>th</sup> session in July 2016.

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 Bodies.

## **3. 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 World Heritage Committee. No referred back nomination was assessed for this cycle.

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 States 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/16/40.COM/INF.8B1.Add.

## **4. Dialogue with States Parties**

ICOMOS makes every effort to maintain dialogue with the States 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.

Following the World Heritage Committee decision 38 COM 13.8 which call upon the Advisory Bodies to consult and have a dialogue with all concerned States Parties during the course of the evaluation of nominations, ICOMOS has strengthened the dialogue and communication in the evaluation process by introducing the following changes:

A meeting held on 13 March 2015 with the nominating States Parties was organized to explain the evaluation methods and processes.

Letters to States Parties throughout the evaluation process have been sent on a more systematic basis and on more focused issues.

Meetings with each nominating State Party during the ICOMOS Panel meeting have been organized on an experimental basis.

The States Parties for which ICOMOS recommendation was not to inscribe the property on the World Heritage List have been informed at an earlier stage about this decision.

Interim reports as prescribed by the revised *Operational Guidelines* have been delivered to each nominating State Party.

In addition, to reinforce dialogue with States Parties 29 meetings or skype conferences have been organized from December 2015 to end of February 2016.

Finally, a meeting organized on 9 March 2016 with the States Parties which have submitted new nominations for 2017 has opened dialogue for next cycle.

The dialogues with States Parties were fruitful in clarifying issues as well as being helpful for elucidating facts.

Positive impact as well of this earlier dialogue was the withdrawal of some nominations and the consecutive request to assist States Parties in the reconfiguration of their nomination dossiers.

However, the main point that these direct dialogues highlighted is the fact that, even though the State Party receives advice from ICOMOS earlier than

previously, there is still very limited time available under the current evaluation timetable established by the *Operational Guidelines* for both parties to work together to resolve issues with dossiers that require reformulation at a wider scale, even if the State Party expresses a willingness to do so.

In conclusion, ICOMOS encourages States Parties to request Upstream advice which could be useful for resolving issues prior to the submission of nominations.

ICOMOS recalls working document WHC/14/38.COM/9A which mention the “*option of extending the evaluation process by 12 months to allow for improved and constructive dialogue between stakeholders, in the light of the outcomes of the Director General’s meeting “World Heritage Convention: Thinking ahead”*” and supports an extension of the calendar for the evaluation of nominations by 12 months, which would open up the possibility of dialogue and exchange of information with the States Parties.

## **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 for the Implementation of the World Heritage Convention* 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 2016



## Check tool recommendations

Comparative analysis	Integrity	Authenticity	Criteria	Selection justified (series)	Boundaries	Protection property	Protection buffer zone	Conservation	Management	Threats addressed	Mission required	Conclusion
√	√	√	√	√	√	√	√	≈	≈	≈	No	Inscription
√	√	√	√	√	≈	X	X	≈	≈	≈	No	Referral
√	√	√	√	√	X	X	X	X	X	X	Yes	Deferral
○	√	√	○	√							Yes	Deferral
○	○	○	○	○							Yes	Deferral
X	X	X	X	X							-	No inscription



OK - Good



Adequate - Can be improved



Not demonstrated at this stage



Not OK - 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  
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## Cultural and Mixed Properties

### Nominations by category

New nominations (22)		
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Bosnia-Herzegovina/ Croatia/ Montenegro/ Serbia	C 1504	Stećci – Medieval Tombstones
Brazil	C 1493	Pampulha Modern Ensemble
Chad	N/C 1475	Ennedi Massif: Natural and Cultural Landscape
China	C 1508	Zuojiang Huashan Rock Art Cultural Landscape
Croatia	C 1522	Roman Urbanism of the Zadar Peninsula with the Monumental Complex on the Forum
Czech Republic/ Germany	C 1478	Mining Cultural Landscape Erzgebirge/Krušnohorí
Germany	C 1494	Francke Foundations, Halle
Greece	C 1517	Archaeological site of Philippi
India	C 1502	Excavated remains of Nalanda Mahavihara
India	N/C 1513	Khangchendzonga National Park
Iran	C 1506	The Persian Qanat
Iraq	N/C 1481	The Ahwar of Southern Iraq: Refuge of Biodiversity and the Relict Landscape of the Mesopotamian Cities
Japan	C 1495	Churches and Christian Sites in Nagasaki
Micronesia	C 1503	Nan Madol: Ceremonial Center of Eastern Micronesia
Montenegro	C 1512	Historical Centre of Cetinje
Republic of Korea	C 1498	Seowon, Neo-Confucian Academies of the Joseon Dynasty
Spain	C 1501	The Antequera Dolmens Site
Thailand	C 1507	Phu Phrabat Historical Park
Turkey	C 1518	Archaeological Site of Ani
United Kingdom	C 1500	Gibraltar Neanderthal Caves and Environments
United States of America	C 1496	Key Works of Modern Architecture by Frank Lloyd Wright
Extensions (1)		
Panama	C 790ter	Archaeological Site and Historic Centre of Panamá City [Significant boundary modification of "Archaeological Site of Panamá Viejo and Historic District of Panamá"]
Deferred nominations (2)		
Argentina/ Belgium/ France/ Germany/ India/ Japan/ Switzerland	C 1321rev	The Architectural Work of Le Corbusier An Outstanding Contribution to the Modern Movement
Canada	N/C 1415rev	Pimachiowin Aki



## Cultural and Mixed Properties

### Geographical spread of nominations

<b>Africa</b>			1 State Party, 1 nomination
Chad	N/C 1475	Ennedi Massif: Natural and Cultural Landscape	
<b>Arab States</b>			1 State Party, 1 nomination
Iraq	N/C 1481	The Ahwar of Southern Iraq: Refuge of Biodiversity and the Relict Landscape of the Mesopotamian Cities	
<b>Asia – Pacific</b>			7 States Parties, 8 nominations
China	C 1508	Zuojiang Huashan Rock Art Cultural Landscape	
India	C 1502	Excavated remains of Nalanda Mahavihara	
India	N/C 1513	Khangchendzonga National Park	
Iran	C 1506	The Persian Qanat	
Japan	C 1495	Churches and Christian Sites in Nagasaki	
Micronesia	C 1503	Nan Madol: Ceremonial Center of Eastern Micronesia	
Republic of Korea	C 1498	Seowon, Neo-Confucian Academies of the Joseon Dynasty	
Thailand	C 1507	Phu Phrabat Historical Park	
<b>Europe – North America</b>			15 States Parties, 12 nominations
Argentina/ Belgium/ France/ Germany/ India/ Japan/ Switzerland	C 1321rev	The Architectural Work of Le Corbusier An Outstanding Contribution to the Modern Movement	
Bosnia-Herzegovina/ Croatia/ Montenegro/ Serbia	C 1504	Stećci – Medieval Tombstones	
Canada	N/C 1415rev	Pimachiowin Aki	
Croatia	C 1522	Roman Urbanism of the Zadar Peninsula with the Monumental Complex on the Forum	
Czech Republic/ Germany	C 1478	Mining Cultural Landscape Erzgebirge/Krušnohoří	
Germany	C 1494	Francke Foundations, Halle	
Greece	C 1517	Archaeological site of Philippi	
Montenegro	C 1512	Historical Centre of Cetinje	
Spain	C 1501	The Antequera Dolmens Site	
Turkey	C 1518	Archaeological Site of Ani	
United Kingdom	C 1500	Gibraltar Neanderthal Caves and Environments	
United States of America	C 1496	Key Works of Modern Architecture by Frank Lloyd Wright	
<b>Latin America and the Caribbean</b>			3 States Parties, 3 nominations
Antigua and Barbuda	C 1499	The Antigua Naval Dockyard and Related Archaeological Sites	
Brazil	C 1493	Pampulha Modern Ensemble	
Panama	C 790ter	Archaeological Site and Historic Centre of Panamá City [Significant boundary modification of "Archaeological Site of Panamá Viejo and Historic District of Panamá"]	



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C 1500	<b>United Kingdom</b>	Gibraltar Neanderthal Caves and Environments	186
C 1501	<b>Spain</b>	The Antequera Dolmens Site	165
C 1502	<b>India</b>	Excavated remains of Nalanda Mahavihara	85
C 1503	<b>Micronesia</b>	Nan Madol: Ceremonial Center of Eastern Micronesia	103
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Cultural and mixed properties  
**Technical evaluation mission experts**

State Party	ID number	Name of the property	Field mission	Date
<b>New nominations</b>				
Antigua and Barbuda	C 1499	The Antigua Naval Dockyard and Related Archaeological Sites	Daniel Young-Torquemada (Panama)	Aug. 2015
Bosnia-Herzegovina/ Croatia/ Montenegro/ Serbia	C 1504	Stećci – Medieval Tombstones	Sergiu Musteata (Moldova) – Bosnia-Herzegovina Cynthia Dunning (Switzerland) – Croatia, Montenegro, Serbia	Sept. 2015
Brazil	C 1493	Pampulha Modern Ensemble	Maria Eugenia Bacci (Venezuela)	Sept.-Oct. 2015
Chad	N/C 1475	Ennedi Massif: Natural and Cultural Landscape	Christian Dupuy (France)	Oct. 2015
China	C 1508	Zuojiang Huashan Rock Art Cultural Landscape	Meenakshi Dubey-Pathak (India)	Oct. 2015
Croatia	C 1522	Roman Urbanism of the Zadar Peninsula with the Monumental Complex on the Forum	Jean-Pierre Adam (France)	Sept. 2015
Czech Republic, Germany	C 1478	Mining Cultural Landscape Erzgebirge/Krušnohoří	Miles Oglethorpe (United Kingdom) Adriaan Linters (Belgium)	Sept. 2015
Germany	C 1494	Francke Foundations, Halle	Dominique Bourseaux (Belgium)	Sept. 2015
Greece	C 1517	Archaeological site of Philippi	Francesca Morandini (Italy)	Sept. 2015
India	C 1502	Excavated remains of Nalanda Mahavihara	Masaya Masui (Japan)	Aug. 2015
India	N/C 1513	Khangchendzonga National Park	Kai Weise (Switzerland)	Sept.–Oct. 2015
Iran	C 1506	The Persian Qanat	Kazuya Yamauchi (Japan)	Sept. 2015
Iraq	N/C 1481	The Ahwar of Southern Iraq: Refuge of Biodiversity and the Relict Landscape of the Mesopotamian Cities	Assad Seif (Lebanon)	Oct. 2015
Japan	C 1495	Churches and Christian Sites in Nagasaki	Rene Luis Sevilla Mata (Philippines)	Sept.–Oct. 2015
Micronesia	C 1503	Nan Madol: Ceremonial Center of Eastern Micronesia	John Peterson (Guam)	Aug. 2015
Montenegro	C 1512	Historical Centre of Cetinje	Elena Dimitrova (Bulgaria)	Sept. 2015
Republic of Korea	C 1498	Seowon, Neo-Confucian Academies of the Joseon Dynasty	Lynne Di Stefano (Canada)	Sept. 2015
Spain	C 1501	The Antequera Dolmens Site	Margaret Gowen (Ireland)	Sept. 2015
Thailand	C 1507	Phu Phrabat Historical Park	Guixiang Wang (China)	Sept. 2015
Turkey	C 1518	Archaeological Site of Ani	Alkiviades Prepis (Greece)	Nov. 2015

State Party	ID number	Name of the property	Field mission	Date
United Kingdom	C 1500	Gibraltar Neanderthal Caves and Environments	Gabriel Cooney (Ireland)	Sept. 2015
United States of America	C 1496	Key Works of Modern Architecture by Frank Lloyd Wright	Sheridan Burke (Australia) Wessel de Jonge (Netherlands)	Sept. 2015
<b>Extensions</b>				
Panama	C 790ter	Archaeological Site and Historic Centre of Panamá City [Significant boundary modification of "Archaeological Site of Panamá Viejo and Historic District of Panamá"]	Angela Rojas (Cuba)	Sept.–Oct. 2015
<b>Deferred nominations</b>				
Argentina Belgium France Germany India Japan Switzerland	C 1321rev	The Architectural Work of Le Corbusier An Outstanding Contribution to the Modern Movement	Hugo Segawa (Brazil) - Argentina Nathalia Dushkina (Russia) - France Marieke Kuipers (Netherlands) – Belgium, France, Germany, Switzerland Dominic Galicia (Philippines) - India Helen Lardner (Australia) - Japan	Aug.–Sept.– Oct. 2015
Canada	N/C 1415rev	Pimachiowin Aki	Gregory De Vries (United States of America)	Aug. 2015

### **III Mixed properties**

#### **A Africa**

New nomination

#### **B Arab States**

New nomination

#### **C Asia – Pacific**

New nomination

#### **D Europe – North America**

Nomination deferred by previous sessions of the World Heritage Committee



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## Ennedi Massif (Chad) No 1475

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### Official name as proposed by the State Party

Ennedi Massif: Natural and Cultural Landscape.

### Location

East and West Ennedi Regions  
Republic of Chad

### Brief description

The Ennedi Massif is a mountainous region in north-east Chad, an impressive sandstone plateau eroded by wind and thermal cycles into gorges, cliffs, canyons and outliers. Although part of the Sahara, the climate of the Ennedi Massif is much more suitable for human habitation than most of the desert, with regular rain during summer, wadis flowing once or twice a year, *gueltas* and a relatively large range of flora and fauna – including some of the few remaining populations of crocodiles west of the Nile. On the rocky surfaces of its caves, canyons and shelters, thousands of images – dating from 5000 BC onwards – have been painted and engraved, comprising one of the largest collections of rock art in the Sahara and characterised by a wide variety of themes and styles.

### 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* (July 2015) paragraph 47, it is 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

21 July 2005

### International Assistance from the World Heritage Fund for preparing the Nomination

None

### Date received by the World Heritage Centre

28 January 2015

### Background

This is a new nomination.

### Consultations

ICOMOS has consulted its International Scientific Committee on Rock Art and on Cultural Landscapes, and several independent experts.

### Technical Evaluation Mission

A Joint ICOMOS – IUCN technical evaluation mission visited the property between 4 and 15 October 2015.

### Additional information received by ICOMOS

On 29 September 2015, ICOMOS sent a letter to the State Party, seeking additional information on; cartographic documentation, rationale for the definition of the buffer zone, existing and planned protection regimes, coordination measures between the traditional and the formalised management structures, tourism strategies, and tourism facility development in Fada.

The State Party responded on 30 October 2015 and the relevant information is incorporated into the present report.

Following the ICOMOS Panel, in November 2015, ICOMOS met the Chad Permanent Delegation and discussed issues emerged during the evaluation.

A joint ICOMOS-IUCN interim report and additional information letter was sent to the State Party on 16 December 2015 requesting updated information on the approval of the revised decree 400/2015; official submission of the revised map of the property and buffer zone presented during the meeting between ICOMOS and the Permanent Delegation at the end of November 2015, photographic and cartographic documentation of sites so far inventoried; additional information on mechanisms ensuring integration between traditional and institutionalised management, an implementation calendar for the finalisation of the management system and of the above.

On 25 February 2016 the State Party transmitted its additional information and a map depicting a major reduction of the nominated property, excluding the northern part of the Massif, and an amended buffer zone. This is discussed in the relevant sections of this report.

### Date of ICOMOS approval of this report

11 March 2016

## 2 The property

### Description

The natural environment and human settlement  
The Ennedi Massif with its sandstone stratification rises above the continental granitic base, reaching almost 1,500 m a.s.l. at the Basso peak. The region witnessed in the past millennia dramatic climatic changes that shaped its morphology and environment. During the arid periods, immense sand dunes accumulated on the sides of the sandstone outcrops which served as occupation sites for human groups during the humid phases.

The last humid phase witnessed by this region began around 11,700 BP, when the desert climate was succeeded by a humid one, due to abundant precipitation.

These favourable climatic phases have left several traces in the Sahara, when the sandy plains and dunes were covered with tree-filled savannah, forest galleries grew in the bottom of the valleys, and the run-off from the inner Massif fed small endorheic lakes. Some specimens of the species that flourished in those epochs have survived until the present day in the deep canyons of the Ennedi. The specific climatic situation of the Ennedi also attracted human occupation and settlement.

Humans have been able to profit from the natural environment and its resources. The rich litho-stratigraphy of the region offered to stone-cutters a wide range of raw materials which they were able to profit from, as attested to by the thousands of stone implements in diorite, quartzite and sandstone found in the area. Later, metal workers and smelters were able to exploit the iron-rich ores hidden in the sandstone formations to feed their reduction furnaces.

Humans made their livelihood through hunting, fishing, gathering, and livestock farming (from the 6<sup>th</sup> millennium BCE) and later on agriculture, in an era which remains to be established, possibly around the 1<sup>st</sup> millennium BCE, when millet cultivation developed south-west of Lake Chad, and the rock art attests to some of their hunting and pastoral activities.

Thanks to its southern position, each time rainfall decreased, the Ennedi acted as a refuge zone at the crossroads of several cultures. The climatic deterioration led human groups to abandon the region and migrate towards other more favourable ones, e.g. Lake Chad, the Nile, the Niger or the Senegal valleys.

In the present day, local communities still practice nomadic pastoralism and a traditional way of life, which nevertheless integrates, where necessary, modern aspects.

#### The rock art

Past human presence is attested to by several rock art sites distributed throughout the Ennedi massif.

This form of human expression covers a span of some 7,000 years. Scholars have identified different periods: *archaic* (7,000 – 6,000 BP), *bovidienne* (5,000 – 2,000 BP), and *cameline* (2,000 BP – present day). Currently, the University of Cologne is carrying out a project on the Ennedi massif, with several lines of action, including inventorying rock art figures to continue the work begun earlier in the 20<sup>th</sup> century.

The inventories, a long way from being completed, have, however, already catalogued 650 decorated sites encompassing at least 10,000 motifs within the 30,000 sqkms comprising the plateau. The works are

diverse and original in both their expression and styles. The polychromy of the paintings and the engravings denotes refined techniques. Most of the rock walls were painted or engraved when cattle and sheep farming was practiced (after the 6<sup>th</sup> millennium BCE); some human figures, today out of reach due to soil erosion, are probably more ancient. The majority of the rock art expressions tell us about the links between humans and wild fauna and domestic animals, as well as about garments, jewelery, armaments and sometimes the habitat. The simultaneous introduction of horses and dromedaries 2000 years BP is attested to by innumerable images of mounted horses and *mehari* camels in flying gallops, representations which appear to be unique to the Ennedi. The riders exhibit a dynamic attitude and the mounting harnesses are rendered with plenty of details. The drawings highlight elements always popular in the Ennedi: flowing dresses, pommel saddles, dromedary cantles, arm knives, that illustrate details of the way of life of past communities.

Following the major reduction of the boundaries of the nominated property, some 30 sites of rock art, including the outstanding site of Guirchi Niola Doa, have been excluded by both the nominated property and the buffer zone.

#### Other cultural testimonies

Innumerable monumental tombs are scattered throughout the eastern part of the property. Only a handful of them have been studied in detail. They are tumuli grouped in large necropolises easily detectable in the landscape - in Chibi more than 2000 burial sites extend over dozens of hectares – and the ICOMOS technical evaluation mission found them to be intact. Their investigation using archaeological methods could yield much information on the ancient funerary traditions which could complement the studies of the ancient territorial occupation and of the rock art. The most ancient among these graves possibly date back to the end of the 4<sup>th</sup> millennium BCE, on the grounds of the C14 dating results that have been obtained from comparable monuments in south Libya, Algeria and north-east Niger.

The region has unexpectedly revealed itself to be rich in remains related to iron metallurgy. During the technical evaluation mission some 30 bases of reduction smelters were found in three distinct places, which can be considered the northernmost smelting sites currently known in the south Sahara. The observed structures relate to trapped slag furnaces which were ventilated by forced draught through tail pipes or bellows, or to larger devices functioning by natural convection provided with basal openings to allow the slag to be discharged outside of the combustion cell during or at the end of the reduction process. Future explorations and excavations could lead to important discoveries of ancient purification workshops and smithies. This knowledge on the metallurgy of the past could be interpreted through reconstructions and workshops. In this regard, ICOMOS notes that the knowledge and memories of local

blacksmiths are highly important and need to be recorded and preserved with the maximum urgency.

Traces of ancient human occupation are found on several dunes and sandstone outcrops within and outside the nominated property and these vestiges extend sometimes over hundreds of square meters. Archaeological investigations on these sites will be beneficial to understanding the evolution of prehistoric populations' traditions, of their artistry, and of habitats, complementing the information gained by the study of the rock art.

### **History and development**

Climate alteration has been responsible for the dramatic changes that affected the region. Between 11,700 and 4,300 BP a humid climate transformed the desert and favoured the formation of an environment suitable for the growth of a diverse flora and fauna, which formed the basis for human settlement in the region. This humid phase ended around 5,300 BP and the end of abundant rainfall caused drastic stress to the flora and fauna, which were forced to adapt to the new climatic conditions. The geomorphology of the Ennedi massif preserved secluded humid environments and ecological niches, where animal and floral species have survived, bearing witness to these climatic alterations. Human history can be traced in the region since the Holocene (from 12000 BP ca onwards), thanks to archaeological, paleo-botanical and related research: the rock art in particular bears witness to human adaptation to changing climatic conditions.

Scientific research on the rock art of the Ennedi started as early as 1911, the major campaigns dating to 1948, 1953, and 1997, and it has continued up until today.

## **3 Justification for inscription, integrity and authenticity**

### **Comparative analysis**

The nomination dossier has grounded its comparative analysis on the following aspects: quantity of images, temporal framework, quality, aesthetics and styles, exemplarity, rarity of techniques and of themes, and the state of conservation of the rock art. It has examined 15 areas containing rock art sites – all from Africa – providing a synthetic and quantitative table of the findings, in which is suggested a superiority of the nominated property compared to the other examples.

ICOMOS considers that a comparative analysis of rock art sites which is based only on properties from the same geo-cultural region could be justified, on the grounds of the specificities of the cultural traditions that produced these forms of human expressions and also of the different time-spans in which it developed in the different regions. However, the cultural attributes of the nominated property and particularly the rock art could have benefited from a comparison at the global scale.

ICOMOS also notes that, due to little awareness of a good part of the scientific literature on the Ennedi rock art, the comparison misses important arguments to support the Ennedi as a rock art region with a status so particular that it complies with the criteria for a World Heritage declaration. This weakness can also be recognised in the proposed justification of criterion (iii).

ICOMOS considers that, in certain parts, the comparative analysis unnecessarily overstates the significance of the nominated property in comparison with other similar sites in the Africa region: e.g. the rock art in Tsodilo (Botswana, 2001, (i)(iii)(vi)) is a rare and incomparable art tradition; the Drakensberg rock art (Maloti-Drakensberg Park, Lesotho/South Africa, 2000, (i)(iii)(vii)(x)) and shaded polychrome pictures of the region are a unique artistic achievement; or the Brandberg rock art sites (Brandberg National Monument Area, Namibia, tentative list) contain some 50,000 pictures in a much smaller area.

In ICOMOS's view the rock art of the nominated property is rich and particular but not unique in all its motifs. Clear lines of artistic relations can be drawn from the Jebel Ouweinat in the northeast or the Tibesti in the northwest. These links do not weaken but strengthen the case of the Ennedi: despite the clear integration of the region in the wider eastern Saharan landscapes, in small areas there have surfaced very peculiar artistic traditions evincing a high social and cultural dynamic while, on the other hand, a very homogenous subsistence system, based first on herding mainly cattle and later camels, prevailed throughout.

Following the major reduction of the boundaries of the nominated property officially proposed by the State Party in February 2016, ICOMOS does not consider that the comparative analysis could justify consideration of the reduced nominated property, due to the exclusion of crucial rock art sites, among which Guirchi Niola Doa.

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Despite certain weaknesses, ICOMOS considered that the comparative analysis justified consideration of the originally nominated property for the World Heritage List. After the major reduction of its boundary and the exclusion of rock art sites crucial for the justification for inscription, ICOMOS does not consider that the comparative analysis, justifies at this stage consideration of the property for the World Heritage List.

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### **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 Ennedi Massif is a veritable open-air museum containing thousands of witnesses to natural and cultural history;
- The climatic changes of the Holocene have physically marked the region: the humid period of the lower Holocene (11,700 – 4,300 BP) allowed flora

and fauna to flourish and human societies to be established there;

- Thanks to its topography, the nominated property exhibits a high climatic diversity, which still allows human settlement, essentially of herder communities, whose way of life represents a living cultural tradition and a continuation of ancient cultures;
- The rock art in the Ennedi massif illustrates the evolution of human life in this region, covering a time-span of 7,000 years, from the era of the hunters-gatherers, to the period of the early herders, to that of nomadism;
- From a natural perspective, the Ennedi is a unique ecosystem within the Sahara region, a real biodiversity hotspot populated by Sahel and subtropical species. This environment is still inhabited by relict flora and fauna species that were widespread in the Holocene and are now restricted to the gorges and the *gueltas*;
- The combination of rock formations in the desert environment, rock art, wild flora and fauna and the local living communities form, altogether, an exceptional landscape.

ICOMOS considered that, overall, this justification was appropriate for the originally nominated property, however, following the drastically reduced boundaries and the subsequent exclusion of exceptional rock art sites directly supporting the proposed justification for inscription (see the ICOMOS Thematic Study on Rock art of Sahara and North Africa (2007), pp. 71 – 76), ICOMOS considers that the above justification is not sufficiently supported by the attributes still included in the nominated reduced property.

Additionally, the use of the term 'human evolution' is not applicable to the rock art of Ennedi, in that the human history so far known to be associated with the rock art of the nominated property, relates to the Holocene. Hence, it seems inaccurate to consider it as a source of information on human evolution, as the span of time along which rock art developed is not long enough.

ICOMOS nevertheless considers that the Ennedi rock art, as originally nominated by the State Party, is an outstanding source for a cultural expression of human adaptation to climatic deterioration and this represents the conclusive argument supporting the justification of inscription for the entire Ennedi Massif and its rock art in the World Heritage List. Archaeological remains contribute to shed light on these adaptations and on the technical knowledge developed by the ancient populations of the area.

### **Integrity and authenticity**

#### **Integrity**

The nomination dossier explains that the attributes on which the proposed Outstanding Universal Value are grounded are the rock art sites, and the combination of

rock formations with *gueltas*, wadis and other natural features. The nominated property contains all the elements necessary to illustrate the proposed values and the processes underlying the formation of the relevant attributes. These are scattered throughout the Massif and therefore it was originally proposed for inclusion in the nominated property in its entirety; in this way it would have also allowed for the inclusion of all three hydro-geological basins of the Massif and the safeguarding of their delicate balances. However, this is no longer the case, and details are explained below.

In its letter dated of 30 October 2015, responding to ICOMOS's additional request for information, the State Party informed that, following discussions during the technical evaluation mission, in order to ensure that all relevant attributes are contained within the boundary of the nominated property, the State Party was modifying its limits to encompass the areas of Wadi Namous with its salt lakes, the oasis villages in the hollows of the palm groves, and the rock art sites located right up to the last outcrops at the north-east of Bahr el Ghazal.

Equally, the State Party informed that, in order to provide the nominated property with an added layer of protection, the buffer zone, originally covering a small tract of land on the eastern part of the Massif around Fada, is being expanded to include a 10 km-wide buffer around the whole of the nominated property.

As part of the evaluation process, following the meeting between the State Party representatives and ICOMOS at the end of November 2015 and the joint ICOMOS – IUCN interim report sent in December 2015, on 24 February 2016, the State Party submitted maps depicting radically reduced boundaries for the nominated property and different boundaries for the buffer zone from those agreed upon during the technical evaluation mission and in dialogue between the State Party and ICOMOS. The reasons for this drastic reduction of the proposed boundaries for the buffer zone are not explicitly explained but seem to be related to a partnership contract between the State Party and oil companies for oil extraction and private lease of land in areas partially included in the nominated property.

ICOMOS considers that the exclusion from the nominated property of the entire northern area of the massif, where some of the most important rock art sites are located, including the Guirchi Niola Doa site, which is a crucial attribute to support the justification for inscription, impairs the wholeness of Ennedi massif as a geo-cultural and archaeological environment and thus undermines substantially the integrity of the nominated property which cannot be any longer considered demonstrated.

At the level of individual sites, ICOMOS considers that the integrity of the attributes of the nominated property and particularly of the rock art, allows the reconstruction, with the support of the inventories and of the archaeological investigations, of the history of multi-



millennial human occupation of the Ennedi and therefore sheds light on an important phase of the human occupation of the Ennedi.

The exclusion of important cultural attributes from the nominated property and from the protected designated area puts at threat all artistic, archaeological remains and the landscape features of the Ennedi Massif relevant for the understanding of its proposed Outstanding Universal Value and not included in the reduced boundaries of the nominated property.

The cultural attributes of the nominated property exhibit overall a high degree of intactness and did not appear prone to imminent threats; however, the possible exploitation of the fossil resources in the northern part of the Massif substantially increases the threats to important rock art sites in the Massif.

Additionally, an increase in tourism, which is likely to occur due to the nomination process, may cause impacts on the delicate environment of the Ennedi and induce changes in the traditional socio-economic structure. They both need to be carefully assessed, managed and monitored.

#### Authenticity

According to the nomination dossier, the attributes of the property meet the conditions of authenticity as set out in the *Operational Guidelines*. The archaeological remains, and particularly the rock art, reflect human and cultural evolution throughout some 7000 years, in that they give a glimpse of the life, traditions, and beliefs of the ancestors of the local population, throughout the entire Holocene. They also make evident the role given to certain animals and the important connections between humans and animals.

The pristine state of the Ennedi Massif, along with its vegetation pattern, forms an intact landscape and a visual setting that are probably very close to that which existed when the rock art was created. Currently the site is used by the local population for traditional activities and tourism still accounts for very small numbers of visitors, and therefore does not interfere with the perception and understanding of this living and, at the same time, fossil landscape. The combination of archaeological remains, traditional way of life and intact natural environment conveys the sense of an authentic place. The traditional system of management of the resources and of the nominated property contributes to retaining its authenticity.

ICOMOS concurred with most of the statements of the State Party on the aspects of the authenticity of the nominated property but, following the major modification of the proposed boundaries for the nominated property, also the authenticity of the Massif, no longer nominated as whole, as a geomorphological, and relict cultural landscape illustrating impacts on cultural expressions of

climatic transitions during the Holocene is no longer demonstrated

Additionally, ICOMOS notes that living communities cannot be conceived as static entities. In this regard, a cultural landscape approach would be beneficial for the fine-tuning of the articulation of the conditions of authenticity with regard to traditions and human/environment interactions.

In conclusion, ICOMOS considered that the conditions of integrity and authenticity could have been met with the expansion of the boundaries of the nominated property to include a number of attributes as discussed with the State Party during the evaluation process (see Boundaries section). Following the present major boundary reduction of the nominated property, ICOMOS does not consider that integrity and authenticity are any longer met.

#### Criteria under which inscription is proposed

The property is nominated on the basis of cultural criterion (iii), and natural criteria (vii) and (ix).

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 rock art in the Ennedi Massif represents the human evolution in this area over a long span of time (7,000 years). This evolution is represented by the different artistic periods – the *périodes archaïque, bovidienne* and *cameline* – which include 16 styles, and illustrate the uninterrupted human occupation of the area and different stages of human evolution, from hunter-gatherers, through to early herders, to nomadism. The rock art figures also bear witness to the climatic changes occurring during the Holocene. The justification for this criterion also mentions that certain grottoes are still in use by nomadic groups of herders.

ICOMOS considered that there can be no doubt that the rock art provides a rich archive of the world views of past cultures in exceptional richness, expression and aesthetic elaboration. In fact, the argument for criterion (iii) could have been put forward much more convincingly and with many more details. For instance, while the motifs of the flying horse and of the flying camel are not unique, the motifs of the mounted flying horse and of the mounted flying camel are unique to Ennedi rock art.

ICOMOS notes that the use of the term 'evolution' in statements such as 'human evolution' appears problematic, since this would suggest that the Ennedi Massif harbours sources on human evolution and may be seen to be in some way in line with the findings at Toumaï, further west in Chad. However, as far as it is known up to now, human history in the Ennedi Massif exclusively relates to the Holocene and therefore no data or sources can be found in the region that would

provide information on human evolution. However, the rock art of Ennedi testifies in an exceptional manner to the cultural expression of human groups adapting to climatic deterioration.

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Despite certain weaknesses of the arguments, ICOMOS considered that this criterion was justified for the originally nominated property. Following the major reduction to the proposed boundary of the nominated property, excluding significant rock art and archaeological sites ICOMOS does not consider that this criterion is still justified.

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ICOMOS considered that the nominated property could meet criterion (iii) and conditions of authenticity and integrity, with minor and agreed modifications to the boundary of the nominated property and to the buffer zone, as discussed during the technical evaluation mission and in dialogue with the State Party at the end of November 2015. The unexpected reduced boundaries for the nominated property submitted in February 2016 impair the ability of the nominated property to meet criterion (iii) and the conditions of integrity and authenticity.

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#### **4 Factors affecting the property**

The nomination dossier makes a thorough analysis of the factors impacting on the nominated property.

Thermal differences and sun exposure cause localised exfoliation and spalling, and there is also wind erosion. Changes in pastoral practices and increases in the numbers of sheep may impact on natural resources, especially water and vegetation. The use by shepherds of decorated rock caves or hollows as shelters, and the lighting of fires, has a negative effect on the paintings, although this habit is limited to a few sites only. Also, the consumption of wood for heating or charcoal production may threaten the tree cover in that, with additional human pressure caused by visitors and population increases, dead wood may not suffice to satisfy fuel needs.

Some modest negative impacts derive from the cattle roaming in areas where decorated rocks are located: their hides and droppings may in the long term affect the figures.

In the additional information provided by the State Party on February 2016, the State Party informs for the first time about the existence of a partnership contract between Chad and private companies for oil extraction that concerns also areas included in the originally nominated property. The State Party has thus proposed a reduced boundary for the nominated property so as to exclude the leased areas. In so doing, however, it also excluded crucial attributes for the justification of inscription of the nominated property.

ICOMOS considers that fossil resources exploitation in the northern part of the Ennedi Massif threatens its values and attributes and jeopardises the possibility for its inscription on the World Heritage List. The nomination process seemed to be conducted with a great sense of responsibility by the State Party, however, at this stage, it appears severely undermined by this recent decision to give prevalence to private interests and fossil resources extraction.

ICOMOS considers that the State Party should halt any fossil resource exploitation, a Heritage Impact Assessment (HIA) should be carried out independently with the maximum urgency and the results transmitted to the World Heritage Centre and the Advisory Bodies for review.

With regard to the other factors reported by the State Party in the nomination dossier, ICOMOS considers that it would be advisable that those sites most used by cattle be inventoried and light measures adopted to prevent access by the animals (e.g. fences or light shelters in front of their preferred sites).

Thankfully, for the time being, no looting and vandalism are observed in the Ennedi.

At the moment, tourism does not represent a threat to the property: the area is not easily accessible and this keeps low the number of visitors per year. Nevertheless, the nomination dossier highlights the impact of motorized vehicles on the vegetation, as they drive outside of the marked routes, and the blown sand caused by the speed of the vehicles may contribute to damaging the rock art.

To address tourism-related issues, the Chad Tourism Office (OTT) has set out clear and strict rules for travel agencies. These include leaving vehicles 500m away from the rock art sites, camping further away, and removing all waste and traces of visitors' presence.

However, in view of the inscription of the property in the World Heritage List, increase of tourism can be expected and the contact between outsiders and local traditional communities may cause issues that need careful management.

ICOMOS concurs with the State Party that management measures for all tourism-related impacting factors should be put in place to assist the local communities in tackling this challenge and to avoid negative effects on the nominated property and their living environment. This also implies their careful monitoring.

With regard to tourism pressures, the nomination dossier mentions the construction of a hotel for 150 guests. ICOMOS requested additional information on this project and the State Party has only provided some illustrations of the planned facility but it is not clear in which location this will be built.

ICOMOS notes that the graphic documentation provided only concerns the new building, but nothing is shown of its setting, nor is it clear how it would fit into its building site, or its immediate setting.

In this regard, ICOMOS recommends that a heritage and landscape impact assessment for this hotel be carried out according to the HIA ICOMOS Guidance, and the results be submitted to the World Heritage Committee before any final decision is taken.

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ICOMOS considers that the main threats to the property are oil extraction within the originally proposed perimeter of the nominated property, the subsequent decision to propose a major reduction of the proposed boundaries of the nominated property, and thus the lack of effectiveness in protection. ICOMOS recommends that any fossil resource exploitation be halted and an independent Heritage Impact Assessment be urgently carried out for the extraction programme and its results submitted to the World Heritage Centre and the Advisory Bodies. Other factors include spalling and exfoliation of the rock layers, possible improper waste management, and over-use of natural resources. ICOMOS also considers that tourism-related development needs to be carefully assessed. ICOMOS also suggests that a Heritage Impact Assessment be carried out for the hotel planned to be built in Fada. The final report of both HIAs should be submitted for consideration by the World Heritage Committee with the maximum urgency.

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## **5 Protection, conservation and management**

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

The boundaries of the nominated property (30,445 km<sup>2</sup>, with 30,000 inhabitants, concentrated in sparse hamlets) follow the topographic and visual features of the landscape, namely the distinction between the massif, the plains and the contour levels. For the most part they include the mountainous relief excluding the plains, but in some directions parts of the plains are encompassed within the boundaries of the nominated property for protection purposes.

The buffer zone (1,363 km<sup>2</sup>) is a small area, compared to the size of the nominated property, on the east, encompassing Fada and its surroundings.

In September 2015, ICOMOS requested clarification on the rationale for the definition of the buffer zone.

In its response, the State Party informed that, following discussions during the technical evaluation mission, the buffer zone was being extended to encompass a 10km-wide buffer around the entire nominated property, in order to provide an adequate added layer of protection, especially from visual disturbances.

Additionally, the State Party also informed that the boundaries of the nominated property were being extended towards the west, to include within the zone Wadi Namous with its salt lakes, the oasis villages in the hollows of the palm groves, and the rock art sites located right up to the last outcrops, at the north-east of Bahr el Ghazal.

Immediately after the ICOMOS Panel meeting in November 2015, a meeting was held with the State Party representatives in which issues emerged during the evaluation and highlighted by the Panel were discussed. In this occasion, the State Party made available a revised map in line with the ICOMOS – IUCN recommendations requesting the enlargement of the buffer zone and the inclusion of some sites within the nominated property.

A joint ICOMOS–IUCN interim report was sent on 16 December 2015 requesting from the State Party formal submission of the maps depicting the expanded boundaries of the nominated property and its buffer zone.

On 25 February 2016, the State Party submitted a map depicting boundaries for the nominated property and the buffer zone substantially different from those included in the nomination dossier and those made available during the meeting at the end of November 2015. By means of a straight horizontal line this major modification to the boundaries of the initial proposal excludes from the nominated property a substantial part to the North of the Ennedi Massif, which preserves some of the most prominent rock art sites. Furthermore, no buffer zone is envisaged for the reduced boundary of the property to the North and the proposal to create a 10 km buffer surrounding the entire Massif – announced in the first additional information and reiterated during the meeting at the end of November 2015 – is no longer confirmed.

ICOMOS considers that the proposed reduction of the nominated property severely affect its integrity and undermines its Outstanding Universal Value.

An amendment to the decree n. 400/2015 that was supposed to take into account the new expanded limits of the property and its buffer zone was announced in the first additional information submitted by the State Party and rediscussed at the end of November 2015.

In their joint letter sent in December 2015, ICOMOS and IUCN requested updated information on the progress made in the final approval of the amended Decree.

In February 2016, the State Party informed that, following the reduction of the boundaries of the nominated property, the decree was in process to be further amended and finalised.

ICOMOS considers that the reduction of the nominated property impairs the protection of the Ennedi Massif in relation to its proposed Outstanding Universal Value.

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ICOMOS considers that the major reduction to the proposed boundaries for the nominated property depicted in the map officially submitted on 25 February 2016 makes these boundaries highly inadequate with regard to the inclusion of the crucial attributes depicting the proposed Outstanding Universal Value of the nominated property and thus undermines the integrity of the nominated property and its ability to meet the requirements of the *Operational Guidelines*.

In conclusion, ICOMOS considers that the boundaries of the nominated property will be adequate when expanded to encompass the zone of Wadi Namous, with its villages and palm groves, and the entirety of the rock art sites at the north-east of Bahr el Ghazal. The boundaries of the buffer zone will be adequate when expanded to encompass a 10 km-wide buffer around the nominated property and this will be equipped with appropriate protection measures.

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### **Ownership**

The nominated property belongs to the State, although rights of use are granted to the local population. The access to the property is regulated by the local traditional Chiefs. Land-use rights on specific parcels are granted to the local inhabitants for traditional forms of exploitation.

### **Protection**

The nominated property is protected under different legal instruments, among which the most important are Law n. 14/PR/2008 on forests, fauna and fishing resources and Law n. 14/PR/98 on the environment, which also includes a chapter on the protection of the historic and cultural heritage.

A specific decree for the designation of the nominated property under the national legislation was under approval at the time the nomination dossier was submitted.

In its first request for additional information, ICOMOS asked for an updated status of the legal protection regimes.

The State Party responded on 30 October 2015, providing the text of the approved decree (n. 400, 28 January 2015) and also informing that this decree was being updated to take into account the new boundaries that were agreed during the technical evaluation mission.

This information was taken into account during the ICOMOS Panel meeting and when meeting the State Party.

The interim report asked the State Party to submit updated information on the revision of the above-mentioned decree.

The State Party informed that the Decree was undergoing one further amendment to align it with the substantially reduced boundaries of the nominated property now being proposed and that this process was being finalised.

ICOMOS considers that the reduction of the boundaries of the nominated property and the exclusion of some of the most prominent rock art sites from it and the subsequent modification of the Decree establishing legal protection within the national framework undermines the efforts to protect effectively the Outstanding Universal Value of the Ennedi Massif.

ICOMOS additionally noted that all implementation measures indicated in the decree n.400/2015 were not yet in place and the decree itself did not contain an implementation calendar for these measures nor did it contain any protection measures to be applied pending the ad-hoc protective instruments.

ICOMOS in this regard considers it to be crucial that protective measures be in place at the time a property is nominated for inscription and requested the State Party to provide updating on this aspect.

On 25 February 2016, the State Party responded that the Decree had been amended and was under ratification. The protection measures established by the decree include the exclusion of mining prospecting or exploitation, hunting and tree-cutting. On the other hand the traditional uses are allowed.

The Ministry of Culture, Youth and Sports is in charge of the World Heritage sites, while the protected areas and the environment are under the responsibility of the Ministry of Environment and of fishing resources, as well as of the Ministry of Water. Within the decentralisation framework, the regions have obtained additional powers and stronger institutional structures. The two regions of West and East Ennedi share the responsibilities for the administration of the nominated property. They now have a regional delegation for the Environment and the fishing resources, which is involved in the process of the elaboration and implementation of the management plan.

Protection measures are implemented by the regional delegation, the national and international Non-Governmental Organisations (NGOs), and the local communities, through their traditional organisational structures.

The local communities are still founded on traditional forms of organisation (chiefdoms) and these forms have provided, over time, the protection and the conservation of the property.

Currently the NGO's work in close collaboration with the support of the Swiss and they have accomplished already substantial work for the protection of the property. Two associations have been set up at the level of the local villages; the *Association pour la Promotion des Initiatives de Développement Local* (APIDEL), and the *Bureau d'Appui aux Initiatives de Protection de l'Environnement* (BAIPE). These are meant to assist the local population and the administration in their tasks.

ICOMOS considers that a combined form of protection that includes both traditional and institutional stewardship is very important to ensure the involvement of the local communities and to increase their awareness and participation in the protection and the management of the nominated property. Their cooperation and integration, however, should be carefully structured in order to prevent overlaps.

Whilst NGO's are also important entities in providing assistance to civil society, ICOMOS notes that it is important to ensure long-term sustainability for their operation, so as to ensure that once external donors eventually withdraw, the structure put in place can continue to operate. This requires a careful strategy for fund raising and donor diversification.

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In conclusion, ICOMOS considers that the reduction of the boundaries of the property covered by the Decree 400/2015 does not ensure the adequate protection of crucial attributes of the nominated property as originally proposed. The legal protection in place will be adequate when the decree issued in 28 January 2015 is revised, provided with protective measures for the entire Ennedi Massif, and accompanied by an implementation calendar for the protection and management measures contained therein. In particular the decree should also provide for safeguarding measures pending the finalisation of the permanent protective measures.

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### **Conservation**

A long-term project of the University of Cologne is ongoing in the Ennedi Massif (ACACIA project). This has various lines of actions and has already carried out surveys and inventories that continue work commenced previously. These inventories, a long way from being complete, have, however, already catalogued 650 decorated sites encompassing at least 10,000 motifs within the 30,000 sqkms delimiting the plateau.

ICOMOS nevertheless notes that neither the nomination dossier nor the additional information transmitted by the State Party contain detailed information and samples of these inventories. ICOMOS also observes that the additional cartographic documentation sent with the additional information by the State Party upon ICOMOS's request is largely insufficient as a base for the conservation, planning and management of the property.

In this regard, ICOMOS considers that a more detailed cartography should be provided or developed and all known rock art and archaeological sites should be clearly mapped. Geometric and photographic documentation of the decorated rock walls should be developed as a base for any protection, conservation, management and monitoring purposes. The ICOMOS *Rock Art: pre-nomination Guidelines* offers useful suggestions for the elaboration of the preliminary documentation of rock art.

In the interim report transmitted in December 2015, ICOMOS asked the State Party to provide samples of

cartographic and photographic documentation of the inventoried rock art sites.

In February 2016, the State Party informed that, due to the difficult accessibility to most of the areas where the cultural attributes are located, no new inventories could be elaborated; however a long term interdisciplinary research programme is envisaged. To respond to ICOMOS request concerning examples of inventories, three scientific papers were provided, documenting investigations, mappings and inventories carried out in the previous years.

ICOMOS considers that the additional documentation provided on inventories appears at this stage inadequate to ensure the necessary knowledge of the cultural attributes for their protection and conservation.

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In conclusion, ICOMOS considers that the production of cartography at adequate scales of detail, the precise mapping of the known archaeological and rock art sites, and the graphic and photographic documentation of the cultural heritage resources is urgent. Agreements with research institutions operating within the region to obtain copies of their surveys and to develop further research should be envisaged in order to set up a baseline documentation for protection, conservation and monitoring purposes.

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### **Management**

Management structures and processes, including traditional management processes

The management of the natural and cultural heritage of Ennedi up to the present day has been based on traditional management practices and structures.

Social organisation in West and East Ennedi depends upon one Sultan, based in Amdjarass, and 55 Canton Chiefs – 33 in East Ennedi and 22 in West Ennedi. They have the mission of preserving the ancestral values, including peaceful cohabitation among the populations, and managing in a rational and effective manner the natural and cultural resources, for their transmission to future generations. The power of the chiefs is passed on from father to son; they provide the continuity of tradition. This traditional system is framed within the organisation of the State and the Canton Chiefs are all formally recognised by presidential decree.

Traditional management is granted by the Canton Chiefs: they monitor the entrance to the property, are responsible for security, the management of tree cutting and for the sensitisation of local communities towards the preservation of the rock art sites.

Since 2012 the Chad Tourism Agency has complemented the work of the Canton Chiefs, by organising the local guides and the staff of travel agencies.

However, an institutional management system has been envisaged to support traditional practice. This has not yet

been put in place but, according to the State Party, the different actors involved – *Comité Scientifique National Interministeriel et Pluridisciplinaire* (CSNIP), regional ministerial delegates, the local population, Chad Tourism Office (OTT), the international organisations (African Parks and Sahara Conservation Fund), and the tour operators – began consultations in 2011. The key topics of the management are pastoralism, tourism, and protection of rock art and of natural resources.

ICOMOS asked for additional information in September 2015 on the steps undertaken to establish a formal management system in support of the traditional one and on the ways to integrate them in one single system.

The State Party responded on 30 October 2015, explaining that the Sultans' responsibilities are outlined in the Law n.13/PR/2010, which establishes that the traditional authorities cooperate with the State and are accountable to their regional governors. In view of the creation of the natural and cultural reserve and of its long-term management by the NGO, African Parks, the State Party will put in place an official steering committee.

ICOMOS observes that the institutional framework envisioned for the nominated property is largely based on the management system adopted for Lake Ounianga World Heritage Property. The mandate of the national Inter-ministerial and interdisciplinary scientific committee will be extended to the Ennedi Massif. The manager, yet to be appointed, along with local operational committees (*Comités locaux d'Organisation et d'Exécution*) will be responsible for the preservation of the natural and cultural heritage of the nominated property, including all the range of actions needed to make this operational.

In this regard, it would be crucial that the State Party clarifies how, operationally, the institutional management system which is going to be established, will integrate and cooperate with the traditional organisation and practice so far implemented and defined in the existing legislation.

Coordination with the local actors is envisaged through meetings to be held every two months. Considering the size of the nominated property and the difficult accessibility of large parts of the area, as well as the means of transportation available to local communities and their traditional representatives, it appears very difficult for this to be achieved.

At the time when the ICOMOS technical evaluation mission was carried out, the management system for the Ennedi was being put in place. The Ministry of the Environment has established close cooperation with African Parks; while the Ministry of Planning has approached the European Development Fund, in order to secure financial assistance to implement management actions.

The State Party informed that on 21 October 2015 the European Union (EU) validated the 11<sup>th</sup> programme of the European Development Fund (2014-2020) and that the

EU stated officially its intention to support Chad in the institutional management of the nominated property, the putting into operation of which seemingly will begin in December 2016.

With regard to the additional information provided by the State Party, ICOMOS notes that it has not been clarified how, operationally, the integration between traditional and institutional management would be set up and implemented. Whilst the time-scale to set up the management system is given – December 2016 – no additional information is provided on the operational steps that are planned to make it happen.

An implementation calendar guiding the steps towards the setup of the reserve and of its management system/plan by December 2016 would assist in achieving the objective in the planned time. ICOMOS therefore suggests the development of such an operational timeframe.

In this regard, in the joint ICOMOS-IUCN interim report, ICOMOS asked the State Party to provide further updated information on the finalisation of the institutionalised management and its integration with the traditional management, as well as on the above-mentioned implementation calendar.

The State Party responded that a complete management plan will be elaborated that shall take into consideration all aspects of management and protection and that a management committee will be established before December 2016.

ICOMOS considers that the key aspect is the integration of the traditional management into the institutionalised management in order to guarantee coordination, the maintenance of traditional practices as well as social organisations and empowerment of local communities.

The State Party has prepared an implementation calendar to respond to ICOMOS and IUCN concerns as emerged in December 2015. However, the major reduction of the boundaries of the nominated property, the disconfirmation of the proposed boundaries for the buffer zone as presented at the meeting with ICOMOS at the end of November 2015, the information that fossil resource exploitation were in existence in areas within the nominated property, indicate that contradictory protection and management priorities need to be addressed. These include halting oil or gas prospection and exploitation in the areas comprised in or in the vicinity of the nominated property as originally delineated, elaborating a Heritage Impact Assessment for these exploitation programmes to assess the negative impacts of such a plan and identify any corrective measure to cancel or reduce these impacts.

In general, ICOMOS considers that resources extraction activities are not in line with World Heritage designation.

In ICOMOS's view, an important aspect that requires further clarification in the management system concerns

the sharing with local communities of revenues generated through tourism. This aspect is mentioned in the nomination dossier but not explained. In particular, the management system should address the imbalances created by uneven tourism potential of the different areas of the nominated property, and envision mechanisms for redistribution in order to ensure that benefits from tourism are enjoyed directly or indirectly by all local communities.

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

A management plan is attached to the nomination dossier. The document illustrates the values and attributes of the nominated property, the main factors that affect or may affect it, the opportunities to be grasped and the challenges to be tackled. It also describes the management system in place for the nominated property, and the measures to be put in place to ensure that the nominated property is protected and adequately managed.

In ICOMOS's view, the measures envisaged by the plan are reasonable and sound. They need, however, a robust training and capacity building programme for the implementation of which the European Union funds could assist greatly. In particular, it would be very important that mid- to long-term programmes to prepare managers and management staff within the members of the local communities be elaborated and implemented.

With regard to tourism, the nomination dossier mentions that a national tourism strategy is being developed. This will be crucial in setting out the vision at the national level and for the places having major tourism potential.

In its letter, ICOMOS requested additional information concerning the national and regional strategies for tourism.

The State Party replied on 30 October 2015 and, with regard to tourism, transmitted two decrees issued by the Region of West Ennedi on regulations concerning tourism management.

ICOMOS considers these decrees important steps; however, it also notes that the State Party has not provided any additional explanation as to how tourism would be managed and on the time-scale of the national and regional tourism strategy.

However, ICOMOS also notes that important steps concerning training in the tourism sectors have been already initiated by the Chad Tourism Office (OTT). These efforts should be continued so as to increase the number of members of local communities that are prepared to face tourism consequences.

The additional information sent by the State Party also included the recommendations issued by the Chad Tourism Office for the travel agencies. In this regard,

ICOMOS considers that this is an important step for the engagement of the tourism sector in the appropriate management of the impacts from tourism.

ICOMOS, however, considers that waste management measures already in place should be strengthened, by defining ad-hoc measures for the removal of all non-recyclable or slowly-recyclable waste (e.g. plastic containers, tins, glass).

With regard to the development of facilities for tourists, while this exigency needs to be met, ICOMOS considers that it would be important that a general plan be prepared and clear guidance on materials, building processes, and eco-sustainable operation be established and implemented.

Involvement of the local communities

In ICOMOS's view, this crucial aspect has been rather vaguely dealt with in the nomination dossier. While the consultation and participation of the local stakeholders is mentioned many times, there is no conclusive information about who got involved, when and with what concerns. It is not clear whether this process included the common people in a more or less participatory discourse or it largely concerned the political and administrative spokespeople.

This aspect needs to be addressed by the State Party in order to ensure that the institutional management can be understood and accepted by local communities, and that they can cooperate through their traditional and officially-recognised management practices.

In the interim report, ICOMOS asked the State Party to provide updated information on how local communities are involved in the finalisation of the institutionalised management system being set up.

The State Party responded that the revised decree 400/2015 will allow traditional activities within the protected area. Participation and involvement of local communities to management will be supported through periodical meetings.

ICOMOS considers that the participation process requires an ad-hoc strategy with regard to institutionalised management and should be further detailed.

ICOMOS considers that the major reduction of the boundaries of the nominated property unexpectedly proposed in February 2016 poses some fundamental questions with regard to management effectiveness and priorities that need to be addressed urgently. With regard to the proposed framework, ICOMOS considers that special attention is needed to ensure the integration/coordination of the traditional and institutional management forms, identifying clear responsibilities and providing the necessary implementation means. Clarification on how the revenue from tourism would be returned to all local communities, through agreed

redistribution mechanisms, is also necessary. Training and capacity building strategy and programmes should be developed in order to prepare future local managers for the nominated property, so as to ensure that in the mid- to long-term, the management of the property can rely on organisations internal to Chad.

In conclusion, ICOMOS considers that the traditional management system for the property appears adequate; however, the ways in which coordination of the traditional and institutional management systems will be provided need to be further clarified. The management system will be effective only if specific action plans are implemented. ICOMOS recommends that priority should be given to waste and water management, with a view to an increase in visitors.

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## 6 Monitoring

The nomination dossier includes a set of indicators articulated under different lines of action, following the main focus of the management plan. These indicators could be understood also as a sort of roadmap for the implementation of the management activities. They include 8 lines of action and 52 indicators – in fact, activities to be carried out within three years.

ICOMOS considers that the monitoring system is site-specific and objective-based and would serve the purpose of measuring the advancement of the action plans. ICOMOS however considers that the monitoring system should assist in measuring both the management effectiveness and the condition of the property.

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In conclusion, ICOMOS considers that the monitoring system is targeted to the specific needs of this management phase and may need adjustment in the future, in order to monitor both management effectiveness and the state of conservation of the property.

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## 7 Conclusions

The Ennedi Massif is a mountainous region in north-east Chad, an impressive sandstone plateau eroded by wind and thermal cycles into gorges, cliffs, canyons and outliers. Although part of the Sahara, the climate of the Ennedi Massif is much more suitable for human habitation than most of the desert, with regular rain during summer, wadis flowing once or twice a year, *gueltas* and a relatively large range of flora and fauna – including some of the few remaining populations of crocodiles west of the Nile. Throughout its caves, canyons and shelters, thousands of images – dating from 5,000 BC onwards – have been painted and engraved, comprising one of the largest collections of rock art in the Sahara and characterised by a wide variety of themes and styles.

The State Party appeared fully engaged in protecting and managing in a sustainable manner the Ennedi Massif for the benefit of its inhabitants. The measures already put in place seemed to point in the right direction and suggested that the major challenges for this property and its inhabitants had been recognised and being addressed.

ICOMOS notes that despite the many steps already undertaken, much still remains to be done in order to set up management mechanisms that ensure the protection of the delicate environmental balances of the property and, at the same time, contribute to the sustainable, equitable and compatible development of the communities living therein.

The setting-up of the institutional management system, planned to be established by December 2016, and its integration/coordination with the traditional management, needs to be clarified and further detailed.

In this regard ICOMOS suggests that an implementation calendar be elaborated with all needed actions detailed, so as to assist the State Party to achieve its goal.

Local communities, who have until now managed the nominated property and its resources according to traditional practices, which have been formally recognised also by the State, need to be fully involved in the finalisation of the institutional management system.

The recent and unexpected information that a partnership contract was signed between the State Party and private oil companies for resource exploitation, implying the lease of land within the boundaries of the originally proposed nominated property, and the equally unexpected decision to reduce significantly the boundaries of the nominated property, instead of expanding them, as agreed between ICOMOS and the State Party to include the Wadi Namous area and the oasis villages, and not to confirm the proposed buffer zone, as presented at the end of November 2015, have a significant impact on ICOMOS evaluation of this nomination.

The exclusion of the northern part of the Ennedi Massif from the nominated property by drawing a straight line and ignoring any geomorphological, hydrological or other natural or cultural features implies the exclusion also of some of the most important rock art sites and archaeological remains in the region. These include Guirchi Nola Doa, which, according to the ICOMOS Thematic Study on Rock Art of the Sahara and North Africa (2007) are the most significant rock art sites that could justify the inscription of this property on the World Heritage List. This inexplicable and unexplained decision severely undermines the integrity and authenticity of the nominated property and its ability to meet the requirements of the *Operational Guidelines*.

ICOMOS previous assessment of the integrity and authenticity of the nominated property, which could have been demonstrated by expanding the boundaries of the nominated property as agreed between ICOMOS and the



State Party (see additional information sent on 30 October 2015 and the map made available by the State Party on 30 November 2015), cannot be any longer valid.

The recent information that a partnership contract between the State party and private oil companies is signed and that lease of land within the nominated property for fossil resource extraction has been issued, magnifies the scale of the threats to the nominated property. The fact that the nomination process did not contribute to avoid that fossil resource exploitation permitted within the originally nominated property or its vicinity suggests significant gaps in protection and management effectiveness as well as in heritage awareness.

## 8 Recommendations

ICOMOS recommends that the World Heritage Committee adopts the following draft decision, noting that this will be harmonised as appropriate with the recommendations of IUCN regarding their evaluation of this mixed site nomination under the natural criteria and included in the working document WHC/16/40.COM/8B.

### Recommendations with respect to inscription

ICOMOS was ready to recommend the inscription of the Ennedi Massif: natural and cultural landscape, Chad, on the World Heritage List, on the ground of the original nomination dossier and the expansion of the boundaries of the nominated property and of the buffer zone as agreed between ICOMOS and the State Party until the meeting held in ICOMOS headquarter on 30 November 2015 and attested to by the additional information submitted by the State Party on 30 October 2015 and by the map made available in occasion of the above mentioned meeting. However, following the major reduction of the boundaries of the nominated property and the disconfirmation of the expansion of the boundaries of the buffer zone, proposed by the State Party with its letter sent on 25 February 2016, ICOMOS regrets that its recommendation has to be changed, in that the new reduced boundaries of the nominated property do not include crucial cultural attributes supporting the justification of criterion (iii) and the proposed Outstanding Universal Value.

ICOMOS therefore finds itself obliged to recommend that the examination of the nomination of the Ennedi Massif: natural and cultural landscape, Chad, to the World Heritage List be **deferred** in order to allow the State Party to:

- Halting the oil exploitation programme in areas within the original nominated property;
- Reestablishing the boundaries of the nominated property as depicted in the map submitted at the end of November 2015;

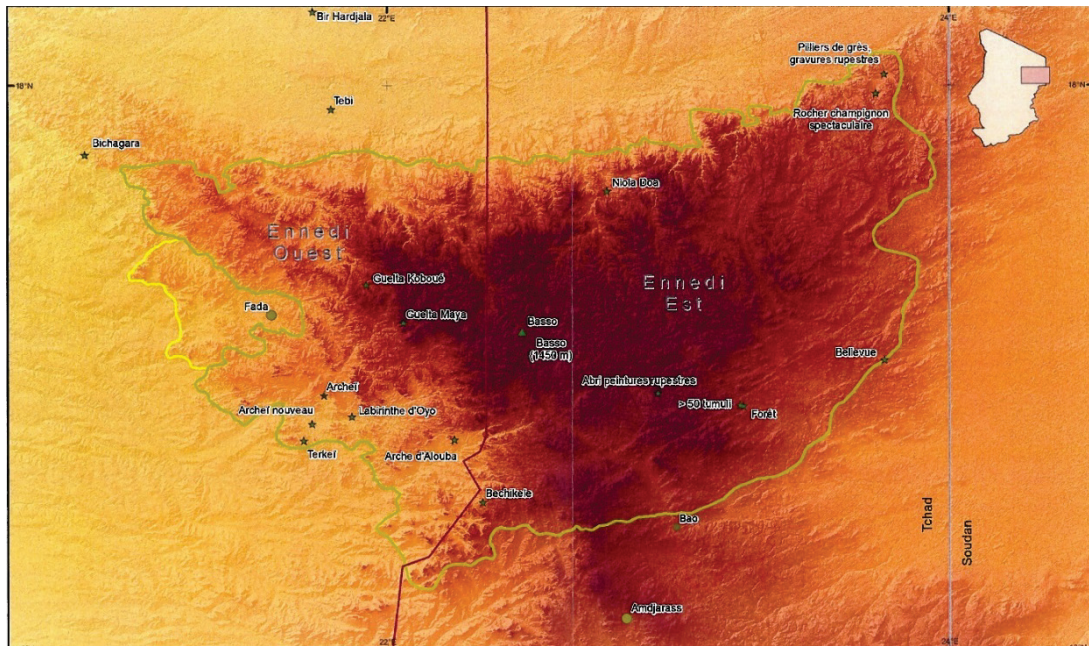
- Finalising the revision of decree n. 400/2015 in line with the reestablished boundaries of the nominated property as suggested by ICOMOS during the evaluation process and by including protection measures and an implementation calendar for the envisioned protective measures;
- Carrying out an independent Heritage Impact Assessment for the fossil resource exploitation plan identifying the negative impacts on the nominated property, its attributes and its setting and submit the result of the HIA to the World Heritage Centre and the Advisory Bodies for examination;
- Finalising and putting in place the institutional management system and prepare an operational implementation calendar for all steps needed to achieve this goal and clarify the management responsibilities of the new system in coordination with the traditional one which has been in place until today;
- Ensuring the full participation of the local communities and of their traditional authorities at the different levels to the finalisation of the institutional management system.

### Additional recommendations

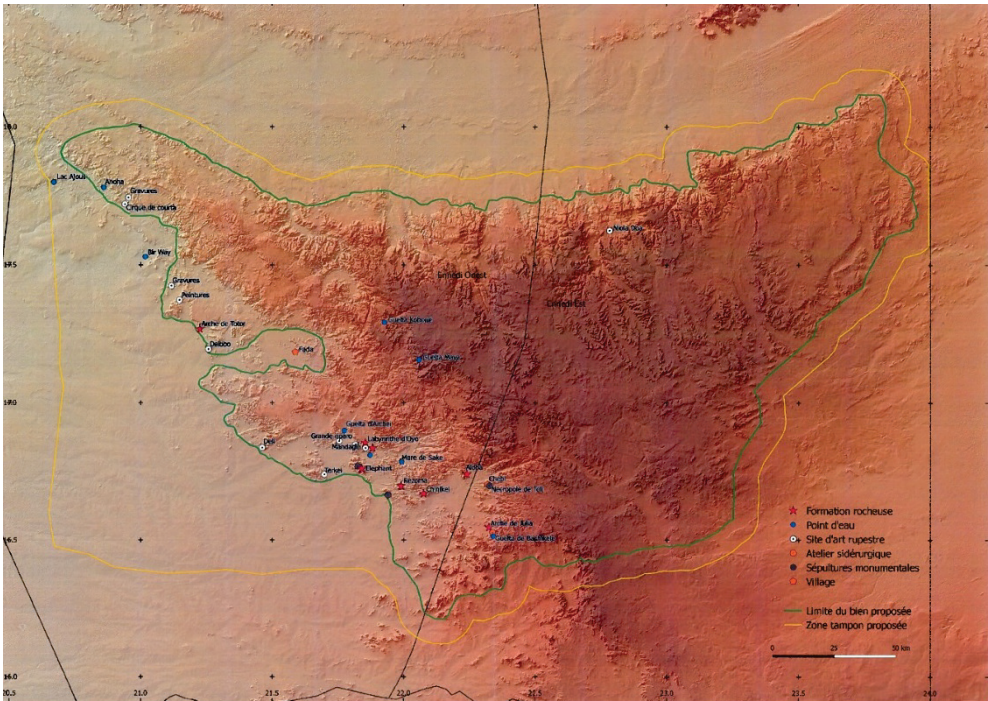
ICOMOS further recommends that the State Party gives consideration to the following:

- Preparing and submitting cartographic documentation and mapping, with the assistance of the research institutions that have been and are currently working in the region, at an adequate scale, of the sites so far inventoried, in order to have a baseline for protection, conservation and management purposes;
- Strengthening and diversifying waste management according to the waste types;
- Continuing training and sensitization of local communities;
- Establishing capacity building strategies and training programmes in order to prepare the future managers of the property from within the members of the local communities;
- Incorporating a Heritage Impact Assessment approach into the management system, so as to ensure that any programme, project or legislation regarding the property be assessed in terms of its consequences on the Outstanding Universal Value and its supporting attributes.



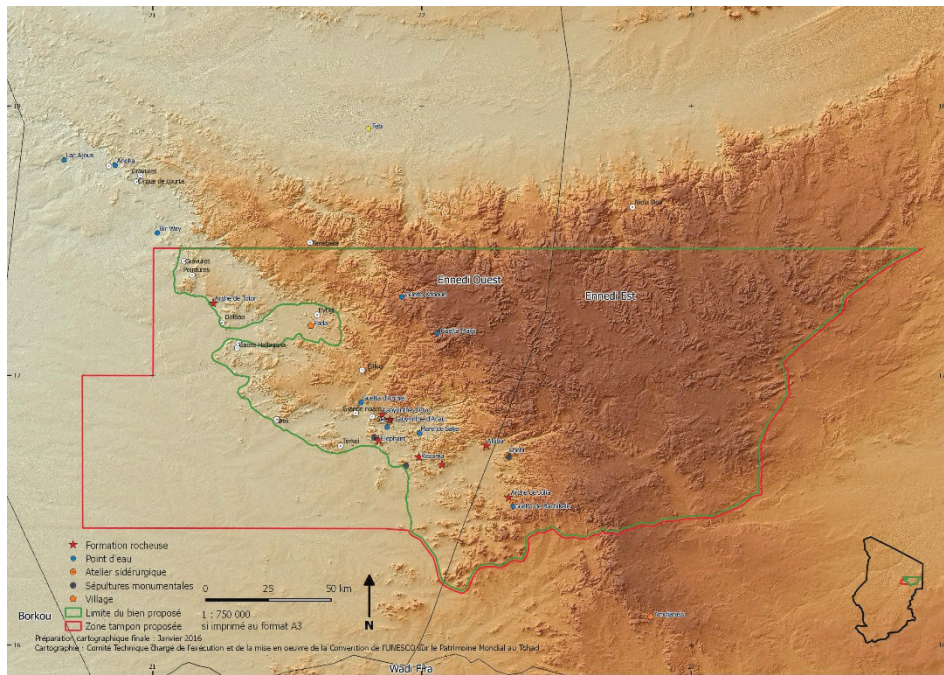


Original map showing the boundaries of the nominated property (included in the nomination dossier)



Revised map showing the boundaries of the nominated property submitted on 30 November 2015





Revised map showing the boundaries of the nominated property submitted in February 2016



Oyo labyrinth





Rock art - Horses and camels galloping



Rock art - Bovines with individual characteristics



### **III Mixed properties**

**A Africa**

New nomination

**B Arab States**

New nomination

**C Asia – Pacific**

New nomination

**D Europe – North America**

Nomination deferred by previous sessions of the World Heritage Committee





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# The Ahwar of Southern Iraq: Refuge of biodiversity and Relict Landscape of the Mesopotamian Cities (The Republic of Iraq)

## No 1481

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### Official name as proposed by the State Party

The Ahwar of Southern Iraq: Refuge of Biodiversity and the Relict Landscape of the Mesopotamian Cities

### Location

Governorates of Al Muthanna, Dhi Qar, Maysan and Al Basrah  
Republic of Iraq

### Brief description

This is a serial nomination of seven sites, consisting of three archaeological sites and four wetland marsh areas.

The Archaeological Cities of Uruk and Ur together with Tell Eridu Archaeological Site form part of the remains of a hierarchy of Sumerian cities and settlements that developed in southern Mesopotamia between the 4<sup>th</sup> and 3<sup>rd</sup> millennia BCE, in what was then a rapidly urbanising area of small states in the marshy delta of the Tigris and Euphrates rivers. The cities flourished between 4<sup>th</sup> and 2<sup>nd</sup> millennium BC and their prosperity was underpinned by agriculture around the rivers and marshes, and by trade from sea ports, such as at Ur along the Persian Gulf.

Between 2120-2000 BCE, monumental architecture emerged in these cities, particularly ziggurats, religious structures reflecting a complex cosmology. All three sites have remains of these religious structures and also cuneiform tablets that developed around the same time and were used to document the economic and religious life of ancient southern Mesopotamia.

At the time these cities were flourishing, the Tigris and Euphrates rivers flowed jointly across the Mesopotamian plain to a marshy delta at the edges of Ur. Gradually over centuries the two rivers diverged and their deltas moved to the south-east, with the result that the ancient marshes became saline and eventually dried out, leading to the demise of the cities by around 1700 BC. And, as the coastline regressed, newer marshes evolved downstream towards the Persian Gulf. Four areas of these newer marshes have been nominated, mainly for their natural value, but also for some emerging archaeological evidence. The marshes were mostly drained in the 1990s, forcing the Marsh Arab communities who lived there to move away. Parts of marshland areas are now being re-flooded to recreate the marshes and their habitats.

### 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 3 *monuments* and 4 *sites*.

[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

07 July 2000 for "Ur"

29 October 2003 for "The Marshlands of Mesopotamia"

### International Assistance from the World Heritage Fund for preparing the Nomination

None

### Date received by the World Heritage Centre

29 January 2014

### Background

This is a new nomination.

### Consultations

ICOMOS has consulted its International Scientific Committees on Cultural Landscapes, on Archaeological Heritage Management, and several independent experts.

### Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the properties from 6 to 13 October 2015.

### Additional information received by ICOMOS

A letter was sent by ICOMOS to the State Party on 6 August 2015 to request further information on the selection of components, the relict cultural landscape and the mixed property. The State Party replied on 16 November 2015, sending additional documentation which has been taken into account in this evaluation. An interim report was sent by ICOMOS to the State Party on 21 January 2016 which included the recommendations of the ICOMOS Panel in relation to reconfiguring the nomination in order to allow the three main cultural components of Ur, Uruk and Tell Eridu to be put forward separate to the four wetland components; and for the boundaries of the cultural components of Ur, Uruk and Tell Eridu to be extended to include relict marshlands.

The State Party responded on 23 February 2016. This response included a new environmental justification for the overall series related to the unstable deltaic landscape and the way the cities and the wetland marshes of the delta reflect the impact of environmental change and the severe environmental and cultural threats of today. This response is reflected in this report.

### Date of ICOMOS approval of this report

11 March 2016

## 2 The property

### Description

*NOTE: The nomination dossier submitted for this serial property is quite slight and, moreover, more details are provided for the natural aspects than for the cultural aspects. The graphic and photographic evidence is inadequate and descriptions are mainly historical rather than covering details of the archaeological components.*

In contrast to today when much of southern Iraq appears to be alluvial desert, during the 6<sup>th</sup> to 3<sup>rd</sup> millennia BCE, the Persian Gulf and its marshy delta used to extend over several hundred kilometres further inland towards the north-east. And around the edges of the marshes, in what is now a parched landscape, arable fields were irrigated by river water. These fertile fields supported the growth of small states and with them the beginnings of the first cities.

The three archaeological sites, two cities and one sacred site, are nominated to reflect the network of cities across southern Mesopotamia. The other components of the series are four wetland marshes, the nearest over 40 kilometres to the east of Ur in the present day marshy delta of the Persian Gulf; they are seen to have symbolic associations with the remains of the ancient cities.

Around 5,500 BC, during the Ubaid period, a network of these cities started to form. Gradually the cities began to foster specialised trades, such as weaving, and these led to the growth of a network of trade routes. By 3,350 BCE a hierarchy of cities of different sizes had emerged within a rapidly urbanizing area.

The main cities of what has become known as the Sumerian civilisation were Nippur, Shuruppak, Uruk, Ur, Larsa, Bad-Tibira, Lagash, Girsu, and Umma while Eridu was a major cultural centre. There were also numerous smaller towns under the influence of their bigger neighbours.

Formed on small mounds around 30 km from each other, the cities were mostly inter-visible, linked by waterways, and surrounded by arable fields, beyond which were shifting marshes that provided fuel, fodder for sheep and cattle, and plenty of game, fish, and waterfowl.

As early as the Ubaid period, some of the marshes were drained through the building of dams and irrigation canals. These were later much developed and extended by the Sumerians who built major dams on the Tigris and Euphrates and elaborate irrigation canals to expand agriculture far inland. Traces of these major hydrological constructions and of ancient irrigated fields are still found within the sites and their surrounding landscapes.

A critical invention of this area was writing which probably developed from incised clay tokens used for accounting after the 6<sup>th</sup> millennium BC. The writing

included pictograms and symbols for numbers in what has become known as cuneiform script. Some of the earliest examples of this written script were found in the cities of Uruk and Jamdet Nasr around 3,300 BCE. The large corpus of cuneiform tablets uncovered to date give an extensive insight into the Mesopotamian world and highlight the importance of the wetland environment for the economy, belief system and literature.

By the second half of the 3<sup>rd</sup> millennium an elaborate cult religion had also developed. Each city-state had its own pantheon of gods, with a chief deity believed to reside in the city's main temple and many other gods in temples all over the area, some specifically associated with the marshes. Temples played an important role in the social and economic life of the cities, central to the development of administrative practice and writing.

The three cities included in the property contain examples of the development of the massive religious structures that would be a key feature of Mesopotamian cities for millennia: the ziggurat. Ziggurats took the form of terraced step pyramids. They were built in cities of ancient Mesopotamia and also in the western Iranian plateau after c. 2,000 BCE. In the Mesopotamian area, nearly thirty ziggurats have been discovered by archaeologists. These date from the end of the 5<sup>th</sup> millennium BCE to the 3<sup>rd</sup> century BCE.

The Eridu ziggurat is considered the oldest known example of this building type. The form that appears to have developed at Eridu and also later at Uruk, eventually reached maturity at Ur, which has one of the largest and best preserved remains of ziggurats.

The marshes of the joint delta of the Tigris and Euphrates River were the setting for the first cities. Starting in the 2<sup>nd</sup> millennium BCE, the two rivers began to diverge and a tongue of land formed between them causing the sea coast to regress towards the south-east. Gradually the marsh landscape around the cities became first more saline, and then more arid, undermining the whole basis of the cities' prosperity. As the coastline moved south-east, new marshes were formed, that fostered from at least the 9<sup>th</sup> century AD communities of what became known as Marsh Arabs or Ma'dān who had no known link with the Sumerians.

In these wetland marshes, four sites have been nominated to represent the ancient marshlands that once supported the cities.

These seven component sites of the series are considered separately, as follows:

#### Ur

Although Ur was once a coastal city, at the mouth of the Euphrates, on the Persian Gulf, it now sits well inland in an arid landscape south of the current course of the river.

Ur emerged as a city-state during the First Ur Dynasty (2670 BCE), when, as the capital of Sumer, it became one of the wealthiest Sumerian cities and developed a highly complex and centralised administration system. Its wealth was derived from its location close to the Arabian Gulf on which it developed a port, one of the largest on the Gulf. Two of the three identified harbours of Ur, one on the northern corner of the city wall, and the second along the western wall, are in the buffer zone (none of them yet excavated), while the main port is outside the buffer zone. According to the State Party, it has yet to be excavated and the boundaries might be extended at a later stage.

The archaeological site is surrounded by a mud brick wall of oval shape. Within is a ziggurat, several other temples, palaces, residential quarters, and a burial site including the so-called royal tombs. Some of the public buildings are in the buffer zone. Few details have been provided of the individual component parts.

Some 80,000 cuneiform tablets have been retrieved from the city and testify to the use of written records on an unprecedented scale. The tablets provide details of a centralized bureaucratic administration, and highlight the importance of the wetland environment for the economy, belief system and literature, although ICOMOS notes that few details have been provided as to what is said and how it relates to the nominated sites.

Currently old barracks in the boundary are used as a temporary visitor centre. These will be removed as soon as a new visitor centre envisaged in the new management plan is completed.

#### Uruk

Uruk was the largest settlement in ancient Iraq and the main force of urbanization in southern Mesopotamia in the 4<sup>th</sup> millennium BCE. Uruk (modern name Warka) lies about 80 km northwest of ancient Ur. The original city of Uruk was situated southwest of the Euphrates River. Today, the site lies to the northeast of the river as its river changed its course – a key factor in the decline of the city. Uruk's history covers four millennia from the end of the Ubaid period (c. 3,800 BCE) to the late Sassanid period (7<sup>th</sup> century CE).

The archaeological site of Uruk is composed of three 'tells' and there is evidence of multiple cities built on top of one another.

Its archaeological remains are said to illustrate several phases of the city's growth and decline, the architectural evolution and sophistication of public buildings, and the spatial organization of a vast and complex city with its sacred precincts encircling monumental temples – including two ziggurats, residential quarters organized by professions, and a canal system. However ICOMOS notes that few specific details are provided on each of these components.

The earliest cuneiform texts were found in the temple precinct, while *The Gilgamesh Epic*, the earliest literary text, also originated in Uruk. The city wall of Uruk is mentioned in this epic as one of the major building tasks of this famous king. At the height of its power, Uruk was surrounded by a double circular mudbrick wall 9.8 km long. The archaeological remains of the city wall have been verified in several small trenches and excavations, as well as by a geophysical survey. It was up to 5 m thick and strengthened by semi-circular bastions. The building material was mainly mud brick with some burnt brick. The city wall was first erected in the beginning of the 3<sup>rd</sup> millennium BC and remained in use until at least the Seleucid period (3<sup>rd</sup> century BC).

Just before Uruk entered its final period of decline, under Parthian rule (250 BCE to 227 CE), the Temple of Charyos was built, parts of which still survive.

The land around Uruk was extremely well supplied by canals, some recently identified through magnetometry. The canal system flowed through the city connecting it with the maritime trade on the ancient Euphrates River as well as with the surrounding agricultural land, in and around lowland marshes.

#### Tell Eridu

Eridu was a religious site rather than a city, as evidenced by its extensive temple complex with the remains of a ziggurat, and the sacred mound that underlies it, where eighteen successive temples were built over during a period of 3,000 years. The main tell is surrounded by six smaller tells – only one of which is within the boundary of the site. Five of the smaller mounds together with the depression that marks the site of the original lagoon are within the buffer zone. Only 1 to 2% of its surface has been excavated. As with the other two archaeological sites, ICOMOS notes that few details have been provided of component parts.

#### Ahwar Marshes

Four sites have been nominated in the Ahwar marshes.

Although the nomination states that the Ahwar marshes '*provide unique cultural services*', '*exemplify the ancient marshlands where key civilizations developed and agriculture development was pioneered*' and contain '*numerous archaeological sites*', the link between the marshes around the ancient cities and the Ahwar marshes is symbolic rather than historical. An archaeological study of a few sites was undertaken during the time the marshes were drained forty-five small archaeological tells have been identified within the boundaries or buffer zones of the marshes with pottery showing occupation from the 4<sup>th</sup> millennium BCE to the early Islamic period, but these sites do not relate to the Sumerian cities. The main cultural value of the Ahwar is their association with the Marsh Arabs for which the nomination dossier provides no details.

#### History and development

This has been included within the description above.

### 3 Justification for inscription, integrity and authenticity

#### Comparative analysis

The analysis is based on comparisons for two aspects of the series: first the role of marshland resources in the development of the cities and cultures in ancient southern Mesopotamia; and secondly the way the remains of Uruk, Ur and Eridu testify to the outstanding contribution of all southern Mesopotamian cities to the history of the Ancient Near East.

The comparisons are undertaken for four different cultural aspects/fields: western and eastern Asian societies that developed in wetland environments or along major rivers more or less contemporaneously to the Ubaid and Sumerian periods; specific cultures that developed in wetlands within arid environments spanning different periods and geographical areas; relict cultural landscapes affected by environmental and historical changes in deltas that have been inscribed; and monumental structures similar to the ziggurat.

Although the development of urban settlements occurred in Upper Mesopotamia as well as in Lower Mesopotamia in the 4<sup>th</sup> millennium, it is argued that southern Mesopotamian cities developed to a much larger size than those in the north, especially in the late 4<sup>th</sup> and 3<sup>rd</sup> millennia.

The Pharaonic sites of Ancient Egypt already inscribed on the World Heritage List are seen to reflect monumental structures of religious and political importance, rather than the development of towns near the river.

In the Indus valley, although there is evidence of occupation from the 8<sup>th</sup> millennium BCE, urban centres emerge from around 2,500 to 1,800 BCE, at least a millennium later than in southern Mesopotamia. The sites of Mohenjo Daro, built in the middle 3<sup>rd</sup> millennium BCE reflects monumental architectural and town planning, as do the Archaeological Site of Harappa, and the Archaeological Site of Rehman Dheri, while it is suggested that the Archaeological Site of Mehrgarh (6500-2500 BCE) should be seen as a pre-urban settlement.

Various World Heritage inscribed sites in China are considered and also some on the Tentative List, but at a somewhat superficial level and it is suggested that they do not reflect the emergence of cities. Many sites in China could have been cited that do reflect early urban development and links to natural resources although overall they do reflect completely different cultural traditions. Similarly references are made to Tiwanaku and Olmec cultures which again reflect completely different cultural traditions.

A few comparison are also offered with relict cultural landscapes inscribed on the World Heritage List but these are not considered by ICOMOS to be relevant.

ICOMOS considers that the rise of the network of Sumerian cities through the development of the marsh and riverine hinterland, with very specific religious structures and the emergence of writing, reflects a very specific type of urban development in a particular area, in response to a very particular environment, over a long period of time. ICOMOS does not consider that a global comparative analysis in terms of the development of cities related to rivers and marshes is that enlightening. Rather the cities as a whole reflect the emergence of urban structures in a certain part of the globe and what should have been set out was the geo-cultural area within which meaningful comparisons might have been made.

ICOMOS nevertheless considers, on the basis of its own comparisons, that the cities of southern Mesopotamia can be considered as a discrete group with different characteristic to those further north.

In terms of how the three nominated sites, two cities and one sacred site, might reflect the whole network of Sumerians cities in southern Mesopotamia, it is suggested in the additional information they have provided in November 2015, that the sites of Uruk, Ur and Eridu, are the most intensively investigated early urban sites and therefore the best documented. Furthermore, it is suggested that for the remainder of the early urban sites in southern Mesopotamian (e.g. Umma) on the edges of the ancient marshes, either individual sites have not yet been sufficiently excavated or that extensive looting has irremediably affected their integrity. However few details are provided on these other cities to allow an understanding of how they relate to these put forward. Furthermore it is suggested that other sites might be nominated in the future but without details being provided as to which these sites might be.

In terms of providing justification for the choice of sites, comparisons are made with other cities that have ziggurats, and the three chosen are seen to have the best preserved remains. This focus on the ziggurat perhaps explains the fact that the boundaries exclude important urban and landscape features (see below) but is inadequate to justify why these three sites can reflect the whole lower Sumerian civilisation.

ICOMOS considers that given the enormous importance of the whole network of Sumerian cities, if the three selected sites are to be seen to reflect them all, then much clearer information is needed on how these cities might be seen as a group, what the overall characteristic were, and how the three nominated sites could be seen as either typical or exceptional. To achieve this, much more information is needed on the wider network of Sumerian cities as well as on overall city sites, their component parts and their symbiotic relationship with their surrounding landscapes. Currently there is more of a focus on the ziggurats rather than on the overall urban forms and their supporting infrastructures, that would allow a full understanding of the complexity, power and economic basis of these city states.

For the Ahwar marshes, no details have been provided as to how the four components were selected in terms of cultural parameters and the impression given is that natural parameters were the only ones used for selection. The specific marsh areas are not referred to in the analyses.

Thus the overall series has not been compared: rather the analysis has concentrated on the three cities and their marsh hinterlands that existed while they were flourishing.

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ICOMOS considers that the comparative analysis has not so far adequately justified consideration of this serial property for the World Heritage List.

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### **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 three urban sites:

- Were originally situated within the marshy landscape of the deltaic plain;
- Developed, between the 4<sup>th</sup> and 3<sup>rd</sup> millennia BCE, into some of the most significant urban centres of southern Mesopotamia and saw the origin of writing, monumental architecture, and complex technologies and societies;
- Offer a complete testimony to the growth and achievements of southern Mesopotamia urban centres and societies, and to their outstanding contribution to the history of the Ancient Near East and mankind as a whole;
- Document the economic and symbolic role of the wetland resources and landscape for the cultures of ancient southern Mesopotamia;
- Are testimonies of the antiquity and achievements of southern Mesopotamian cultures and of the impact of the unstable deltaic landscape upon the rise and fall of their large urban centres.

The three natural components of the marshes:

- Testify to the history of human occupation in the Ahwar marshes, through their several dozen small archaeological mounds.

ICOMOS considers that this justification highlights the main weakness of the series of seven components as not all the components convey a similar justification for Outstanding Universal Value. For a series, each component needs to contribute to the overall Outstanding Universal Value of the whole series, and thus to each of the criteria, and the components need to reflect cultural, social or functional links over time. In the nominated series these conditions have not been met.

ICOMOS does not consider that the cultural value of the current series of seven sites has been justified. The nominated natural marshes with their limited archaeological evidence, do not relate directly to the three cities, and cannot be said to represent the ancient marshlands around the cities. There are no cultural, social or functional links between the three cities and the four natural marshlands that have persisted over time.

ICOMOS considers that the three cities do have the potential to justify Outstanding Universal Value in the way they represent and reflect the early development of extensive and complex cities in southern Mesopotamia and their contribution to the history of the Ancient Near East and mankind as a whole, as well as their symbiotic relationship with the now relict marshlands that supported their prosperity.

In order to achieve this, the current series would need to be reconfigured with the three urban sites separated from the four wetland marshes. Moreover, far more information would be needed on precisely how the three archaeological sites reflect the planning, architectural, economic, and symbolic aspects of Sumerian culture, how they relate to the other Sumerian cities and to trade networks, and how they exploited the marshes and their riverine surroundings.

ICOMOS considers that this justification for the cultural value of the whole series has not been substantiated at the current time.

### **Integrity and authenticity**

Integrity

In terms of the series as a whole, the integrity is difficult to define for two reasons. First, a full justification has not been provided to show how the three cities might reflect the whole Sumerian culture, and indeed there is mention of other sites coming forward in the future. Secondly, the inclusion of the four wetland marshes in the series to reflect the former relationship of the cities with their then adjacent marshes, is not convincing.

In terms of integrity of the individual sites, there is overall concern that not all the elements are included in the individual boundaries. The nationally protected areas are larger than the nominated sites and more readily encompass elements of the cities. But even these larger boundaries do not reflect all the elements that are crucial to understanding the relationships of the cities with the now relict marshlands.

Further the conservation condition of the three urban sites is not good (as detailed under conservation below) and certain elements have already suffered irreversible erosion and are also highly vulnerable to collapse, leaving a severe doubt as to how the integrity of the sites can be sustained.

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ICOMOS considers that the integrity of the whole series has not so far been met; and that the integrity of the individual sites that comprise the series is highly vulnerable to the lack of conservation which is leading to erosion of archaeological evidence and the potential collapse of some structures.

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#### Authenticity

In terms of authenticity of the overall series, there is inadequate justification as to how all the seven component sites contribute to the Outstanding Universal Value of the series under the cultural criteria. It is therefore not possible to evaluate the overall authenticity of the series.

In terms of material authenticity of the three urban archaeological sites, although there is no doubt of the link between the fabric and what they convey, that link is extremely vulnerable for some areas, where lack of conservation and maintenance has caused irreversible erosion of the mud and burnt brick fabric and the potential collapse of some structures (as detailed under Conservation).

The material authenticity of the four wetland marshes is difficult to assess in material terms as archaeological evidence is limited and in terms of associations, there are no cultural, social or functional links between the three cities and the four natural marshlands that have persisted over time.

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ICOMOS considers that the authenticity of the whole series has not so far been met; in terms of individual component sites, that the authenticity of the three urban archaeological sites is highly vulnerable to the loss of archaeological evidence, and that the authenticity of the four wetland marshes has not been demonstrated.

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ICOMOS considers that the conditions of integrity and authenticity have not so far been met.

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#### Criteria under which inscription is proposed

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

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 remains of the Mesopotamian cities of Uruk and Ur together with Tell Eridu offer a complete testimony to the growth and subsequent decline of southern Mesopotamian urban centres and societies from the Ubaid and Sumerian periods until the Babylonian and Hellenistic periods. The three cities were major religious, political, economic and cultural centres which emerged and grew during a period of profound change in human history. They bear witness to the full repertoire of the contribution of southern Mesopotamian cultures to the development of ancient Near Eastern

urbanized societies and the history of mankind as a whole: the construction of monumental public works and structures in the form of ziggurats, temples, palaces, city walls, and hydraulic works; a class structured society reflected in the urban layout which included royal tombs and palaces, sacred precincts, public storehouses, areas dedicated to industries, and extensive residential neighbourhoods; the centralized control of resources and surplus which gave rise to the first writing system and administrative archives; and conspicuous consumption of imported goods.

ICOMOS considers that in principle this criterion could be appropriate but only for the three archaeological sites, and what needs to be set out much more clearly is how the three nominated sites reflect the 'full repertoire of Mesopotamian culture' and the overall network of cities, and particularly the basis for their prosperity in terms of hydraulic works and trade. The current nomination does not provide the essential details needed to make this case. Further all the necessary attributes need to be within the nominated boundaries, which is currently not the case (see boundaries below).

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ICOMOS considers that this criterion has not so far been justified.

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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 three cities, originally near freshwater marshes together with the 'newer' wetland marshes to the south-east, exemplify the impact of the unstable deltaic landscape of the Tigris and Euphrates upon the rise and fall of large urban centres in southern Mesopotamia. Testimonies of this relict wetland landscape are found today in the cities' topography as traces of shallow depressions which held permanent or seasonal marshes, dry waterways and canal beds, and settlement mounds formed upon what were once islets surrounded by marsh water.

Architectural elements, archaeological evidence and a corpus of cuneiform texts document how the landscape of wetlands provided natural resources for building, fuel, food and agriculture and water transportation and also contributed to shaping religious beliefs, cultic practices, and literary and artistic expressions of successive cultures in southern Mesopotamia.

ICOMOS considers that undoubtedly the cities of Southern Mesopotamia developed as powerful trading and religious centres through exploiting the resources of the surrounding fresh water marshes, and their proximity to the Arabian Gulf. Currently the three nominated archaeological sites encompass three cities but not the relict marshes of their hinterland that could have

provided the details needed to understand how the marshes were used for agriculture, in particular through the extensive canal systems and how they declined when the area dried out. Furthermore this justification does not apply to the four wetland marshes. The four marshland areas that have been nominated cannot be said to relate to the cities in historic or cultural terms.

ICOMOS considers that in principle this criterion could be appropriate but only for the three city sites, and if the boundaries were extended to include some of the relict marshland areas.

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ICOMOS considers that this criterion has not so far been justified.

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ICOMOS considers that the serial approach has not so far been justified. In conformity with *Operational Guidelines*, paragraph 137b) each component of a serial nomination needs to contribute to Outstanding Universal Value and thus to each of the criteria. In the nominated series that is not currently the case. ICOMOS considers that the three archaeological sites have the potential to satisfy the cultural criteria, with extended boundaries and the provision of more detailed information and justification. The rationale for the choice of sites need strengthening, all the key urban attributes need to be within the boundaries, and the relationship between the cities and the relict marshlands needs to be substantiated through inclusion of some relict marshlands within the boundaries. ICOMOS does not consider that the wetland marshes have the potential to satisfy a similar justification for cultural criteria. The wetland marshes have interesting cultural associations but these do not relate to the proposed justification for the cultural criteria, nor do they demonstrate any cultural, social or functional links over time with the archaeological sites, in conformity with paragraph 137a) of the *Operational Guidelines*, that component parts should reflect cultural, social or functional links over time.

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ICOMOS considers that the criteria have not so far been justified.

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#### 4 Factors affecting the property

Following excavations in the 1930s, the sites were mainly left unattended and unprotected until the 1960s, and since then there has only been intermittent work undertaken.

In the last 85 years, erosion of the remains of the mud built structures from rain, strong winds, and sometimes uncontrolled access by visitors, have all contributed to the alarming deterioration of the three urban sites, and particularly the excavated areas. This erosion, compounded by the lack of regular maintenance, has led at best to decay and at worse to complete disintegration

of some of the excavated remains (see Conservation below).

A further problem is the impact of inappropriate conservation materials, such as concrete on the ziggurat of Ur, which has caused cracks that allow water penetration to some upstanding remains.

At Ur, some vegetation growth (especially in areas where water and moisture accumulate), as shown on a high-resolution map produced with the help of a drone, by an Iraqi-Italian mission currently working there, causes undercutting and collapse of mud brick walls. Once it dries-up in summer, this vegetation also contributes to fire hazards.

The lack of maintenance and protection between the 1930s and 1960s allowed some looting to take place. Clan elders expressed to the mission their continuing concern that looting and illegal excavations still persist.

Modern graffiti are visible on the surface of the bricks on the ziggurat of Ur and on the royal graves.

The Integrated National Energy Strategy for 2013-2030 (INES), recognises the impact of the oil extraction plants on heritage and the necessity to preserve the needed distance between these plants and the archaeological sites is clearly stated.

The construction of upstream dams, in Iraq and in neighbouring countries could have adverse impacts, such as damage to archaeological deposits from a raised water table resulting from intensified irrigation. The reduced flow of water in the rivers could also impact adversely on the four recreated marshland areas.

A military base (Camp Ader) set up by the United States of America 300 m away from the edge of the buffer zone has threatened the stability of some of the buildings on the site. The military base was returned to the Iraqi army in 2009 and there are now more limited activities.

The city of Nasiriyah borders the archaeological site of Ur.

The municipality has put forward a plan to build a ring road, which will connect Ur directly to the Nasiriyah-Baghdad highway and will avoid the city centre. This project includes proposals for a visitor centre and a high standard hotel in the city centre and a bridge over the Euphrates. None of these developments are in the vicinity of the Ur Archaeological site. Nevertheless ICOMOS recommends that detailed plans of the project should be provided.

Within Ur, various structures have been constructed to support excavation teams within the buffer zone. A dig house and guard house are located after the entrance of the site about 350 m to the north east of the ziggurat. Another dig house, hosting international archaeological missions, is located 450 m from the ziggurat. A

laboratory adjacent to the living quarters of the guards and their families is situated 275 m northeast of the ziggurat.

All these modern buildings are within the official boundaries of the protected archaeological site and inside the proposed buffer zone. Currently these buildings do not have water, drainage or electricity connected and ICOMOS considers that provision of these would have to be carefully planned to avoid disturbing intact archaeological deposits or visual impact, and may be undesirable.

Until 2014, electrical poles and wires ran along the paved road from the Ur's main entrance to the foot of the ziggurat. These have now been removed, as have a paved road and parking areas built in the 1960s over an excavated area, an enclosure of the ziggurat.

At Uruk, a dig house and a guard houses are located inside the property. A small station of the Antiquity and Heritage Police is in the buffer zone. No services are connected. An agricultural village is situated just outside the buffer zone, but there seems to be no encroachment.

At Ur, currently visitor numbers are very low and on average the site has received less than one thousand visitors a year over the past five since the withdrawal of the US army at the airbase near to Ur, and before the 2003 war, the number of visitors was only slightly higher.

Tourism is not thus currently a pressure factor. At Eridu, no visitors are recorded at the site, there are therefore no visitor facilities nor impact from visitation. Furthermore, there are no plans to encourage visitation for the years to come, on account of the sites' remoteness, challenges to ensuring its protection against visitors, and because there are little visible remains. ICOMOS considers that plans for visitation can only be considered after a comprehensive, multi-year, research and conservation project has been implemented.

At Uruk, very few visitors access the site: they usually come as part of delegations. No school trips are presently organized there. Signage has been installed by the State Board of Antiquity and Heritage (SBAH) in front of major monuments.

The potential power of attraction of these three sites for international visitors is high. ICOMOS considers it is essential to put in place forward plans for the development of appropriate tourism and interpretation strategies in order to ensure that tourism does not become a negative force but these must be linked to improved conservation as currently none of the three archaeological sites are in an adequate state for the arrival of visitors.

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ICOMOS considers that the main threat to the property is the almost complete lack of consolidation and maintenance of the excavated areas until very recently,

and the subsequent loss of the archaeological resource from erosion and collapse.

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## **5 Protection, conservation and management**

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

For all three sites, the protected archaeological areas go beyond the boundaries of the nominated areas to encompass the buffer zones as well. As has been set out above, key archaeological sites that should be part of the sties, now lie in the buffer zone.

Recent non-invasive investigations have led to an improved understanding of the relationship between the three cities and the relict marshlands of their hinterlands which supported their wealth and growth, through for instance identification of networks of canals. The boundaries need to encompass some of these areas to allow an understanding of the symbiotic relationship between the cities and the now relict marshes.

#### **Ur**

Some of the public buildings are in the buffer zone, as are three of the harbours, while the main harbour of Ur is situated outside the buffer zone. All of these key sites should be within the boundaries. Further recent non-invasive surveys have identified crucial element of canals in the hinterland of the site which should also be reflected within the boundaries.

#### **Eridu**

The nominated site is small with a large buffer zone that encompasses its surrounding wall and several small tells, all of which should be in the boundary.

#### **Uruk**

As with the other two sites, the protected area encompasses the site and its buffer zone. The ruins of the Bit Akitu (the New Year festival house) to the North-East of the mudbrick city wall are outside the buffer zone boundary and should be included within it.

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ICOMOS considers that the boundaries of the three nominated city sites and their buffer zones need to be re-assessed on the basis of more detailed surveys to allow the boundaries to fully reflect the necessary attributes.

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### **Ownership**

The whole property is owned by the State Party.

### **Protection**

The three archaeological sites are protected by the Antiquities and Heritage Law and Law no. 55 of 2002, the latter considered as private Law having priority over the public laws. In case of any contradiction between the two, the private Law no. 55 would take precedence.



Registration in the Official Gazette includes both the sites and their buffer zones. What this means is the acknowledgment that important archaeological sites extend beyond the boundary of the nominated component sites.

The nomination dossier sets out clearly in an Annex an Analysis of the Legal and Regulatory Framework.

Provided that the nomination of the property results in its inscription on the World Heritage List, the Government will issue a cabinet legal decree recognizing the special status of all components as a World Heritage property.

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ICOMOS considers that the legal protection in place is adequate.

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### **Conservation**

At Ur, an aerial survey carried out recently by drone has been completed to a high definition. In addition 3D photogrammetry of most of the standing monuments has been undertaken. For most of the rest of the three sites, documentation is quite inadequate.

There is currently no overall archived documentation of the excavation reports or plans, nor a plan on what documentation is needed and how this will be achieved. For Ur, a Digitization Project, run in partnership by the British Museum and the Penn Museum, was launched in 2013 to collate and digitise some of the finds related to the campaigns of Woolley of the 1920s and 1930s but has not yet commenced collaboration with the Iraq Museum. For Uruk, the German Institute is beginning to collate information on past excavation work.

#### **Ur**

The Iraqi mission to Ur restored the ziggurat during the 1960s and 1980s using fired bricks laid with cement. Substantial excavations and consolidation works were also undertaken including the three flights of stairs and the lower portions of the western end of the south frontage.

Today, the ziggurat shows cracks and erosion, both in the modern restoration and in the original core. For the latter, a solution needs to be found as a matter of urgency to stop water infiltration and allow water finding its way into the core to drain out.

The E-dub-lal-mah temple is located in the south-east corner of the sacred precinct of the ziggurat, was excavated by Leonard Woolley in the 1920s, and restored using concrete, including the addition of a concrete roof. Some conservation work was undertaken during the 1960s which involved exposing the walls of the temple and its paved limestone floor, and rebuilding the stairs leading to the 'holy of holies'. The cella's internal and external walls were also restored.

Today the E-dub-lal-mah building is in a deplorable state of conservation, with deep cracks due in large part to the heavy concrete roof and because of long periods of

neglect and exposure to the elements without any maintenance work. The building has been documented recently by an Iraqi-Italian mission and a conservation proposal with related specifications and bill of quantities was prepared in 2014.

The Nin-mah temple is situated inside the sacred *temenos* to the east of the E-dub-lal-mah temple. The building was cleaned by the Iraqi Mission in the 1960's, when its architectural features were exposed but the building was not restored nor consolidated. It was subsequently left to disintegrate totally, as a result of exposure to the elements, neglect, and uncontrolled access.

The Lower Temple of Nannar is situated right opposite the ziggurat. The Iraqi mission took charge of clearing the site of the temple from debris and exposing the structure of the building. Like the other monuments, it was then left to disintegrate due to the absence of a conservation and maintenance programme.

The same conditions characterize the Nin-Kal temple and Kiki bar-ku temple whereby exposure to the elements and the lack of maintenance and conservation have almost completely obliterated the traces of these ancient buildings.

The E-nun-mah temple, located to the east of the E-dub-lal-mah, was subjected to some cleaning and consolidation during the 1960's mission, but this has not stopped the heavy decay of its remains. Today, little is visible of the original plan.

Nanna's temple, located to the north of the ziggurat, also suffered from neglect and erosion and ICOMOS considers that proper re-excavation and consolidation will be needed in order for it to be interpreted. The same can be said of Nanna's courtyard, located to the east of the ziggurat, the Gig-par-ku of Amar-Sin, the E-hor-sag of Ur-Nammu and Shulgi, located to the south and south-east of the ziggurat, and the mausoleum of Shulgi and Amar-Sin.

The Royal Cemetery of the Third Dynasty consists of a number of subterranean structures built with fired bricks. During the 1960s mission, the various structures were consolidated and partly rebuilt using fired bricks laid with cement. Lack of maintenance has caused erosion, brick-displacement and cracks in several walls and ceilings. Modern graffiti (mainly in ink) are visible on the surface of the walls. These structures are being documented by the Iraqi-Italian mission and a detailed conservation proposal is being developed.

There are a number of other structures located outside of the sacred precinct but they, too, are in a poor state of conservation due to neglect, erosion, and material decay. These include the so-called House of Abraham, the Harbour temple, the Larsa-period quarter, and the Parthian period buildings. While the House of Abraham was reconstructed by Woolley, the other structures were

only partly excavated and have almost completely collapsed or been buried. The House of Abraham received further conservation work in the early 2000s, when walls were consolidated using fired bricks, and capped with layers of cement.

#### Eridu

Major archaeological excavations were conducted in Eridu between 1946 and 1949. Since then, no further excavation, survey, or conservation and maintenance work has been conducted at the site, resulting in the progressive reburial of all excavated structures, with the exception of the ziggurat and other nearby structures.

The ziggurat is heavily eroded due to its exposure to the elements for over 70 years, especially in its northwest and southwest sides, and ICOMOS considers that an accurate condition assessment and a detailed conservation plan will be needed in order to consolidate and preserve what remains. Significant damage resulting from particularly heavy rains, have caused landslides and the formation of holes in the ground.

All other structures, such as the Enki Temple and other temples, the Ubaid tombs and the Uruk period buildings, identified and published after the excavation campaigns of 1946-1949, are presently reburied under the sand and their state of conservation is unknown.

The landscape setting of the site is in an excellent state of preservation.

#### Uruk

The German team working on the site backfilled several old excavation trenches and structures in order to protect them from the harsh weathering conditions. This is why most of the Uruk period buildings are covered with earth today. As only a few layers of mud bricks had survived, these would have deteriorated quickly without such protection.

However, the backfills consist of softer material than the surrounding natural deposits with an absence of drainage for rain water. These two factors (the soft composition and the absence of drainage) resulted in the deterioration of the backfilled material, which then gets washed by heavy rain, creating deep gullies.

The remains of the Gareus Temple and the associated bath are still well preserved. As they were built without a foundation on a layer of mashed loam, this has caused subsidence, erosion, and rising damp, and they urgently need restoration and consolidation measures.

On the inner side of fortification wall II, bathing facilities were constructed in the Parthian period. The walls of the baths were partly reconstructed during the 28<sup>th</sup> campaign (1970). The new reconstructed structures are currently in bad condition. They need conservation measures using suitable materials.

Overall the lack of conservation and maintenance activities at the sites has resulted in the progressive deterioration and collapse of many ancient features. Some of the most endangered structures are those that received substantial conservation in the past, such as the White Temple in Uruk, the E-dub-lal-mah Temple and the Royal Tombs in Ur. In Eridu, most excavated areas are now reburied and it is not possible to have an idea of their previous state of conservation until renewed excavations bring them to light again.

#### Ur

As mentioned above, the Iraqi-Italian project currently financed by the Italian Cooperation is addressing documentation and the preparation of conservation plans for three structures at Ur: the E-dub-lal-mah, the Royal Cemetery, and the ziggurat.

Currently, plans for the conservation of the E-dub-lal-mah temple and the Mausolea of Ur III are completed and can be implemented either through the resources of the State Board of Antiquities and Heritage (SBAH) or in collaboration with missions active in Ur and other donors. The Dhi Qar Governorate approved the budget for this project as part of its 2013 budget allocation, but the funds have not yet been committed, largely due to the deteriorating security situation. These projects constitute the first two phases of the conservation study funded by the Italian Cooperation and led scientifically by La Sapienza - University of Rome; the third phase involves the conservation and maintenance of the ziggurat. Projects for the Royal Tombs and the ziggurat are in preparation in addition to a study for developing signage and interpretive panels to be installed on site.

As well as the conservation projects planned with the Italian mission, there is an investigation project aiming at the study of the core of the ziggurat. Within the framework of this project a training component for the management team and for other archaeologists will also be implemented. Furthermore, the Stony Brook University, New York, plans a survey and an excavations project in the south part of the Royal Tombs. The framework agreement organizing this work has been recently signed with the SBAH.

#### Eridu

In early 2014 the SBAH granted the Italian Mission the permission to conduct archaeological investigations at the site. Work so far has consisted in undertaking preliminary surface surveys and re-mapping of the site.

After the excavation and re-excavation of some of the structures, a conservation plan will be developed.

#### Uruk

The German Archaeological Institute is planning a return to the site once the security situation improves in the country. The German team proposes an excavation of the still preserved city wall either side of the street leading into the site in order to present this important element of the town to the public. Activities in the

meantime have concentrated on the publication of older excavations, exhibitions and 3D digital reconstructions of excavated structures. The future research will start with a survey of the suburbs of Uruk (3 km radius) which will add to an older survey of the Uruk countryside.

ICOMOS considers that it is important that these various proposals are detailed and submitted for review until such time as an overall Conservation Plan can be prepared for the sites which sets out parameters for interventions. Such a plan will also need to consider ways of consolidating the fragile remains, as well as how they might be interpreted.

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ICOMOS considers that the lack of maintenance and active conservation means that the state of conservation of some individual excavated areas has deteriorated to such an extent that vital evidence has been or will soon be eroded; and that the three sites are now in danger of losing authenticity and integrity. Although ICOMOS acknowledges that some survey and conservation work is now being planned, it considers that there is an urgent need to establish an overall approach to surveys, documentation and consolidation in advance of conservation work commencing. ICOMOS recommends that an overall Conservation Plan be prepared for the three nominated sites which sets out parameters for interventions and consider ways of consolidating the fragile remains, as well as how they might be interpreted.

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## Management

Management structures and processes, including traditional management processes

In 2013, an inter-ministerial National World Heritage Committee was created. This will play a role in the direct management and protection of the properties, once activated.

There is no specific over-arching management for this series nor local management structures at each of the sites.

At the State level, the State Board of Antiquities and Heritage is the main authority responsible for the conservation of the three sites.

A World Heritage Site Section exists within the SBAH in Baghdad, which has been involved in the preparation of the new Management Plans for these sites.

At the governorate level, Antiquity and Heritage Directorates (AHDs) are directly responsible for the conservation, management and monitoring of archaeological sites inside their respective jurisdiction. The Dhi Qar AHD has jurisdiction over Ur and Eridu, whereas the Muthanna AHD has jurisdiction over Uruk.

AHDs are assisted by the Antiquity and Heritage Police, created in 2007 for monitoring archaeological sites. The

Antiquity and Heritage Police maintains a permanent presence at Uruk and Ur and regularly patrol the site of Eridu.

There are three site guards in Ur (living on site with their families), one in Uruk (also on site with his family), and one in Eridu (conducting daily inspections from Nasiriyah).

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

The nomination dossier said that a Strategic Action Plan was being developed and a copy was provided to the mission expert. The Plan sets out a strategy for the property based on an overall vision for the management of the property. The Strategy will address the effective coordination and cooperation between all parties involved in the management; the involvement of all key stakeholders; coordination with the international community on; adequate staffing and financial resources; national responses to threats facing the property; and overall coordination of human resources.

This Strategy will cover both its natural and cultural components. An Action Plan is being developed and the mission was told that two of its actions have been implemented: the establishment and activation of the national committee for the World Heritage and the establishment of the management units for the sites of Ur, Eridu and Uruk.

Individual plans have been prepared for each of the component sites; only those for the natural sites were attached with the dossier. A plan for the three archaeological sites was submitted by the State Party in November 2015. This acknowledges that *“no regular monitoring is presently being carried”*, that *“the lack of conservation and maintenance activities at the sites is resulting in the progressive deterioration and collapse of many ancient features”* and the *“absence of local management structures at the site”*.

It emphasises that it is essential for the NCWH to be activated, in order to monitor the implementation of the management plan of the proposed property.

The Plan sets out a structure for management and lists the approaches for conservation documentation, interpretation and tourism that all need to be developed as a matter of urgency, together with a preliminary timeframe. This outlines an ambitious undertaking which will need substantial resources and coordination, as well as detailed agreement as to how the extremely difficult conservation condition of many part of the three sites will be approached.

Involvement of the local communities

In Iraq, the chieftain system and the clan system is a key feature of people’s daily lives. Most of the civil incidents

are resolved on the clan level and do not reach the courts. This system is run by the elders of the clans.

The clan elders in the region of the three archaeological sites, are much concerned by the sites and their state of preservation especially in regards to illicit excavations and looting. They consider that the sites are the legacy of their clans and consequently it is their duty to preserve them for the future generations.

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In conclusion, ICOMOS considers that although a management system has been set up it has not had chance to become fully operational and it remains to be seen how it can address the far-reaching and fundamental issues facing the sites, through acting on and amplifying the objectives of the management plan.

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## 6 Monitoring

Monitoring indicators have been set out but these are currently related to percentage of buildings needing repairs, rate of encroachments, stability of buildings and relative humidity. These are a good but limited start. Given the dire state of conservation of the three urban sites, the main need is for a monitoring system with an established baseline that can provide an accurate record of changes to the overall fabric over time.

ICOMOS considers that there is an urgency in establishing such a baseline and an agreed monitoring system using the best available equipment, including remote sensing.

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ICOMOS considers that the current monitoring system does not adequately address the challenges to the sites and as a matter of urgency a detailed monitoring system needs to be put in place, based on an established baseline, and addressing all the key attributes of the sites.

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## 7 Conclusions

From a procedural point of view, the nominated series of seven components present conceptual difficulties in terms of the requirements of the *Operational Guidelines* for serial properties. The series of seven component sites does not meet the requirements of paragraph 137b) that all component sites of a series must contribute to the overall Outstanding Universal Value of the series, and thus each component must contribute to each criteria. Currently, the three archaeological component sites of Ur, Uruk and Tell Eridu do not contribute to the proposed justification for the natural criteria, while the four wetland marsh areas do not contribute to the proposed justification for the cultural criteria. Nor does the series meet paragraph 137a) that component parts should reflect cultural, social or functional links over time. The symbolic links proposed

between the ancient cities and the wetland marshes are links that are perceived today.

Although ICOMOS strongly supports the idea that the Sumerian cities that arose along the Euphrates River had a highly productive symbiotic relationship with their surrounding marshes through the way that they provided water for irrigation and transport, and reeds for fodder, fuel and building materials, and also sacred associations, the ancient marshes that were the lifeblood of these cities have now dried out and are not those being nominated.

The four wetland marshes that are part of the nominated series are between 60 and 150 kilometres away from the cities with whom only modern symbolic links have so far been demonstrated. Although some archaeological sites have been identified in the wetland marshes, these have not been shown to be linked historically to the growth and development of the three cities or to have cultural attributes that relate to the potential cultural criteria.

For the reasons set out below, ICOMOS considers that further detailed discussions are needed with the State Party and with IUCN to consider how the seven sites might relate to the requirements of the World Heritage Convention, whether as one mixed property, or as two properties, one cultural and one mixed, or through some other variation, and that time is needed for these discussions.

The three Sumerian urban sites have great potential to contribute to the World Heritage List but much more detailed information needs to be provided on the selection of sites, what they contain, their relationship with their now relict marshlands and their states of conservation. And a clearer rationale needs to be provided for the selection of sites to show how the cities relate to other Sumerian cities in southern Mesopotamia, and might be seen to reflect the whole network of these cities.

Furthermore, more extensive details need to be provided to allow a full understanding of how they reflect the complexity, power and economic basis of these city states through what has been excavated and what remains. Currently in terms of documentation there is more of a focus on the ziggurats than on the overall urban forms and their supporting infrastructures. The nomination does not provide sufficient information to explain what survives of these great cities and what needs managing to ensure they may continue to reflect fully their intricate and complex histories.

Of great concern is the state of conservation of the three urban sites as a result of lack of maintenance and conservation until the very recent past. The highly eroded nature of the sites impacts adversely on authenticity and integrity, making it difficult to understand the extensive layers of evidence that were uncovered by excavations. The surveys that have been initiated to set out a baseline for the current state of the remains need

to be extended for the whole of the three sites in order that conservation plans can be developed that may set out clearly the various options for intervention and fully justify what approach is to be followed in developing the urgently needed conservation measures.

The desertified former marshland landscapes beyond the boundaries of the cities are now beginning to reveal patterns of canals and fields, and satellite settlements from non-invasive surveys. It is ICOMOS's view that some of these areas need to be included within the nominated boundaries in order to reflect the way the use of the marshes underpinned the prosperity of the cities. The precise delineation of these extended areas would need to be considered in relation to the detailed output of the various surveys – which so far have not been provided.

The four nominated wetland marshland areas are being put forward mainly for their natural values, rather than for how they reflect cultural resources related to the Sumerian cities. Information has been provided that forty-five small tells were investigated when the marshes were drained – some within the boundaries and some outside – but no details have been given as to their precise location, or what the investigations revealed, nor any links with the Sumerian cities. Neither has information been provided on the association between the marshes and the Marsh Arabs, who inhabited the areas from the 9<sup>th</sup> century AD. The only links presented between the wetland marshes and the ancient cities are symbolic rather than historical.

At the end of February 2016, the State Party submitted supplementary information in response to ICOMOS's interim report. This emphasised that the inclusion of the wetland marshes with the three cities could emphasise the link, on the one hand, between the demise of the cities and environmental change related to the unstable delta, and, on the other hand, between the wetland marshes and the cities and the severe environmental and cultural threats that they are respectively facing. As this approach was not mentioned specifically in the original nomination dossier, it has not been considered by the ICOMOS Panel. Nevertheless, ICOMOS would like to observe that such an approach would need to set out clearly the cultural and natural attributes that would be managed (and whether these relate to degradation and irreversible change) and would need to be justified by an augmented comparative analysis.

ICOMOS considers that more time is needed to develop this nomination in order to allow the cities to reflect their symbiotic relationships with their surrounding marshlands and to put in place a structured approach for archaeological conservation in order to begin to allow a full understanding of the multi-layered remains.

ICOMOS suggests if the cities were inscribed on the basis of the current dossier, and in their highly unstable and potentially dangerous conservation condition, that

this would not provide the basis for a sustainable way forward.

ICOMOS appreciates the dialogue that has already been undertaken with the State Party during the evaluation process and would welcome a continuation of this dialogue in order to address in more detail the structure of this nomination and the fundamental conservation challenges that the three archaeological sites are facing.

## 8 Recommendations

ICOMOS recommends that the World Heritage Committee adopts the following draft decision, noting that this will be harmonised as appropriate with the recommendations of IUCN regarding their evaluation of this mixed site nomination under the natural criteria and included in the working document WHC/16/40.COM/8B.

### Recommendations with respect to inscription

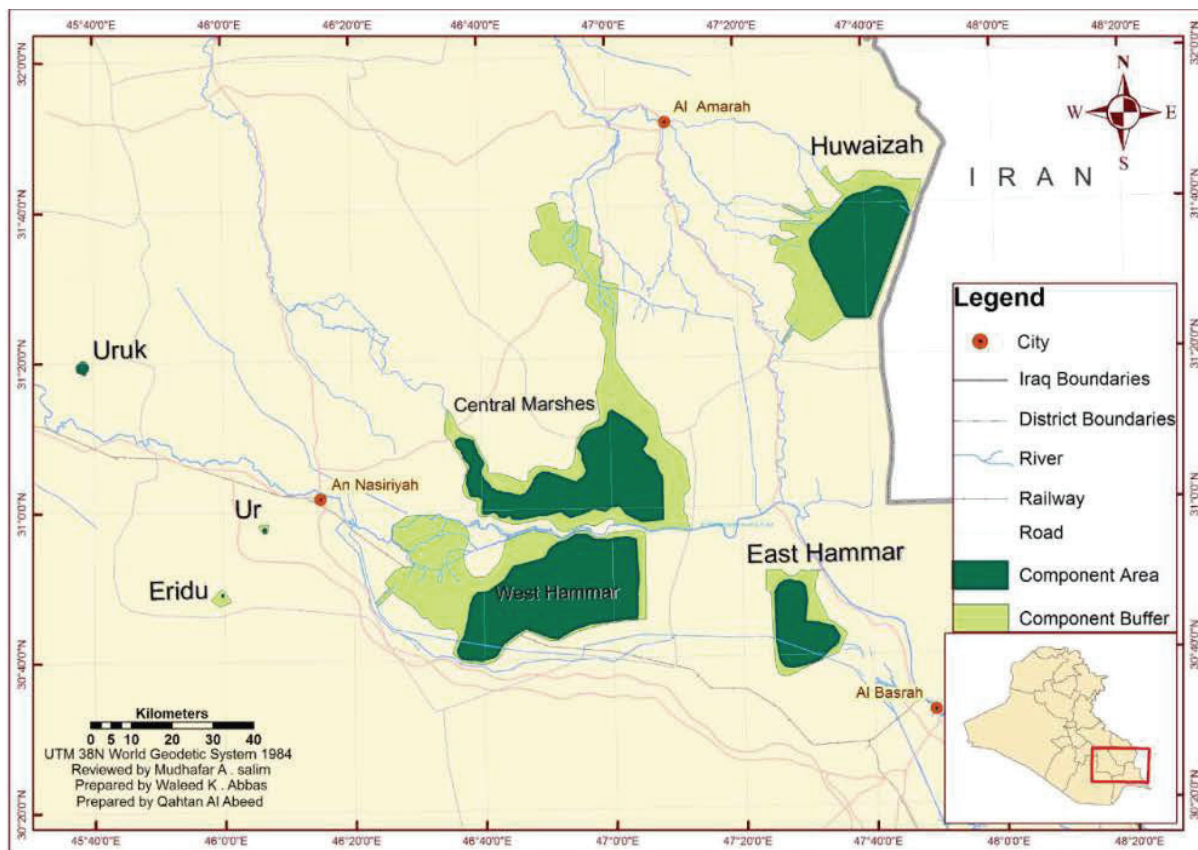
ICOMOS recommends that the examination of the nomination of The Ahwar of Southern Iraq: Refuge of Biodiversity and the Relict Landscape of the Mesopotamian Cities, Republic of Iraq, to the World Heritage List be **deferred** in order to allow the State Party, with the advice of ICOMOS and the World Heritage Centre, if requested, to:

- Undertake discussions with both Advisory Bodies to consider how the seven sites might relate to the requirements of the World Heritage Convention, whether as one mixed property, or as two properties, one cultural and one mixed, or through some other variation, in order to re-structure the nomination;
- Provide, in the context of a revised nomination or nominations:
  - A clear rationale for the selection of urban sites to show how the cities might be seen to reflect the whole network of cities in southern Mesopotamia, and provide details of the final shape of the series;
  - Augmented details for the three cities to allow a full understanding of what remains that reflect their complexity, power and economic basis, and to allow a clear basis for conservation to ensure the evidence they contain is sustained;
  - Enlarged boundaries around the three cities in order to encompass archaeological aspects of the relict marshland landscapes surrounding them;
  - In order to begin to address the highly unstable conservation conditions of the archaeological sites, a programme of surveys to create a base-line delineation of the current state of conservation of the sites;

- A programme of conservation plans for all three cities on the basis of the surveys that set out clearly the various options for intervention, and justify which approach is to be followed in developing conservation measures;
- A detailed master plan/road map that sets out how and when the conservation of the sites will be put on a sustainable basis.
- Produce a detailed management plan for the overall property that sets out its governance systems and how it relates to management plans for individual component sites.

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

ICOMOS appreciates the dialogue that has already been undertaken with the State Party during the evaluation process, and would be ready and willing to continue this dialogue, in the spirit of the Upstream processes, in order to address in more detail the structure of this serial nomination and the fundamental conservation challenges that the three archaeological sites are facing.



Map showing the boundaries of the nominated properties





The Eanna District and the Inanna Ziggurat, Uruk



The main entrance of the E-dub-lal-mah in Ur





The Ur Ziggurat



The Eridu Ziggurat



### **III Mixed properties**

**A Africa**

New nomination

**B Arab States**

New nomination

**C Asia – Pacific**

New nomination

**D Europe – North America**

Nomination deferred by previous sessions of the World Heritage Committee



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# Khangchendzonga (India) No 1513

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## Official name as proposed by the State Party

Khangchendzonga National Park

## Location

State of Sikkim

Districts of West and North Sikkim

## Brief description

Located in the Himalayan range in northern India, Khangchendzonga National Park (KNP) is a mountainous area including several peaks exceeding 6000m and 7000m in height and Mt Khangchendzonga, reaching 8586m a.s.l. The homonymous Massif determines the physiography of Sikkim. The rapid change in height of the nominated area (from 1220m to 8586m a.s.l. in just 40km, as the crow flies) has a strong influence on the climate, the precipitation regimes, and the variety of the flora and fauna of the region. Mount Khangchendzonga and many natural features within the nominated property are endowed with cultural meanings and sacred significance and represent the centre of Sikkim's indigenous peoples' cosmogonies. These were later integrated into Buddhist belief and altogether constitute the base for Sikkimese identity and unity.

## 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* (July 2015) 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

15 March 2006

### International Assistance from the World Heritage Fund for preparing the Nomination

None

### Date received by the World Heritage Centre

31 January 2015

## Background

This is a new nomination.

## Consultations

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

## Technical Evaluation Mission

A joint ICOMOS–IUCN technical evaluation mission visited the property from 28 September to 9 October 2015.

## Additional information received by ICOMOS

On 22 September 2015, ICOMOS requested additional information on: the boundaries of buffer and transitional zones for the biosphere reserve and the buffer zone of the nominated property; aspects of traditional management; extension of the comparative analysis to cover cultural aspects; state of conservation of the cultural attributes; the management plan and how it addresses cultural aspects of the nomination. The State Party responded on 2 November 2015 and the additional information has been included in the relevant sections of this report.

Following the ICOMOS Panel meeting held in November 2015, on 16 December 2015 an Interim report was transmitted by ICOMOS to the State Party, explaining the reasons for ICOMOS' assessment and further requesting specific additional information. This included the expansion of the buffer zone so as to include areas in the transitional zone, where there are attributes relevant to the cultural dimensions of the property and which are able to support the protection of the nominated property.

The State Party responded on 22 February 2016 and the additional information has been assessed by ICOMOS and incorporated in the relevant sections of this report.

## Date of ICOMOS approval of this report

11 March 2016

## 2 The property

### Description

Khangchendzonga National Park (KNP) is located in the Himalaya range in northern India. It is a mountainous area that encompasses several peaks exceeding 6000m and 7000m in height, while Mt Khangchendzonga, which gives its name to the park, is the third highest peak in the world at 8586m.

The Khangchendzonga Massif determines the physiography of Sikkim; it is surrounded by five great ridges that run in five different directions. The elevation of the nominated property ranges from 1220m a.s.l. to 8586m over just 40km, as the crow flies. This rapid change in height influences the climate, the precipitation regimes, and subsequently the flora and fauna of the region. The nominated property exhibits a monsoon climate with an extended wet season; however, the climate also varies in relation to the altitude and exposure:

therefore both the temperature and the average rainfall may vary substantially from one watershed to another.

The massif is the source of two main rivers – the Teesta and the Rangit – which are fed by several glaciers. The whole area can be subdivided into seven river sub-basins; four rivers (Rangit, Prek, Churong, Lachen) flow in a north-south direction, while three flow from west to east (Lhonak, Zemu, Rangyong).

Geologically, the Himalayan main rock types belong to the metamorphic group. The soil features are variable but in general they are rather rich in organic matter. The area is very rich in glaciers (18 within the nominated property) and glacial lakes (73 within the nominated property).

Vegetation is articulated into four zones: subtropical (1200–2100m a.s.l.), temperate (2100–3100m a.s.l.), subalpine (3100–4100m a.s.l.), and alpine (4100–4500m a.s.l.). The different exposure, soil types and rainfall altogether contribute to the diversity of the flora for which Sikkim is known. The region is also rich in animal species.

Khangchendzonga National Park is part of a wider system of protected areas that links together areas in Nepal, China, Bhutan, and Darjeeling (India). KNP is also contiguous with the Khangchendzonga Conservation area on the western watershed of the massif, which is located in Nepal.

Subsistence systems for the inhabitants of the region include pastoralism, collection of medicinal plants, tourism and hunting. In 1998 a ban on pastoralist practices within the KNP was issued, but the practice continued in later years. Nevertheless, the park authorities are making progress in the implementation of the ban on grazing and the removal of cattle sheds.

Commercial exploitation of plants was allowed between the 1970s and the 1990s, although this was stopped in 2001, due to excessive depletion of plants. Hunting was a traditional practice, like the others described above, but it has now been banned in the park. Tourism seems to be the only activity to be permitted and fostered within the national park, and the State Party holds that it has improved the economic prospects and living conditions of the local communities.

The entire nominated property and many of its natural features are endowed with cultural meanings and sacred significance. This begins with the name of Khangchendzonga, which means the great snowy repository of five treasures: 1) salt, 2) gold and turquoise, 3) Buddhist scriptures, 4) arms, 5) medicines and seeds.

The core of the cultural significance of the property revolves around the notion of *beyul* or 'hidden land'. This concept is linked to the narrative on Guru Padmasambhava or Rinpoche or Second Buddha, who visited Sikkim in the 8<sup>th</sup> century and sanctified the whole region, naming it *beyul* or 'sacred hidden land', a paradise on earth. No boundaries were defined but the *beyul* was

divided into Highlands, Midlands and Lowlands, with Khangchendzonga sitting like a king on a throne, presiding over and protecting the upper region of the *beyul*.

Around the concept of *beyul* a number of religious texts and rituals have been elaborated. One of the first is Lama Gongdu: although ascribed to the 8<sup>th</sup> century, it was revealed in the 14<sup>th</sup> century by Terton Sangye Lingpa. This text forms the basis for subsequent compilations, e.g. the *Nay-Sol*, which includes the description of an offering ritual to all deities of the *beyul*, and the *Nay-Yig*, a more recent text based on a 14<sup>th</sup> century prophetic source, that contains a kind of guide to all sacred sites and treasures of the hidden land of Beyul Demojong.

Another important ritual associated with Khangchendzonga and the other guardian deities is the Pang Lhabsol, which was consolidated by the King of Sikkim in the 17<sup>th</sup>-18<sup>th</sup> century and is still performed annually. It includes an itinerary through the main Buddhist monasteries and notable natural features mentioned in sacred texts. This particular Buddhist ritual is interwoven with Lepcha rites, carried out by two shamans (*bungthings*) at the same time as Pang Lhabsol is performed - one in Northern and the other in Southern Sikkim. These rituals have been performed for over three centuries and, along with the texts wherein they are described, have played a crucial role in shaping Sikkimese identity and their relationship with the environment.

Tangible natural elements conveying the association with nature and making intelligible the sacred geography of the nominated property include: lakes, caves, sacred rocks, and sacred peaks. Conversely, manmade elements of the links between humans and the natural environment are the monasteries, the *chortens*, and the ruins of royal palaces.

Along with the Buddhist world-view there still persist indigenous Lepcha and Bhutia people's beliefs and world-views. Key elements of this cosmogony include: the notion of *Mayel Lyang*, which corresponds to the Lepcha's hidden land which, differently from the Buddhist *beyul*, is located along Khangchendzonga's slopes; the mountain god Kongchen (their name for Khangchendzonga) is the protector of the Lepcha people and a source of fertility and biodiversity; Lepcha clans trace their ancestry in the mountain peaks and lakes; after death, they are guided by the shaman through a passage-way to the land of their ancestors.

Sikkimese Bhutias migrated to Sikkim from Tibet from the 13<sup>th</sup> century onwards and have lived side by side with the Lepcha, from whom they adopted several aspects of their world-view, although retaining their own specificity. For instance, they believe that all natural elements of the landscape, including the fauna, are inhabited by supernatural beings or deities, and Khangchendzonga is revered as the chief of all deities. Damaging nature or its elements can cause illness or bad fortune and it is necessary to perform a healing ritual to rectify the offences.

### History and development

The earliest known occupants of the region were the Lepcha, for whom no record of migration is known and who therefore could be regarded as the autochthonous inhabitants of Sikkim. The mythology narrates that the first couple of the Lepcha people were crafted out of the fresh snows of Mt. Khangchendzonga.

Religious records indicate that in the 8<sup>th</sup> century, Guru Padmasambhava, who consolidated Buddhism in Tibet and was revered as a Second Buddha, visited Sikkim and sanctified the land. He introduced Buddhism to Sikkim and is said to have hidden sacred Buddhist books in hidden places in the mountains.

The arrival of the Bhutias from Tibet in the 13<sup>th</sup> century was also marked in the mythological history, which records the friendship treaty made between the Lepcha and the Bhutias. An eternal friendship was established with Khangchendzonga.

In 1642 the Kingdom of Sikkim was established by three visionary lamas who enthroned the first King of Sikkim (Phuntsog Namgyal of Gangtok). The propagation of Buddhism occurred through the conversion of the Lepcha's sacred landscape, integrating its sacred features into the Buddhist sacred geography. Bhutias and Lepchas were joined by the Sikkimese Tsongs. These three populations signed an agreement with the King of Sikkim and, in this way, achieved political unity around and through the worship of the deities of the land. The third King of Sikkim, Chagdor Namgyal, institutionalised the festival of Pang Lhabso.

In the 19<sup>th</sup> century the first expedition visited the property and these continued in the 19<sup>th</sup> and 20<sup>th</sup> centuries. When Mt Khangchendzonga was first climbed in 1955, the expedition honoured the local community's beliefs and stopped short a few meters below the summit.

## 3 Justification for inscription, integrity and authenticity

### Comparative analysis

The nomination dossier has developed the comparative analysis on three different levels: national, regional and global. However, it has only considered properties exhibiting natural values: out of 13 comparators, only one – Sakteng Wildlife Sanctuary, on the Tentative List of Bhutan – also includes one cultural criterion.

Therefore, ICOMOS asked the State Party to extend the comparative analysis in order to include consideration of the cultural values of the mixed nominated property.

The State Party responded on 2<sup>nd</sup> November 2015, providing an expanded comparison with an additional 18 cultural and mixed properties inscribed on the World Heritage List, properties included in the Tentative Lists of the States Parties, as well as properties not included in

either of the previous two and selected among those considered regionally and globally relevant.

ICOMOS considers that the expanded comparative analysis highlights the outstanding cultural significance of the Mount Khangchendzonga region and the distinctness of the attributes in respect to other similar properties. The region expresses multiple layers of sacredness for several groups of people – the Lepcha and the Sikkimese but also the Tibetan Buddhists, especially Nyingmapa, in and outside the region - well beyond the borders of Sikkim.

Similar to Papahānaumokuākea (USA, 2010, (iii), (vi), (viii), (ix) and (x)), although the environment is substantially different, the nominated property is an ancestral environment where the populations' ancestors are embedded in, and deeply linked to, the local peoples through kinship. According to the Sikkimese, Khangchendzonga is the place where all life is said to have been created – especially human – and where all the spirits return after death – guided along the rivers and into ravines. This form of spiritual significance extends beyond the indigenous people.

In ICOMOS' opinion, the comparison with other sacred mountains, while suggesting similarities, also underlines specific aspects of how associative values are manifested and attached to rituals performed, e.g. in the case of Fujisan (Japan, 2013, (iii) and (vi)), pilgrimages to the mountain are part of the worship practice; however, Khangchendzonga peak is worshipped from a distance.

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

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### 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:

- Mount Khangchendzonga, as well as other peaks and notable natural features within the nominated property and on its fringes, are held sacred and culturally significant by the Sikkimese communities;
- The fringes of the nominated property contain natural and manmade elements that are associated with, or used for, cultural and religious practices by the local communities.

ICOMOS observes that this justification may be considered generally appropriate, although it is rather generic as it does not illustrate adequately the distinctive cultural values embodied by this associative cultural landscape.

ICOMOS however considers that KNP is the heartland of a culture, which has evolved over time and includes several Sikkimese ethnic groups and a multi-layered

syncretic religious tradition that exists in a precious balance with nature – in its traditional use of resources, culture, and religion. The exceptional biodiversity of the region resonates in the deep indigenous cultural knowledge of the people inhabiting the region. Lepcha religious tradition fosters an exceptional relationship with the fragile environment surrounding them. These people have a vast knowledge of the medicinal plants in the KNP, that has been passed down from generation to generation. It is sacred knowledge and was included in the initiations of the religious specialists. The Lepcha community is on the verge of disappearing. The indigenous knowledge on flora and fauna, and of the medicinal properties of the plants, is quickly vanishing with changing lifestyle and the recent deaths of several prominent senior religious specialists. The protection of, and research on, this body of knowledge is important, not only for the Lepcha as a cultural tradition, but also for its potential worth in the field of medicine.

In summary, ICOMOS considers that the Outstanding Universal Value of the nominated property is expressed by the coexistence of multiple layers of sacred meaning, and of shamanic and Buddhist traditions, which appears crucial for the cultural significance of the nominated property. The cultural significance is portrayed by three main different facets: firstly, the notion of *beyul* or hidden sacred land, which extends to all of Sikkim but has its heart in the territory of Khangchendzonga National Park, is important in Tibetan Buddhism, not only intrinsic to Sikkim, but in the neighbouring countries and beyond – that is to say, the property is home to a sacred site of one of the world's leading religious traditions; secondly, the multi-layered sacred landscape of Khangchendzonga and the cultural and religious relevance of the hidden land (*beyul* in Tibetan Buddhism and *Mayel Lyang*, in Lepcha tradition) is specific to Sikkim and is a unique example of co-existence and exchange between different religious traditions and people; and thirdly, the indigenous religious and cultural practices of the Lepcha with regard to the ecology and the specific properties of local plants, which stand as an outstanding example of traditional knowledge and environmental preservation.

### **Integrity and authenticity**

#### **Integrity**

The nomination dossier illustrates the conditions of integrity only taking into account natural values, features and processes, particularly those supporting criterion (x).

ICOMOS requested additional information on the cultural dimensions of the nominated property in order to clarify to what extent the nominated property includes attributes necessary to express the proposed Outstanding Universal Value and whether a significant proportion of the elements necessary to convey the totality of the value of the property are included.

Whilst ICOMOS notes that many manmade attributes related to the cultural expressions and traditional and

religious practices of the local communities and indigenous people lie within the buffer zone or the transitional zone of the Khangchendzonga Biosphere Reserve and even beyond, it also recognises that most of the notable natural features (mountain peaks, lakes, caves, groves) that shape the sacred geography embedded in the Lepcha and Sikkimese belief systems are located within the nominated property.

ICOMOS also notes that the key concept of *beyul*, or hidden sacred land, extends well beyond the boundaries of the nominated property, endowing the whole of Sikkim with a sacred meaning; however, Dzonga, Sikkim's guardian deity and the owner and protector of the land, resides on Mt. Khangchendzonga and it is on its slopes that *Mayel Lyang*, the Lepcha's mythological place where every tangible and intangible resource has its origin, is placed. Therefore, ICOMOS considers that the nominated property could be regarded as the centre of a much wider sacred landscape: as such it bears multiple layers of meanings, stories and notable places, and about which a profound knowledge has been developed, which nurture the sense of identity of all Sikkimese peoples.

On the other hand, since most of the relevant manmade features associated with religious practices performed by the Sikkimese can be found within the transitional zone of the Khangchendzonga Biosphere Reserve, ICOMOS considers that the current buffer zone should be extended to encompass the transitional zone, which contains a high density of cultural attributes that are functionally important as a support to the property and its protection.

In its interim report, ICOMOS asked the State Party to expand the buffer zone to include areas located in the transitional zone of the Biosphere Reserve. The State Party has responded in a positive manner. The details are discussed in the relevant sections; however, in terms of integrity, the proposed expansion reinforces the integrity of the nominated property and its protection.

It is, however, worth mentioning that the Khangchendzonga National Park and Biosphere Reserve borders the Kanchenjunga Conservation Area in Nepal. Therefore, ICOMOS observes that consideration should be given to assessing the feasibility of the possible extension to the Kanchenjunga Conservation Area in the future.

#### **Authenticity**

Authenticity of the cultural attributes within the proposed World Heritage boundary has been preserved. Although the tangible manmade attributes within the boundaries of the nominated property are restricted to various *chortens*, some smaller *gompas* and several sacred shrines linked to natural features such as rocks and lakes, their continued reverence, maintenance and possibly the rituals associated with the places attest that they could be held as credible witnesses of the proposed Outstanding Universal Value.



The source of information on their function and spiritual meaning is mainly the *Nay-Sol* text, revered by all Sikkimese. It tells of Lama Lhatsun Chenpo who cut his way through the Singaila Range and crossed the Kang La from Nepal into the hidden land, and performed an elaborate thanksgiving ritual dedicated to Dzonga who lives in Mount Khangchendzonga and is the protective deity of Sikkim. Additionally the *Nay-Yik* text provides information on natural features along specific routes, guiding those performing rituals or pilgrimages through the landscape, with information on the sacred lakes, caves, rocks and even trees. These natural features can still be traced in the landscape. Strict rules on behaviour ensure that the environment is not disturbed or harmed. Other earlier texts, the concept of *beyul*, rituals such as the Pang Lhabso, the oral history and traditional knowledge of flora and fauna held by the Lepcha people, all contribute to the authenticity of the attributes.

In the additional information provided by the State Party on 2 November 2015, a table explaining how natural features contributing to the proposed Outstanding Universal Value has been prepared. It clarifies how natural features have been integrated into the Buddhist belief and ritual system and provides also some additional information on the association of the Lepcha with natural elements.

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

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#### **Criteria under which inscription is proposed**

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

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 contains a number of sacred peaks, caves, rocks and lakes associated with worship practices by Sikkimese populations such as the Lepchas, the Bhutias and the Limbus (or Tsongs). For each of these communities, Mount Khangchendzonga, the other peaks and a great number of natural elements (e.g. caves, rivers, lakes, waterfalls, rocks, etc.) are associated with mythological and cosmological stories and are the object of regular worship; kinship relations are also established between the mountains and the people.

Khangchendzonga is the focus of the rituals and festivals performed by the Sikkimese and by the Tibetan Buddhists, as the abode of Dzonga, Sikkim's guardian deity, who, in the 17<sup>th</sup> century, was also conferred the title of chief defender of the Dharma within Tibetan Buddhism.

ICOMOS considers that the justification of this criterion is grounded mainly in the meanings and the sacred significance attributed to notable natural features located within and on the fringes of the nominated property, and

appears mainly associative in nature. However, Buddhism has integrated these beliefs and has codified them through the precise description of the natural elements to be venerated in sacred texts which are regularly recited in the assemblies of the Sikkim monasteries.

ICOMOS also notes that, although the dossier focuses on Lhatsun Chenpo's activities and tradition (17<sup>th</sup> century; opening up of the *beyul*), there are also earlier narratives revolving around Guru Rinpoche (8<sup>th</sup> century; initiation of the Buddhist sanctity of the region, such as in Chungthang) as well as other Buddhist texts on the sacred hidden land, such as the prophetic source *Bras ljongs lung bstan gsal ba'i me long* by Rigdzin Godemchen (rig 'dzin rgyod kyi Idem phru can).

The precise identification of natural features to be venerated, and associated stories and rituals in preserved sacred texts, justifies the application of this criterion.

However, In ICOMOS's view, the justification of this criterion is based on attributes that could also well support the justification of criterion (vi), which, although not proposed by the State Party, could reinforce the justification of this criterion.

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ICOMOS considers that this criterion has been demonstrated but could be reinforced by criterion (vi).

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#### **Criteria not proposed by the State Party**

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;*

Although this criterion has not been proposed by the State Party, ICOMOS considers that the significance and the attributes of the property can also justify this criterion. KNP is the heartland of a culture which has evolved over time, includes several Sikkimese ethnic groups and a multi-layered syncretic religious tradition, and which exists in a profound relationship with the natural environment and its notable features.

This kinship is expressed by Mount Khangchendzonga being revered as *Mayel Lyang* by the indigenous peoples of Sikkim and as a *beyul* (sacred hidden land) in Tibetan Buddhism. This role is sustained by regularly-performed rituals: Buddhist lamas go every year to the vicinity of the peak of Khangchendzonga to perform a ritual which is believed to bring benefits, well-being and prosperity to the whole Sikkim population. It is a specific Sikkimese form of sacred mountain cult which is shared by the communities linked to Tibetan cultures.

An even more important ritual is performed at the end of the monsoon season in all Sikkimese monasteries and is known under the name of *Pang Lhabso*: it celebrates Mount Khangchendzonga as a deity protecting the

territory and giving peace and prosperity, and it can involve dances with elaborate masks.

The kinship between the human communities and the mountainous environment has nurtured the elaboration of a profound and well-developed traditional knowledge of the natural resources and of their medicinal properties, particularly within the Lepcha community, which deserves to be safeguarded and continued.

In summary, all the above demonstrates that Mount Khangchendzonga is the central element of the socio-religious order, of the unity and solidarity of the ethnically very diverse Sikkimese communities, which is conveyed through a variety of tangible and intangible attributes.

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ICOMOS considers that this criterion is justified.

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In conclusion, ICOMOS considers that the nominated property meets criteria (iii) and (vi) and conditions of authenticity and integrity.

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#### **Description of the attributes**

Mount Khangchendzonga and its Massif, as well as the natural and manmade features, together are conceptualised as 'hidden sacred land', both by Buddhists, under the name of *beyul*, and by the indigenous people, as *Mayel Lyang*. These features are worshipped and mentioned in ancient sacred texts or included in indigenous and Buddhist rituals being, or having been, performed in the region, embodying the links between the living communities and their environment in a sacred geography. The ensemble of the myths, stories and notable events, as well as the sacred texts themselves, convey and make manifest the cultural meanings projected onto natural resources and the indigenous and specific Buddhist cosmogony that developed in the Himalayan region. The indigenous traditional knowledge of the properties of local plants and the local ecosystem which is peculiar to local peoples could develop only thanks to their deep understanding of, and relationship with, their environment: it is on the verge of disappearing and represents a precious source of information on the healing properties of several endemic plants. The traditional and ritual management system of forests and natural resources of the land pertaining to Buddhist monasteries expresses the active dimension of Buddhist cosmogonies and could contribute to the property's effective management.

#### **4 Factors affecting the property**

The nominated property and the buffer zone of the national park have no permanent inhabitants, therefore no development pressures are expected from existing communities. The main threats mentioned to the natural aspects of the property are pastoralism, hunting and feral dogs. A ban on cattle grazing has been issued and applied, and today there are no permanent cattle sheds

within the National Park. Measures to counteract poaching and feral dogs have been initiated.

The increase of tourism is indicated as a serious source of pollution that needs to be controlled, especially when considering the increase of tourism over the last decade.

ICOMOS notes that the nomination dossier mentions only factors that may have impacts on attributes related to natural values and does not deal with possible threats to the cultural dimensions of the nominated property. In this regard, ICOMOS notes that measures adopted to grant protection to natural features, e.g. the relocation of the inhabitants outside the national park and the ban on cattle grazing, although carried out in regulated phases, certainly have impacts on both the possibility of nurturing spiritual ties with the environment and to continue the traditional activities of the local communities, made up essentially of herders.

ICOMOS considers that the increase in tourism, combined with the discouragement of traditional activities such as cattle grazing, or traditional medicinal plant collecting, may lead to the weakening of the cultural ties and to the loss of traditional knowledge within the local communities, in the absence of reasons for its transmission to younger generations.

ICOMOS also notes that a major threat to these areas comes from plans to build hydroelectric dams. There have, however, been successful campaigns that have stopped all the dam projects that would impact on any part of the national park or buffer zone. This type of threat as well as large infrastructure developments need, however, to be carefully monitored in the future.

Finally, ICOMOS notes that development pressures exist in the town areas within the transitional zone. This requires long-term strategies and stringent planning instruments to be controlled and readdressed.

Measures to readdress how construction and renovation works are carried out within the monasteries and monuments, mainly in the transitional zone, would also be very useful.

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ICOMOS considers that the main threats to the property from a cultural perspective are the impacts of modernisation on the traditional communities, along with the difficulties of continuing traditional occupations, and the increase in tourism.

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#### **5 Protection, conservation and management**

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

The boundaries of the nominated property coincide with the limits of Khangchendzonga National Park, while its

buffer zone is the same as the buffer zone of the Khangchendzonga Biosphere reserve.

The transitional zone of the Khangchendzonga Biosphere Reserve apparently has been excluded from the buffer zone of the nominated property.

ICOMOS notes that the boundaries of the nominated property include the key natural features that express the cultural significance and sacred nature of Khangchendzonga as the *beyul* and *Mayel Lyang*, that is, the hidden treasured land.

On the other hand, ICOMOS notes that in certain areas of the transitional zone there are several monuments and monasteries, the integrity and authenticity of which, however, could be questionable in terms of historic material to be included within the nominated property. They, however, represent attributes that are functionally important as a support to the property and its protection, and contribute to improving the understanding of the sacred geography of Mt Khangchendzonga.

In its interim report, ICOMOS asked the State Party to expand the buffer zone so as to include man-made features bearing cultural significance as a support for the protection of the nominated property.

The State Party responded on 22 February 2016 explaining that a community consultation was carried out on the proposed extension of the buffer zone to include portions of the transitional zone. The result of this consultation led to the extension of the buffer zone to include 10 sites in the Yuksam region containing man-made cultural attributes with direct connection with the cultural dimensions of the nominated property.

It was found that, although other sites exist that relate to the cultural values of the nominated property, they are either traditionally protected as *gya-ra* and *gya-nak* surrounding the monasteries, or are only generically linked to the nominated property and their inclusion in the buffer zone was not seen as feasible, due to their distant locations. These sites are nevertheless protected in traditional ways.

ICOMOS considers that the proposal from the State Party meets the request made by ICOMOS, although it encourages the State Party to continue the dialogue with the local communities with a view to possibly integrating into the buffer zone further areas with relevant man-made attributes. ICOMOS equally recommends that interpretation programmes be set up in order to connect the nominated property, its attributes, and other cultural sites related to the values of the nominated property, which are located outside the property and its buffer zone.

In conclusion, ICOMOS considers that the boundaries of the nominated property are considered adequate; following the proposal for its expansion by the State Party, the buffer zone can be considered adequate.

### **Ownership**

The nominated property is comprised of State-owned land.

### **Protection**

The nominated property was designated as a National Park in 1977 under notification n. 43(9)Home/77 26<sup>th</sup> August 1977, covering an initial area of 850sqkm and then extended to cover 1784sqkm under notification n. 1/KNP/WL/F/27 19<sup>th</sup> May 1997. The protection of natural features has been strengthened through specific ordinances.

The buffer zone is protected as a Forest Reserve under the Indian and Sikkim relevant legislation.

From a cultural perspective, Sikkim has a department for Ecclesiastical Affairs which is responsible for managing religious monuments and complexes and for preserving Sikkim's Buddhist cultural heritage. In 1998 the Home Department of the Government of Sikkim issued a notification (n.59/Home/98) that prohibits the conversion of sites, the defilement of sacred lakes, and the scaling of sacred peaks, as they are believed to be the abode of deities. Subsequently, another notification (n.70/Home/2001) has identified specific sacred peaks, caves, rocks, lakes, stupas, and hot-springs as the most sacred Buddhist places for worship, and protects them under the above-mentioned notification and the Places of Worship Act (1991).

The protection of the sacred landscape and the cultural attributes is achieved through the traditional protection system defined in the ritual scripture of the *Nay-Sol* and *Nay-Yik*. The reverence accorded to the sacred landscape by the local communities ensures that this pristine landscape is protected.

ICOMOS notes that the above-mentioned legislation is of great importance in protecting the natural features with cultural significance, although it also notes that only three out of the several monasteries are under the protection of the Archaeological Survey of India, while the other ones are managed by the monks and the local communities.

ICOMOS also notes that the protection of the religious sites within the transitional zone is, however, not as clear as the protection granted within the national park. Due to the nature of the living traditions, these sites are constantly undergoing change, in many cases change that would not be considered appropriate for a heritage site. In this regard, ICOMOS recommends that conservation guidelines be elaborated and used to carry out conservation and rehabilitation interventions in the monasteries and other religious sites, so as to retain their surviving heritage features. Additionally, forms of regulation and control over urban development are necessary to reduce the impact of building pressures on the qualities of the landscape.

In the additional information provided, the State Party articulates on the form of protection/management granted

to the forest areas surrounding the monasteries. They comprise two zones; the inner and closer to the monastery is named *gya-ra*, whilst the second, further one *gya-nak*. The first is a sacred space, well demarcated and strictly regulated in its use in all monasteries up to the present day, and no damage can be caused to any natural feature; a specific set of rules exist to regulate the behaviour of the people in relation to this area. The wider area, *gya-nak*, is under the jurisdiction of each monastery and is where they get their resources; in general no tree can be felled; however, when necessary, monks decide which tree needs to be felled and replaced. Although still in existence, the state of conservation of this area may vary from one monastery to another. In the nominated property and its buffer zone, the *gya-nak* are generally well maintained, although in some cases rules have been relaxed and a limited amount of cattle and grazing are today permitted.

Finally, ICOMOS notes that the ban on permanent or temporary residence and activity within the boundary of the nominated property and its buffer zone, except for tourists, may, in the medium- and the long-term, undermine the links between the living community and its sacred environment, especially those indigenous groups whose culture is on the verge of disappearing.

Due to the specific nature of the associative values of the property, based on the concept of *beyul* and *Mayel Lyang*, that is, the hidden treasured land, which could virtually be extended to the whole of Sikkim, ICOMOS considers that, although not included in the nominated property or in the buffer zone, a number of sites, including Tashiding and its setting, Dzongu valley, and Pemayangtse, need to be protected and integrated into the interpretation and communication of the values of the nominated property.

In conclusion, ICOMOS considers that the legal protection in place for those natural features having cultural significance are adequate within the boundary of the nominated property and of the buffer zone. Three monasteries are legally protected by the Archaeological Survey of India, while the other ones are under the jurisdiction of Sikkim's Department for Ecclesiastical Affairs. If in the nominated property and in the buffer zone protective measures may be considered adequate for cultural attributes, in the transitional zone, protection and regulatory measures for the built heritage and the built-up areas would assist in retaining heritage features in the religious structures associated with the beliefs and rituals performed at the nominated property, as well as in maintaining their landscape qualities. ICOMOS also considers that a number of sites outside the nominated property and its buffer zone need to be equally protected as they bear cultural significance that relates to the value of the property and facilitate its understanding.

### Conservation

A traditional inventory system exists in the form of the ritual scriptures of the *Nay-Sol* and especially the *Nay-Yik*. They detail rituals and offerings to be made to

Khangchendzonga and other guardian deities of Sikkim and also describe the sacred landscape and location of the sacred sites. The descriptions of the sacred landscape and notable sacred features would need to be taken as the basis for future conservation. The continued recording of sacred features is needed as a basic monitoring mechanism within the management system.

The sacred landscape with its associative values linked to natural attributes of the proposed World Heritage property is well conserved. Questions arising from the state of conservation of the natural component of the site would need to be referred to the IUCN report. However, these would be closely linked to the natural attributes with associative cultural values.

ICOMOS notes that monasteries have undergone major changes, especially after the damage caused by the recent earthquakes in September 2011 and April 2015.

Reconstruction work has included the use of cement plaster and new structures are being constructed using reinforced cement concrete frames. The main Tashiding *gompa* was restored after the earthquakes, with additional rooms being added in the four corners. A new parking structure is being constructed right next to the main Pemayangtse *gompa*.

These sites still retain their significance in respect to rituals, spirit and feeling, and within the overall cultural landscape of the Beyul Demojong or the "hidden fruitful valley". However, the above-mentioned interventions reduce the ability to understand them as important sacred sites and detract from their landscape value.

There are, however, two cultural attributes that need to be dealt with more specifically: the *gompas* in Tshoka and near Charmani. At Tshoka, a timber structure from the 1960s, functioning as a community religious building, has been slightly neglected since the community was moved down to Yuksom. Efforts must be made to continue the maintenance and use of this *gompa*.

On the other hand, the *gompa* near Charmani has collapsed and its reconstruction would need to be handled with utmost care, since the landscape here is impressive and pristine and inappropriate work may compromise the silhouette of the four *chortens* against the backdrop of Mt Pandim. A Heritage Impact Assessment should be undertaken in case reconstruction is proposed.

In general, in ICOMOS' view, it would be advisable for the State Party to work on introducing conservation mechanisms to ensure the retention of the heritage qualities, authenticity and integrity of man-made cultural structures and features within the nominated property, its buffer zone and the Khangchendzonga Biosphere Reserve transitional zone.

In conclusion, ICOMOS considers that inventories of heritage and culturally-relevant natural features based on the sacred texts need to be developed for

conservation and monitoring purposes. Guidelines for the conservation of the religious structures need to be developed and applied. Particular attention to the landscape values of these structures should be paid in any intervention.

## Management

Management structures and processes, including traditional management processes

An institutional management system has been established for the Khangchendzonga National Park as defined by the national legislation (Khangchendzonga National Park Management Plan 2008-2015). This system focuses on the natural heritage sites and ensures the highest level of protection with regard to natural values. Further information on this will be found in the IUCN evaluation report.

The management for the man-made and certain natural features bearing cultural significance is based on a traditional system which follows the regulations and belief system defined in the *Nay-Sol* and *Nay-Yik* documents. This management practice has been in place for many generations and defined how the landscape was maintained.

A coordination committee has been formed which includes authorities and experts in both natural and cultural heritage. This coordinative committee needs to be given a formal mandate with regular meetings to ensure communication between those managing the natural and those managing the cultural dimensions of the heritage attributes.

The above traditional management system could be adequate to ensure that the cultural components and dimensions of the associative cultural landscape are safeguarded. However, ICOMOS noted that the nomination dossier does not adequately explain the traditional system and how this would function in conjunction with the management system for those natural features bearing cultural significance.

In the additional information submitted by the State Party in November 2015, an outline of the management system for cultural attributes is provided. This additional information clarifies that the Ecclesiastical Department is responsible only for the built religious heritage outside the National Park, therefore the cultural attributes and dimensions of the nominated property need to be integrated into the management system. To this end, local eco-development committees have been established, in which the villages of the transitional zones are also included, to cooperate with the National Park Administration in the protection and management of the property.

The outline for the integrated management envisages the development of a partnership between the Department of Forest, Environment and Wildlife Management, the pivotal

management body for the National Park, the Ecclesiastical Department of Sikkim, the Culture and Heritage Affairs Department, as well as the Namgyal Institute of Tibetology.

The framework also identifies priority objectives, including strengthening local communities' participation in the management, increasing the awareness of the tangible and intangible cultural attributes of Khangchendzonga National Park and of the need for their protection and promotion, contributing to the living conditions and economic development of the local communities, extending the protection of the values and their attributes in the buffer zone.

The additional information clearly underlines the need for an integrated management system for both natural and cultural values and attributes that is also capable of combining formal and traditional, as well as participatory management approaches.

ICOMOS concurs with the State Party that there is a need to set up a robust management framework in which all relevant management agencies, local authorities and local communities are involved and assigned clear roles and tasks.

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

The additional information submitted by the State Party in November 2015 envisages supporting the management system and existing management plan through a conservation and a maintenance plan. It also mentions the need to develop a visitor plan, accompanied by an interpretation outreach. A risk management plan is also mentioned and the key threats to be addressed have been identified.

ICOMOS concurs with the State Party that there is a strong and urgent need to develop a set of management measures that deal with the cultural attributes of the property as well as those in its buffer and transitional zones. ICOMOS, however, also notes that this set of plans is yet to be drafted and therefore suggests the State Party develops an implementation calendar with different phases of implementation and priorities of action, as a roadmap to achieving effective implementation of the many and complex objectives and measures outlined in the management section of the additional information provided.

In this regard, ICOMOS in its interim report of 16 December 2015 asked the State Party to explain how the management of cultural attributes will be strengthened and integrated into the existing management system which addresses only natural attributes. ICOMOS also found it necessary to understand how existing traditional management systems and traditional knowledge will be integrated into the institutionalised management of the property.

The State Party responded that the man-made cultural attributes are under the responsibility of the Ecclesiastical and the Culture Departments, with limited monitoring activities. On the other hand, the natural attributes bearing cultural significance are protected under the Wild Life Protection Act. In order to improve protection and management implementation, there is now the intention to involve the Eco-Development Committees (EDC's) in the protection and daily management of the cultural attributes within the nominated property, in addition to their responsibilities in managing the natural resources. Local communities will carry out monitoring and regular inspection. This additional task has been formalised through the establishment of a new executive body for culture which will cooperate with the park authorities. Additionally, a multi-disciplinary and interdepartmental advisory body for culture, headed by the Chief Secretary of the State, has been established. This body includes representatives from the Departments of Culture, Ecclesiastical Affairs, Tourism, Finance, Forestry and the Namgyal Institute of Tibetology. The advisory body will formulate policies and guidelines to ensure an integrated management of cultural and natural attributes.

ICOMOS believes that the role and action of the EDC's is crucial also for the management of the cultural attributes and recommends that the proposal to extend the tasks of the EDC's to the cultural dimensions and attributes is fundamental to ensuring the participatory management of the cultural attributes within the nominated property.

#### Involvement of the local communities

The history of the nomination shows that, eventually, local communities found ways to be involved in the nomination. However, in ICOMOS' view, it is crucial that their inclusion in the management and protection of the property be reinforced through ad-hoc management actions and strategies.

In its interim report, ICOMOS asked the State Party to explain how local communities will be involved in the management of the property and its expanded buffer zone.

The State Party replied that the local communities already play an important role in the management of the natural resources of the KNP through the EDC's, since 2001. There are 21 of them and they consist of a general assembly formed by representatives of each household living in the villages at the fringes of the KNP. This assembly elects the executive body of the EDC (33% of the seats are reserved for women) which comprise between 5 to 11 members (one or two seats are reserved ex-officio to panchayat members). EDC's undertake micro-planning through a participatory approach in rural appraisal. These micro-plans are compiled in an Annual Management Action Plan for the Park which is approved by the Executive Body of the KNP and Khangchendzonga Biosphere Reserve (KBR).

It is envisaged that the management of the cultural attributes will be integrated into the EDC Annual Management Action Plan and implemented by the EDC's.

ICOMOS considers that the State Party has provided important additional information with regard to the traditional knowledge of the local communities and indigenous people that can give added value to management if effectively integrated into the overall management system.

ICOMOS, however, recommends that in addition to the representatives of the local communities, the staff of cultural heritage protection authorities and researchers should also be actively involved in the preparation of the section of the management plan concerning the cultural dimensions of the nominated property and in its integration into an overall management plan.

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ICOMOS considers that the integration of the advisory body and of the new executive body into the existing management structure is crucial to ensuring the effective consideration of cultural values. Nonetheless, the management framework would benefit from a clarification of roles and responsibilities. Extending the role of the Eco-Development Committees to also address the cultural heritage represents a valid option; however, a capacity-building strategy encompassing the cultural dimensions of the property needs to be envisaged and put in place. ICOMOS considers that, from a cultural perspective, the management system should be extended to include both the buffer zone and the transitional zone, for which stringent regulations in terms of spatial planning and landscape consideration should be elaborated. The envisaged set of ad-hoc plans should be further developed. To this end, the elaboration of a phased implementation calendar would assist the State Party in achieving its objectives. Furthermore, ICOMOS recommends that, in the protection and management of natural resources, consideration also be given to the deep ties and associations that local communities have developed with nature over several centuries to build and nurture their world-view.

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## 6 Monitoring

The monitoring system described in the nomination dossier addresses only natural resources and values. There is an urgent need to integrate into the monitoring system specific indicators to monitor changes to tangible and intangible cultural attributes, as well as to evaluate the effectiveness of management strategies and activities.

In its interim report, ICOMOS requested further information from the State Party on how the monitoring system will monitor the advancement of objectives and measures for the protection and management of the sacred values of the nominated property.

The State Party responded on 22 February, providing a carefully prepared list of objectives to be pursued in order to ensure that the notion of *beyul* is transmitted in its full integrity, and corresponding measures to achieve these objectives. These include legal and regulatory measures as well as a management approach (see previous sections of this report). A monitoring table has also been prepared.

ICOMOS considers that the objectives and related measures are well thought-out; on the other hand, the monitoring remains too generic, with no specific qualitative or quantitative indicators. In this regard, further work is necessary.

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In conclusion, ICOMOS considers that the monitoring system should be extended to also cover the cultural attributes and the effective management of both natural and cultural attributes.

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## 7 Conclusions

Located in the Himalayan range in northern India, Khangchendzonga National Park (KNP) is a mountainous area including several peaks exceeding 6000m and 7000m in height, with Mt Khangchendzonga reaching 8586m a.s.l. Mount Khangchendzonga and many natural features within the nominated property are endowed with cultural meaning and sacred significance, and represent the centre of Sikkim's indigenous peoples' cosmogonies, which were later integrated into Buddhist belief and constitute the base for Sikkimese identity and unity.

KNP is the heartland of a culture, which has evolved over time and includes several Sikkimese ethnic groups and a multi-layered syncretic religious tradition, that exists in a precious balance with nature – in its traditional use of resources, its culture, and its religion.

The nomination dossier and the additional information provided by the State Party have succeeded in demonstrating the Outstanding Universal Value of the nominated property.

ICOMOS congratulates the State Party for submitting such an important and complex property, in which natural and cultural values are closely and deeply intertwined.

By this nomination, the State Party has demonstrated an important commitment towards the multi-layered and exceptional natural and cultural significance of the property, its protection and perpetuation.

The nomination of Khangchendzonga as a mixed property represents the first step in protecting and strengthening cultural meanings and associative ties between the local communities and their environment, which has been negatively impacted by measures adopted in past decades, to ensure the protection of the KNP's natural values.

Some of the indigenous populations are today on the verge of disappearing and, with them, their culture and knowledge. There is therefore a need for an effort, based on a convincing participatory approach, to strengthen the safeguarding of the cultural attributes and to provide the local communities with means to sustain their livelihood, their traditional way of life and their culture. These means should not be limited to tourism or tourism-related activities but should encompass traditional activities, as well as their contemporary sustainable reinterpretation.

To succeed in this challenge, the involvement of the local communities and of the indigenous people in the management is crucial, and should be supported and accompanied by an adequate framework, measures and means.

Already during the nomination process, the State Party has initiated important steps towards a management that integrates the cultural and natural significance of the property and its attributes.

The additional information submitted in February 2016 demonstrates the full engagement of the State Party and of the State Authorities in ensuring the effective protection and management of the nominated property. The extension of the buffer zone, as requested by ICOMOS, to include at least part of the transitional zone of the Biosphere Reserve where there are important sites bearing cultural significance, represents an important step in a process that needs to be continued so as to ensure that relevant attributes or sites within the transitional zone be encompassed within the buffer zone of the property, as understood within the World Heritage context. In this regard, the extension of the management system and mechanisms to the transitional zone and the cultural attributes located therein, appears very important.

## 8 Recommendations

ICOMOS recommends that the World Heritage Committee adopts the following draft decision, noting that this will be harmonised as appropriate with the recommendations of IUCN regarding their evaluation of this mixed site nomination under the natural criteria and included in the working document WHC/16/40.COM/8B.

### Recommendations with respect to inscription

ICOMOS recommends that Khangchedzonga National Park, India, be inscribed on the World Heritage List as a cultural landscape on the basis of **cultural criteria (iii) and (vi)**.

### Recommended Statement of Outstanding Universal Value

Brief synthesis

Located in the Himalayan range in northern India, Khangchendzonga National Park (KNP) is a mountainous area including several peaks exceeding 6000m and 7000m in height, and Mt Khangchendzonga, reaching

8586m a.s.l. The homonymous Massif determines the physiography of Sikkim. The rapid change in height of the nominated area (from 1220m to 8586m a.s.l. in just 40km, as the crow flies) has a strong influence on the climate, the precipitation regimes, and the variety of the flora and fauna of the region. Mount Khangchendzonga and many natural features within the property and its wider setting are endowed with deep cultural meanings and sacred significance, giving form to the multi-layered landscape of Khangchendzonga, which is sacred as a hidden land both to Buddhists (*Beyul*) and to Lepchas as *Mayel Lyang*, representing a unique example of co-existence and exchange between different religious traditions and ethnicities, constituting the base for Sikkimese identity and unity. The ensemble of myths, stories and notable events, as well as the sacred texts themselves, convey and make manifest the cultural meanings projected onto natural resources and the indigenous and specific Buddhist cosmogony that developed in the Himalayan region.

The indigenous traditional knowledge of the properties of local plants and the local ecosystem, which is peculiar to local peoples, is on the verge of disappearing and represents a precious source of information on the healing properties of several endemic plants. The traditional and ritual management system of forests and the natural resources of the land pertaining to Buddhist monasteries express the active dimension of Buddhist cosmogonies and could contribute to the property's effective management.

**Criterion (iii):** The property – with Mount Khangchendzonga and other sacred mountains – represents the core sacred region of the Buddhist, Sikkimese, Lepcha and syncretistic religious and cultural traditions and thus bears unique witness to the coexistence of multiple layers of both Buddhist and pre-Buddhist sacred meanings in the same region, with the abode of mountain deities on Mt Khangchendzonga. The property is central to the Buddhist understanding of Sikkim as a *beyul*, that is, an intact site of religious ritual and cultural practice for Tibetan Buddhists in Sikkim, in neighbouring countries and all over the world. The sacred Buddhist importance of the place begins in the 8<sup>th</sup> century with Guru Rinpoche's initiation of the Buddhist sanctity of the region, and later appears in Buddhist scriptures such as the prophetic text known as the Lama Gongdu, revealed by Terton Sangye Lingpa (1340-1396), followed by the opening of the *beyul* in the 17<sup>th</sup> century, chiefly by Lhatsun Namkha Jigme.

**Criterion (vi):** Khangchedzonga National Park is the heartland of a multi-ethnic culture which has evolved over time, giving rise to a multi-layered syncretic religious tradition, which centres on the natural environment and its notable features. This kinship is expressed by Mount Khangchendzonga being revered as *Mayel Lyang* by the indigenous peoples of Sikkim and as a *beyul* (sacred hidden land) in Tibetan Buddhism. It is a specific Sikkimese form of sacred mountain cult which is sustained by regularly-performed rituals, both by Lepcha people and Tibetan Buddhists, the latter performing two rituals: the

*nesol* and the *Pang Lhabsol*. The kinship between the human communities and the mountainous environment has nurtured the elaboration of a profound traditional knowledge of the natural resources and of their properties, particularly within the Lepcha community. Mount Khangchendzonga is the central element of the socio-religious order, of the unity and solidarity of the ethnically very diverse Sikkimese communities.

#### Integrity

Most of the notable natural features, such as mountain peaks, lakes, caves, glaciers, groves, and the key man-made features that shape the sacred geography embedded in the Lepcha and Sikkimese belief systems, are included in the property. Dzonga, Sikkim's guardian deity and the owner and protector of the land, resides on Mount Khangchendzonga and, on its slopes, *Mayel Lyang*, the Lepcha's mythological place, is located. On the other hand, the Buddhist concept of *beyul*, or hidden sacred land, extends well beyond the boundaries of the property, endowing the whole of Sikkim with a sacred meaning.

Therefore, other man-made attributes that are functionally important as a support to the cultural significance of the property, its protection and its understanding, are located in the buffer zone, in the Khangchendzonga Biosphere Reserve, and in the wider setting of the property. The integrity of the associative values and of traditional knowledge has been impacted by past policies for environmental protection, changes in lifestyle and discouragement of traditional practices for subsistence.

#### Authenticity

The authenticity of the cultural attributes within the proposed World Heritage boundary has been preserved. Although the tangible man-made attributes within the property are restricted to some *chortens*, *gompas* and several sacred shrines associated with revered natural features, their continued reverence, maintenance and the associated rituals attest that they bear credible witness to the property's Outstanding Universal Value. Sources of information on the associative values of the property and its attributes comprise the *Nay-Sol* and the *Nay-Yik* texts, which provide important information on the stories, the rituals and the associated natural features as well as the still-performed rituals, the oral history and the traditional knowledge held by the Lepcha.

#### Management and protection requirements

The property comprises state-owned land and has been protected as a National Park since 1977, whilst the buffer zone is protected as a Forest Reserve.

Natural features having cultural significance are protected by notifications, n.59/Home/98 and n. 70/Home/2001, issued by the Government of Sikkim. They identify the sacred features and regulate their use as places of worship. Some of the monasteries fall under the protection of the Archaeological Survey of India, while other ones are



managed by monastic and local communities through traditional management systems that extend to the immediate and wider settings of the monasteries (*gya-ra* and *gya-nak* zones).

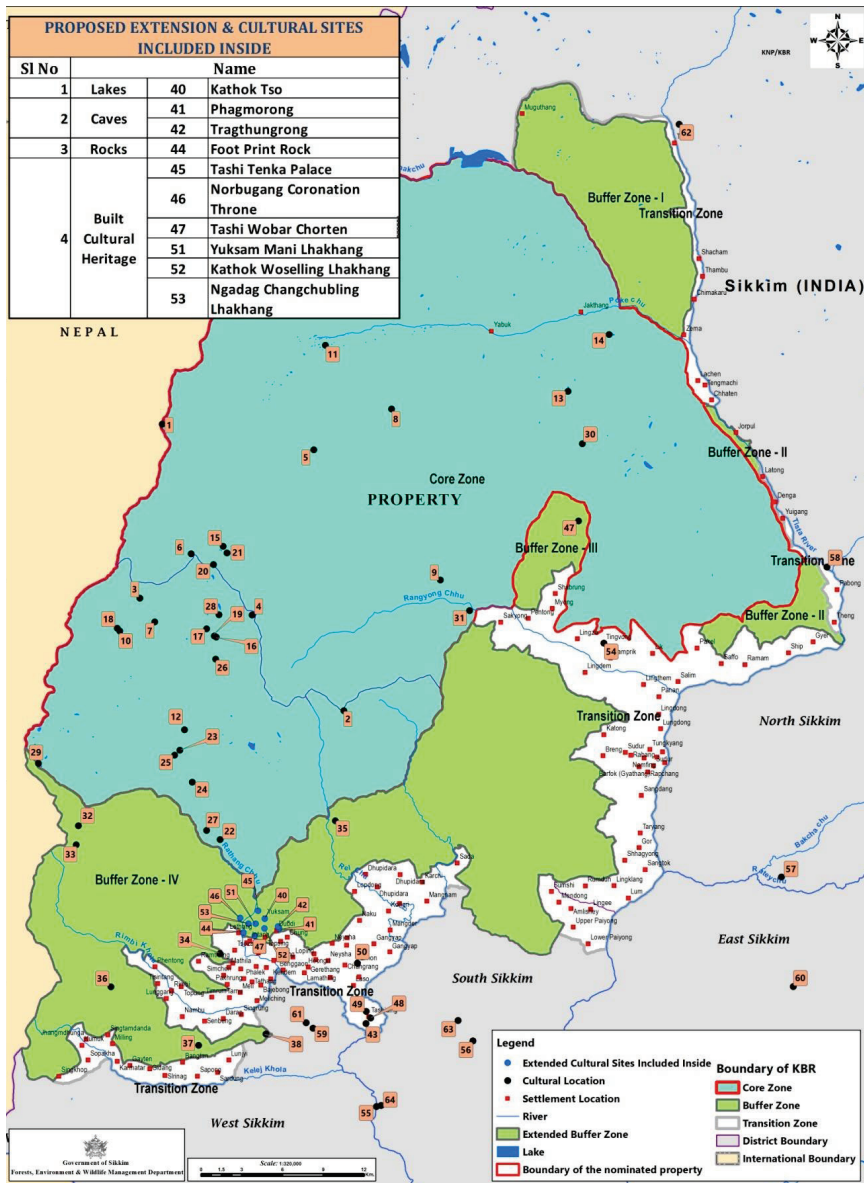
The institutional management is carried out by the Department of Forests, Environment and Wildlife, which addresses mainly natural aspects. However, a partnership is envisaged with the Ecclesiastical Department of Sikkim, the Department of Cultural Heritage Affairs and the Namgyal Institute of Tibetology, to ensure that consideration of cultural values and attributes are integrated into the existing management. A participatory approach to management exists through the Eco-Development Committees (EDC's): their role in monitoring and inspection is planned to also be extended to cultural aspects and attributes. From a cultural perspective, the extension of the traditional and participatory management to cultural attributes located in the buffer and transitional zones would greatly assist the effective protection of the cultural values, and the reinforcement of cultural ties and traditional knowledge of the local communities with their environment.

#### **Additional recommendations**

ICOMOS further recommends that the State Party gives consideration to the following:

- Finalizing and implementing the envisaged management system and related mechanisms, and extend it to the transitional zone in order to allow the full understanding of the cultural significance of the property and of associated cultural sites;
- Preparing an implementation calendar for the finalisation of the management system and for the actions envisaged in the additional information submitted in November 2015;
- Developing inventories of natural and man-made features that are mentioned in sacred texts, for conservation and monitoring purposes and of their state of conservation; paying careful attention to the landscape value of religious structures when planning maintenance or restoration activities;
- Putting in place protection and regulatory measures for the built heritage and the built-up areas in the transitional zones to assist in retaining their heritage features and improving their landscape characteristics; extending the monitoring system to the cultural dimensions of natural and man-made attributes and setting up qualitative and quantitative indicators;
- Preparing and submitting an updated report on the implementation of the above mentioned recommendations, along with an implementation calendar for the envisaged actions, by 1 December 2016, for review by the World Heritage Centre and the Advisory Bodies.





Revised map showing the boundaries of the nominated property



Khangchendzonga seen from Khangchendzonga National Park



One of the high altitude lake in Khangchendzonga National Park





The *chortens* of Du Tsen Lu Sum



The permanent Lepcha open air altar of Kusung-Lingko (Tingvong)



The *chortens* of Tashiding



Sikkim's chief guardian deity during Pang Lhabsol at Pemayangtse monastery

### **III Mixed properties**

**A Africa**

New nomination

**B Arab States**

New nomination

**C Asia – Pacific**

New nomination

**D Europe – North America**

Nomination deferred by previous sessions of the World Heritage Committee





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## Pimachiowin Aki (Canada) No 1415rev

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### Official name as proposed by the State Party

Pimachiowin Aki

### Location

Manitoba and Ontario Provinces  
Canada

### Brief description

Pimachiowin Aki encompasses 33,400 square kilometres of the Anishinaabe ancestral lands at the headwaters of the Berens, Bloodvein, Pigeon and Poplar rivers. This forest landscape dissected by free-flowing rivers, lakes and wetlands includes portions of the lands of five Anishinaabe First Nations: Bloodvein River First Nation, Little Grand Rapids First Nation, Pauingassi First Nation, Pikangikum First Nation and Poplar River First Nation.

The Anishinaabeg are a highly mobile indigenous hunting-gathering-fishing people who have made use of this and adjacent landscapes for over 6,000 years. The Anishinaabe cultural tradition of *Ji-ganawendamang Gidakiiminaan* (Keeping the Land) involves honouring the Creator's gifts, observing respectful behaviour toward all life, and maintaining harmonious relations with other people.

Pimachiowin Aki expresses a testimony to the beliefs, values, knowledge, and practices that constitute Keeping the Land through a complex network of often impermanent interlinked sites, routes and areas. Specifically there are ancient and contemporary livelihood sites, habitations and processing sites, travel routes, named places, trap lines and sacred and ceremonial sites, most linked by waterways, and all tangible reflection of *Ji-ganawendamang Gidakiiminaan* (Keeping the Land).

Today Anishinaabeg are based in five small permanent Anishinaabe settlements and have use of powerboats, snowmobiles, nylon fish nets, and high powered rifles to access and harvest animals, plants and fish as an adaptation of their traditional practices. They still maintain their strong spiritual interactions with the natural landscape through the legendary beings and spirits who are seen to control the natural world.

### 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* (July 2015) 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

01 October 2004

### International Assistance from the World Heritage Fund for preparing the Nomination

None

### Date received by the World Heritage Centre

24 January 2012

### Background

This is a deferred nomination (37 COM, Phnom Penh, 2013).

The World Heritage Committee adopted the following decision (37 COM 8B.19):

*The World Heritage Committee,*

1. *Having examined Documents WHC-13/37.COM/8B, WHC-13/37.COM/INF.8B1, WHC-13/37.COM/INF.8B2 and WHC-13/37.COM/INF.8B4,*

2. *Defers the examination of the nomination of Pimachiowin Aki, Canada, to the World Heritage List in order to allow the State Party to:*

a) *Consider options, in collaboration with the First Nations and the partners in the nomination, to refine and strengthen the boundaries of the nominated property to meet integrity requirements in relation to the operation of ecological processes within the property and surrounding areas;*

b) *Explore whether there is a way that the relationship with nature that has persisted for generations between the Anishinaabe First Nations and Pimachiowin Aki, might be seen to have the potential to satisfy one or more of the cultural criteria and allow a fuller understanding of the inter-relationship between culture and nature within Pimachiowin Aki and how this could be related to the World Heritage Convention.*

3. *Recommends that the State Party invite a joint ICOMOS and IUCN Advisory Mission, under the principles of the Upstream Processes, in order to address the above mentioned issues;*

4. *Commends the State Party, the First Nations and other stakeholders for their exemplary efforts to develop a nomination that will protect, maintain and restore the significant cultural and natural assets and values associated with Pimachiowin Aki;*

5. *Recognizes that this mixed nomination and the associated IUCN and ICOMOS evaluations have raised fundamental questions in terms of how the indissoluble bonds that exist in some places between culture and nature can be recognized on the World Heritage List, in particular the fact that the cultural and natural values of one property are currently evaluated separately*

and that the present wording of the criteria may be one contributor to this difficulty;

6. Further recognizes that maintaining entirely separate evaluation processes for mixed nominations does not facilitate a shared decision-making process between the Advisory Bodies;

7. Requests the World Heritage Centre, in consultation with the Advisory Bodies to examine options for changes to the criteria and/or to the Advisory Body evaluation process to address this issue and decides to include a debate on this item on the agenda of its 38th session.

Following the decision, an ICOMOS/IUCN advisory mission provided upstream assistance to the organizers of the nomination and residents through a series of workshops in October 2013.

Subsequently further advice was provided to the State Party through Skype discussions and also through written advice on the Comparative Analysis.

The revised nomination that has been submitted provides much more details on cultural aspects; it also has different cultural criteria and a substantially revised comparative analysis.

#### **Consultations**

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

#### **Technical Evaluation Mission**

A joint ICOMOS/IUCN technical evaluation mission visited the property from 23 to 31 August 2015.

#### **Additional information received by ICOMOS**

None

#### **Date of ICOMOS approval of this report**

11 March 2016

## **2 The property**

### **Description**

The revised nomination provides much more detailed information on the cultural traditions of the Anishinaabeg (Ojibwe people), their symbiotic relationship with the landscape and the tangible evidence of past and present interactions.

The Anishinaabeg are an indigenous hunting-gathering-fishing people who are believed to have lived in the surrounding areas for at least 6,000 years, although as discussed below there have been many migrations in and around the nominated area by the Anishinaabeg and also by the Cree people.

In spite of being subject to significant social disturbances as a result of European colonization, such as being placed on Reserves and children being separated from their families by residential schooling, the Anishinaabeg

have been able to retain their traditional culture including knowledge of, and respect for, the landscape and the tangible and intangible natural resources it provides. The landscape has shaped the way of life of the people and in turn is embedded in their oral traditions and cosmology.

The nominated area includes portions of the ancestral lands of five Anishinaabe First Nations: Bloodvein River First Nation, Little Grand Rapids First Nation, Pauingassi First Nation, Pikangikum First Nation and Poplar River First Nation. Today they number around 6,200 people.

Pimachiowin Aki can be translated as *the Land that Gives Life*. The Anishinaabeg view their land as a gift from the Creator to be shared for the benefit not only of Anishinaabeg, but also for visitors, and for all of humanity. The Anishinaabeg and all other beings, the animals, the trees and plants, the fish, the waters, are perceived as one living entity, part of an ancient, but continuous, and living cultural landscape.

The greatest ambition of Anishinaabeg is *mino-bimaadizi* (to lead a good life). The health and well-being associated with *bimaadiziwin* is seen to depend on maintaining respectful and harmonious relationships with all life on the land.

The nominated area provides a complete representation of how the living cultural tradition of Keeping the Land guides Anishinaabe perception and use of the Pimachiowin Aki cultural landscape. The tangible evidence of the Anishinaabe cultural tradition within Pimachiowin Aki includes resource harvesting places, cabin and seasonal camp sites, harvest processing sites, traditional travel routes, named places, sacred and ceremonial sites, pictographs and other sites of archaeological significance, and trap line areas.

The communities maintain their traditional world view and pass it on to new generations through oral history and rituals. Community Elders are respected, traditional values and teachings heeded, and culturally important sites memorised. A major part of the population speaks *Anishinaabemowin*, some as their only language. The five communities differ from one another culturally, socially and economically.

The nominated area is large and contains sufficient mature and diverse vegetation to allow the communities to sustain their traditional livelihoods.

The Pimachiowin Aki nomination has been led by the Anishinaabeg who wish to have recognition for their role in sustaining their community's relationship with the waterways and forests of the environment within which they live.

Within the landscape, the impact of the Anishinaabeg activities can be seen mostly along the rivers, near ancient routes (some still in use), in ceremonial sites and

rock pictographs, at camps and cabin sites, both abandoned and actively-used, and in settlements.

The nominated area extends to some 33,400 square kilometres across the heart of the North American 'boreal shield' forest (that is forest of the northern temperate zone within the Canadian Shield of Precambrian rock), dissected by long free-flowing rivers, myriad lakes and wetlands. The North American Boreal shield is part of a global boreal biome that encircles the globe just south of the Arctic Circle. Thus there is a Eurasian boreal shield as well as one in North America.

The boundaries of the nominated area have been determined through a community-led land-use planning initiative between indigenous peoples and the Provincial authorities that had the aim of creating new livelihoods to help sustain aboriginal communities. The boundaries do not encompass all the Anishinaabeg ancestral lands; some 8,900 square kilometres lie outside the boundaries and are in the buffer zone. The Anishinaabe / Ojibwe language is spoken in an extensive area on both sides of the border between Canada and the United States of America.

The people within the nominated area represent around one quarter of all those speaking *Anishinaabemowin* as their first language. The Anishinaabe cultural landscape, and beliefs and practices connected with it, thus continue beyond the boundaries of the nominated area. The communities moved prior to permanent settlement and there are references to culturally important sites outside the nominated area. However, the nominated area is where the Anishinaabe culture is seen to persist most strongly.

Their landscape is beginning to be opened up to tourists, with operators from outside the area developing fly fishing lodges and hunting camps (see below).

Hunting, trapping, fishing and harvesting wild produce  
Hunting, trapping, fishing and harvesting are at the heart of the Anishinaabeg relationship with the land. The continued harvesting of plants, animals, and other forms of life is undertaken in a manner that ensures continuity of all life on the land.

The Anishinaabeg travel throughout the nominated area to hunt animals such as moose, trap fur-bearing animals such as muskrat and beaver, fish the rivers and lakes, and gather native plants such as *manoomin* (wild rice). They also cultivate some wild rice.

Hunting, trapping and fishing is today carried out for briefer periods than in the past and from the basis of their permanent settlements. It is also regulated by provincial trapping regulation introduced in the 1940s. Summer fishing takes place by nets and lines and increasingly by rod and reel, indicating a shift from subsistence towards recreational fishing. Weirs, fish traps or harpooning are no longer practised. Autumn is the time in particular for moose hunting, with a specific

school leave dedicated to it so that the younger generations may participate. Apart from trapping, the communities hunt and fish for their own food. Berries, lichen and medicinal plants are still commonly gathered and wild rice is cultivated on a small scale for domestic use, but former garden plots for larger scale rice production are now largely grown over.

The Anishinaabeg maintain a strong communal practice which means that resources are there to be shared. If someone kills a moose, its meat is distributed around the community.

#### Waterways and sled routes

The *gete bimishkaawin* (cultural waterways) that transect the forest are the main transportation routes. Travel by water requires skill and patience in navigating the numerous rapids, chutes, and waterfalls. The principal watercourses form a network connecting the communities with one another and to the extensive harvesting areas. The traditional routes continue to be used, although canoes have been replaced by outboards and in the winter, snowmobiles have replaced sleds drawn by dog-teams over ancient tracks and have made travel more efficient, survival still depends on an intimate knowledge of the land.

Mnemonic narratives connected with the travel routes have continued. Elders have begun to document these travel routes and associated traditions using cultural Geographic Information System mapping (GIS).

#### Ceremonial sites, including ancestral burial sites

It is customary for Anishinaabeg to leave offerings at certain sites to respect those spirit beings that control the weather, or how and when animals are made available for hunting or harvesting. The most powerful spirit being are *Binesiwag* (Thunderbirds), who are seen as responsible for bringing rain, lightning, and life-renewing fire to the forest.

Numerous ceremonial sites occur in the area but, to preserve their cultural sensitivity, few have been formally recorded.

Culturally important movable heritage has been relocated in different museums and collections outside the nominated area but is mostly accessible to the communities and is linked with the presentation of the property.

#### Pictographs

Several hundred pictographs have been recorded at thirty-nine locations. Some of the images correspond in form and material to other pictographs in the Lake of the Woods Style associated with the Archaic Period in North America. A few of the images could have been made as late as c 1,800 AD. They are seen by the Anishinaabeg to be related to sacred sites.

### Settlements

Until a century ago, people mainly gathered in one place only in the summer months. Anishinaabeg dispersed across the whole of Pimachiowin Aki during the winter. During the spring and autumn, people camped near seasonal resources to work together in collecting and processing storable food, while during the summer months they gathered in larger settlements on lakes with productive fishing resources that supported multiple extended families and their sled dogs. Shelters were log cabins or temporary wigwams.

Five of these traditional summer gathering sites have now become year-round settlements for the First Nation communities who have built modern houses. Each settlement is surrounded by its own reserve and located on one of the four main waterways.

### Camps and cabin sites

Outside of the contemporary First Nation communities, temporary habitation and food processing sites are found throughout the nominated area, and especially along waterways. Many of these sites have spruce-log cabins, drying racks, and smoke houses made of spruce poles and covered with birch bark or tarps. Others are simply cleared areas, or easily cleared areas, where people erect temporary shelters. At camp sites established near *manoomin* stands, there are often pits in the ground that were used to separate the chaff from the kernel.

Spring and fall camps are made near fish-spawning areas, waterfowl-gathering sites, and good hunting areas. Anishinaabeg used these camps for only a few weeks to harvest limited, seasonal resources.

In the winter, when hunting and trapping is focused on more dispersed and elusive prey, family groups may spend several months at well-established cabins or clusters of cabins. Such winter cabin sites generally have satellite camps within a day's journey of the main settlements.

Even where these sites are not currently in use, they remain important, whatever their state of repair, as physical markers of personal and collective histories, or as claims to resources, and thus can retain an active social role in contemporary society.

Collaborative research between the community and archaeologists since 2003 has helped to document sites used within living memory for habitation and harvesting activities. More than 700 cabin and camp sites have been recorded to date within the nominated area. Some show remarkable continuity of evidence with many cabins located on or near the ancient campsites, some for instance being near fire pit sites that have been dated to the Middle Woodland period (2,200–1,300 ya) or Late Woodland period (1,300–300 ya), or near to pictograph sites or early quartz quarry sites at which stone material was collected to make tools.

### The forest

Some of the forest resources used by the communities such as medicinal plants are highly dispersed, and found in small and highly specific places. In order to sustain such plants, a sifting or rotational use of sites is practiced. The land-based knowledge of Anishinaabeg, known as *Akiwi-gikendamowining*, is especially important in locating these resources and understanding the changing distribution throughout the nominated area over time, particularly after wild fires.

A more widespread type of harvesting is of birch bark, peeled from paper birch trees along the rivers and used for making baskets, horns for calling moose in the autumn hunt, and historically, as a material for covering wigwams and for building canoes.

### Controlled fires

In early spring when the lakes are still snow covered, the Anishinaabeg practise *bashkosigewining*, the controlled burning of shoreline wetlands. This promotes the growth of grasses that enhance foods and habitats for animals such as muskrats and ducks that are hunted for food.

### Wild rice

Some harvesting sites in Pimachiowin Aki have been intentionally managed to increase their productivity. Some of the most noticeable are the *manoomin* (northern wild rice) harvest areas that are found across the nominated area. Archaeological evidence on Rowdy Lake and the Bloodvein River, indicates that Anishinaabeg were cooking wild rice in pots at least 1,200 years ago. But wild rice has also been cultivated as food and shelter for a variety of animals such as beaver, muskrat, ducks, and geese, all of which are hunted.

### Oral traditions

The Anishinaabeg world view of a symbiotic relationship between people and nature attributes animacy to objects in the natural world giving meaning to peoples' existence in this environment over time and through the seasons. The Creator, *Manitou*, has a central place. The Anishinaabeg believe that He has placed them on their ancestral lands. Two kinds of spirit beings are repeatedly referred to: the Thunderbirds or *Binesiwag* and the Little Rock People or *memegwesiwag*. The first represent a cultural tradition widely shared across continents. They are generally known and awed by the Anishinaabe communities, like many other First Nations, as powerful helpers and carers for the land. In the nomination they are said to nest in rock formations created at a time when plants still did not exist. Their nests are respected. They are believed to cause forest fires by lightning.

Elders and others with land-based knowledge (*akiwi-gikendamowining*) are especially esteemed for their role in guiding decision-making in personal, family and community matters related to use of the land. Knowledgeable elders are revered for their role in ensuring continuity of Keeping the Land.

### **History and development**

Although human occupation in the Pimachiowin Aki area can be dated to Late Paleo-Indian Plano traditions around 10,000-8,000 years ago, and is associated with small isolated communities of hunters, the ancestors of the Anishinaabeg people appear to have begun to settle seasonally when the climate turned warmer between 7,000 to 2,200 years ago. This is when pictographs are believed to have first appeared. By 2,200 years ago a definite seasonal pattern of hunting appears to have been established.

The present-day Anishinaabe have their cultural roots in the Great Lakes area and were officially recognised as being in Pimachiowin Aki in the Treaty of 1875.

The nomination dossier that asserts that Pimachiowin Aki demonstrates 'more than 7,000 years of indigenous occupancy' centred on the five Anishinaabe First Nations. Whether they have been living there for centuries if not millennia, or migrated into the area in the 18<sup>th</sup> century is still debated by historians. There are those who consider the Shield region was devoid of human habitation at the time of contact with Europeans (although not denying evidence of earlier occupancy) with the Cree people moving later into the area, while others consider that the Shield region was occupied at the time of contact by the Cree people, but the Ojibwe moved into the area and displaced the pre-existing Cree population, and yet others assert that it was the term Ojibwe that gradually came to be associated with all the people living in the Shield region and thus the Crees and other northern residents did not move, they became Ojibwa. These aspects are considered further below under conclusions.

Pimachiowin Aki's geographic position in the centre of the continent, has led to techniques and ideas being introduced from all directions, such as in the 18<sup>th</sup> century AD through involvement with the international fur trade, and, in the 19<sup>th</sup> century, through the oil trade and the spread of Christianity.

Euro-Canadians who organised the fur trade bought pelts from animals trapped by the Anishinaabeg. By the 1820s when the initial intense fur trade had ended and the beaver population had been decimated, the Anishinaabeg communities returned to their traditional seasonal trapping activities. In the second half of the 19<sup>th</sup> century, a second commercial harvesting activity was developed around the export of oil from sturgeon in Lake Winnipeg organised by non-Anishinaabeg people. As with the fur trade, intense exploitation led to a rapid decline in resources. In the 1930s and 1940s smaller sturgeon fishing enterprises were set up in the nominated area but these were short lived.

Between the 1950s and 1970s, the growth in air traffic, and the support of the Federal Government, allowed the Anishinaabeg people to exploit other species of fish for trade. During these two decades, fishing took over from traditional trapping as the main source of income and

brought increased material prosperity. By the 1970s, commercial fishing opportunities had declined dramatically in the face of rising costs, conservation concerns, and unstable markets. During the 1980s, international markets for fur also went into steep decline as a result of international anti-trapping campaigns.

From the 1940s changes were also brought about by an increase in the activities of government agencies, particularly in relation to education and health care. Both of these were centralised and this had the effect of pulling communities towards fixed settlements and a concomitant decline in seasonal hunting and fishing. At the same time, fur trapping became regularised and quotas were set under what is known as a trap line system.

The decline in opportunities for commercial fishing and trapping over the past fifty years has greatly diminished independent incomes amongst the Anishinaabeg. They are now strongly dependent on public subsidies. During the same time the population has significantly increased.

This loss of income combined with the pull of federal services and the push off the land has spurred cooperative relations between First Nations, and the provinces of Manitoba and Ontario.

In 2002, the five First Nations of Pimachiowin Aki came together to develop a cooperative accord they titled Protected Areas and First Nation Resource Stewardship: A Cooperative Relationship Accord. This has since come to be known as the First Nations Accord. It aims to strengthen mutual support. There are other Anishinaabe First Nations outside the Accord.

The Accord was subsequently extended to a partnership with the two Provincial governments of Ontario and Manitoba and became the Pimachiowin Aki Corporation. The Corporation promoted the nomination process and community based land-use planning that was instrumental in determining the final boundaries of the nominated area.

### **3 Justification for inscription, integrity and authenticity**

#### **Comparative analysis**

The comparative analysis in the revised nomination is substantially improved. There are very few models for comparative analyses for properties of indigenous values especially in which there is not substantial tangible built evidence or landscape modification and where the landscape is considered 'natural'. The Pimachiowin Aki nomination has developed a framework for such comparative analyses which is helpful but has some limitations – especially in terms of the lack of cultural documentation in some sites selected for comparison.

The purpose of the comparative analysis is to show that the nominated property, as a place with potential Outstanding Universal Value, has no comparators on the World Heritage List, or on Tentative lists, or anywhere else. Thus comparisons need to be made between the property and other potentially comparable places to see if any of them have the same or similar combination of Outstanding Universal Value and a combination of attributes that defines them as a place.

The comparative analysis that has been offered does not quite adopt this holistic approach. Instead it offers separate comparisons with discrete aspects of the property, called themes (harvesting sites, habitations and processing sites, sacred and ceremonial sites, water travel routes, widespread distribution and customary governance), whereas it is the combination of these themes that make up the idea of Keeping the Land.

Selection of sites for comparison, starts from the premise that places that most clearly exhibit cultural traditions most similar to the Anishinaabeg practice of Keeping the Land are found in the North American sub-arctic area as this is where similar boreal forests and waterways are located and similar traditions of use by indigenous peoples. ICOMOS agrees that this geo-cultural area should provide the basis for the analysis.

Thirty-four sites were considered and seven immediately discarded as having only relict evidence. Of the remaining 27 sites, 17 are in Canada and 10 in the United States of America. All of these are designated historic sites. It is presumed that only protected sites were considered but this point is not made clear.

Analysis of these sites under the six themes concludes that some sites exhibit some themes but not others, while in many others the documentation is insufficient to allow a definitive answer, as there is no cultural inventory, or there is no mention in planning documents of customary governance. Perhaps the most common negative factors are the lack of, or weak evidence for, sacred and ceremonial sites, the lack of acknowledged customary governance, and insufficient size to allow widespread hunting and trapping and seasonal migration.

The analysis was only undertaken in relation to the current boundaries of the chosen sites even though the boundaries might have been drawn to protect natural assets (as is clear from some of the names that include Wildlife Refuge, and Biodiversity Reserves) rather than cultural assets. It thus appears to be sometime the case that these sites might have yielded more positive comparisons if further evidence had been available.

In summary, comparisons show that there are four sites in Canada that might be seen as comparable to Pimachiowin Aki in that they all exhibit the themes to varying degrees and overall can be said to reflect the relationship between indigenous culture and the environment. These sites are Old Crow Flats Special

Management Area, Saoyú-?ehdacho National Historic site, Albanel-Témiscamie-Otish proposed Biodiversity Reserve, and Cat Lake – Slate Falls First Nations Protected Areas.

In making the case for why it is considered that there is room on the World Heritage List of Pimachiowin Aki, it is suggested that it has the most complete representation of the attributes and is thus an exceptional example and has the strongest claim to Outstanding Universal Value over and above the four others.

ICOMOS considers that what is clear from the work undertaken is that ideas similar to the Keeping the Land concept are common across the vast area of the American North Subarctic. However the detailed data to support understanding of precisely how communities relate to their environment and have done so over time remains patchy at best. What is not clear on the basis of the evidence provided is whether there are few social and cultural differences between the many communities and thus Pimachiowin Aki is the best place to represent this vast part of the globe on the World Heritage list, or whether there are cultural differences related to specific aspects such as hunting traditions, governance, water management, and cultural history, and there could be an opportunity for more than one place to be put on the World Heritage List as a reflection of differing approaches to the idea of Keeping the Land in this region.

Clearly it would have been desirable for a more detailed thematic study to have been undertaken on this extremely important type of cultural landscape that could have shown more clearly the differences and similarities between communities and the way they have interacted with the land over many centuries. Such a study could also have thrown more light on the migrations of people around the area – this would not have diminished their connection with the land but could have amplified the way traditions have persisted over time even if people have moved from one area to another (this point is picked up in the Conclusions).

On the basis of the evidence put forward, ICOMOS considers that the analysis justifies consideration of Pimachiowin Aki for the World Heritage List, for its reflection of the water-based practices of the Anishinaabeg, but that it should not be considered as representing the cultural landscapes of the whole of the American sub-arctic region.

ICOMOS considers that further studies should be undertaken on the way landscape reflects the important cultural systems that characterise the many indigenous communities of the American sub-Arctic region, before any further sites are considered for nomination.

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ICOMOS considers that the comparative analysis has justified consideration of this property for the World Heritage List under cultural criteria.

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### 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:

- Pimachiowin Aki is the most complete and therefore exceptional example of a landscape within the North American Subarctic geo-cultural area that provides testimony to the cultural tradition of *Ji-ganawendamang Gidakiiminaan* (Keeping the Land);
- *Ji-ganawendamang Gidakiiminaan* consists of the beliefs, values, knowledge, and practices that guide the Anishinaabeg in their interaction with *aki* (the land and all its life) and with each other in ways that are respectful and express a reverence for all creation;
- Anishinaabeg have for millennia lived intimately with this special place in the heart of the North American boreal shield forest;
- The Anishinaabeg cultural traditions are manifest in harvesting sites, habitation and processing sites, trap lines, travel routes, named places, ceremonial sites, and sacred places such as pictographs associated with powerful spirit beings;
- These attributes are dispersed widely across a large landscape and concentrated along waterways, which are an essential source of livelihood resources and a means of transportation;
- Anishinaabe customary governance and oral traditions ensure continuity of these cultural traditions across the generations.

ICOMOS considers that, as is discussed above, Pimachiowin Aki, on the basis of present knowledge cannot necessarily be seen to be the most complete example of a landscape that reflects Keeping the Land traditions. It is though an exceptional example of the way one group of communities manifest those traditions, in an extensive natural landscape of multi-layered forest, particularly through the use of waterways and through perpetuating their traditions of customary governance.

Nor can it be said that the Anishinaabeg have been the only communities to have lived for millennia in this particular part of the overall North American shield forest which many communities have shared. In ICOMOS's view this does not diminish the value of the special relationship between people and the land and the landscape that this has sustained.

### Integrity and authenticity

#### Integrity

The nominated area encompasses around a quarter of the lands occupied by Anishinaabeg peoples. The boundaries partly conform to historic trap line areas but do not include all the ancestral areas of the five communities – see boundaries below.

In terms of the area within the boundaries including the attributes necessary to convey value, the area is of

sufficient size to encompass all aspects of Anishinaabeg traditional livelihood activities, customary waterways, traditional knowledge of the landscape and seasonal rounds of travel, for hunting, trapping, fishing and gathering, and sacred sites, although some of these extends beyond the boundaries.

The key attributes are considered to be highly intact. The whole property is protected from commercial logging, mining, and hydroelectric development, and all its waterways are free of dams and diversions. Patterns of traditional use (fishing, gathering, hunting and trapping) and veneration of specific sites by the Anishinaabe First Nations have developed over millennia through adaptation to the dynamic ecological processes of the boreal forest, and appear to be ecologically sustainable.

The vastness of Pimachiowin Aki at 33,400 km<sup>2</sup> with only 6,510 residents and a buffer zone of an additional 40,400 km<sup>2</sup> with 5,800 residents, provides a sufficiently large area to enable the continuity of the living cultural tradition of Keeping the Land.

The very limited infrastructure includes some power lines, seasonally functional winter roads, and the all-season East Side Road (under construction). All of these are subject to numerous protections concerning development.

#### Authenticity

The ability of the landscape to reflect its value is not straightforward when, as is the case with Pimachiowin Aki, the links between people and place are often ephemeral and often intangible. Authenticity relates in this instance first all to the robustness of cultural traditions that underpin spiritual, social and economic interactions and their ability to function fully in relation to the adequacy of natural resources, and secondly to the necessary freedom of movement needed for communities to respond to changing seasons and environmental conditions.

In the case of the Anishinaabeg, the cultural traditions appear to be strong. Although modern equipment allows for much quicker transport and modern hunting equipment provides for greater success, communities appear to be meeting the challenge to restrict modern interventions so that interactions with the landscape remain ecologically and socially sustainable.

Secondly authenticity also relates to how far the sites in the landscape (such as archaeological sites, sacred sites, waterways and hunting and harvesting sites) remain in use to a degree that the landscape reflects adequate interactions over time. And this in turn relates to the ability of the Anishinaabeg communities to maintain the resilience of their traditions across their vast landscape.

Although cultural traditions are pervasive across the landscape, through both personal and collective

connections, within the five First Nation communities there are minor variations in relation to the particular ways of perceiving, practicing and maintaining the tradition of Keeping the Land. These variations seem to reflect centuries of interaction with people from outside of these communities such cross-cultural contact with Oji-Cree, Metis, northern European and other peoples within the Poplar River and Bloodvein River First nations.

In order to sustain the resilience of traditions, maintaining authenticity will need to be an overt part of the management of the property.

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ICOMOS considers that the conditions of integrity and authenticity have been met, but authenticity will need to be actively sustained.

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#### **Criteria under which inscription is proposed**

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

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 Pimachiowin Aki provides an exceptional testimony to the continuing Anishinaabe cultural tradition of *Ji-ganawendamang Gidakiiminaan* (Keeping the Land). Keeping the Land guides relations between Anishinaabeg (Ojibwe people) and the land; it is the framework through which the cultural landscape of Pimachiowin Aki is formed, given meaning, and maintained across the generations.

*Ji-ganawendamang Gidakiiminaan* reflects the intimate interconnectedness between Anishinaabeg and their environment; a way of life in which nature and culture are inextricably intertwined and which has persisted over several millennia;

No other site in the North American Subarctic contains a comparable testimony to the complete suite of attributes that manifest Keeping the Land, and the distribution of these attributes across a wide landscape interconnected by waterway travel routes.

ICOMOS considers that this criterion can be justified but without it being said that this is the only place in the North American sub-arctic that might demonstrate the idea of Keeping the Land, as other landscapes of other communities might provide different but also exceptional responses to this key philosophy.

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ICOMOS considers that this criterion has been justified.

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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 Pimachiowin Aki is directly and tangibly associated with the living tradition and beliefs of Anishinaabeg, who understand they were placed on the land by the Creator and given all they need to survive.

Having received the gift of life that is Pimachiowin Aki, Anishinaabeg are bound by a sacred trust to “keep” the land; that is, to care for all life in a way that honours creation and enables Anishinaabeg to achieve health and prosperity, or *bimaadiziwin* (a good life). Anishinaabe uphold this sacred responsibility to care for the land through their cultural tradition of *Ji-ganawendamang Gidakiiminaans* (Keeping the Land).

They involve ensuring harmonious relations with the other spirit beings with whom Anishinaabeg share the land and carry out the Creator’s plan for a healthy and productive life on the land, through offering sites such as grandfather stones and hollows in exposed bedrock where objects of value or tobacco are left for spirit beings; ceremonial sites used to communicate with and pay respect to other beings through drumming, dancing, and visions; and sacred places such as pictograph sites, Thunderbird nests, and places where *memegwesiwag* (little rock people) dwell.

The beliefs and values that make up *Ji-ganawendamang Gidakiiminaan* are carried down through the generations by means of a vibrant oral tradition in the Ojibwe language. Oral traditions, including legends, stories, and songs, are central to the authentic intergenerational transmission of the cultural tradition. Oral traditions are tangibly associated with the nominated area through named places, which serve as mnemonic prompts for intimate knowledge of the land, including locations of resources, travel routes, and the history of Anishinaabe occupation and use.

These beliefs are sustained by systems of customary governance based on family structures and respect for the elders.

ICOMOS considers that although it cannot be said with certainty that the Anishinaabe have for millennia lived in Pimachiowin Aki, nor that Pimachiowin Aki is the only landscape in North America that manifest ideas of people having a sacred responsibility to keep the land, its size and the strength of its traditions make it an exceptional example of a belief of universal significance.

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ICOMOS considers that this criterion has been justified.

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#### **4 Factors affecting the property**

New all-weather roads are being planned within the property in response, it is stated, to worsening climatic conditions, in order to try and address the high cost of staple foods being transported into the area, to provide jobs for locals and to promote tourism.



The main construction is a new all-season road that will run on the east side of Lake Winnipeg, for some 200 kilometres inside the nominated property. This East Side road will replace the existing winter road network which currently extends through and beyond the nominated area. The road will link the four Manitoba First Nation communities of Pimachiowin Aki, and the neighbouring First Nation community of Berens River, with the existing all-season road system to the south.

This is a long-term project. Work has already started and the road will reach Bloodvein River, the southernmost First Nation in Pimachiowin Aki, in 2015, Poplar River in 2036, and Little Grand Rapids and Pauingassi in 2060. By 2030, the three communities that are not currently accessed by all-season roads will become connected.

Although some road construction is necessary for the wellbeing of the communities, ICOMOS considers that its environmental impacts should be carefully assessed and checked by high-quality planning, fitting the road into landscape and minimising its disruptive effects to wildlife and traditional land uses. This might involve higher than normal costs.

The socio-cultural impacts of new roads should be also assessed, including the effects of increased accessibility on the communities and on the road corridors, and particularly on potential tourism development.

While commercial forestry is now prohibited within the nominated area, small scale community-based commercial forestry is allowed in limited areas of the buffer zone.

Forest management plans for the potential commercial forestry on parts of the buffer area have been developed by communities to protect both natural and cultural heritage.

There is no mining in the nominated area and mineral exploration and mining development are not allowed in the community land-use plans. However, in parts of the buffer zone there are pending mineral claims. Should these be revived, mining activity would have to be approved by the First Nation on whose traditional land it would take place, as well as by the provincial government.

No mineral extraction is foreseen within the buffer zone; two small areas identified decades ago by the province for low-medium mineral potential in the eastern buffer zone are unlikely to be developed due to low potential yield, high cost of extraction, inhabitation by First Nation people, and adjacency to protected lands including Pimachiowin Aki. During the ICOMOS technical evaluation mission, this was confirmed by representatives at high levels in the Province of Manitoba which has fully supported the nomination. Gold mining already occurs in Red Lake outside the buffer zone. It is not legally possible to ban mining in the adjacent areas.

Stronger preventive measures to mitigate the environmental impacts of mining beyond the buffer zone are suggested in the nomination dossier, for instance a strict permit procedure involving control by First Nations.

For the segments of the all-season road within the nominated area, small gravel quarries related to road construction are designated through mandatory community-based processes along the road corridor.

Development within the nominated area is also associated with tourism activities such as canoeing and fishing. The building of lodges without negotiation or formal permission is still a cause for resentment for the First Nations, as well as the overuse of certain fish stocks by tourists. The current scale of development, however, remains modest with the number of visitors around 2,000 per year, but the all season road project is expected to facilitate more arrivals.

The First Nations express their willingness to develop sustainable tourism in a limited way, under their own control, through providing their own services and interpretation centres and by offering guiding to selected sites. Interviews by the ICOMOS technical evaluation mission with Anishinaabe and non-indigenous owners of fishing and hunting lodges indicated that guests' desire for more "authentic" experiences with First Nation people and traditions. The biggest tourism pressure is expected to be the Atikaki Provincial Park, the most accessible part of the nominated area. Only Bloodvein River will welcome tourism to its entire reserve area.

Associated with the all-season road project, small scale, tourism oriented facilities are being built to accommodate visitors such as a boat launch and associated parking area and camping area in order to contain social and environmental impacts. Campsite systems are in place in Woodland Caribou and Atikaki provincial parks within the nominated area. In conjunction with the First Nation communities, the provincial parks have developed river warden and land warden programs that place local young people in areas frequented by tourists to build capacity and foster cultural engagement.

Each of the five First Nations has their own distinct tradition, including their unique and thriving dialects. Some of the teachings and skills have been lost or weakened and are being re-learned. The extensive recording of oral history and its codifying into educational programmes and tourist interpretation is an important cultural process, and care needs to be exercised to protect the use of this knowledge, and also to avoid a situation in which a corpus of recorded and distributed 'frozen' tradition may partly substitute living tradition as the basis of Anishinaabe identity.

Threats may also come from the commercial heritage industry, 'disneyfication', or from substitution of genuine Anishinaabe traditions by a "pan-Indian" contemporary

faith for therapeutic purposes (already occurring in some other areas).

The ability of the First Nations to sustain their culture is also under some threat from socioeconomic and health issues and by acculturation. The former include extremely high unemployment, and health problems.

Climate change may increase the likelihood of forest fires, an essential ecosystem process in the boreal forest. Provincial fire management regimes include cultural heritage and environmental factors such as endangered species into their response plans. The preferred option is to allow fires to fulfil their ecological role.

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ICOMOS considers that the main threats to the property are the physical and indirect developmental impacts of roads, rapid expansion of tourism, the loss of traditional knowledge and increased acculturation.

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## **5 Protection, conservation and management**

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

The proposed boundaries encompass three provincial protected areas (Woodland Caribou and Atikaki Provincial Parks and Eagle-Snowshoe Conservation Reserve) as well as all the designated protected areas determined through community-led land use planning by the five Anishinaabe First Nations. The boundaries are not visually delineated on the ground due to the enormity of the proposed area and the similar and intact landscape of the surrounding buffer zone. For the inhabitants of the nominated area and those of the buffer area, the boundaries are apparent because they conform to trap lines. These boundaries are also mapped and recorded in law to designate the territory of the five Anishinaabe First Nations of Pimachiowin Aki.

The boundaries have been defined by each community in a slightly different way. Pikangikum has included only its cultural waterways, leaving the ancestral land of Whitefeather Forest to the buffer zone as an adjoining management area, whereas Poplar River and Bloodvein River have included their respective management areas and the commercial zone in the nomination. While this reflects the relative autonomy of the First Nations, it leads to a certain inconsistencies for the property overall that could be reviewed further in the future.

The cultural landscapes of the partner communities stretch beyond the nomination boundary and those of neighbouring non-partner First Nations partly overlap with those inside. Thus there are likely to be elements reflecting different values in the nominated area, and in the buffer zone – especially along the cultural waterways.

Exclusions to the nominated property include areas within neighbouring First Nations where land use planning is pending, limited areas with presumed low-medium mineral potential, areas with potential for commercial community-based forestry, and small shoreline settlements and offshore islands in Lake Winnipeg.

The boundaries are thus not complete in terms of encompassing the lands of all five First Nations. However given the large area concerned, and the information provided by the State Party concerning the process by which the boundaries were determined, the boundary is adequate.

The large buffer zone surrounds the property extending to 40,400 km<sup>2</sup>. This is covered by multiple, complementary regulatory regimes that buttress the community-based land management systems within the buffer and is adequate.

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

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### **Ownership**

All the nominated area is government owned.

### **Protection**

There are no federal designations such as National Parks in the nominated area. Heritage protection for the nominated property takes place under provincial rather than federal legislation. In addition there is supportive “enabling legislation” at federal and provincial levels relating to protecting species at risk, regulating resources and development, as well as to public consultation on proposed land-uses.

The vast majority (c. 99.98 %) of the nominated property is protected under provincial legislation that recognizes the designated protected areas identified in the First Nation land use plans or provincial parks legislation (applies to three provincial protected areas and the designated protected areas in the Pikangikum First Nation planning area). The five First Nation settlements make up the remainder of the nominated area (c. 0.02 %) and are covered by Canada’s Indian Act. Additional national and provincial legislation applies, for example, to Lake Winnipeg, several rivers and with regards to specific terrestrial and aquatic species.

The entire nominated area is protected from all commercial logging, mining, and the development of hydroelectric power, oil and natural gas. Similar protections cover the buffer zone.

ICOMOS considers that protection has improved since the original nomination as peat mining is now prohibited throughout the nominated area and plans for a potential large scale community-led forestry project in the Bloodvein River First Nation planning area community (previously covering 2% of the nominated area) have

been abandoned, relegating this 2% of the nominated area to the same standard of protection as the remaining 98%.

The five First Nation communities have strong traditional mechanisms of protection that draw from the cultural tradition of Keeping the Land. The commitment to these mechanisms and their expression led to the signing of the First Nations Accord among the five communities in 2002 which created the impetus of developing this nomination.

In most cases the protection is primarily for nature conservation but the park legislation allows cultural heritage to be taken into account.

Jurisdiction over public lands is in principle shared between the federal government, the provincial governments of Ontario and Manitoba and the five First Nations of the Accord. Section 35 of the Federal constitution frames Aboriginal and Treaty rights. The rights of the First Nations in the area were originally defined in the Treaty 5 in 1875. Treaty rights do not surpass provincial legislation and in practice the First Nations co-operate with the provinces. They do not have sovereignty over their lands, meaning that theoretically the Treaty rights could be reinterpreted by the Crown. In the past, staking of third-party claims has occurred in First Nation ancestral lands of the nomination without their consent.

As the nominated area is divided in two by the provincial border, ensuring the effectiveness of protection requires a common management policy for the two provincial governments. ICOMOS notes that plans are underway to form an interprovincial park out of Atikaki and Woodland Caribou parks, pointing the way to a cooperative management approach between the provinces.

ICOMOS considers that current levels of protection are effective against foreseeable negative development impacts, although procedures for solving eventual conflicts over land use and conservation remain untested. Such conflicts could arise over hunting regulations, licences for tourism development or distribution of benefits.

The buffer zone has some degree of protection and neighbouring First Nations participate in land use decision-making in its area.

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ICOMOS considers that the legal protection in place is adequate.

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### **Conservation**

The state of archaeological evidence is in general good. Typical archaeological sites along the watercourses are still easily identifiable in the landscape. Only a few of them have yet been excavated. Wear and tear from tourism or traditional land uses is minimal.

The pictographs, painted by red ochre with sturgeon oil as binding agent appear in some cases to be of prehistoric origin. The pictographs from different periods have been extensively documented and studied. They are mostly well preserved, considering that they are found in places beneath the high water mark. The state of preservation does however vary.

In terms of other structures (traps, smoking racks, marking poles etc.) modified landscapes (wild rice paddies, burned-over grassy shores), most are ephemeral and the buildings (cabins, campsites) of fairly recent origin. In the community settlements some intrusive buildings and structures, such as relay masts, airstrips, sewage treatment plants or gravel pits may be detected. However, due to the small size of the communities their impact remains limited.

Preservation of the natural environment allows for the continuation of hunting, trapping and fishing, and this is well protected.

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ICOMOS considers that the state of conservation of the nominated property is satisfactory.

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### **Management**

Management structures and processes, including traditional management processes

The legislative processes of both provinces support the governance of the First Nations. A joint negotiation mechanism is provided by the Pimachiowin Aki Corporation that comprises all five First Nations and both provincial governments. This aims for protection through traditional stewardship, land-use planning and collaboration.

The current fixed 'trap line system' to control hunting was introduced in the 1940s by the provincial governments together with harvest quotas. It is based on traditional tenure of families or groups of families. Prior to the trap line system, harvesting was not strictly regulated, although harvesting areas were associated with particular groups. Now a permit from the officially registered head trapper is mandatory. The head trapper is a non-hereditary position although often it remains within certain families. At the community level the Elders have a decisive say in the control of traditional land use. Besides them, there are elected councils and chiefs as well as community planners.

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

The property has an overall management plan that brings together key elements of the five First Nation land use plans and the park management plans of the three provincial protected areas. The management plan and series of legal protections uphold the practices associated with the traditional land management system

embedded in Keeping the Land. The management plan is a high level plan and relates to more detailed planning for the designated protected areas.

Since the first nomination, all of the community land use and management plans have been approved. Management plans have been approved as follows: Poplar River 2011, Bloodvein River 2008, Little Grand Rapids 2012, Pauingassi 2012. Land use plans/strategies have been approved as follow: Little Grand Rapids 2011, Pauingassi 2011, Bloodvein 2014 and Pikangikum 2010. There is also a Woodland Caribou Signature Site Management Plan approved in 2007.

To clarify the management system, as it relates to decision making, ICOMOS requested the State Party to develop a statement which outlines the protocol for decision making. This reflected the slightly reactive focus of the Plan and acknowledged the need to make it more proactive.

One aspect that is not currently a strong dimension of the management plan is the need to address the socio-economic problems of the communities through promoting diversification and strengthening of their economies as well as genuine empowerment to avoid over emphasis on tourism.

There is also a need for more detailed plans to address specific aspects of management such as visitor management, to ensure it is sustainable in terms of the landscape and its spiritual associations, is under the control of the communities, and offers benefits to them.

The effectiveness of the complex and integrated management system should be carefully monitored over time.

Financial support, independent of the operational budgets of the provincial parks and the supporting network of Non-Governmental Organisations (NGOs) and private local and regional businesses associated with Pimachiowin Aki, comes from annual grants from Manitoba and Ontario, substantial in-kind support from many of the partners, and a conservation trust fund. Additional funding from public and private sources is anticipated.

Involvement of the local communities

Involvement of the five First Nations totally underpins this nomination.

While the approach for the management of the property appears to be appropriate for the values of this area, so far the integration is at a general level and needs to be made more specific. In order to allow the possibility of consensus at different levels over land use planning and management, the management plan needs to harmonise zoning principles and concepts of the different

component plans and to provide more defined action plans.

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ICOMOS considers that the management system for the property is adequate but should be developed further to address specific over-arching themes such as socio-economic development, visitor management, and interpretation in order to actively coordinate activities and infrastructure.

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## 6 Monitoring

Research activity has extensively documented the Anishinaabe oral history and place-related traditions since the 1930s. More recently, place-related traditions have been collected in the context of First Nations land use planning into GIS databases.

While numerous examples of sacred and ceremonial sites, habitation and processing sites, harvesting sites, travel routes, and named places are well inventoried, some additional tangible heritage assets are less well understood, inventoried, and represented in the nomination. The Pimachiowin Aki Corporation is undertaking further community based cultural research such as on petroglyphs.

Key indicators are described in the nomination dossier with timelines and responsible authorities. The indicators are for fire regimes, hydrology, intactness, species diversity, community benefits (involvement in tourism), public understanding and appreciation of culture (educational programmes, media stories, web traffic, and info requests), governance / leadership (implementation of land use plans), culture (language use and retention), archaeological sites (integrity of sites) and traditional land use (level of trapping).

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ICOMOS considers that the key indicators are satisfactory.

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## 7 Conclusions

The nomination of Pimachiowin Aki has been driven by the First Nations in order to achieve recognition of their desire to sustain a living, working engagement with their all-encompassing natural and ancestral landscapes, and for their role in sustaining the waterways and forests.

Since 2002, the five First Nations of Pimachiowin Aki have come together to develop a cooperative First Nations Accord that aims to strengthen mutual support. The Accord was subsequently extended to a partnership with provincial planning authorities that developed the nomination and aims to develop alternative sources of income for the communities.

The main focus of the original nomination was to sustain the essential role that the Anishinaabe play in sustaining

the Boreal Biome. As natural criteria cannot acknowledge the cultural value of communities in supporting natural value, the World Heritage Committee requested the State Party to explore whether the spiritual relationship with nature that has persisted for generations between the Anishinaabe First Nations and Pimachiowin Aki, might be considered exceptional and could be seen to have the potential to satisfy one or more of the cultural criteria.

The revised nomination has done just that and put forward detailed descriptions and discussion of the specific cultural heritage practices of the Anishinaabeg, and how their profound respect for all living forms leads them to sustainable use of natural resources, and to deriving spiritual succour from them.

Although the comparative analysis could not on the basis of available evidence lead to the conclusion that only in Pimachiowin Aki is this cultural concept of Keeping the Land still resilient as a guiding force for the communities, it has allowed a detailed understanding of the more widespread scope of this practice. ICOMOS considers that it has shown how Pimachiowin Aki is an exceptional example of the way one group of communities manifest this practice, in an extensive natural landscape of multi-layered forest, particularly through the use of waterways and through perpetuating their traditions of customary governance. ICOMOS further considers that the analysis has left open the possibility of other landscapes reflecting different nuanced approaches of Keeping the Land that might be considered for the World Heritage list in the future.

What has also become clear from the revised nomination is that the Anishinaabeg could be characterised as water people rather than forest people, as the waterways that cut through the forest are their lifeblood in allowing fishing hunting, trapping and also some cultivation along the banks. The forest is the wider canvas of their activities, its resources used judiciously for medicine, for some hunting and as shrines and nurtured through allowing wildfires that bring new plant life – all of which benefit the communities.

In terms of the Anishinaabe's long association with the landscape, the nomination raises the issue as to whether there is evidence for the assertion that they have been associated with the Pimachiowin Aki landscapes for over 7,000 years. On the basis of archaeological evidence, there has been habitation in the area from the end of the last Ice Age. Historical evidence is less clear cut though on whether the same people have been in the area or there has been migration of various peoples around the common Shield area over time (as discussed above under History).

ICOMOS considers that as the Cree and Ojibwe are very closely related, including linguistically, as both are part of the entire Shield common area, and as both have lived in the wider area over thousands of years, probably in an ever changing dynamic, with some groups living close to

each other and some further apart, then Pimachiowin Aki could be said to be both Anishinaabe and Cree, with the Anishinaabeg being the current 'caretakers'. Pimachiowin Aki was an area previously shared by the Anishinaabeg and Cree, but, under the influence of the western ideas of land ownership, it came to be assigned to the Anishinaabeg.

## 8 Recommendations

ICOMOS recommends that the World Heritage Committee adopts the following draft decision, noting that this will be harmonised as appropriate with the recommendations of IUCN regarding their evaluation of this mixed site nomination under the natural criteria and included in the working document WHC/16/40.COM/8B.

### Recommendations with respect to inscription

ICOMOS recommends that Pimachiowin Aki, Canada, be inscribed on the World Heritage List as a cultural landscape on the basis of cultural **criteria (iii) and (vi)**.

### Recommended Statement of Outstanding Universal Value

#### Brief Synthesis

Pimachiowin Aki, part of the ancestral lands of the Anishinnabe people at the headwaters of the Berens, Bloodvein, Pigeon and Poplar rivers, is an exceptional example of cultural tradition of *Ji-ganawendamang Gidakiiminaan* (Keeping the Land) that involves honouring the Creator's gifts, observing respectful interaction with *aki* (the land and all its life), and maintaining harmonious relations with other people.

The forest landscape, dissected by free-flowing rivers, lakes and wetlands, includes portions of the lands of five Anishinaabe First Nations: Bloodvein River, Little Grand Rapids, Pauingassi, Pikangikum and Poplar River First Nations and extends to 33,400 square kilometres. It encompasses around a quarter of the lands occupied by Anishinaabeg peoples.

The Anishinaabeg are a highly mobile indigenous hunting-gathering-fishing people who have made use of this extensive natural landscape of multi-layered forest, particularly through the use of waterways. Pimachiowin Aki expresses a testimony to their beliefs, values, knowledge, and practices that constitute *Ji-ganawendamang Gidakiiminaan* and through a complex network of often impermanent interlinked sites, routes and areas. Specifically there are ancient and contemporary livelihood sites, habitations and processing sites, travel routes, named places, trap lines and sacred and ceremonial sites, widely dispersed across the landscape, most linked by waterways, and all tangible reflections of *Ji-ganawendamang Gidakiiminaan*.

Today, within Pimachiowin Aki, Anishinaabeg are based in five small permanent Anishinaabe settlements and

have use of modern equipment to access and harvest animals, plants and fish as an adaptation of their traditional practices. They still maintain their strong spiritual interactions with the natural landscape through the legendary beings and spirits who are seen to control the natural world. The persistence of Anishinaabe customary governance and oral traditions ensure continuity of these cultural traditions across the generations.

**Criterion (iii):** Pimachiowin Aki provides an exceptional testimony to the continuing Anishinaabe cultural tradition of *Ji-ganawendamang Gidakiiminaan* (Keeping the Land). *Ji-ganawendamang Gidakiiminaan* guides relations between Anishinaabeg (Ojibwe people) and the land; it is the framework through which the cultural landscape of Pimachiowin Aki is perceived, given meaning, used and sustained across the generations.

Widely dispersed across the landscape are ancient and contemporary livelihood sites, sacred sites and named places, most linked by waterways that are tangible reflections of *Ji-ganawendamang Gidakiiminaan*.

**Criterion (vi):** Pimachiowin Aki is directly and tangibly associated with the living tradition and beliefs of Anishinaabeg, who understand they were placed on the land by the Creator and given all they need to survive. They are bound to the land and to caring for it through a sacred responsibility through their cultural tradition of *Ji-ganawendamang Gidakiiminaans* (Keeping the Land).

This involves ceremonies at specific sites to offer, and communicate with other beings, and respecting sacred places such as pictograph sites, Thunderbird nests, and places where *memegwesiwag* (little rock people) dwell, in order to ensure harmonious relations with the other spirit beings with whom Anishinaabeg share the land and to maintain a productive life on the land.

The beliefs and values that make up *Ji-ganawendamang Gidakiiminaan* are sustained by systems of customary governance based on family structures and respect for elders, and through vibrant oral traditions that are tangibly associated with intimate knowledge of the land through named places, which serve as mnemonic prompts, including locations of resources, travel routes, and the history of Anishinaabe occupation and use.

The size of Pimachiowin Aki and the strength of these traditions make it an exceptional example of a belief that can be seen to be of universal significance.

#### Integrity

Pimachiowin Aki is of sufficient size to encompass all aspects of Anishinaabeg traditional livelihood activities, customary waterways, traditional knowledge of the landscape and seasonal rounds of travel, for hunting, trapping, fishing and gathering, and sacred sites, although some of these extends beyond the boundaries, and includes sufficient attributes necessary to convey its value.

The key attributes are considered to be highly intact. The whole property is protected from commercial logging, mining, and hydroelectric development, and all its waterways are free of dams and diversions. Patterns of traditional use (fishing, gathering, hunting and trapping) and veneration of specific sites by the Anishinaabe First Nations have developed over millennia through adaptation to the dynamic ecological processes of the boreal forest, and appear to be ecologically sustainable.

The vastness of Pimachiowin Aki and of its buffer zone provides a sufficiently large area to enable the continuity of the living cultural tradition of *Ji-ganawendamang Gidakiiminaan*.

The very limited infrastructure includes some power lines, seasonally functional winter roads, and the all-season East Side Road (under construction). All of these are subject to numerous protections concerning development.

#### Authenticity

The ability of the landscape to reflect its value relates to the robustness of the cultural traditions that underpin spiritual, social and economic interactions and their ability to function fully in relation to the adequacy of natural resources, and to the necessary freedom of movement needed for communities to respond to changing seasons and environmental conditions.

The cultural traditions of the Anishinaabeg appear to be strong. Although modern equipment allows much quicker transport and modern hunting equipment provides for greater success, communities appear to be meeting the challenge to restrict modern interventions so that interactions with the landscape remain ecologically and socially sustainable.

The degree to which sites in the landscape, (such as archaeological sites, sacred sites, waterways and hunting and harvesting sites) remain in use to a degree that the landscape reflects adequate interactions over time, relates to the ability of the Anishinaabeg communities to maintain the resilience of their traditions across their vast landscape.

In order to sustain the resilience of traditions, maintaining authenticity will need to be an overt part of the management of the property.

#### Protection and Management requirements

There are no federal designations such as National Parks in the nominated area. Heritage protection for the property takes place under provincial rather than federal legislation. In addition there is supportive “enabling legislation” at federal and provincial levels relating to protecting species at risk, regulating resources and development, as well as to public consultation on proposed land-uses.

The vast majority (c. 99.98 %) of the property is protected under provincial legislation that recognizes the designated protected areas identified in the First Nation land use plans or provincial parks legislation (applies to three provincial protected areas and the designated protected areas in the Pikangikum First Nation planning area). The five First Nation settlements make up the remainder of the nominated area (c. 0.02 %) and are covered by Canada's Indian Act. Additional national and provincial legislation applies, for example, to Lake Winnipeg, several rivers and with regards to specific terrestrial and aquatic species. In most cases the protection is primarily for nature conservation but the provincial park legislation allows cultural heritage to be taken into account.

The entire nominated area is protected from all commercial logging, mining, peat extraction, and the development of hydroelectric power, oil and natural gas. Similar protections cover the buffer zone.

The five First Nation communities have strong traditional mechanisms of protection that draw from the cultural tradition of Keeping the Land as articulated in the First Nations Accord, 2002.

Jurisdiction over public lands is in principle shared between the federal government, the provincial governments of Ontario and Manitoba and the five First Nations of the Accord. Section 35 of the Federal constitution frames Aboriginal and Treaty rights. The rights of the First Nations in the area were originally defined in the Treaty 5 in 1875. Treaty rights do not surpass provincial legislation and in practice the First Nations co-operate with the provinces. They do not have sovereignty over their lands, meaning that theoretically the Treaty rights could be reinterpreted by the Crown. In the past, staking of third-party claims has occurred in First Nation ancestral lands of the property without their consent.

The buffer zone has some degree of protection and neighbouring First Nations participate in land use decision-making in its area.

The legislative processes of both provinces support the governance of the First Nations. A joint negotiation mechanism is provided by the Pimachiowin Aki Corporation that comprises all five First Nations and both provincial governments. This aims for protection through traditional stewardship, land-use planning and collaboration. At the community level the Elders have a decisive say in the control of traditional land use. Besides them, there are elected councils and chiefs as well as community planners.

The property has an overall management plan that brings together key elements of the five First Nation land use plans and the park management plans of the three provincial protected areas. The management plan and series of legal protections uphold the practices associated with the traditional land management system

embedded in *Ji-ganawendamang Gidakiiminaan*. The management plan is a high level plan and it relates to more detailed management plans and land use strategies that are in place for the five First Nations' areas and for the Woodland Caribou Signature Site.

The management plan needs strengthening to address the socio-economic problems of the communities through promoting diversification and strengthening of their economies as well as genuine empowerment to avoid over emphasis on tourism. There is also a need for more detailed plans to address specific aspects of management such as visitor management, to ensure it is sustainable in terms of the landscape and its spiritual associations, is under the control of the communities, and offers benefits to them.

The effectiveness of the complex and integrated management system should be carefully monitored over time.

#### **Additional recommendations**

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

- Continuing to develop the management plan, particularly in respect of policies to address:
  - the socio-economic problems of the communities through promoting diversification and strengthening of their economies as well as genuine empowerment to avoid over emphasis on tourism;
  - control and limit the development of tourism so that it is sustainable in terms of the landscape and its spiritual associations, is under the control of the communities, and offers benefits to them;
  - a coordinated approach across the property, particularly in relation to infrastructure.
- Ensuring regular monitoring of the effectiveness of the management plan as a proactive tool for the benefit of communities;
- Actively promoting and strengthening the partnerships between communities and provincial authorities.





## **IV Cultural properties**

### **A Asia – Pacific**

New nominations

### **B Europe – North America**

New nominations

Nomination deferred by previous sessions of the World Heritage Committee

### **C Latin America - Caribbean**

New nominations

Extension



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## Zuojiang Huashan Rock Art (People's Republic of China) No 1508

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### Official name as proposed by the State Party

Zuojiang Huashan Rock Art Cultural Landscape

### Location

Guangxi Zhuang Autonomous Region  
Chongzuo City  
Ningming County, Longzhou County, Jiangzhou District  
Fusui County  
People's Republic of China

### Brief description

Meandering through the karst landscape in the border regions of southwestern China, the Zuojiang River and its tributary Mingjiang River have cut steep cliffs on which the Luoyue people created pictographs illustrating their life and rituals. Dating from around the 5<sup>th</sup> century BCE to the 2<sup>nd</sup> century CE, 38 sites of rock art and their associated karst, riverine and tableland landscape are located in three areas which together comprise the Zuojiang Huashan Rock Art series of sites. Depictions of ceremonies have been interpreted as portraying the bronze drum culture once prevalent across southern China.

### 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 property of 3 sites.

In terms of the *Operational Guidelines for the Implementation of the World Heritage Convention* (July 2015), paragraph 47, it is 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

30 January 2015

### Background

This is a new nomination.

### Consultations

ICOMOS consulted its International Scientific Committee on Rock Art and several independent experts.

Comments about the evaluation of this property were received from IUCN in December 2015. ICOMOS carefully examined this information to arrive at its final decision and its March 2016 recommendation; IUCN also revised the presentation of its comments in accordance with the version included in this ICOMOS report.

### Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the property from 12 to 17 October 2015.

### Additional information received by ICOMOS

A letter was sent by ICOMOS to the State Party on 23 September 2015 requesting additional information on the serial approach, integrity, comparative analysis, conservation, protection, development and visitor facilities. A response was received on 30 October 2015 and the information has been incorporated below. As requested by the revised *Operational Guidelines*, the State Party received an Interim Report on 18 January 2016.

### Date of ICOMOS approval of this report

11 March 2016

## 2 The property

### Description

The nominated property lies in the northern part of the tropical region of China in an area of karst topography on the Yunnan-Guizhou Plateau which formed around 200 million years ago. Featuring forested limestone peaks cut by winding rivers, the area has its own microclimates favouring particular animal and plant resources, including bamboo, red common bombax flowers, wild egrets and other wild birds. The nominated rock art comprises 38 sites located in three nominated property components; two along the Zuojiang River (components 2 & 3) and one along its tributary, the Mingjiang River (component 1), each with its own buffer zone. The pictographs are located high up on steep cliff faces formed at river bends where the river has cut into limestone peaks. Facing them are lush tablelands on which the Luoyue people lived in small settlements, farmed and held their ceremonies and rituals. A number of villages/hamlets are located within the nominated property components. Remnants of wood piles indicate that scaffolds were built in order to paint high up on the cliffs (15-130 m above the water), or in some cases painting platforms were suspended from the tops of the cliffs. The nomination dossier also suggests that some were painted by people climbing the cliffs from the bottom.

The Rock Art was an aesthetic practice sustained over centuries which involved societal organization, technical wherewithal to situate these drawings in such precarious locations, and common spiritual motivations. The art work and its cliff face setting, the meandering river and fertile tablelands, and associated cultural practice are inseparable. The cultural and natural elements are

integral to one another and gain their meaning through their relationships that are topographical, visual and spiritual.

The pictographs were painted using a medium of hematite (red oxide) pigment mixed with plant sap as an adhesive. The majority of the pictographs depict human figures described as 'squatting', either in front view or side view, with bent legs and raised arms illustrating ritual dance. The height of the figures ranges from 0.2 m to 3.58 m. Associated weapons (ring-head swords, swords with a hand-guard or pommel and short flat-stalk swords) and animal figures (canids and birds) have been interpreted as indicating the higher status of some individuals. Images of sheep-horn bells and bronze drums indicate the performance of ritual ceremonies. The total property area is 6,621.60 ha and the buffer zone total is 12,149.01 ha.

Component 1 includes four rock art sites: Zhushan, Longxiashan, Gaoshan and Ningming Huashan along the Mingjiang River. Each contains a number of separate panels of rock art which in turn contain a number of groups. The property component contains images as described above at all four sites. The property area is 1,628.83 ha and the buffer zone is 2,725.37 ha. The Ningming Huashan site, on the east bank cliff opposite two tablelands contains the most images (1,951) including 1,556 human figures, the largest of which at 3.58 m high is the largest within the overall nominated property. It includes 209 bronze drums, and images found at only two other sites elsewhere within the property - one copulation image and 13 ferryboat images.

ICOMOS notes that the rock paintings are quite low down at this site and can be viewed from a wooden pathway along the base of the cliff. A major conservation project has been carried out at this site to reinforce the rock by filling cracks without disturbing the paintings. The rock art can also be viewed by telescopes from a wooden platform opposite them at Bayao wharf. One of the two monitoring centres is located at Ningming. The other is at the main office at Zuojiang.

Also located within the nominated property area according to the maps provided with the nomination dossier are 11 villages/hamlets: Badeng, Zhumie, Xincun, Bayao, Baluan, Huiyao, Laijiang, Daning, Tuohe, Zhushantun, and Muzhou. The buffer zone contains 6 villages/hamlets according to the maps.

ICOMOS notes that Huiyao Village in the vicinity of Ningming Huashan (site no. 4) where Zhushan people carry out ceremonies four/five times a year related to the rock art is located within the nominated property.

Component 2 includes 16 rock art sites: Chenxiangjiao, Baojianshan, Shuiyanshan, Duimianshan, Loutiyan, Sanzhoutoushan, Sanzhouweishan, Yanminshan, Bafengshan, Wumingshan, Chaochuantoushan, Duchuanshan, Dazhoutou, Sanjiaoyan, Shamaoshan, and Mianjiang Huashan along the Zuojiang River. Each

contains a number of separate panels of rock art which in turn contain a number of groups. The property component contains images as described above, but not all are represented at every rock art site. In addition the Chenxiangjiao site also contains a copulation image, and the Duchuanshan site contains one ferry boat image. The property area is 2,506.50 ha and the buffer zone is 5,331.11 ha. Also within the nominated property area according to the maps provided with the nomination dossier are 8 villages/hamlets: Hecun, Xiao'an, Baixue, Tangbian, Qiaoban, Tingxiu, Nongmei, and Bainian. The buffer zone contains 20 villages/hamlets according to the maps.

ICOMOS notes that all the sites are viewed from boats except at Mianjiang (site no. 20) where a wooden platform accessible by both boat and bus on the riverbank opposite allows viewing by telescopes.

ICOMOS also notes that the hamlet of Shangbaixuetun in the vicinity of Wumingshan (site no.14) and Chaochuantoushan (site no.15) where the inhabitants make ritual sacrifices to appease the painted mountains is apparently located within the nominated property.

Component 3 includes 18 rock art sites: Tuobaishan, Tuobaiyinsan, Chuanlongshan, Ba'anshan, Mabishan, Guandaoshan, Zhakoushan, Lingzhishan, Dashan, Xiaoyinwengshan, Dayinwengshan, Qixingshan, Yanhuaishan, Kongtuoshan, Baigeshan, Jiangjunshan, Dawanshan, and Wanrendongshan along the Zuojiang River. Each contains a number of separate panels of rock art which in turn contain a number of groups. The property component contains images as described above, but not all are represented at every rock art site. The property area is 2,486.27 ha and the buffer zone is 4,092.53 ha. Also within the nominated property area according to the maps provided with the nomination dossier are 5 villages/hamlets: Jiujiu, Mafang, Hecun, Tuonong, and Tuoya. The buffer zone contains 23 villages/hamlets and part of Qujiu Town according to the maps.

ICOMOS notes that Poli Village, where ceremonies related to sites in the vicinity take place, is located in the buffer zone about halfway between Dashan (site no. 29) and Xiaoyinwengshan (site no. 30), according to the maps.

ICOMOS notes that at Wanrendongshan (site no.38) a wooden railed platform has been constructed on the river bank opposite the site to enable viewing of the rock art by visitors using telescopes.

### **History and development**

Archaeological discoveries have shown that human habitation of the Chongzuo City area, Guangxi Zhuang Autonomous Region dates back more than 100,000 years. In the pre-Qin Dynasty period (2070-221 BCE) according to historical records the area was inhabited by the Luoyue people. During this period pit burials gave way to cave burials and the burial goods began to reflect a wealthier

society. The discovery of bronze moulds indicates that the local people had mastered bronze smelting and casting techniques. From tombs of the Warring States period (475–221 BCE) when the several states of the Zhou Dynasty fought for hegemony, bronze drums and weapons such as the short flat-stalk swords and sheep-horn bells have been found. The pictographs within the nominated property's rock art sites depict images of these types of artefacts. They represent a period of turmoil prior to a brief period of unification under the Qin Emperor and the rise of the Han dynasty in 206 BCE. Remains from the Han Dynasty (206 BCE – 220 CE) period still include bronze drums and sheep-horn bells. Historical records show that the main group living in the area was still the Luoyue people, although their name "Luoyue" gradually disappeared in the period of the Eastern Han Dynasty.

Descriptions of rock art in the "Erguang" area in records dating from the Song Dynasty (960-1276) are thought to refer to the Zuojiang Huashan Rock Art, as are later records of the Ming Dynasty (1368-1644). Qing Dynasty records (1661-1722 and 1644-1911) refer to red human figures on the cliffs of Huashan. Researchers from the Guangxi Provincial Museum began to investigate the rock art in 1951. Subsequent investigations took place in 1956 and 1962. Following further detailed research including collection of folk lore about the rock art was published. Further detailed study has included dating by comparison with artefacts and by carbon and uranium series dating of wood poles thought to have been used in scaffolding, and calcium carbonate attached to the pictographs.

Researchers have identified four locational and stylistic phases of painting. The first pictographs were located along the lower reaches of the Zuojiang River, and were painted lower down on the cliff faces. The images are smaller but realistic, with no grand scenes. Pictographs of the second phase have been discovered in 27 rock art sites widely distributed along the upper, middle and lower reaches of the Zuojiang River and located higher up the cliff faces. There are grand scenes with smaller figures surrounding a larger one, but the figures are simplified and less realistic in expression. The third phase pictographs are distributed similarly to the second and also along the Mingjiang River, with a higher proportion here and in the upper reaches of the Zuojiang River. They are mostly located higher up the cliff faces than the first and second phases, are smaller in scale, the scenes with central figure are still there but no copulation, sheep-horn bell or ferry boat images. The circular (bronze drum) images are simpler and the human figures more stick-like. Images of the fourth period are found in 8 rock art sites mostly in the lower reaches of the Zuojiang River and significantly reduced in quantity. The figures are all front-view, similar in shape and size, slender, around 0.8 m high and reduced to simple patterns or symbols.

### 3 Justification for inscription, integrity and authenticity

#### Comparative analysis

The nomination dossier makes reference to the *Rock Art: Pre-nomination Guidelines* (ICOMOS 2010) in comparing the nominated property with other rock art sites on the World Heritage List of which it tables 30. Within the surrounding region are the Petroglyphic Complexes of the Mongolian Altai, Mongolia (2011, criterion (iii)); Sulaiman-Too Sacred Mountain, Kyrgyzstan (2009, criteria (iii) and (vi)); Petroglyphs within the Archaeological Landscape of Tamgaly, Kazakhstan (2004, criterion (iii)); Rock Shelters of Bhimbetka, India (2003, criteria (iii) and (v)) and Gobustan Rock Art Cultural Landscape, Azerbaijan (2007, criterion (iii)).

The nomination dossier points out that rock art of similar time periods in the same region may bear similarities to each other, such as hunting scenes painted in caverns during the Palaeolithic in Europe, and nomadic animal scenes on the steppe. In discussing important rock art properties in south-east Asia it points out that there rock art tends to be in caves or croplands and does not exhibit comparable drawing skills, content and cultural connections.

ICOMOS notes that no other depictions of rituals undertaken to militate against a state of war appear to be presented in these examples, and at Sapa – The Area of Old Carved Stone in Sapa, on Vietnam's Tentative List (1997), no mention is made of depictions of bronze drums, although that is in the area of the Dong Son bronze drum culture. In any case, according to the additional information provided by the State Party, the Chinese bronze drum culture, while part of the same bronze drum cultural circle that existed in ancient times across south China and south-east Asia, developed separately from the Dong Son bronze drum culture of Vietnam.

ICOMOS notes that the ritual scenes depicted in the nominated rock art are distinguished by their apparent relationship to the state of war that continued to erupt during the period of their execution. They are possibly unique as a representation of life during the Warring States period in China and the rituals undertaken to enhance the success of the Luoyue people.

On the other hand, the frontal-view human figures from Tham Khon in Phu Phrabat Historical Park (Thailand, currently under evaluation), express a similar artistic sense, and from this it seems that the figures in the Huashan vicinity should not be considered an isolated artistic phenomenon, but perhaps an outpost of a universal expression deriving from south-east Asia. Human and animal figures from both these site areas in China and Thailand have a certain artistic sympathy. Between these two regions lie northern Vietnam and Laos and one might expect to find there in future other sites with similar prehistoric rock art, giving a sense of

the spread of traditional ancient cultures over a wide area.

ICOMOS notes that the selection of sites has been designed to present all phases of the rock art production from the early to end phase, as the earliest phase is most represented lower downstream in Component 3 and the later, most developed phase is most represented in the upper reaches of the tributary (Mingjiang) river (Component 1).

According to the additional information provided by the State Party, from the lower to the upper reaches (components 3 to 1), the themes of the rock art grow more complex, with narrative panels covering worship, sacrifice, and wars, with greater numbers of bronze drums and tools such as the various types of swords, and sheep-horn bells being depicted in the scenes.

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

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#### **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 rock art is uniquely associated with closed landscape units of river, cliff and tableland opposite;
- The rock art depicts ancient rituals practised here for more than 700 years;
- The rock art represents all phases of its development.

The serial approach is justified by the fact that it enables coverage of all phases of the rock art.

ICOMOS considers that this justification is appropriate because the sites selected have the highest value, are in the best state of preservation and relatively concentrated distribution. They represent the development over four phases of commencement, development, peak and decline and completely represent the features and process of the Zuojiang Huashan Rock Art Cultural Landscape. The art work and its cliff side setting, the meandering river and fertile tablelands, and associated cultural practice are inseparable. The cultural and natural elements are integral to one another and gain their meaning through their relationships that are topographical, visual and spiritual. Together the ensemble creates a distinct sense of place and character.

#### **Integrity and authenticity**

##### **Integrity**

The three components of the nominated property cover three areas of karst landform along the Zuojiang and Mingjiang rivers, the second and third components being separated by a relatively flat area which accommodates

the built-up area of Chongzuo City. The components are relatively complete geographical spatial units, preserving the cliffs bearing the rock art, rivers forest and tablelands. The 38 rock art sites were selected as the best preserved pictographs representing all phases of development. The location of the nominated property away from the nearest cities provides at present an inherent protection against the adverse effects of urbanisation. Mining and deforestation are banned in the property and buffer zone.

The three property components have been minimally impacted by non-traditional housing using red bricks and machine-pressed tiles in Xiaoan village in Component 2 and Huiyaotun in Component 1. This is now mitigated by controls in the Master Plan for the Conservation and Management of the Zuojiang Huashan Rock Art Cultural Landscape of January 2015. Residents within the vicinity of the property are dependent on farming, plantation and fishing and the villages within the property and buffer zone are not considered a threat. In general the traditional village houses such as at Laijiang and Huiyaotun in Component 1; Baixue in Component 2 and Poli in the buffer zone of Component 3 are constructed out of mud bricks, with a thatched/terracotta tiled roof and maximum use of wood. All construction and vegetation is controlled by the Master Plan. Minimal non-intrusive infrastructure has been provided to enable visitors to view the rock art. This is primarily accessible by boat. The inhabitants of all three property components belong to the Zhuang ethnic group, which also inhabits the wider Guangxi Zhuang Autonomous Region and Guangxi Province. This group follows the traditions of their Luoyue ancestors in terms of rituals and ceremonies related to the Bronze Drum Culture as derived from the rock art. The bronze drums have significance today as ritual artefacts and symbols of power. The additional information provided by the State Party states that the local people believe the bronze drums provide a link to the ancestors and the gods. According to historical records they were last played by inhabitants of villages within the property in 1919, and seven bronze drums have been unearthed during archaeological excavations in the Zuojiang River Valley.

ICOMOS notes that when required for performances for visitors today bronze drums are played by people invited from the neighbouring town of Hechi in Guangxi Province.

ICOMOS considers that the property contains all the elements necessary to convey the values of the cultural landscape and rock art.

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ICOMOS considers that the integrity of the whole series has been justified; and that the integrity of the individual sites that comprise the series has been demonstrated.

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##### **Authenticity**

The geographical form of the nominated property components is intact and preserves a large area of

tropical rainforest. Each site enclosed by mountains and rivers has preserved the rock art in its folds for over 2000 years. Sandbars making a tableland formed by the sediments are washed down by the rivers all around the year. With fertile soil, it is farming land where the inhabitants grow crops like sugarcane and rice, using a shallow tillage and keeping to the original form. The location and setting of the rock art is thus authentic. The rock art is generally located high up on the cliffs, revered by the local inhabitants and although subject to weathering over time is authentic in terms of materials and substance. The motifs and figures of the rock art were related to the beliefs of the inhabitants of the area surrounding them. Today the painted mountains are revered by local people and rituals and sacrifices are performed to appease the invisible forces affecting their lives. Practices replicating the dances and rituals depicted in the rock art are encouraged by the authorities as contributing to the value of the property for visitors.

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ICOMOS considers that the authenticity of the whole series has been justified; and that the authenticity of the individual sites that comprise the series has been demonstrated.

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ICOMOS considers that the conditions of integrity and authenticity of the whole series have been justified; and for individual sites, the conditions of integrity and authenticity have been met.

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#### **Criteria under which inscription is proposed**

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

Criterion (i): *represent a masterpiece of human creative genius;*

This criterion is justified by the State Party on the grounds that the Zuojiang Rock Art is a set of uniquely-created images portraying rituals that continued over 700 years. Painted on high karst cliffs at river bends and designed to be viewed from the tablelands opposite, the images stand out in representing long-lasting painting techniques with strong visual expression, conveying the spiritual life once practised by the Luoyue people.

ICOMOS considers that the comparative analysis does not support justification of the rock art as a masterpiece.

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ICOMOS considers that this criterion has not been demonstrated.

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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 the Zuojiang Huashan Rock Art Cultural Landscape, with its special combination of landscape and rock art, vividly conveys the vigorous spiritual and social life of the Luoyue people who lived along the

Zuojiang River from the 5<sup>th</sup> century BCE to the 2<sup>nd</sup> century CE. It is now the only witness to the tradition.

ICOMOS considers that the rock art in its karst riverine landscape bears exceptional testimony in terms of its location and content to the Luoyue people of the 5<sup>th</sup> century BCE to the 2<sup>nd</sup> century CE. The rock art located on high cliffs portrays the ceremonies and rituals related to the bronze drum culture practised by the inhabitants of the landscape below it. It is exceptional in its dominating presence.

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ICOMOS considers that this criterion has been justified for the whole series.

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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 images depicting drums and related elements are symbolic records directly associated with the bronze drum culture once widespread in the region. Today bronze drums are still respected as symbols of power in southern China.

ICOMOS considers that the bronze drum culture is still respected in the region, and ceremonies and rituals deriving from those depicted in the rock art are practised in some villages today, in tribute to the rock art.

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ICOMOS considers that this criterion has been demonstrated.

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ICOMOS considers that the serial approach is justified and ICOMOS considers that the selection of sites is appropriate.

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ICOMOS considers that the nominated property meets criteria (iii) and (vi) and conditions of authenticity and integrity has been demonstrated.

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#### **Description of the attributes**

The attributes are the mountains, rivers, cliffs and tablelands and the rock art sites that dominate and are inseparable from their setting, in demonstrating the bronze drum culture which once existed and is still respected in the region.

## **4 Factors affecting the property**

ICOMOS notes that the rapid overall development growth of China means that the property faces pressure from urban and rural development as well as water conservancy and shipping constructions due to the rapid urbanisation of Ningming, Longzhou and Fusui counties and Jiangzhou district. Within the nominated property there are 11 villages in Component 1; 8 villages in Component 2 and in Component 3 there are 5 villages.

Within the buffer zone there are 6 villages in Component 1, 20 villages in Component 2, and 24 villages in Component 3. The Master Plan for the Conservation and Management of Zuojiang Huashan Rock Art Cultural Landscape implemented from January 2015 is intended to control urban and rural development. This addresses the need to restrict growth of the number of inhabitants within the nominated property. At present there are 15,875 inhabitants in the property and 21,540 in the buffer zone. There is considered to be no development threat to the property at present and no threat from seismic activity or flooding. Fire is not mentioned and no risk preparedness strategy is included. In the additional information, the State Party has pointed out that there is very little land available for development within the nominated property since it comprises primarily farmland.

Tourist facilities are located at some wharfs giving boat access to view the rock art sites. Details were provided in the additional information submitted by the State Party in response to ICOMOS' letter. There is not considered to be severe tourism pressure at the property at present.

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ICOMOS considers that the main threats to the property are population growth and consequent development pressure.

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## 5 Protection, conservation and management

### Boundaries of the nominated property and buffer zone

The boundaries of the nominated property components clearly follow geographical features including the mountains and rivers and are marked by reinforced concrete and metallic flag posts. The boundaries of the buffer zone are similarly defined and marked.

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

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### Ownership

The mountains, watercourses, embankments, beaches, forests within the nominated property are all state-owned. The villages and farmland are collective-owned. Within the overall nominated property 1,778.08 ha is state-owned; 4,843.52 ha is collective-owned.

### Protection

Within the nominated property only one of the 38 rock art sites (Ningming Huashan) is a State Priority protected site - that is, protected at the National level in accordance with the *National Law on the Protection of Cultural Relics*. The other 37 are all protected at the Provincial level. The remainder of the nominated property is protected by the provisions of *Measures of Guangxi Zhuang Autonomous Region on the Protection of Zuojiang Rock Art* and the *Measures of Chongzuo City on the Protection of Zuojiang Rock Art*, together with other laws and regulations which protect the scenic areas, waterways and farmlands, as

well as voluntary village regulations for the protection of rock art in their vicinity.

The buffer zones are protected by the regulations of the Construction Control Zone pursuant to the National Law on the Protection of Cultural Relics. Projects within the construction control zone must be submitted for examination and approval to the relevant authorities.

The relationship of the Construction Control Zone protected area and the Scenic Area protected zone to the nominated property and buffer zones are shown in Figures 5-1 and 5-2 respectively of the nomination dossier. It can be seen that the whole nominated property and buffer zones are covered by these protection mechanisms.

ICOMOS notes that there is a plan underway to put all 38 rock art sites under National (State) level protection.

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ICOMOS considers that the legal protection in place and the other protective measures for the property are adequate. ICOMOS recommends that the plan underway to put all 38 rock art sites under National (State) level protection be completed.

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### Conservation

The most recent comprehensive inventory of the rock art sites was carried out in 2012. According to the nomination dossier the nominated rock art sites are well preserved, with only a few covered by sediment on the surface caused by weathering and exfoliation. Most of the sites are well preserved (17 rated A as the best preserved; 16 rated B and 5 rated C as the least well-preserved). A pilot conservation programme has been carried out at Ningming Huashan Rock Art site in Component 1, where water seepage causing erosion and cracking was considered a threat to the pictographs. After several years of research, investigation and monitoring from 2007, the conservation programme was implemented from 2010-2014. This involved filling cracks using natural hydraulic lime combined with a small amount of adhesive and Huashan rock powder. Technical guides based on the processes used and their subsequent assessments have been produced to guide future conservation programmes on the Zuojiang Huashan Rock Art. According to the additional information provided by the State Party, no work apart from recording and copying has been carried out to the pictographs themselves.

ICOMOS recommends that the documentation and description in the 2012 inventory be treated as baseline data for ongoing monitoring and conservation purposes.

ICOMOS also recommends that a conservation programme be drawn up to cover all the nominated sites, together with follow-up monitoring programmes.

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ICOMOS considers that the rock consolidation project 2010-2014 at Ningming rock art site appears to have been adequate but that an ongoing conservation



programme is required based on the 2012 documentation and inventory and the results of the monitoring of the Ningming site.

## Management

Management structures and processes, including traditional management processes

Overall management of the nominated property is the responsibility of the Chongzuo Management Centre in Chongzuo City, which oversees the management measures and systems of the subordinate district and county administrative departments under which the three property components fall. Financial resources are provided through special allocations of national finance from central government and local finance departments at all levels and are considered to be adequate.

A full time staff of 70 people, comprising administrative staff and experts have been assigned various everyday responsibilities concerning the management of Zuojiang Huashan Rock Art. Long and short-term training programmes are provided for staff, who are also provided vocational training and practical experience in the relevant skills and techniques required.

ICOMOS notes that no risk preparedness strategy has been provided and the possibility of forest fire has not been addressed.

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

The nominated property is included in the Master Plan for Guangxi Huashan Scenic Area. However the key document is the Master Plan for the Conservation and Management of Zuojiang Huashan Rock Art Cultural Landscape. This has been approved by the relevant county, district and provincial departments and was issued in January 2015 for implementation by the Chongzuo City People's Government after consultation with expert committees and public participation. It prohibits all quarrying, sand mining, soil collecting, logging and road construction and controls all development within the nominated property and buffer zone including in the villages, where it restricts the height of construction to 8 metres and area coverage to 150 square metres. It also controls the form, materials and colours of any new construction.

Visitor numbers to date are extremely low. Tourists are conducted to embarkation points outside the nominated property and buffer zone by bus from the distribution centre in Chongzuo City. This includes the main interpretation centre with movie presentation of the Zuojiang Huashan Rock Art; archaeology museum, archives and the Ethnic Group Museum which exhibits bronze drums of different periods. The embarkation docks at each property component (Shangjin, Wenquan and Baixue) each have facilities including small parking areas, service centres, shops, restaurants and cafes, toilets and

interpretation centres and exhibition halls with maps, posters and brochures about the rock art sites of the respective components. From these docks visitors are carried by boat to a small number of landings located within the property components opposite some of the rock art sites. Facilities at the landings include telescopes for viewing the rock art, toilets, small presentation museums and shops. The rock art is otherwise viewed from the boats, on which telescopes and other visitor facilities are also provided. Signage and safety warning systems are provided at the individual rock art sites.

ICOMOS notes that the Zuojiang Huashan Rock Art has been publicised on a large scale employing a wide range of media.

Involvement of the local communities

Local communities are involved in the management of the rock art in their respective areas as stakeholders through their Village Elders. They are required to conform to the guidelines of the local authority. Volunteers from the villages are organised by the Village Heads to watch over the rock art. In general they wish to protect the painted mountains as they believe any damage to the rock art will cast a curse on them and their village.

Regarding the current management ICOMOS considers that firewood collection from the forest should be restricted because as the population keeps growing so does the pressure on the natural resources comprising the sites' bio-diversity. Similarly, areas for farming should be restricted to the present level. Solar heating and electric power could be used instead of fossil fuel for the operation of boats and other facilities in the surrounding villages.

In conclusion, ICOMOS considers that the management system and plans should be extended at all component properties to include a conservation programme covering all nominated rock art sites and a risk preparedness strategy. Furthermore, ICOMOS recommends that firewood collection from the forest should be restricted and solar energy used for boats and village facilities, and farmland restricted to the present area.

## 6 Monitoring

The monitoring schedule sets out categories of monitoring including for the pictographs, cliffs, rivers, mountains and tablelands; management and construction control, tourism management, archaeological excavation, projects for protection and presentation, the conservation management plan, natural and social environment against indicators, monitoring cycle and the responsible authority. The main monitoring centre (Chongzuo Culture Bureau) is located at Zuojiang in Chongzuo City.

There is an ongoing monitoring programme for the Ningming Huashan rock art site where water seepage,

rock temperature and cracks are measured constantly, and CCTV cameras record visitor activity. Further detailed monitoring arrangements similar to that at Ningming will be needed to follow up future consolidation projects at other rock art sites.

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ICOMOS considers that the monitoring system is adequate as it stands but further detailed monitoring will be needed to follow up future consolidation projects at the other nominated rock art sites.

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## 7 Conclusions

ICOMOS considers that the serial approach is justified, the selection of sites is appropriate and the nominated property meets criteria (iii) and (vi) and conditions of authenticity and integrity. The main threats to the property are population growth and consequent development pressure. It is of paramount importance that the provisions of the Master Plan for the Conservation and Management of Zuojiang Huashan Rock Art Cultural Landscape for the property be applied to control these. Regarding current management ICOMOS considers that firewood collection from the forest should be restricted because as the population keeps growing so does the pressure on the natural resources comprising the sites' bio-diversity. Similarly, areas for farming should be restricted to the present level. Solar heating and electric power could be used instead of fossil fuel for the operation of boats and other facilities in the surrounding villages.

The boundaries of the nominated property and of its buffer zone are adequate. The legal protection in place and the other protective measures for the property are adequate.

ICOMOS considers that the rock consolidation project 2010-2014 at Ningming rock art site appears to have been adequate but that an ongoing conservation programme is required based on the 2012 documentation and inventory and the results of the monitoring of the Ningming site. The management systems and plans should be extended at all component properties to include a conservation programme covering all nominated rock art sites as well as a risk preparedness strategy. ICOMOS considers that the monitoring system is adequate as it currently stands, but further detailed monitoring arrangements similar to that at Ningming will be needed to follow up future consolidation projects at other nominated rock art sites.

## 8 Recommendations

### Recommendations with respect to inscription

ICOMOS recommends that the Zuojiang Huashan Rock Art Cultural Landscape, People's Republic of China, be inscribed on the World Heritage List as a cultural landscape on the basis of **criteria (iii) and (vi)**.

## Recommended Statement of Outstanding Universal Value

### Brief synthesis

Dating from around the 5<sup>th</sup> century BCE to the 2<sup>nd</sup> century CE, 38 sites of rock art and their associated karst, riverine and tableland landscape depict ceremonies that have been interpreted as portraying the bronze drum culture once prevalent across southern China. Located on steep cliffs cut through the karst landscape by the meandering Zuojiang River and its tributary Mingjiang River, the pictographs were created by the Luoyue people illustrating their life and rituals.

**Criterion (iii):** The Zuojiang Huashan Rock Art Cultural Landscape, with its special combination of landscape and rock art, vividly conveys the vigorous spiritual and social life of the Luoyue people who lived along the Zuojiang River from the 5<sup>th</sup> century BCE to the 2<sup>nd</sup> century CE. It is now the only witness to the tradition.

**Criterion (vi):** The images of Zuojiang Huashan depicting drums and related elements are symbolic records directly associated with the bronze drum culture once widespread in the region. Today bronze drums are still respected as symbols of power in southern China.

### Integrity

The components of Zuojiang Huashan are relatively complete geographical spatial units, preserving the cliffs bearing the rock art, rivers forest and tablelands. The 38 rock art sites were selected as the best preserved pictographs representing all phases of development. The property contains all the elements necessary to convey the value of the cultural landscape and rock art and does not suffer from development or neglect.

### Authenticity

Each site enclosed by mountains and rivers has preserved the rock art in its folds for over 2000 years. The location and setting of the rock art is authentic. The rock art is generally located high up on the cliffs, revered by the local inhabitants and although subject to weathering over time is authentic in terms of materials and substance. The motifs and figures of the rock art were related to the beliefs of the inhabitants of the area surrounding them. Today the painted mountains are revered by local people and rituals and sacrifices are performed to appease the invisible forces affecting their lives.

### Management and protection requirements

One of the 38 rock art sites (Ningming Huashan) is protected at the National level in accordance with the *National Law on the Protection of Cultural Relics*. The other 37 are all protected at the Provincial level. The remainder of the property is protected by the provisions of *Measures of Guangxi Zhuang Autonomous Region on the Protection of Zuojiang Rock Art* and the *Measures of*

*Chongzuo City on the Protection of Zuojiang Rock Art*, together with other laws and regulations which protect the scenic areas, waterways and farmlands, as well as voluntary village regulations for the protection of rock art in their vicinity. The buffer zones are protected by the regulations of the Construction Control Zone pursuant to the National Law on the Protection of Cultural Relics. Soon all 38 rock art sites will be placed under National level protection.

Overall management of the property is the responsibility of the Chongzuo Management Centre in Chongzuo City, which oversees the management measures and systems of the subordinate district and county administrative departments under which the three property components fall.

The Master Plan for the Conservation and Management of Zuojiang Huashan Rock Art Cultural Landscape was approved and issued in January 2015 for implementation by the Chongzuo City People's Government after consultation with expert committees and public participation. It prohibits all quarrying, sand mining, soil collecting, logging and road construction and controls all development within the property and buffer zone including in the villages, where it restricts the height of construction to 8 metres and area coverage to 150 square metres. It also controls the form, materials and colours of any new construction.

#### **Additional recommendations**

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

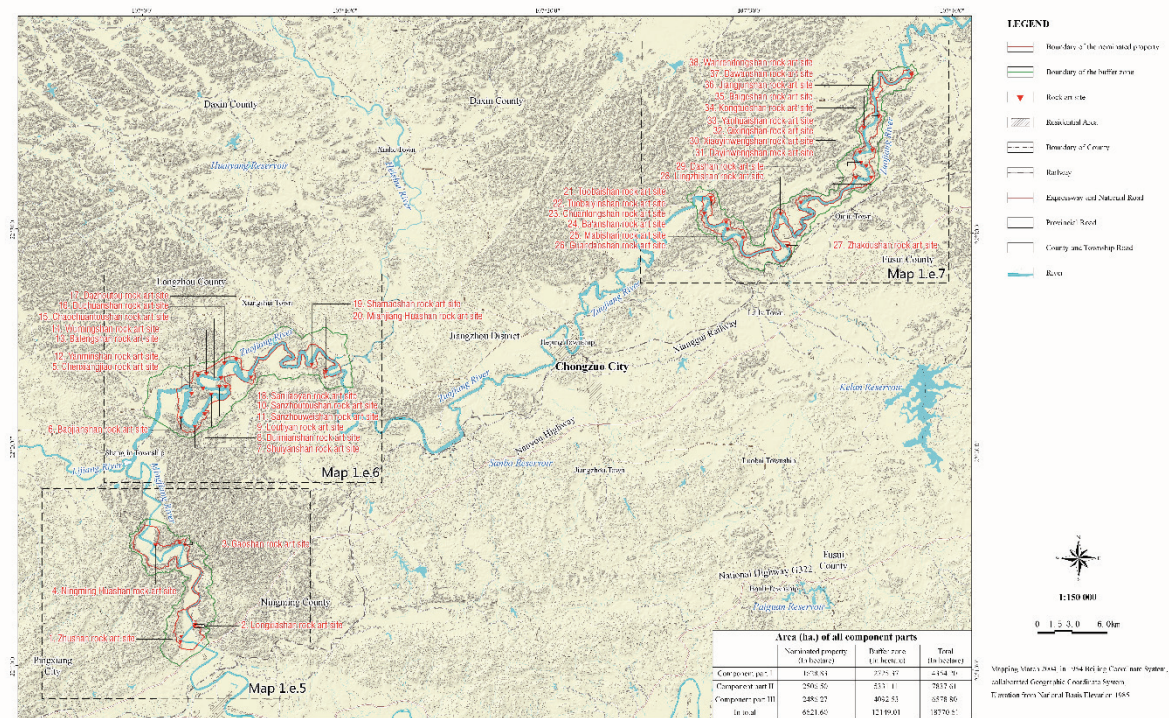
- Completing the plan underway to put all 38 rock art sites under the highest protection level;
- Preparing a conservation / consolidation programme for all the rock art sites with consequent follow-up monitoring systems;
- Extending the management plan to include a risk preparedness strategy and addressing the risk of forest fire;
- Restricting firewood collection from the forest as a means of protecting the environment of the rock art sites.
- Considering solar heating and electric power instead of fossil fuel for the operation of boats and other facilities in the surrounding villages;
- Restricting areas for farming to the present level.

In addition ICOMOS would encourage the State Party to ensure that other rock art sites not included in the World Heritage property are not subject to neglect.



### Zuojiang Huashan Rock Art Cultural Landscape

1.e.4 A topographic map showing the boundaries of nominated property and buffer zone - General Map





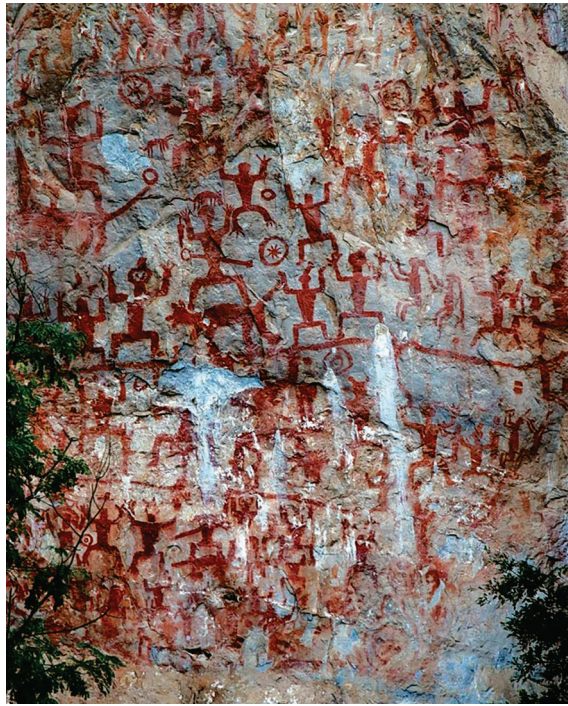


Meandering river and typical tableland



Location of the Guandaoshan Rock Art Site





Part of Ningming Huashan Rock Art Site



First panel of Ningming Huashan Rock Art Site





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## Nalanda (India) No 1502

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### Official name as proposed by the State Party

Excavated remains of Nalanda Mahavihara

### Location

Bihar, Nalanda District, Bargaon  
India

### Brief description

The Excavated remains of Nalanda Mahavihara is located in the northeastern state of Bihar, India. The Mahavihara is associated with the revival of Buddhism in the 3<sup>rd</sup> century BC and its flourishing in medieval times, before the sack and abandonment of Nalanda in the 13<sup>th</sup> century. It includes stupas, chaityas, shrines, viharas and important art works in stucco, stone and metal. The layout of the buildings testifies to the change from clustered grouping around the stupa-chaitya, to a linear alignment flanking an axis from south to north. The historic development of the property testifies to the development of Buddhism into a religion and the flourishing of monastic and educational traditions.

### 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

09 January 2009

### International Assistance from the World Heritage Fund for preparing the Nomination

None

### Date received by the World Heritage Centre

28 January 2015

### Background

This is a new nomination.

### Consultations

ICOMOS consulted its International Scientific Committee on Archaeological Heritage Management and several independent experts.

### Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the property from 25 to 30 August 2015.

### Additional information received by ICOMOS

A letter requesting additional information was sent by ICOMOS to the State Party on 02 October 2015 requesting information on the justification for Outstanding Universal Value, comparative analysis and history and development. Additional information was received from the State Party on 02 November 2015 and has been incorporated in this report. As requested by the revised *Operational Guidelines*, the State Party received an Interim Report on 15 January 2016.

### Date of ICOMOS approval of this report

11 March 2016

## 2 The property

### Description

Nalanda Mahavihara is located around 70 kilometres southwest of Patna, the provincial capital of Bihar, India. It covers an area of 23 hectares. It is the archaeological remains of a monastic-cum-scholastic institution dating from the 3<sup>rd</sup> century BC to the 13<sup>th</sup> century AD. It is 'buffered' by a 57.88 ha area, between 30 to 400 meters wide, around the property's area. The buffer zone consists primarily of agricultural land and bodies of water.

Components of the nominated property include the remains of the principle stupa encased in a chaitya (stupa-chaitya), 4 chaityas, 11 viharas and a large number of votive stupas and shrines.

The buildings of the site are organized in two systems. The earlier is a clustered stupa-centric one, which means that the viharas are organized around a sacred core, which is the focal stupa. The later system of site organization is linear, with viharas organized in a linear alignment on a north-south axis. The earlier clustered arrangement did not permit for expansion whereas the later linear arrangement accommodated expansion, which was necessary with the transformation of Buddha's teachings into a formal religion and the segregation of sacred activities from secular ones. The mounds beyond the excavated site suggest that Nalanda may have extended over an area of at least two square kilometres and possibly included more rows of viharas and several chaityas.

A stupa is a structure associated with the sacred life of Nalanda scholars. There two types of stupas: relic and votive. In Nalanda there is only one relic stupa which is the core of site no. 03. It was constructed by Emperor Ashoka in the 3<sup>rd</sup> century BC to consecrate the bodily remains of Sariputta. It became the core for seven successive additions, assuming the shape of a chaitya or stupa-chaitya. A large number of votive stupas (commemorative stupas) are consecrated throughout the property around the different chaityas. They are of two types; the first type is built of bricks and stucco and the second is built of stone.

A chaitya is a sanctified religious entity. There are two types of Buddhist chaityas: a panchayatan chaitya which is of quincunx form, and a cruciform chaitya. Site no. 3 is the only panchayata chaitya in the property and is Nalanda's important contribution to Buddhist architecture. It is the only surviving early panchayatan chaitya which was adopted extensively after the 6<sup>th</sup> century AD. The property includes three cruciform chaityas: sites no. 12, 13 and 14.

At the eastern edge of the excavated site, the Shrine Mound dates to the 7<sup>th</sup> and 8<sup>th</sup> centuries AD. It is rich with the remains of architectural and decorative features, including many subsidiary shrines, moulded decorations, pilasters, niches for displaying images of deities, traces of lime plaster and steps. According to literary records, the Shrine Mound housed an 80 foot tall statue of the Buddha. The Shrine Mound is of a quadrangular layout and is also referred to as a chaitya.

A vihara is a residential-cum-educational building. The remains of 11 viharas have been excavated in Nalanda. The earliest four are clustered around the stupa chaitya whereas the later seven are organized on a linear south-north axis. The quadrangular vihara is a contribution by Nalanda to the development of Buddhist architecture. Viharas in Nalanda attained a regular form and consisted of rooms organized around a rectangular courtyard. A staircase at the south-west corner led to upper floors. A room for each scholar opened onto a corridor overlooking the courtyard. The courtyard was used for classes, debates and religious activities with communal access. A centrally-located shrine was added during the later Pala dynasty period, with the development of rituals to be conducted inside viharas.

The uninterrupted development and flourishing of Nalanda Mahivara from the 3<sup>rd</sup> century BC to the 13<sup>th</sup> century AD led to the development of a distinctive school of art, which contributed to Buddhism, including features associated with deities and workmanship in stucco, stone and metal. Traces of art in stucco are evident at sites no. 01, 12, 13 and the most elaborate at site no. 03.

### **History and development**

Nalanda was started in the 3<sup>rd</sup> century BC when Emperor Ashoka consecrated the bodily remains of Sariputta in a stupa - the core of site no. 3 today - and established a college. Other patrons during this period contributed to the growth of Nalanda into a Mahavihara. Although the construction of viharas going back to this phase is a subject of debate, it should be considered that early viharas were constructed of perishable materials such as mud, straw and wood. The core stupa grew by the addition of seven successive phases, leading to the formation of a chaitya.

Nalanda became a centre of scholasticism during the period from the 5<sup>th</sup> century to the 7<sup>th</sup> century AD. Kings, particularly Gupta, and other patrons, contributed generously to the development of the Mahavihara. It was during this period that the property assumed the layout

that we see today. The linear expansion of seven viharas and four chaityas were constructed during this period, which also witnessed reconstructions, repairs and additions to earlier structures. These activities were recorded by seals, inscriptions or stone tablets. This period is considered to be the golden years of Nalanda Mahavihara.

The third phase of the site's development was from the 8<sup>th</sup> to the 13<sup>th</sup> centuries, during the Pala dynasty. During this period sites no. 09, 10 and 11 were constructed and existing buildings were repaired or partially reconstructed. A shrine was added to the centre of the courtyard of sites no. 01, 04, 05, 08 and 10. A shrine east of site no. 7 and many stupas were also built during the Pala phase.

The destruction and abandonment of Nalanda occurred in the 13<sup>th</sup> century AD during the reigns of Gopala, Mahipala and Devapala. No new buildings were added to the site. Apart from a low key usage of a few viharas, the property was abandoned and fell into ruin from the 14<sup>th</sup> century onwards.

After the Pala rulers, Nalanda was ravaged and set ablaze. Even after successive attacks, Nalanda continued to function with modest patronage from lesser rulers such as Chalaraja with a small community of Bhikkhus, until about the 14<sup>th</sup> century AD. During this period, no new structures were added, while only a few viharas continued to be in use; for example, site no. 01 shows as many as nine levels of occupation of Nalanda Mahavihara.

The site was reduced to mounds with the passing of time. Nevertheless, it continued to be mentioned by chronicles and records in association with the art and architecture of Buddhism as it influenced major Buddhist sites in Asia. This led the British administration of India in the late 19<sup>th</sup> and early 20<sup>th</sup> centuries to commission surveys to locate Nalanda. The survey of Sir Alexander Cunningham contributed to ascertaining that the mounds of the property were the remains of Nalanda Mahavihara. In 1904, the Government of India acquired forty-eight acres of land to protect the property and excavations between 1916 and 1938 unearthed the remains of Nalanda.

## **3 Justification for inscription, integrity and authenticity**

### **Comparative analysis**

The nomination dossier presents a twofold comparative analysis. Firstly, Nalanda is compared with universities (stand-alone or university towns) that have triggered significant developments in art or architecture or planning, or different facets of education. It then focuses on a deeper comparison with the universities of Paris and Bologna. Secondly, a comparative analysis is made on a regional level with sites which are influential centres of education and share built typology (viharas, chaityas and stupas) similar to Nalanda Mahavihara.

ICOMOS considers that the lengthy cross-cultural comparative analysis with historic universities on a global level is not clear justification for the property's nomination.

ICOMOS requested clarification on the rationale of the definition of Nalanda as a "university" and thus limiting the comparison with monastic complexes of learning to universities worldwide. The State Party responded by providing an additional explanation as well as a further expansion on the mention of Nalanda's organizational system in the available records and elaboration of the comparison with the universities of Paris and Bologna.

ICOMOS considers that the additional information provided by the State Party did not improve the weakness in the comparative analysis of the basis of the identification of Nalanda Mahavihara as a university.

ICOMOS considers that the regional typology-based comparative analysis could assist in demonstrating the distinctive qualities of Nalanda Mahavihara. The comparisons with Vallabhi in Gujarat, Vikramshila in Bihar, Benaras in Uttar Pradesh, and Kanchipuram in Tamil Nadu are relevant.

ICOMOS notes that the establishment of the specificity of Nalanda could be strengthened by comparison with other mahaviharas and monastic-educational facilities in the Indian subcontinent and the Pan-Asia region.

However, the comparison did not demonstrate the significance of Nalanda Mahavihara with regards to site planning, architecture, artistic tradition and intellectual contribution to Buddhism.

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ICOMOS considers that the comparative analysis did not justify the consideration of this property for the World Heritage List at this stage.

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#### **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 rare combination of outstanding achievements in institution-building, site-planning, art and architecture.
- Symbolizes the multiplicity of knowledge production, the innovative processes of the organized transmission of ideas through education, and a shared heritage of people living in many regions of Asia.
- Led to developments in systems of learning, logic, philosophy and Schools of Buddhism that influenced contemporary Asian culture.
- Provides evidence for the development of architecture and evolution of the artistic traditions of South Asia.
- Contributed to the development of Buddhism and Buddhist art and architecture in large parts of Asia.

ICOMOS considers that this justification is not appropriate.

#### **Integrity and authenticity**

##### **Integrity**

ICOMOS notes that the nomination dossier did not identify the area and extent of Nalanda Mahavihara before its destruction and final abandonment, as it is said to have included more than eighty viharas at one point. Today the mounds beyond the excavated site suggest that Nalanda may have extended over an area of at least two square kilometres and possibly included more rows of viharas and several chaityas.

As per paragraph 100 of the *Operational Guidelines for the Implementation of the World Heritage Convention*, boundaries should be drawn to include all those areas and attributes which are a direct tangible expression of the Outstanding Universal Value of the property, as well as those areas which, in the light of future research possibilities, offer the potential to contribute to and enhance such understanding.

ICOMOS considers that the State Party did not demonstrate that the nominated property includes all the elements necessary to express the proposed Outstanding Universal Value or that it is of adequate size to ensure the complete representation of the features and processes that convey its significance.

In addition, there seems to be a number of issues regarding adverse effects of development, such as the big memorial hall, the newly developed Nalanda University, and other present and potential developments in the vicinity of the site.

ICOMOS considers that the condition of integrity of the nominated property has not been met.

##### **Authenticity**

All the excavated structural remains of Nalanda are retained at the original location where they were excavated. In addition, within the property area, except for some shelters installed for protecting some of the structural remains, there are no structures which obstruct the overall view of the spatial composition of the Mahavihara and no problems of authenticity in location and setting.

Regarding the building fabric, minor modifications have been made, such as the replacement of some incomplete sections from which cornices have been lost with new construction elements of simplified design. However, no conjectural reconstructions have been undertaken. This can be considered a positive thing as it distinguishes between the original and the modified parts. Another impact on the building fabric is the capping by several courses of bricks of some walls to protect the walls from rainwater penetration.

ICOMOS notes that, after excavations in Nalanda throughout the period from 1916 to 1938, exposed fragile brick sections, which had progressively deteriorated, were repaired with new bricks. Although the sizes of bricks differ according to the period, it is not always possible to distinguish the different interventions as not all bricks were marked or inscribed with dates. The lack of detailed documentation of the restoration work is an issue for determining and maintaining the authenticity of the restored sections and ICOMOS recommends that the State Party puts in place a more precise documentation stating in which sections new bricks were used, or where the reused bricks are located, in order to establish “the credibility of information” referred to in the Nara Document on Authenticity (1994).

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ICOMOS considers that the requirements for integrity and authenticity have not been met at this stage.

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#### **Criteria under which inscription is proposed**

The property is nominated on the basis of cultural criteria (iv) and (vi).

*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 Nalanda distinguished itself as the earliest university in the Indian subcontinent and that the excavated structures and the arts of Nalanda manifest a significant evolution in Buddhist art, architecture and planning that influenced medieval Buddhism in the Indian subcontinent, the Malayan archipelago, Nepal, Myanmar and Tibet.

ICOMOS considers that the arguments put forward to present Nalanda as the earliest university in the Indian subcontinent are very general and can apply to many other educational monastic buildings. A request for more information was sent to the State Party to clarify what the term ‘university’ implies in the context of Nalanda and from what period was it used in historic documentation. The State Party replied with clarifications that remain generic and not fully convincing.

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ICOMOS considers that this criterion has not been justified.

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*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 criterion is justified by the State Party on the grounds that: Nalanda attracted leading scholars of Buddhism from the Indian subcontinent and received patronage from local rulers; Nalanda didn't only focus on the study and teachings of topics related to Buddhism; students from several regions of Asia were admitted to Nalanda; Nalanda transmitted organized knowledge for an unbroken period of 800 years; and that Nalanda

influenced the development of various sects and schools of thought of Buddhism throughout Asia.

ICOMOS requested the State Party to further elaborate in what way the archaeological remains testify to the maturing of ancient Indian pedagogy and the related philosophical discourses. The State Party replied with clarifications by attributing different components of the Mahavihara to specific roles in support of knowledge production and concepts of learning.

ICOMOS notes that the arguments for Outstanding Universal Value of the property were not justified by the attributes of the archaeological site.

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ICOMOS considers that this criterion has not been justified.

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In conclusion, ICOMOS considers that the nominated property does not meet criterion (iv) nor criterion (vi); however, exploring criterion (iii) may be more relevant to the property following work on the comparative analysis.

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## **4 Factors affecting the property**

According to the State Party, development pressure lies in the possible densification of the immediate surroundings of the property's buffer zone through the possible transformation of agricultural land into land for construction and settlement. Another development pressure is the possible expansion of existing settlements to the north and south of the property's buffer zone. Besides the visual impact, this would lead to an increase in waste and pollution levels.

Climatic and environmental factors include moisture, which is the most critical agent of deterioration in Nalanda, with its high levels of precipitation. The continuous wetting and drying cycles have affected the brickwork and have caused, and continue to cause powdering. Another factor is the fast growth rate of vegetation, which causes deep root penetration into masonry.

The property is located in Earthquake Zone IV (moderate to high risk) with the epicentre in Nepal. A number of earthquakes have affected Nalanda, the strongest of which occurred in 1934, which impacted on the archaeological remains of the property. ICOMOS notes that a detailed risk assessment and a preparedness plan are under preparation by the State Party.

The property receives a considerable number of tourists for leisure as well as educational and religious purposes, with the peak season during the months from October to March. The property is under manual surveillance, particularly during the high season, and ICOMOS notes that a visitor management plan is under preparation by the State Party.

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ICOMOS considers that the main threats to the property are potential development pressures, tourism pressures, climatic and environmental agents of deterioration, and the risk of earthquakes.

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## **5 Protection, conservation and management**

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

The nominated property covers an area of about 23 hectares and is surrounded in all directions by a buffer zone with a boundary set at between 30 to 400 meters distance from the property's boundary.

The property contains all archaeological remains that have been excavated. However, the extent of the rest of Nalanda Mahavihara, which remains unexcavated, is unknown. And although the function of each structure can be understood, it is not clear how the whole of Nalanda Mahavihara looked like and functioned as an institution when it was in its most developed phase, including perhaps as many as 84 viharas as opposed to the mere 14 viharas presently uncovered and included within the boundaries of the property.

The buffer zone contains many public facilities, including a museum and related facilities, managed by the Archaeological Survey of India, an interpretation centre managed by the State Government of Bihar, a village-level road, seven temples and shrines, two schools, a hospital, a parking lot for tourists, street stalls selling souvenirs, and 25 residential units housing 175 people. Also within the buffer zone are agricultural land and water features, which are of historical significance.

The sub-surface of the buffer zone contains structural remains and artefacts which are related to Nalanda Mahavihara in a direct or indirect way.

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In conclusion, ICOMOS considers it is not possible with the available information at this stage to establish whether the boundaries of the nominated property and its buffer zone are adequate.

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### **Ownership**

The Excavated remains of Nalanda Mahavihara is under the ownership of the Archaeological Survey of India.

The buffer zone is under mixed ownership. The Archaeological Survey of India owns part of the agricultural land to the west of the property and the Site Museum. The residents of the houses north of the property own the agricultural land and bodies of water north of the property. The shrine at the northern fringe of the property is owned by the temple Trust. The interpretation centre, a school and a hospital located in the buffer zone east of the site are owned by the State Government of Bihar. The settlement within the buffer

zone to the south of the property is under the jurisdiction of the State Government of Bihar.

### **Protection**

The nominated property is protected by the Ancient Monuments and Archaeological Sites and Remains Act (AMASR Act) 1958 (Amendment and Validation 2010). Accordingly, without the permission of the central Government, no landowner may carry out any kind of construction activity, mining, quarrying, etc.

The buffer zone is regulated by the national-level regulations under the AMASR and local state laws, including the Bihar Urban Planning and Development Act 2012 (BUPDA).

The AMASR specifies a zone measuring 100 meters from the edge of the protected area as "the prohibited area", and one measuring a further 200 meters from the prohibited area as "the regulated area". The whole buffer zone, except for a small part of the body of water located at the western edge (about 20 meters according to a map provided in the nomination dossier), is to be included within the range of 300 meters from the property area; that is, the prohibited area and regulated area. Within the prohibited area, no person shall, with the exception of the Archaeological Survey of India's (ASI) officials/staff members, carry out any construction except for public works. Permission of the ASI Director General, upon receipt of the advice of the Expert Advisory Committee, should even be obtained for public works, to ensure that no adverse impact is exerted on the monuments, sites or immediate surroundings. Within the regulated area, only the repair or renovation of the existing buildings is permitted. Furthermore, such proposed activities must undergo deliberation by a national-level competent authority, and obtain the permission of the ASI Director General. The BUPDA regulates any conversion of farmland into multipurpose use.

ICOMOS notes that the installation of the souvenir stalls and the construction of local houses were not constructed recently and do not exert adverse impacts on the property. However, effective strict application of the AMASR should be applied to informal houses and souvenir stalls within the prohibited area. Such an exercise should be in cooperation with the stakeholders' committee, as explained later.

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In conclusion, ICOMOS considers that the legal protection in place is sufficient, while consistent application of measures is required for adequate protection.

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### **Conservation**

The nominated property has been inventoried, described, documented and researched. According to the nomination dossier, research, documentation and conservation activities were carried out during the period of excavating the archaeological remains of Nalanda between 1916 and 1938. This was followed by a period

of inactivity up to the 1970s, when large-scale conservation interventions were carried out. Since then the property has been subject to continuous maintenance and care based on routine annual plans prepared by staff of the Archaeological Survey of India and approved by Patna Circle Office. All the work carried out is published in the Annual Report "Indian Archaeology Review".

The National Policy for Conservation of the Ancient Monuments, Archaeological Sites and Remains, which was initially enacted in 1915, was amended in 2014 and was brought into line with international best practice as stated in the Venice Charter, the *Operational Guidelines for the Implementation of the World Heritage Convention*, the Nara Document and other doctrinal documents.

As noted above, the most crucial issue pertaining to the property is the conservation and repair of brick structures, which is carried out according to annual plans. Despite the fact that brick replacement is undertaken by a specific artisan group under the instruction and supervision of Archaeological Survey of India engineers, the authenticity of the archaeological fabric is threatened by the lack of a marking system to provide a mark on each single brick and thus the absence of exact documentation of local conservation interventions.

ICOMOS considers that the utmost care and precision should be observed with regards to the continuous repairs to the brickwork of the structures of the property through a system of marking and dating each single brick used in the replacement of deteriorated brickwork or in the capping of vulnerable walls, and the consistent detailed documentation of all interventions.

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In conclusion, ICOMOS considers that the conservation of the brick structures should be carried out according to a careful procedure of marking and documentation, which should be integrated into the comprehensive program of conservation and valorisation of the property.

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## **Management**

Management structures and processes, including traditional management processes

The nominated property and buffer zone are managed at site level by the Nalanda Sub-Circle Office, which is formed by the Archaeological Survey of India's different sections. The responsibilities of the Sub-Circle Office include:

- Condition assessment;
- Identification of maintenance and management needs;
- Identification of potential projects.

Proposals by the Sub-Circle Office are forwarded for approval to:

- Circle level Office at Patna;
- Regional level Office (Eastern Region Circle, Kolkata);
- Headquarters level, New Delhi.

Approved plans receive funds, expertise and other resources, which are allocated to the Sub-Circle Office.

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

Preparation and implementation of a Property Management Plan is the responsibility of the Archaeological Survey of India. A five-year plan cycle is applied to address specific action plans and a special committee has been formed by the Archaeological Survey of India to monitor the planning and management process. A five-year plan (2014-2019) was prepared, based on routine assessment, in 2013. It is approved and being implemented. The current plan includes:

- Potential for excavation;
- Conservation;
- Landscaping;
- Enhancing visitor experience.

The State Government of Bihar is proceeding with the formulation of a master plan within which the control of the Archaeological Survey of India is established. The master plan also covers Rajgir, an area of Buddhist holy sites located around 10 kilometres to the south of Nalanda.

The master plan includes a forecast of tourism and the need to upgrade infrastructure. This includes plans to relocate the tourists' parking lot, and the adoption of a pollution-free tourist traffic system using horse-drawn carts, bicycles and rickshaws. It also includes the renovation of the museum.

ICOMOS recognizes the interpretation of the property achieved by signage installed on site, in harmony with the surrounding landscape, a guide system, museum and interpretation centre. However, there is a need for a framework to represent the significance of the property and the provision of more visual information and printed matter.

The number of visitors has exceeded 200,000 a year, with a tendency to increase year-by-year. At present, however, visitors are controlled by restricting areas and by indicating a recommended touring route. Thus, visitor management is being conducted properly, without any particular threat to the property. In future, however, the number of visitors is expected to increase further. Since the size of the existing parking lot is unlikely to meet such an increase, the master plan, referred to above, suggests its relocation. The street from the present

parking lot to the property entrance is lined with many stalls selling souvenirs. Although they do not pose a threat to the value of the property, it is still necessary to review the security of visitors.

#### Involvement of the local communities

A stakeholders' committee has been formed in order to reinforce the effectiveness of:

- The safeguarding of the property and the control of the prohibited and regulated areas by the Archaeological Survey of India;
- The implementation of the land-use regulations by the State Government; and
- The speeding up of the regional development using the property according to the master plan prepared by the State Government of Bihar.

This committee is composed of various members, including governmental agencies such as the Archaeological Survey of India and the State Government of Bihar, researchers of universities and institutes, local experts, and various levels of Panchayats (regional autonomous organizations), in addition to Non-governmental organizations (NGOs), a women's group, tourist agencies, rickshaw drivers, representatives of farmers, and others.

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In conclusion, ICOMOS considers that the management system for the property is adequate. However, special attention needs to be given to the framework of the interpretation and presentation of the significance of the property. Furthermore, the visitor management plan and the risk preparedness plan should be completed and integrated into the management plan of the property.

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## 6 Monitoring

The State Party has outlined four indicators for monitoring the state of conservation of the nominated property (including climatic and environmental effects, structural integrity and alignment of masonry, and deterioration and blackening of stucco) and four indicators for the buffer zone (including urbanization and expansion of settlements, unplanned infrastructure, conversion of agricultural land and water-bodies to other land use). The State Party also identified one more key indicator for both the property and the buffer zone in the event of an earthquake.

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In conclusion, ICOMOS notes that the attributes of the nominated property should be clearly identified, in the light of which the monitoring indicators will be fine-tuned and finalized.

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## 7 Conclusions

Nalanda Mahavihara might have the potential to meet the requirements for Outstanding Universal Value; however this has not yet been demonstrated.

Articulating the attributes of the potential Outstanding Universal Value and deepening the comparative analysis in the direction of comparing Nalanda with mahaviharas and monastic-educational facilities in the Indian subcontinent and Pan-Asia Region may establish the justification for considering the property on the basis of criterion (iii).

Conditions of integrity are not met due to the lack of information on the original extent of Nalanda Mahavihara and the potential development pressures, while the lack of adequate records and methodology for conservation, particularly with regards to the continuous repairs to brickwork, has undermined both the integrity and authenticity of the property.

## 8 Recommendations

### Recommendations with respect to inscription

ICOMOS recommends that the examination of the nomination of Excavated remains of Nalanda Mahavihara, India, to the World Heritage List, be **deferred** in order to allow the State Party, with the advice of ICOMOS and the World Heritage Centre, if requested, to:

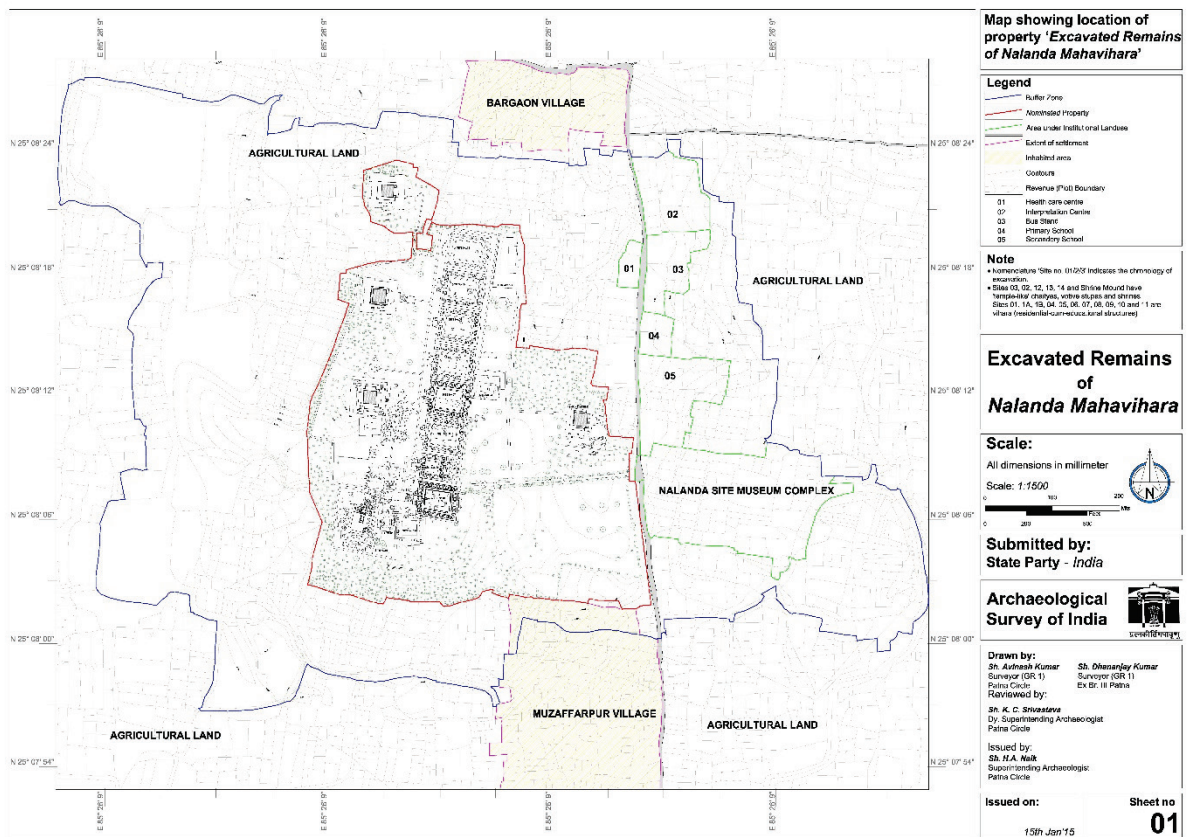
- Deepen the study of the nominated property in order to articulate the attributes of its potential significance, and develop the comparative analysis on a regional-typology basis, to more explicitly establish the importance of the property;
- Carry out historical research, supported by appropriate documentation, to establish the authenticity of the property with particular attention to the identification of all excavation works carried out before the Archaeological Survey of India's, as well as excavations by any other parties, of the property, and the identification of all repair works carried out throughout the site, with particular attention to the repairs of brickwork and the documentation of the differentiation of authentic archaeological fabric and added repairs and added capping and sacrificial layers;
- Take all necessary actions pertaining to the integrity of the property, including the identification of the area and extent of Nalanda Mahavihara before its destruction and final abandonment, which should inform the boundaries of the whole property;
- Should these studies suggest that a robust case could be made to justify the Outstanding Universal Value of the property, then the State Party should

identify the appropriate criteria to justify its inscription, taking into consideration the possible relevance of criterion (iii);

- Conduct a heritage impact assessment to identify and mitigate the different factors influencing the identification of the buffer zone and the impact of the development pressures both present and potential in the vicinity of the property;
- Develop a methodology and implementation plan for the documentation and conservation of the property in order to guarantee the protection of its authenticity and integrity;
- Consider changing the name of the nominated property to “The Archaeological Site of Nalanda Mahavihara.

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 site



View of site n. 3





Buddhists praying



Stucco art on site n. 3



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# The Persian Qanat (Islamic Republic of Iran) No 1506

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## Official name as proposed by the State Party

The Persian Qanat

## Location

Khorasan-e Razavi, Khorasan-e Jonubi, Esfahan, Yazd,  
Markazi and Kerman Provinces  
Islamic Republic of Iran

## Brief description

Throughout the arid regions of Iran, agricultural and permanent settlements are supported by the ancient qanat system of tapping alluvial aquifers at the heads of valleys and conducting the water along underground tunnels by gravity, often over many kilometres. Shaft wells providing access and ventilation to the tunnels appear as craters from above, following the line of the qanat from water source to agricultural settlement. The eleven qanats representing this system include rest areas for the workers, water reservoirs and watermills. The traditional communal management system still in place allows equitable and sustainable water sharing and distribution.

## 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 property of 11 *sites*.

## 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 February 2015

### Background

This is a new nomination

### Consultations

ICOMOS has consulted its International Scientific Committee on Archaeological Heritage Management and several independent experts.

### Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the property from 9 to 18 September 2015.

## Additional information received by ICOMOS

A letter was sent by ICOMOS to the State Party on 22 September 2015 requesting additional information on the serial approach, integrity in terms of non-inclusion of agricultural settlements and whether there was an inventory of the associated structures. A response was received from the State Party on 5 November 2015 and the information has been incorporated below. Following a meeting with representatives of the State Party on 1 December 2015 and the submission of the ICOMOS' interim report on 15 December 2015 the State Party provided further additional information regarding the selection and justification of sites, boundaries and integrity on 26 February 2016, which has been incorporated below.

## Date of ICOMOS approval of this report

11 March 2016

## 2 The property

### Description of the Serial Nomination

The nominated property comprises eleven serial properties (eleven qanats). A qanat comprises an almost horizontal tunnel collecting water from an underground water source, usually an alluvial fan, into which a mother well is sunk to the appropriate level of the aquifer. This part of the tunnel which collects the water is the *taran*. Well shafts are sunk at regular intervals along the route of the tunnel to enable removal of spoil and allow ventilation. Once out of the aquifer but still underground the tunnel is known as the *koshkan*, or transporter. The water is conducted by gravity due to the gentle slope of the tunnel to the exit (*mazhar*), from where it is distributed by channels to the agricultural land of the shareholders. The levels, gradient and length of the qanat are calculated by traditional methods requiring the skills of experienced qanat workers (*moqanni*) handed down over centuries. Many qanats have sub branches and water access corridors for maintenance purposes, as well as dependant structures including rest houses and cloak rooms for the qanat workers, public and private hamams and reservoirs, and watermills along the qanat. The property area of each qanat includes the qanat infrastructure: the wells, tunnels, and dependant structures. The water catchment of each qanat is nominated as the buffer zone. The water distribution is managed according to specific cycles by the qanat council manager (*mirab*) in each case, traditionally using a water clock. The agricultural demand area irrigated by each qanat is recorded in the nomination dossier but does not form part of the property or buffer zone. The eleven qanats have been selected from more than 37,000 across Iran.

1. Qasabeh, Khorasan-e Razavi/Gonabad, dates from 3-4 centuries BCE and runs for over 13 km with 222 wells. Its mother well is 200m deep. The Doolab-e branch runs for over 29 km with 153 wells. Its mother well is 300m deep. Dependant structures include a rest house, temporary rest room, a cloak room, water reservoir, and there were 5 watermills, of which 3 were in use until

1966. There are 2000 shareholders. Property area 4492 ha, buffer zone 25805ha.

2. Baladeh, Khorasan-e Jonubi/Ferdows, dates from 1600 CE and runs for 19 km with 153 wells. There are 15 branches each with their own mother well. Dependant structures include a rest house, 6 reservoirs and it had 12 watermills, one of which is still in use. There are 7200 shareholders. Property area 2757 ha, buffer zone 19321 ha.

3. Zarch, Yazd, dates from 1200-1300 CE and runs for 80 km with 3 branches. The deepest mother well is 90m. It has both circular and square well shafts. Dependant structures include a watermill, rest house/cloak room, 8 water reservoirs and 8 watermills, one of which is still in use. Property area 3984 ha, buffer zone 125162 ha.

4. Hasan Abad-e Moshir, Yazd, dates from 1400 CE and irrigates the World Heritage listed garden Pahlavanpur and 5 other gardens. It runs for 40 km with 1330 wells and 5 sub branches. The mother well is 20 m deep. Dependant structures include a rest house/cloak room, 8 water reservoirs and 5 watermills. Property area 2759 ha, buffer zone 121662 ha.

5. Ebrahim Abad, Yazd, dates from 1000-1200 CE and is associated with ceremonies and rituals associated with cleaning the qanat tunnels. It runs for 11 km with 311 wells on the main branch. There are two sub branches. Dependant structures include rest house/cloak room, a public hamam, public reservoir and charity buildings, mosques and houses. The mother well is 53 m deep. Property area 1238 ha, buffer zone 23655 ha.

6. Vazvan, Esfahan, dates from c 1200 CE and runs for 1800 m with 64 wells. It has an access corridor to an underground dyke which can be blocked for the winter. The mother well is 18 m deep and there are 750 shareholders. Dependant structures include a reservoir, watermill and rest house/cloak room. Property area 5 ha, buffer zone 29631 ha.

7. Mozd Abad, Esfahan/Meyme, dates from 600 CE and runs for 18 km with 615 wells. There are 3 branches and mother wells, the deepest of which is 80 m, and 3 underground dykes with access corridors. The well shafts are both rectangular and round, and as the largest and oldest qanat in the region it is associated with Zoroastrianism. There are 750 shareholders. Dependant structures included six watermills, one of which survives, a reservoir and a rest house/cloak room. Property area 3636 ha, buffer zone 29631 ha.

8. Moon, Esfahan/Ardestan, dates possibly from 578 CE and is a two level qanat due to the impermeable type of clay soil. It runs for 3 km with 30 wells. The upper level mother well is 27 m deep; the lower one is 3 m below that. Dependant structures include 2 watermills, 1 reservoir and 1 rest house/cloak room. Property area 5 ha, buffer zone 3047 ha.

9. Gowharriz, Kerman/Jupar, dates from c 600 CE and runs for 3560 m with 6 branches and mother wells and 129 well shafts. The distribution system of 6 canals shows the expansion of the city. The last well is named after the 12<sup>th</sup> Imam where the exit discharges into a reservoir in the courtyard of the mosque and there is a hamam for curative purposes associated with local belief in the spiritual importance of the qanat. Property area 151 ha, buffer zone 2980 ha.

10. Ghasem Abad, Kerman/Bam, is located within the Bam World Heritage property. It is around 100 years old and as a relatively new qanat like Akbar Abad demonstrates the survival and continuation of traditional knowledge of the qanat system. Neither was affected by the 2003 earthquake. It runs for 9840 m with 25 wells. The mother well is 60 m deep. There is a 10 m drop at the Bam fault, where the water collection tunnel in the aquifer (*taran*) becomes the water transport tunnel (*koshkan*). Property area 15 ha, buffer zone (shared with Akbar Abad) 80 ha.

11. Akbar Abad, Kerman/Bam, is located about 20 m from Ghasem Abad, running more-or-less parallel with it and joining at the exit. It is a relatively new qanat aged only 100 years and runs for 4811 m with 33 wells. The mother well is 59 m deep. It drops 10 m at the fault where the *taran* becomes the *koshkan*. Distribution from both qanats is via large reservoirs at the base of the fault to 120 shareholders for both. Property area 15 ha, buffer zone (shared with Ghasem Abad) 80 ha.

### History and development

The origins of the qanat system are not clear, with some arguing that it was developed by copper miners in Urartu in the early first millennium BCE to drain water from the rising water table in their mines and later adapted to supply water for agriculture, while others suggest that it developed as a practical means to extend water supply from a natural spring. The latter process apparently took place with the spring of Fin at the ancient settlement of Siyalk, Kashan in central Iran, dating from c 3000 BCE, and according to the nomination dossier is a process that has occurred very recently in Khorasan-e Jonubi following a drought in the 1990s. Evidence of qanat development in response to a documented dry period 4100 – 2100 years ago has been found in other areas of the Middle East and is borne out by an apparent qanat system description in an inscription of the Assyrian King Sargon II, 714 BCE. The nomination dossier discusses the traces of the qanat through Iranian history from the Elamites and Assyrians (1400-550 BCE), through the Achaemenian Empire (550-330 BCE), Seleucidian Era (312-250 BC), Parthian (250 BC-150 CE), Sassanid (226-650 CE) and in the Islamic period from 621 CE. It seems clear that however it began, the system has spread widely through Iran and the qanats were built, maintained, destroyed, repaired and new ones built with the system being discovered and rediscovered through each succeeding civilisation.

By the time of the Pahlavi dynasty from 1921 however, the nomination dossier records that most Iranian scholars had a low opinion of traditional technology and belittled it with the aim of paving the way for new technologies. A report in 1942 found that 40,000 qanats were operating with a total recharge of 600,000 litres per second or 18.2 billion cu m per year. However, pumped well technology was introduced in the early 1950s and led to the qanat system being phased out. By 1961, the number of qanats had reduced to 30,000, of which 20,000 were in use, discharging an estimated 12 billion cu m per year. Realisation of the impact of pumped wells on the overall groundwater resources led eventually to the water nationalisation law in 1968 and the law of fair water distribution in 1981. From this period, following the Islamic revolution, the rehabilitation of qanats was taken up and funds granted to stakeholders to maintain their qanats. In 2000 an international conference was held on the qanat in Yazd and in 2005 the Iranian government and UNESCO signed an agreement to set up the International Centre for Qanats and Historic Hydraulic Structures. An annual budget of 15 million USD was allocated by the Iranian government from 2005-9 for construction and maintenance of qanats. At the same time overall water management was brought under control by the government. According to the nomination dossier the total discharge of qanats is now almost steady.

The history of each nominated qanat is set out in the nomination dossier and the dates given in the description above derive from that. The rectangular shafts are attributed to the Sassanid period; these are found in the Zarch Qanat, Yazd and Mozd Abad Qanat, Esfahan/Meyme. Links to Zoroastrianism are discussed for the latter and it is noted that the builder of the Akbar Abad Qanat, Bam, 100 years ago was the steward of Zoroastrians at the time. A number of historical documents covered by the nomination dossier testify to the long traditions of qanat building and repair, water sharing and control.

### 3 Justification for inscription, integrity and authenticity

#### Comparative analysis

The nomination dossier records that some 50 thousand qanats are reported to exist in more than 40 countries, including Iran, where there are over 37,000. Of these the eleven nominated qanats were selected as “*somehow expressive of various aspects of technology as well as geographical, cultural, social and economic innovations during different historical episodes*”. The comparative analysis discusses the qanats in the various regions of Iran. They are generally located on the Iranian plateau, where the groundwater is fed by rainfall in the Alborz and Zagros mountains, and where until recently settlement depended on irrigation-dependant agriculture. Yazd, Kerman and Gonabad on the western, southern and eastern boundaries of the central desert are the arid agricultural areas best known for their dependence on

extensive qanat systems. Of the selected qanats, Qasabeh (No.1) in Gonabad has the deepest mother well; Baladeh (No. 2) has a complex traditional management system related to its complex technology; Zarch (No.3) in Yazd is the longest recorded; Hasan Abad-e Moshir (No. 4) in Yazd irrigates the Pahlavanpur Persian Garden (World Heritage List 2011 (i), (ii), (iii), (iv), (vi)) but is not included in that property; Ebrahim Abad (No. 5) has ceremonies and rituals associated with cleaning it; Vazvan (No. 6) in Esfahan has an underground dyke to regulate water when it is not needed; Mozd Abad (No. 7) in Esfahan has 3 underground dykes; Moon (No. 8) in Esfahan has a double gallery; Gowharriz (No. 9) has a 6 canal distribution system; and Ghasem Abad (No. 10) & Akbar Abad (No. 11) in Bam are associated with the Bam fault and are partly included in the Bam World Heritage listed (2004 (ii), (iii), (iv), (v)) property area, and partly in its buffer zone. Thus the eleven nominated qanats, as stated in the additional information provided by the State Party, together represent the technological, historical, social, cultural, geographical, climatic and economic aspects of similar Persian qanats.

Outside Iran, the comparative analysis covers qanats in Afghanistan, Azerbaijan, Iraq, Oman, Pakistan, China, Algeria, Morocco, Spain and Italy. Of these, five qanats in Oman are included on the World Heritage List as ‘*Aflaj* (qanat) Irrigation systems of Oman’ (2006, (v)) and are directly comparable in terms of age, technology and catchment areas. Qanats are included in the World Heritage listed ‘*Palestine: Land of Olives and Vines – cultural Landscape of Southern Jerusalem, Battir*’ (2014 (iv), (v)); the World Heritage listed (2011 (ii), (iv), (v)) ‘*Cultural Landscape of the Serra de Tramuntana*’, Spain and the World Heritage listed (2011 (iii) (iv) (v)) ‘*Cultural Sites of Al Ain* (Hafit, Hili, Bidaa, Bint Saud and Oases Areas)’, UAE. One might therefore consider that qanat systems could be said to be well represented on the World Heritage List. They are also included in the Tentative List of Morocco (Oasis de Figuig) and Algeria (*Les oasis à foggaras et les ksour du Grand Erg Occidental*) where they are called *foggaras*.

However the State Party argues that there are eight issues distinguishing Persian qanats from these others: the large number and quantity of water discharge; their “extraordinary” nature; they are engineering masterpieces using traditional expertise; associated cultural values including costumes, rituals and art; their role in (agricultural) production; the concern and support they receive from Iran’s government; the elaborate traditional water management system, and the contribution of the qanats to sustainable development.

However, in ICOMOS’ view, the comparative analysis could not demonstrate how these factors may indicate a specificity of the Persian qanat in relation to others in the wider region. Additionally, the selected components shape a series that is not fully coherent in terms of spectrum of values (see below the Justification for inscription section).

In the additional information provided by the State Party, it is stated that in not including the area irrigated by each qanat, so therefore not including the distribution part of the qanat system reflecting community management of the system, the nominated property is similar to the World Heritage inscribed Omani property. However ICOMOS noted that this is not correct. In fact as part of the nomination evaluation process the individual property component areas of 'Aflaj (qanat) Irrigation systems of Oman' were extended to include the wider landscape created by the aflaj irrigation system to include the demand areas in settlements and thus reflect social and community involvement. The revised plans are included on the World Heritage Centre's web site.

ICOMOS notes also that the properties of 'Palestine: Land of Olives and Vines – cultural Landscape of Southern Jerusalem, Battir', 'Cultural Landscape of the Serra de Tramuntana', Spain and 'Cultural Sites of Al Ain (Hafit, Hili, Bidaa, Bint Saud and Oases Areas)', UAE do include the areas dependent on the irrigation system.

ICOMOS noted that according to the State Party the significance of the nominated serial property derives from the above mentioned factors, however the additional information did not succeed to clearly show how these or other distinguishing features are peculiar to the Persian Qanat and not to other ones in the wider region. An expanded comparative analysis has only be outlined but not fully developed to support the arguments presented to justify inscription or the selection of the components.

Additionally, the selection of the components does not appear adequately elaborated and justified at this stage. In this regard, ICOMOS notes that paragraph 137 of the *Operational Guidelines*, serial nominations are required to demonstrate that each component contributes to the Outstanding Universal Value of the property as a whole in a substantial and specific manner. The additional information provided in this regard in response to the additional information first and then to the interim report has not clarified sufficiently the positioning of the selected group in the wider region and the motivations for the selection of each component, in relation to the proposed Justification for inscription and the criteria (see the relevant sections). In fact, in some cases, this outline suggests that further substantial work is necessary to select convincingly the components of the series (e.g., the role of qanat-related infrastructure in defining the urban structure and design in Yazd).

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ICOMOS considers that the comparative analysis does not justify consideration of this serial property for the World Heritage List at this stage.

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#### **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 large number and quantity of water discharge of Iran's qanats and their continued operation make them an outstanding means of traditional water management and sustainable development;
- They are engineering masterpieces using traditional expertise;
- They embody long-established, traditional communal water management and distribution practices, embedded in communal culture and accompanied by rituals;
- They enabled development of the vast central arid plateau of Iran for agriculture and settlement.

ICOMOS considers that the justification for inscription does not appear specific to the Persian Qanat but could be applied to other similar properties in the wider region. Additionally, not all components appear to be able to justify the whole spectrum of values as presented in the proposed Justification for inscription.

According to the State Party the justification of the serial approach is that each of the selected qanats exhibits a distinguishing feature as described above in the comparative analysis and together they combine to provide an overall picture of the qualities and features that make up The Persian Qanat. ICOMOS considers that, despite the additional information, the contribution made by each component and justification for the selection of components remains not adequately justified at this stage. The additional information provided in the State Party's response to ICOMOS' Interim Report has not addressed this satisfactorily.

#### **Integrity and authenticity**

##### **Integrity**

In response to ICOMOS' query as to how each site contributes significantly to the overall postulated outstanding universal value of the property, the State Party's main argument appears to be geographical – that the chosen qanats represent the contribution the qanats make to sustainable development in all the various arid regions of Iran. In addition they each have some distinguishing technical, historical or social aspects. Regarding the non-inclusion of the Deh Luran qanat, dated to c 3000 BCE, the State Party responded that the main factor in the selection process was that the qanats be alive and functioning.

The nominated property included neither the water catchment areas nor the irrigated areas dependent on the nominated qanats. The nominated property covered only the qanat tunnels and features immediately related to them.

In its response to ICOMOS' Interim Report, the State Party explained that the water catchment area specific to each qanat is included in the buffer zone and not in the nominated property because the catchment can in fact feed more than one qanat. On the other hand, some farmland which receives water from the qanat has been



included in the nominated area although it is not considered part of the qanat body.

ICOMOS considers that the additional information as of February 2016 does not clarify whether the farmland is comprised in the nominated property or not; additionally only two maps are presented and compared to the Aflaj system in Oman while the maps of the other qanats were not submitted.

Additionally, ICOMOS considers that any modification to the boundaries in this context would require an evaluation mission. Finally ICOMOS notes that the buffer zone does not surround the whole of the nominated components and it is not clarified why there is no need for a complete buffer zone to surround them.

ICOMOS recalls paragraph 89 of the *Operational Guidelines* which states that “*significant proportion of the elements necessary to convey the totality of the value conveyed by the property should be included*” and that “*Relationships and dynamic functions present in cultural landscapes, historic towns or other living properties essential to their distinctive character should also be maintained*”, therefore the definition of the boundaries should reflect this requirement.

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ICOMOS considers that the integrity of the individual sites and the whole series has not been demonstrated at this stage as not all the necessary elements to convey the Outstanding Universal Value of the property are included within the boundaries of the nominated components.

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#### Authenticity

The nominated qanats have been in use and repaired over many years and have consequently changed in form, location and materials. Nevertheless it is presumed that the fundamental route from mother well to exit has not been significantly changed. The setting has changed for several qanats due to the development of towns and urban areas where formerly there was little or none, such as around Zarch qanat and the mother wells of Vazvan, Moon, Ghasem Abad and Akbar Abad. What is authentic is the traditional qanat system itself, and its communal maintenance and management.

However, ICOMOS notes that the entire spectrum of values proposed to justify inscription is not credibly reflected by the nominated series as not all relevant attributes are included within, particularly those demonstrating the distribution practice and the development of agriculture and human settlement that was enabled by the qanat system.

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ICOMOS considers that the authenticity of the whole series has been justified in terms of the qanat system and its maintenance and management as a technological infrastructure; and that the authenticity of the individual sites that comprise the series has been demonstrated to the extent of the qanat system and its

communal maintenance and management, however the entire spectrum of the values included in the proposed justification is not credibly reflected by the elements included in the nomination.

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ICOMOS considers that the conditions of integrity and authenticity of the whole series are not justified at this stage.

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#### 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 the constantly evolving creative design and building of qanats in the very heart of the arid lands in Iran is a unique representation of human genius, where science, architecture and technology are manifested in association and combination with nature which is hidden underground. The construction and upkeep of qanat systems is a continuous process based on human creativity and innovation over time.

ICOMOS considers that the comparative analysis does not support justification of the qanat system as a masterpiece.

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ICOMOS considers that this criterion has not been justified for the whole series.

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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 Qanat is an outstanding example of a traditional water management system associated with irrigation and water supply that has been developed in ancient Persia spreading east as far as China along the Silk Roads, to the west and north Africa, and later to America by Arabs and the Spaniards. The traditional construction and maintenance technologies have continued evolving based on the interchange of values and knowledge for thousands of years.

ICOMOS considers that while the qanat technology is found in many lands it has not been shown how its development in Iran exhibits an important interchange of human values.

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ICOMOS considers that this criterion has not been justified for the whole series.

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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 qanat systems bear an exceptional and fundamental testimony to cultural traditions and civilisations in desert areas and arid climate regions. Being based on a continuous process of maintenance and upkeep, systems of qanats form a historical stratigraphy of past achievements and historical solutions. The vital role of qanat in the formation of various civilisations is so expansive that the basis of civilisation in the desert plateau of Iran has been called "Qanat (or Kariz) Civilisation". Dispersion of primary settlements on alluvial fans of the inner plateau, desert margins and *kavirs* (deserts) of Iran has an intimate relation with the distribution pattern of qanat system.

ICOMOS considers that the qanat systems could be considered exceptional testimony to the tradition of providing water to arid regions for the purpose of forming and supporting civilisation. However, relevant attributes to credibly support this criterion and to demonstrate that the nominated series is evidence of the "Qanat Civilisation" do not appear included within the nominated property. In particular, attributes in the water catchment areas and in the downstream demand area should be included within the nominated area, as the qanat structure is insufficient to demonstrate this criterion.

The additional information provided by the State Party does not clarify if and what changes have been made to the originally proposed boundaries as only two maps, used to make comparison with the Aflaj system in Oman and not to illustrate modifications carried out to the proposed boundaries, have been provided.

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ICOMOS considers that this criterion could be justified for the whole series if the property areas include both the water catchment areas specific to each qanat and the agricultural development areas.

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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 Persian Qanat is an outstanding example of a technological ensemble illustrating significant stages in the history of human occupation of arid and semi-arid regions in the world. It is the cornerstone of prosperity in desert towns and villages. In arid and semi-arid regions, it has resulted in the creation of a desert style architecture and landscape involving not only the qanats themselves, but also associated structures, such as water reservoirs, water mills, irrigation systems, outstanding desert gardens, as well as urban and rural desert architecture.

ICOMOS considers that the qanat infrastructure could be an outstanding example of traditional technology which has been developed and refined over a long period of time, if additional documentation illustrated in what ways the typology of Persian Qanat differs from other types of traditional irrigation and management system. However the comparative analysis and the additional information provided by the State Party in this regard does not yet support this.

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ICOMOS considers that this criterion has not been demonstrated at this stage but could be through a deepened and expanded comparative analysis.

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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 Persian Qanat system is an outstanding example of human interaction with the environment, providing an environmentally and culturally sustainable land use in arid or semi-arid regions of the world. Qanat drains the aquifer by force of gravity, so its discharge always stays in balance with the recharge of the aquifer. Qanat systems have however become vulnerable under the impact of increasing urbanisation and transformation of technologies in rural areas.

ICOMOS considered that the qanats, their water catchment areas and the distribution system could form an outstanding example of human interaction with the environment, however this to be demonstrated would require including within the nominated area for each component of series the water catchment area and the irrigated area or at least parts of them.

In response to ICOMOS' Interim Report, the State Party has stated that, while the water catchment area is included in the buffer zone, the farmland and water demand area would be "*included in the nominated area but not considered part of the qanat body*". This does not address fully ICOMOS's concerns expressed in the interim report. Additionally, any change to the boundaries of the nominated components, would require to be assessed on site.

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ICOMOS considers that this criterion has not been demonstrated at this stage for the whole series but could be if the boundaries of the nominated components would be expanded to include the water catchment area and the water demand areas or at least sufficient parts of them to illustrate the related values.

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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 selected qanats are outstanding examples of living qanat traditions in Iran and are directly associated with local myths and epics which are deeply rooted and have shaped indigenous beliefs. The traditional system of water distribution and management on the Iranian plateau has merged with social relationships and culture of communities and are reflected in many of their beliefs.

ICOMOS observes that this criterion is used when exceptional associative values are powerfully conveyed by mainly intangible attributes of nominated properties and, in this case, ICOMOS does not consider that this criterion has been justified.

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ICOMOS considers that this criterion has not been justified.

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ICOMOS considers that the serial approach has not been justified at this stage.

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In conclusion, ICOMOS considers that none of the criteria have been demonstrated at this stage, although some could be but further work is needed on their justification, on the definition of the boundaries of the components and their buffer zones and on the comparative analysis.

#### **4 Factors affecting the property**

Qanats have been adversely impacted in the past by agricultural development dependent on water supplied by the construction of deep wells which reduce the water level of the aquifer. This is now controlled by laws banning the drilling of new wells. Where qanats pass through urban development they are protected by regulations which are respected by the communities due to their understanding of the importance of the water to their livelihood, and the shareholders' religious beliefs and traditions. The geographical location of qanats, usually distant from human habitats means they are not threatened by development, and traditional protection rules apply to the water catchments. Drifting sands are a constant threat to the blockage of well shafts of qanats and this is mitigated by covering the well mouths by slabs. All the nominated qanats have had their well shafts capped. Flooding of the plains during the winter can cause flooding of the qanat galleries and damage shafts and tunnels, resulting in sediment deposition and blockage of the passages. This is mitigated by the construction of stone and sand dykes to divert flood water and decrease its speed. Other measures include constructing a bypass tunnel, blocking well shafts or constructing cut-off walls around well shafts. The impact of drought and climate change has been countered by changes in cultivation and crop types and changes in water division methods, as well as increasing water distribution cycles so that in fact overall there has been a rising trend in water discharge from the qanat system. The threat of earthquake is always

present in Iran. Traditional methods of lining and reinforcing the galleries and shafts are used to preserve qanats against minor earthquake damage. Tourism in general does not impact on the qanat system but there is some pressure on visitors' facilities during the Iranian New Year. This is considered in the Management Strategy and Action Plan. There are no inhabitants within the nominated property or buffer zones.

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ICOMOS considers that the main threats to the property are natural disasters.

### **5 Protection, conservation and management**

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

The property boundaries shown on maps for each of the eleven nominated qanats include the physical structure of the qanats; well shafts, galleries, soil mounds dumped around the well shafts and all the dependant structures such as hamams and reservoirs. Where the qanat course passes through urban fabric and residential areas the property boundary runs 15 m on either side of the qanat axis but this does not apply within the agricultural demand areas.

The boundaries of the buffer zone are drawn around the watershed supplying the aquifer feeding the qanats, and also take into account environmental, natural and landscape values. Where the qanat course passes through urban fabric and residential areas, the buffer zone covers the area 50 m either side of the qanat axis except in the agricultural demand areas. The boundaries are not marked on the ground at all components.

ICOMOS noted that the lands using the qanat water (agricultural demand zone) and the water distribution system within them were not part of the property or buffer zone. These lands are described in the nomination dossier as exhibiting traces and signs of human interaction with the environment via qanat technology. They are protected by regulations forbidding functional change in the irrigated lands; activities which harm the tangible and intangible cultural heritage relating to the qanat including its water distribution system, and the landscape; dividing and extending lands without permission from ICHHTO; amassing garbage pollutants, livestock droppings and other waste and alterations to existing construction without the permission of ICHHTO.

In its response to ICOMOS' Interim Report the State Party explained that the water catchment area is included in the buffer zone, which does not surround all the nominated components, while the farmland would be included in the nominated area but not in the qanat perimeter. In ICOMOS view this does not respond to ICOMOS concerns and it does not clarify what is included within the boundaries of the nominated components and what not, particularly because not all maps have been included in

the supplementary information. Additionally any modification to the boundaries of the nominated property or to the buffer zone should be assessed by a mission on site.

Finally, ICOMOS notes that the boundaries are not marked on the ground at all components and that the buffer zones do not surround the whole of each property component, for which no explanation is provided.

With regard to the above, ICOMOS recalls paragraphs 99 and 100 of the *Operational Guidelines* which state that “boundaries should be drawn to incorporate all the attributes that convey the Outstanding Universal Value and to ensure the integrity and/or authenticity of the property” and “boundaries should be drawn to include all those areas and attributes which are a direct tangible expression of the Outstanding Universal Value of the property, as well as those areas which in the light of future research possibilities offer potential to contribute to and enhance such understanding” and notes that these requirements have not been met at this stage.

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In conclusion, ICOMOS considers that the boundaries of the nominated components of the serial property and of the buffer zones are not adequate at this stage.

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#### **Ownership**

Qanats are owned separately from the land by the owners of the qanat infrastructure and shareholders of the water supply from it. The eleven nominated qanats are owned either by a private collective or by an endowment (*waqf*), or are in joint ownership of private collective and *waqf*. According to the table in the nomination dossier Ebrahim Abad, Hassan Abad-e Moshir, Mozd Abad, Vazvan, Gowharriz, Ghasem Abad and Akbar Abad are owned 100% by private collectives, while the other 4 are jointly owned. Qasabeh, Baladeh, Zarch and Moon are owned by the *Waqf* to the extent of 38%, 60%, 16% and 20% respectively.

#### **Protection**

The nominated qanats are legally protected under the Law for the Protection of National Heritage (1930) by being included on the National Register as well as by national laws and regulations protecting underground water resources and qanats. The national laws and regulations protecting water resources also protect the water catchment areas nominated as the buffer zones of the nominated properties. Both qanats and their catchment areas have always been and still are protected by the traditional communal management system run by the shareholders of the qanat.

ICOMOS considers these measures to be effective.

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In conclusion, ICOMOS considers that the legal protection in place is adequate. ICOMOS considers that the protective measures for the property are adequate.

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#### **Conservation**

The eleven nominated qanats are all mapped and recorded in detail. Research and documentation records are held by the International Centre for Qanats and Historic Hydraulic Structures under the auspices of UNESCO in Yazd. Some data is held by the branch offices of ICHHTO in the local communities.

ICOMOS considers that the ICHHTO branch office responsible for each nominated qanat should hold the relevant data and this should be accessible to community members.

A detailed record of the conservation work undertaken to each of the eleven nominated qanats is included in the nomination dossier. The various traditional methods of conservation are described also.

ICOMOS considers that the nominated qanats are adequately maintained by the local communities with the support of relevant government authorities.

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ICOMOS considers that conservation measures are effective.

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#### **Management**

Management structures and processes, including traditional management processes

The overall management of the serial property is guided by a Steering Committee comprised of representatives of the Qanat Council and relevant government departments including the Cultural Heritage Handicrafts and Tourism Organisation (ICHHTO) responsible for legal protection, heritage conservation, promotion and presentation; Natural Resources, Agriculture, Energy, Road and Urban Development, Environment Protection Organisation, Rural Housing Foundation and NGOs relating to cultural heritage and the environment. The ICHHTO National Qanat Base has direct responsibility for management of the qanats through ICHHTO's provincial offices. The day-to-day management is carried out by the qanat traditional councils in the regions, the members of which are selected every 3-4 years by election among the shareholders. The traditional management group headed by the qanat council manager (*mirab*) comprises the water clock operator (*kayyal*), the accountant (*hesabdar*), together with other qanat workers generally termed *moqannis*, and other specialist works such as the bucket operator and the windlass operator.

ICOMOS notes that each group has 4-6 technical experts.

Funding for rehabilitation and maintenance is provided through the budget of the Ministry of Agriculture (about 70%) and by the shareholders (about 30%) in co-operation with the qanat councils. Research and planning for the conservation of underground water resources is carried out by the Ministry of Energy in co-operation with the qanat councils.

Elementary and advanced training courses are organised by the International Centre for Qanats and Historic Hydraulic Structures set up under the auspices of UNESCO. Training in qanat technology is provided at the Qanat College of Taft in Yazd, which was set up in 2005 to enable the passing on of the knowledge of older practitioners to the younger generation.

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

Policy and development plans in general consider qanats in terms of natural resources rather than urban development, since they are mostly located outside city limits. National and provincial development plans must consider the protection of qanats according to Article 106 of the law of the third plan for cultural, social and economic development. Qanats are also considered pursuant to Article 17 of the law of the fourth plan for cultural, social and economic development which requires master plans to consider the pivotal role of water in the country's development.

An outline Management Strategy and Action Plan for the nominated serial property are provided in the nomination dossier in accordance with the MoU signed by the relevant authorities. These include interpretation and tourism management and a Tourism Plan for Qasabeh Qanat is included as Appendix VIII. Risk preparedness does not appear to be covered.

ICOMOS notes that there is little interpretation to explain the qanat to visitors in relation to how the maintenance and management of the qanat and distribution of its water is undertaken by local people; the role of the *mihrab* and traditional rituals associated with the qanats. Key features that distinguish particular qanats such as the double gallery of Moon, and the underground dykes of Vazvan and Mozd Abad and other features that differentiate each of the nominated qanats need to be identified and explained in the interpretation and presentation of the qanats. The Qasabeh tourist plan needs to be developed more comprehensively for each nominated property to cover visitor facilities, uniform signage and visitor information.

Involvement of the local communities

Local communities are involved as shareholders and members of the qanat councils. Participation by the local communities in the maintenance and management of the qanats is voluntary and active.

ICOMOS notes that the communities expect more funds to be made available for maintenance of the qanats should they be inscribed on the World Heritage List.

ICOMOS considers that the current management is effective.

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ICOMOS considers that the management system for the overall serial property is adequate; the management strategy and plans should be extended to include a risk preparedness strategy and a comprehensive tourism strategy for all property components. Furthermore, ICOMOS recommends that boundaries of property components and buffer zones be permanently marked on the ground and data related to each qanat should be collected in the regional offices of ICHHTO and made accessible to members of the local communities.

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## 6 Monitoring

The condition of the qanats is monitored by the traditional qanat workers (*moqannis*) in cooperation with the three government departments primarily responsible for the qanats: Agriculture, Energy and ICHHTO. A table is provided in the nomination dossier setting out the key indicators, periodicity and methods/tools. Another table sets out the administrative arrangements.

ICOMOS considers that it would be useful to extend the indicator table to include the responsible authority in each case.

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ICOMOS considers that the monitoring system should be extended to identify the responsible authority for each key indicator.

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## 7 Conclusions

The nomination of a this serial property of 11 components aiming to illustrate the concept of the Persian Qanat as an example of a civilisation based on the careful management of a scarce resource represents a major undertaking and a complex task and the State Party should therefore be congratulated for having initiated this enterprise.

However, as the nomination dossier demonstrates, the cultural phenomenon of water harvesting and distribution in arid or semi-arid regions and related-infrastructure construction and management system establishment is a complex one which relies on many factors and gives rise to a variety of related structures, devices, territorial layouts, settlement organisations and land use practices that need to be taken into account when depicting the full spectrum of values related to the 'qanat culture'.

The State Party has approached this phenomenon in its broad significance and impact, as demonstrated by the fact that all cultural criteria have been considered. Although appreciable and understandable, this approach has three limits, in ICOMOS' view: the first concerns the insufficient specification of the justification for inscription which is based on arguments which do not appear peculiar only to the Persian Qanat; the second concerns the comparative analysis, which, despite the additional information provided by the State Party in two different

phases, does not adequately address and resolve how the Persian qanat, represented by the serial nomination, would stand out in respect to other similar qanat systems in the wider region; thirdly, this comprehensive approach has not been consequently dealt with when delineating the boundaries of the nominated areas and selecting the relevant attributes, thus undermining the integrity and the authenticity of the nominated series.

These limits were illustrated during the meeting with the State Party's representatives in December 2015, following the ICOMOS World Heritage Panel meeting and in the interim report which was sent to the State Party in January this year.

In its response to ICOMOS' Interim Report, the State Party has provided additional information on the specific nature of the Persian qanats in comparison to qanats in the wider region and regarding the supposed uniqueness of Persian qanats as a typology in the context of other traditional above ground and underground irrigation systems, for the selection of sites as well as for the delineation of the boundaries. However ICOMOS considers that the additional information is not yet adequate and sufficiently developed to address all the limits and weaknesses of this nomination, although the theme of the Persian qanat exhibits strong potential to justify consideration for the World Heritage List, although further substantial work is needed.

With regard to management aspects, ICOMOS considers that the management strategy and plans need to be extended to include a risk preparedness and a comprehensive tourism strategies for all property components. The boundaries of property components and buffer zones need to be permanently marked on the ground and data related to each qanat should be collected in the regional offices of ICHHTO and made accessible to members of the local communities. The monitoring system should be extended to identify the responsible authority for each key indicator.

ICOMOS acknowledges that the State Party has responded energetically to the issues raised during the evaluation period. This is particularly demonstrated in the additional information provided in February 2016. However ICOMOS considers that the time available to the State Party and to ICOMOS during the formal evaluation process is not sufficient to reformulate a nomination on this scale and that it is impossible to appropriately consider and evaluate the proposed changes without the opportunity of a mission. ICOMOS therefore concluded that a recommendation to defer the nomination is necessary in order to resolve these matters.

## 8 Recommendations

### Recommendations with respect to inscription

Whilst acknowledging that the State Party has responded vigorously to the issues raised during the evaluation period, ICOMOS considers that it is impossible to appropriately consider and evaluate these changes without the opportunity of a mission, and the time available to the State Party and to ICOMOS during the formal evaluation process is not sufficient to reformulate a nomination on this scale.

ICOMOS recommends that the examination of the nomination of The Persian Qanat, Islamic Republic of Iran, to the World Heritage List be **deferred** in order to allow the State Party, with the advice of ICOMOS and the World Heritage Centre, if requested, to:

- Further augment the comparative analysis in order to justify the specific nature of the Persian qanats in comparison to qanats in the wider region;
- Further strengthen the justification for the uniqueness of Persian qanats as a typology in the context of other traditional above ground and underground irrigation systems;
- Once a selection of serial components has been identified, ensure the full integrity of the property through the inclusion all elements of the qanat systems including catchment and irrigated areas.

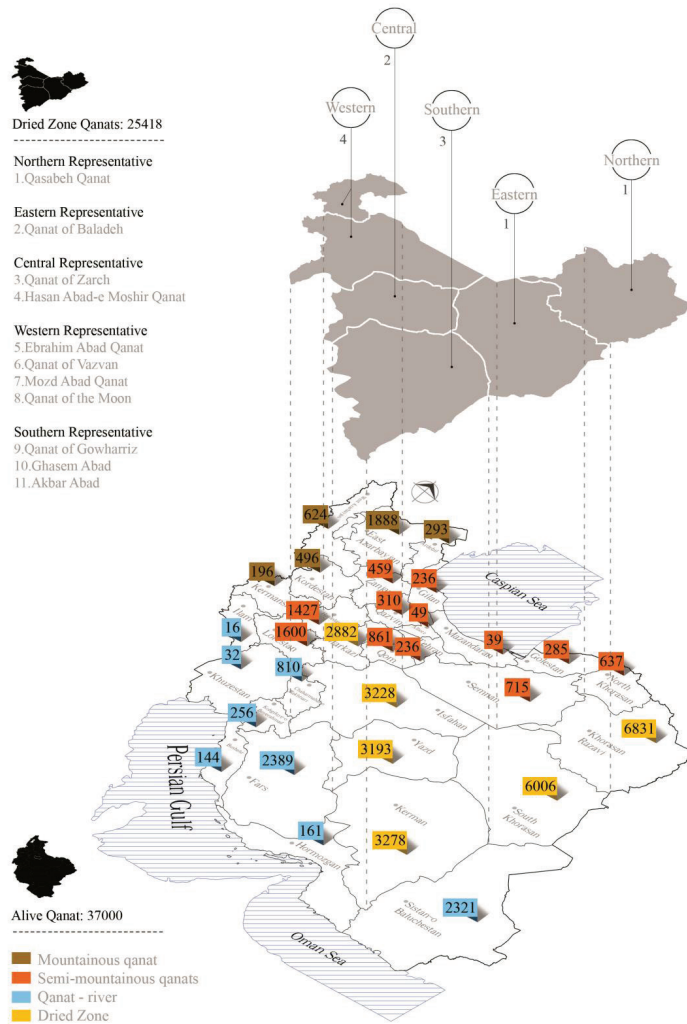
Any revised nomination should be visited by a mission on site.

ICOMOS remains at the disposal of the State Party in the framework of upstream processes to advise on the above recommendations, if requested to do so.

### Additional recommendations

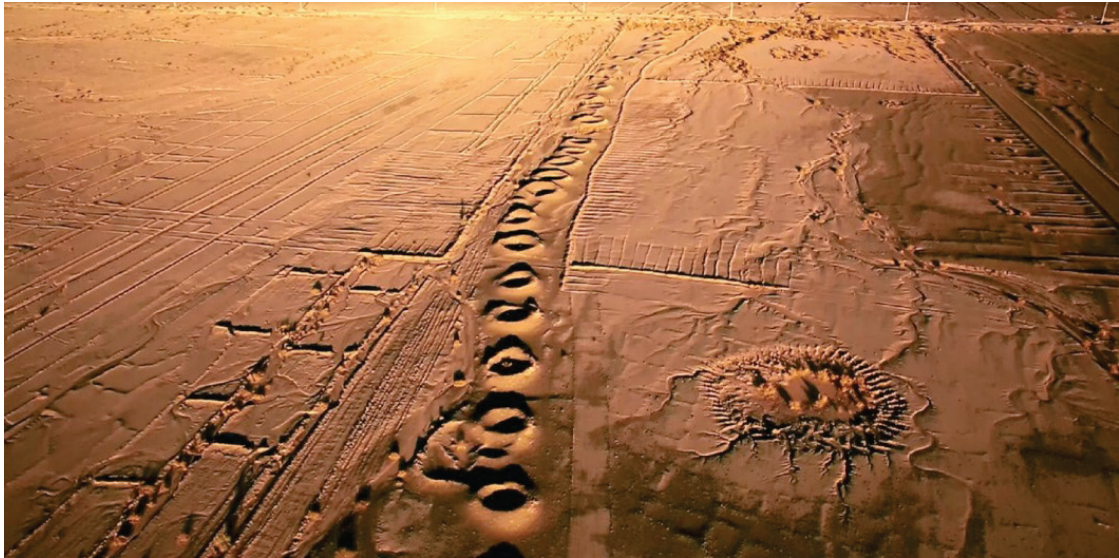
ICOMOS further recommends that the State Party gives consideration to the following:

- Collecting data related to each qanat in the regional offices of ICHHTO and making it accessible to members of the local communities;
- Extending the management strategy and plans to include a risk preparedness strategy and a comprehensive tourism strategy for all property components;
- Extending the monitoring system to identify the responsible authority for each key indicator;
- Permanently marking the boundaries of property components and buffer zones on the ground.



Map showing the location of the nominated properties





Qanat of Bam



Qanat of Baladeh





Qanat of Gowhar-riz, Aerial View, Jupar



Hassan Ābād-e Moshir Qanat water reservoir



Qanat of Vazvān



Mozd Ābād Qanat

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# Nan Madol (Federated States of Micronesia) No 1503

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## Official name as proposed by the State Party

Nan Madol: Ceremonial Center of Eastern Micronesia

## Location

Madolenihmw Municipality, Pohnpei Island

Pohnpei State

Federated States of Micronesia

## Brief description

Created on a series of 99 artificial islets off the shore of Pohnpei Island, the remains of stone palaces, temples, mortuaries and residential domains known as Nan Madol represent the ceremonial centre of the Saudeleur Dynasty. Reflecting an era of vibrant and intact Pacific Island culture the complex saw dramatic changes of settlement and social organisation 1200-1500 CE. Today it preserves the traditional subsistence way of life, social linkages and the political and kingly authority of the paramount chief (Nahnmwarki) and his subject hierarchy.

## 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

3 January 2012

### International Assistance from the World Heritage Fund for preparing the Nomination

None

### Date received by the World Heritage Centre

29 January 2015

## Background

This is a new nomination and is the first nomination of a proposed serial property 'Ceremonial Centers of Eastern Micronesia' that would in future include two components, Nan Madol and Lelu on Kosrae Island.

## Consultations

ICOMOS consulted its International Scientific Committee on Archaeological Heritage Management (ICAHM) and several independent experts.

## Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the property from 17 to 24 August 2015.

## Additional information received by ICOMOS

A copy of the proposed Bill adding to the Pohnpei Code to establish the Nan Madol Historic Preservation Trust together with a copy of the Pohnpei Code were provided to the mission expert, together with the brochure on the Nan Madol Archaeological Site and a research report on the Shoreline Change Phase 1 for Federated States of Micronesia (FSM).

A letter was sent by ICOMOS to the State Party on 23 September 2015 requesting an updated map showing all numbered sites; clarification on protection of the buffer zone; a time schedule for passing the new Bill, and for the completion of the management plan. A response from the State Party was received on 18 November 2015 and the information has been incorporated below. An interim report including a request for additional information was sent by ICOMOS to the State Party on 21 December 2015 following discussions with the State Party by Skype on 2 December 2015 regarding the state of conservation of the property and a possible approach to dealing with this. A second Skype meeting was held with the State Party on 10 March 2016 to clarify this process.

## Date of ICOMOS approval of this report

11 March 2016

## 2 The property

### Description

The Nan Madol settlement complex is built on artificial islets extending across a shallow reef platform within the fringing reef of the adjacent small island of Temwen on the south-east coast of Pohnpei. Navigable tidal canals were created between the islets which were constructed with walls of basalt and coral boulders and filled with coral rubble from the reef and soil from Temwen Island. Erected on top of the islets were monumental stone structures, some with walls 6-7 metres high. Formed by lengths of prismatic/columnar basalt laid in header and stretcher patterns, the walls surround tombs, residential domains, and sites for sacred and ceremonial activities.

The complex is surrounded by a massive sea wall on the north-east, south-east and south-west, and abuts the reef flat of Temwen Island along the north-west. The megalithic construction took place between 1200-1300 CE and 1500-1600 CE during the period of the Saudeleur Dynasty, creating the royal residence and ceremonial centre of the Saudeleur rulers. It is estimated that the small island populations quarried, transported and laid 2000 tons of volcanic rock every year for at least three to four centuries without the benefit of pulleys, levels, metal tools or wheels.

The north-east half of the complex (Madol Powe) includes the island known as Nandowas, containing the monumental remains of three massive royal burial tombs of the Saudeleur rulers and early Nahnmwarki (Paramount Chiefs). Nearby islets contain the remains of construction workers' residences, chiefs' residences, priests' residences, guards' residences and sacred shrines. Other islets were used for functional activities including canoe and sail-making, coconut oil manufacturing, clam aquaculture, local medicine production, moray eel raising, food storage and preparation, sacrificial turtle husbandry, and funeral rituals.

The south-eastern half (Madol Pah) was the location of the larger islets containing the Saudeleur's residence complex and the large Temple of Nankieilmwahu. A separate islet accommodated the chiefs' guest house and other small islets accommodated executions, torture and burials of the tortured.

The total property area is 76.7 ha and it is surrounded by a buffer zone of 664 ha.

The buffer zone includes the adjacent Temwen Island along the north-west side of Nan Madol, where the paramount chief responsible for Nan Madol (Nahnmwarki of Madolenihmw) traditionally takes up official residence, and whose residents utilise the terrestrial and marine resources in and around Nan Madol. Two islets Nangih and Nahkapw in the southern and eastern corners respectively, were used in the transport of stone and are considered part of the ancient territory of the Saudeleurs. It also includes part of the Kasin Nahmw en Nangih Stingray Sanctuary Marine Protected Area on the reef flat at the south-western part of the nominated property.

### **History and development**

Pohnpei was initially settled around 2000 years ago, probably from the south, by people from eastern Melanesia. Oral histories suggest that founding settlements were on off-shore islands or strategically defended shoreline locales, possibly the reef areas off Temwen Island. Archaeological evidence at Nan Madol indicates that there were islets with some columnar basalt construction as early as 500-600 CE, with stone house foundations. Islet construction had increased by 1000 CE, beginning adjacent to Temwen Island and expanding seaward. Islets of ritual significance such as Nandowas and Nannmwoluhsei were constructed c1200 CE according to uranium series dating, and Pahnkedira Islet with the Saudeleur's residence dates from 900-1000 CE. Archaeological evidence and radiocarbon dating indicates that the sacrificial rituals for the Saudeleur rulers were performed from 1200-1300 CE to 1500-1600 CE, indicating that Nan Madol functioned as the administrative and religious centre of the Saudeleurs for a period of 300-400 years. Oral traditions relate that Nan Madol was selected due to the presence of a mythical undersea settlement of various spirits including those of the dead in its vicinity. The Saudeleurs' influence extended across Pohnpei and there is evidence of long distance exchange and interaction across the region in the form of exotic

artefacts and other examples of megalithic structures together with the spread of particular rituals.

It is thought that the cessation of islet and megalithic construction 1500-1600 CE was associated with the overthrow of the Saudeleur dynasty by a chief from neighbouring Madolenihmw. The new paramount chief known as the Nahnmwarki established a new political order but failed to maintain sovereignty over the whole island of Pohnpei and at the arrival of the Euro-Americans during the 19<sup>th</sup> century it was separated into five chiefdoms. Nan Madol fell into decline although some residential construction continued. By the 1820s people no longer lived at Nan Madol but it continues to retain religious and traditional significance.

As part of the Caroline Islands, Pohnpei was colonised by Spain in 1886; ceded to Germany after the Spanish-American War; seized by Japan during World War I and after World War II became part of the Trust Territory of the Pacific Islands under United States administration in 1947. In 1979 the former Trust Territories became the Federated States of Micronesia and as an independent sovereign nation entered into a free association with the United States of America in 1986.

The system of chiefly governance of the five political and administrative areas of Pohnpei continues today, with Nan Madol coming under the Nahnmwarki of Madolenihmw.

Descriptions of the site by missionaries in the 1850s were followed by scholarly reports dating from the 1870s, including the first map of Nan Madol by Kubary (1874); tomb excavations by Christian and a more accurate map by Paul Hambruch in 1910 during the German Administration. Hambruch also surveyed oral traditions related to Nan Madol. Japanese researchers carried out archaeological studies during the 1910s-1930s and a data base was compiled by Intoh in 1999 of all the artefacts from these that were deposited in universities and institutions. Radiocarbon dates were established through systematic excavations in 1963 by the Smithsonian Institution.

Several studies were carried out during the 1970s and following years by the U.S. National Park Service including mapping and excavations, investigation of stone sourcing and transportation, marine resources, mortuary facilities, inter-island interaction and socio-political development. Further studies and collection of oral traditions on Nan Madol were also carried out during this period. The site was included on the U.S. National Register of Historic Places in 1980 and protected under the Pohnpei Historic and Cultural Preservation Act 2002.

## **3 Justification for inscription, integrity and authenticity**

### **Comparative analysis**

The most immediate comparator for Nan Madol is the contemporary megalithic island complex Lelu off Kosrae

Island, which is about one-third the size of Nan Madol. It was the seat of another paramount chiefly dynasty, the Tokosra. It is considered that the similarities of the two sites indicate a common ancestral culture that appears to have split and subsequently followed their own parallel paths of development. The State Party intends to nominate Lelu as a serial component to Nan Madol when ownership, protection and management requirements are resolved.

The comparative analysis has compared the property with other sites in the region of Austronesian speaking peoples across the Pacific on the World Heritage List incorporating stone structures including Rapa Nui National Park (*Ahu* and *Moai* on Easter Island), Chile (1995, criteria (i), (iii) and (v)); Papahānaumokuākea (*Heiau* in Hawaii), USA (2010, criteria (iii), (vi), (viii), (ix) and (x)); and on the Tentative List: Les Iles Marquises (France); Le site sacré de *Tapu-tapu-ātea /Te Pō*, vallée de *Ō-po-ā (Marae* in East Polynesia, France); The Ancient Capitals of the Kingdom of Tonga (Tonga); Yapese Quarry Sites in Palau and Micronesia as well as with the Latte Stones in the Mariana Islands. The discussion points out that there were a variety of megalithic monuments in the Pacific Islands, each of which was closely associated with ceremonies and rituals involving the chiefly hierarchy. All bear witness to a deep cultural affinity due to the historical connections related to the Austronesian dispersal across the Pacific.

However Nan Madol is one of only two (the other being Lelu) networks of artificial islets built in an off-shore locale as a high ranking administrative/ residential/ ceremonial/mortuary centre. It is larger and more expansive than the Ancient Capitals of Tonga in terms of scale and monumentality and the extent of population base that would have been needed for construction. The nomination dossier posits that Nan Madol is an outstanding example of the effort involved in constructing and maintaining such a site. Nan Madol linked island cultures throughout the Pacific as seen by the spread of a distinctive matrilineal network, a shared adaptive pattern, the genetic links of breadfruit hybrids, and the spread of maritime navigation and sailing technology.

The comparative analysis also covered megalithic ceremonial centres on the World Heritage List such as Stonehenge, Avebury and Associated Sites, United Kingdom of Great Britain and Northern Ireland (1986, criteria (i), (ii) and (iii)); Megalithic Temples of Malta, Malta (1980, 1992, criterion (iv)); Pyramids of Djoser as part of Memphis and its Necropolis – the Pyramid Fields from Giza to Dahshur, Egypt (1979, criteria (i), (iii) and (vi)); Historic Centre of Oaxaca and Archaeological Site of Monte Albán, Mexico (1987, criteria (i), (ii), (iii) and (iv)); Sacred City of Caral-Supe, Peru (2009, criteria (ii), (iii) and (iv), Great Zimbabwe National Monument (1986, criteria (i), (iii) and (vi)) and others inscribed on the Tentative Lists, such as Mozu-Furuichi Kofungun, Ancient Tumulus Clusters, Japan.

It concluded that there is an inherent propensity within the human species to build societies with large socio-religious centres for honoured elite. While Nan Madol can be seen as no less an outstanding monument than these, it has taken a different form due to the environmental, technological and cultural differences of the time and the people by whom it was built.

ICOMOS concurs with these views.

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

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### **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:

- Apart from Lelu, it is the only large-scale, monumental ceremonial centre of megalithic construction distributed over a series of off-shore artificial islets in the Pacific;
- The property brings together administrative, ceremonial and mortuary functions to form a high ranking centre of chiefly rule;
- The property represents the association of monumental architecture with the emergence of social complexity in the Pacific as the development of elaborate political hierarchies enabled the creation of monumental structures as emblems of power and authority;
- The property represents Austronesia culture in the Pacific through the inter-island network that spanned the Caroline Islands and extended into other parts of the Pacific

ICOMOS considers that this justification is appropriate because Nan Madol has long been known as a remarkable, monumental site of megalithic construction in the Pacific and the studies and research carried out since its recognition in the 19<sup>th</sup> century have served to amplify its significance to the history of the region.

### **Integrity and authenticity**

#### **Integrity**

According to the State Party, Nan Madol is a unique and well-preserved archaeological ruin and landscape that embodies the florescence of a Pacific Islands culture and that retains deep connections with the living culture through a vibrant oral history and a complex cross-cutting system of clan, kinship, and chiefly lineage. The property includes all elements necessary to express its outstanding value and is of adequate size to ensure the complete representation of the features and processes which convey the property's significance. There are no intrusive elements from development or modification, and there are no reconstructions of the original elements. In a few places there is damage from collapse but these are minimal and current practices are



emerging to mitigate vegetation and other natural elements.

However ICOMOS considers that the state of conservation of the stone structures is of extreme concern, and that their neglect over centuries of abandonment makes the integrity of the property vulnerable.

#### Authenticity

According to the State Party, all the characteristics of authenticity are met and especially qualities of location and setting, intangible culture, spirit and feeling as well as form and design, materials and substance, use and function, and traditions. The site conveys a very sophisticated and powerful Pacific Islands polity and its expression through the ceremonial architecture and landscape of the site.

However ICOMOS considers that the state of conservation of the stone structures with many of them completely overgrown and therefore unable to be seen and understood means that authenticity is vulnerable.

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ICOMOS considers that the conditions of integrity and authenticity are vulnerable.

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#### Criteria under which inscription is proposed

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

While not proposed by the State Party, ICOMOS considers that the property also justifies Criterion (i): *represent a masterpiece of human creative genius*;

ICOMOS considers that this criterion is justified by the monumental megalithic architecture of Nan Madol. This is particularly demonstrated by the wall construction using massive columnar basalt stones, transported from quarries elsewhere on the island, and laid using a distinctive 'header-stretcher technique'.

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 Nan Madol bears exceptional testimony to the development of chiefly societies in the Pacific Islands. The huge scale, technical sophistication and concentration of elaborate megalithic structures of Nan Madol bear testimony to complex social and religious practices of the island societies that persisted for over 500 years.

ICOMOS considers that as the administrative and ceremonial centre for the Saudeleur during a time that saw dramatic changes of settlement and social organization 1200-1500, Nan Madol represents an era of vibrant and powerful Pacific Island culture.

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ICOMOS considers that this criterion has been justified.

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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 Nan Madol is an outstanding small island example of monumental architecture associated with the appearance of stratified societies and centralisation of power that is evidenced in many parts of the world. The megalithic stone complex of Nan Madol includes the remains of chiefly dwellings, ritual/ceremonial sites, mortuary structures and domestic sites that bear unique testimony to the original development of chiefly societies evidenced across the Pacific Islands from around 1000 years ago and associated with increasing island populations and intensifications of agriculture.

ICOMOS considers that the monumental ceremonial centre dramatically located on the edge of the Pacific shore is an outstanding example of Pacific Island megalithic architecture illustrating the political and chiefly authority developed during the period of the Saudeleur dynasty 1200-1500 CE.

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ICOMOS considers that this criterion has been justified.

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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 Nan Madol is an expression of the original development of traditional chiefly institutions and systems of governance in the Pacific Islands that continue into the present in the form of the Nahnmwarki system under which Nan Madol is traditionally owned and managed.

ICOMOS considers that Nan Madol through its archaeological remains is tangibly associated with Pohnpei's continuing social and ceremonial traditions and the authority of the Nahnmwarki.

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ICOMOS considers that the nominated property meets criteria (i), (iii), (iv) and (vi) however conditions of authenticity and integrity are vulnerable.

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#### Description of the attributes

The attributes are the islets with massive basalt and coral stone walls and structures that demonstrate the power and authority of the Saudeleur; the tombs and archaeological remains of temples, residences and shrines that demonstrate the use and functions of the complex; the linking canals and waterways between the islets; the associated oral traditions and rituals that convey the chiefly culture of Nan Madol and the artefacts unearthed from excavations and surface collection over the past 150 years.

## 4 Factors affecting the property

The nomination dossier includes an extensive survey of Nan Madol carried out in 2010 to assess the state of conservation of the site. The property is not threatened by development; it is uninhabited and accessed only for seasonal fruit collection and by tourists, who are not numerous but have had some impact on the site through trampling and moving archaeological remains. A tourist trail has been constructed on slightly elevated causeways running from the land entrance on Temwen Island to Nandowas, passing through six islets and this is thought to have possibly contributed to the silting up of waterways by trapping silt and thereby encouraging mangrove growth. Sand mining beneath the islet of Pahnwi in the past, combined with wave action, has caused the collapse of that islet's largest wall.

The survey showed that the artificial islets along the reef on the open ocean side are vulnerable to waves and wind as well as dense mangrove vegetation, with some stonework loosened or collapsed. The internal islets are mostly covered by dense vegetation including large trees. Where these have withered and fallen perimeter walls have been damaged or collapsed. The islets close to Temwen Island are subject to soil and sand runoff from Temwen due to tidal action and rainwater, choking waterways and forming mud lakes and swamps. The silting up of the waterways and canals is also attributed to climate changes since the construction of the islets and has changed the water level and flow, rendering the canals no longer navigable by canoe except at very high tide.

Typhoons have damaged Nan Madol in the past. They generally pass further south and west of Pohnpei at approximately three yearly intervals. Little can be done to prepare for typhoon damage except vegetation clearance to prevent damage to the stonework from falling trees.

ICOMOS notes that vegetation clearance is carried out daily by maintenance staff around Nandowas, but needs to be extended to other areas of the site.

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ICOMOS considers that the main threats to the property are growth of vegetation, silting up of waterways and storm surge leading to stonework collapse.

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## 5 Protection, conservation and management

### Boundaries of the nominated property and buffer zone

The property boundaries follow the area first described by Hambruch in his 1936 documentation. They follow the outside of the sea walls and extend to the north to include Peinot Island, then extend west across to Sapwenluhk Islet on the edge of Temwen Island's shore reef, following the reef south-west to the beginning of the sea wall. These boundaries were later used to designate

the public lands during the Trust Territory period. They enclose the royal residential ceremonial and burial centre that existed at the height of its use in the Saudeleur period.

The buffer zone boundary is a polygon cornered by island markers and is of adequate size. It includes Temwen Island, on which traditional subsistence farming is still practised, and a large marine area including part of the Stingray Sanctuary and two islands that were part of the early Saudeleur domain.

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

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### Ownership

Nan Madol was granted to the government as public land following the development of the Trust Territory government in 1986 and also remains under the traditional customary ownership of the Nahnmwarki Madolenihmw. Free prior and informed consent to the nomination was signed by the traditional owners in 2011. A Memorandum of Understanding was signed by municipal, state and national governments and the traditional owners of Nan Madol.

### Protection

Nan Madol is legally protected by the federal government having been declared a National Historic Landmark in 1986, administered by the Office of National Archives, Culture and Historic Preservation (NACH) through the Historic Preservation Office of the FSM. It is protected by the state government of Pohnpei under the Pohnpei Historic and Cultural Preservation Act (2002), administered by the Pohnpei Historic Preservation Office. The FSM Constitution acknowledges the customary interests of the traditional chiefs and the property is customarily protected by the Nahnmwarki Madolenihmw. Prior to independence Nan Madol was included on the United States (US) National Register of Historic Places.

The local government of Madolenihmw is responsible for the day-to-day protection of Nan Madol, including keeping stonework clear of damaging vegetation. The provision of allowing planting of coconut palms in order to provide revenue for maintenance is no longer relevant as there is no longer a market for copra. Hence some maintenance is currently funded by the Pohnpei Office of Tourism. Private use of the property was revoked under the 2002 Act, but the actual deterrent is the authority of the Nahnmwarki.

ICOMOS notes that a Bill for new legislation (LB 392) is proposed to create a Nan Madol Historic Preservation Trust with ownership and management under traditional oversight by the Nahnmwarki Chief with a Board of traditional authority. This is expected to permanently consolidate the resolution of issues regarding ownership and management that was established by the Memorandum of Understanding (MoU). According to the additional information from the State Party the draft legislation will be presented to Parliament in October

2016. Meanwhile the property will continue to be protected by the current system.

ICOMOS notes that there is no legal protection of the buffer zone. However it is protected by the authority of the Nahmwarki and through regular compliance survey of development activities on Pohnpei, including in the buffer zone by the Pohnpei State Historic Preservation Office. No development is permitted without this oversight. The State Party considers that the traditional protection is more effective than legal protection and legal protection is not included in the new legislation.

ICOMOS considers that protection measures are adequate.

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ICOMOS considers that the legal protection and protective measures for the property are adequate but will be enhanced by passage of the proposed Bill.

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### **Conservation**

A detailed inventory of the artificial islets which comprise the nominated property was provided as Appendix B to the nomination dossier. This differs from the Hambruch plan used in the information brochure in not including legendary places. Considerable research into the property has been carried out as noted above. The state of conservation was surveyed extensively in 2010, setting out issues to be addressed. A daily maintenance regime is implemented by staff funded by the Pohnpei Office of Tourism to keep the stonework free of vegetation in the area of the site visited by tourists. However the remainder of the site requires similar treatment. A key issue is the need to remove silt from the canals and waterways.

ICOMOS notes that the mangroves provide shade and also contribute to biodiversity and protection from storm surge and typhoon.

ICOMOS considers that the limits of the mangrove growth should be maintained, with the silt being removed by hand. This would be a very labor-intensive project but could be achieved by local labor much as the Office of Tourism supports the two personnel presently maintaining the property.

However ICOMOS is extremely concerned about the state of conservation of the property, given that over 80% of the monuments have conservation problems relating to these issues and all are suffering from lack of conservation. One major wall has fallen within the last twenty years and in another case a washed out corner was more pronounced than it was three years ago. While methods presently applied are contributing to limiting the spread of vegetation and clearing of some of the canals of sediment, the lack of overall maintenance could be reaching a stage where the stonework is too degraded and unstable to allow interventions. In the absence of a conservation policy there is no apparent way forward to address the deterioration of the property.

ICOMOS considers that the inventory provided as Appendix B to the nomination dossier is a good baseline document; however there is uncertainty about the primary and contributing causes of disturbance and collapse. These need to be established before strategies can be devised to stabilize areas. As part of a detailed assessment of the stability of the walls further more detailed consideration will be required of processes contributing to instability. As well as considering historical documentation that might indicate prior vegetation disturbance and clearing, prior storms, damage records and tidal data, this should include a geological and geomorphological analysis of site terrain.

A definitive plan for monitoring condition and processes then needs to be developed, and a treatment plan involving stabilisation to retard future collapse.

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ICOMOS considers that the maintenance regime in the tourist (Nandowas) area of the site should be extended to the whole property. A similar maintenance program to remove the silt from the waterways needs to be put in place. As a matter of urgency a detailed assessment should be made of the stability of the walls and contributing processes of disturbance and collapse as a basis for setting out a conservation strategy that can then be phased and costed, and efforts made to find partners and donors to support this conservation project.

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### **Management**

Management structures and processes, including traditional management processes

Following a Nan Madol capacity building workshop in 2012, a draft management system was developed for Nan Madol. It is intended that management of the site will be co-ordinated by a Nan Madol World Heritage Management Committee under the Nan Madol World Heritage Board. Members of the Nan Madol World Heritage Board include the Nahmwarki, the Municipal Chief Magistrate, State Governor, land owners adjacent to the site, three section chiefs from Temwen Island, national government representatives and technical advisors as required. A diagram of the proposed management structure is provided on p. 112 of the nomination dossier. The Board and Management Committee also link to the Temwen Island World Heritage and Tourism Committee. The first meeting of the Management Committee was held in April, 2014.

The FSM Office of National Archives, Culture and Historic Preservation (NACH) was funded by the FSM government as well as grant monies and support from the US National Park Service including funding of an anthropologist and an archaeologist. Direct financial support to Nan Madol is provided by the Pohnpei Office of Tourism. Other institutions involved in the preservation of Nan Madol as a tourism resource include the FSM Department of Resources and Development and the Pohnpei Department of Land and Natural Resources. These financial resources are supplemented by occasional



funds from the Japan Council and ADB (Asian Development Bank).

ICOMOS notes that the Pohnpei Historic Preservation Office follows the Secretary of the Interior's Standards and Guidelines for Archaeological Preservation of the US National Park Service (NPS). There is a routine monitoring program in place as well as requirements for inventory survey of any new development undertakings in Pohnpei including Nan Madol and Madolenihmw. There is no risk management program as such. Both the national and state Historic Preservation Offices (HPOs) have a limited staff and development of human resources in cultural heritage management is required. While there is currently no designated site manager trained in cultural heritage management, the State Party advised in its further information that a property manager will be appointed from existing experienced staff, and that the property manager and others involved in the management and conservation of Nan Madol will be provided with further training in cultural resource management through regional training opportunities in Japan and at the University of the South Pacific.

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

An outline and process for the development of a comprehensive management plan for Nan Madol was discussed at the first management committee meeting.

Issues to be resolved include information sharing with all stakeholders and collection of access fees to the site. At present, visitors number as few as three per day and not more than 3000-4000 annually. They enter the site from Temwen through a facility operated by the traditional caretaker of the site and then follow the visitor trail to Nandowas where the royal tombs are considered the main attraction. There are currently neither information panels nor guides at the site and there is no museum on Pohnpei to house artefacts from Nan Madol. Visitors obtain information from the tourism office in Kolonia (the capital of Pohnpei) or from tour services. A local visitor/interpretation centre is proposed near Nan Madol but not within the property, and a national museum is proposed for Pohnpei. Details of these proposals are not yet available. ICOMOS notes that the new UNESCO recommendation on the protection and promotion of museums and collections (17 November 2015) is relevant in this context. The proposed museum should be used to disseminate the Outstanding Universal Value of the property.

There is another entrance route by sea along the sea wall at the south-eastern side of the site, at the shoreline of the reef lagoon, but it is accessible only at very high tide.

ICOMOS notes that visitor numbers will increase dramatically when the expected direct flights to Japan are initiated and considers that a comprehensive tourism

strategy should be developed. This should cover infrastructure, guided tours and access to the site with a coordinated system for collecting and distributing visitor fees, which could be increased to provide some modest income for preservation purposes.

ICOMOS considers that a Management Plan for Nan Madol should be prepared that includes risk preparedness and tourism strategies and an internationally supported conservation strategy. Further to the additional information provided, the State Party has advised that funds are being sought to enable completion of the Management Plan with international technical assistance by mid- 2017.

Involvement of the local communities

The traditional owners and local community have been involved in workshops held prior to the preparation of the World Heritage nomination. ICOMOS is pleased to note that the traditional owners offered free, prior and informed consent to the nomination through signing the MoU in 2011. Further consultation has led to the draft Bill for the setting up of a Nan Madol Historic Preservation Trust with ownership and management under traditional oversight by the Nahnmwarki Chief with a board of traditional authority.

The Bill (LB 392) represents collaboration of traditional and civil leadership in resolving conflicts between traditional and civil governance and will provide a reasonable framework for oversight and management. In the meantime ICOMOS considers that the current management as coordinated by NACH, the Pohnpei HPO and the Department of Tourism needs to be extended to encompass an internationally supported conservation strategy. In its response to ICOMOS interim report on this the State Party has advised that an Advisory Board headed by the Nahnmwarki will be established to oversee expenditure of funds managed for a Nan Madol Safeguarding Programme by the Micronesia Conservation Trust. This matter will be presented and discussed at the next FSM World Heritage Committee meeting in March/April 2016.

ICOMOS considers that the Nan Madol Safeguarding Programme will need to secure international funding to cover the activities set out under Conservation above.

ICOMOS considers that special attention is needed for maintenance and conservation of the archaeological remains, tourism management, risk preparedness, and cultural resource management training. ICOMOS considers that the management system for the property should be extended to include a designated site manager trained in cultural resource management; that the current maintenance program should be extended to the full area of the property and to include removal of silt from the waterways, and a risk preparedness strategy needs to be developed. Furthermore, ICOMOS recommends a tourism strategy be developed to improve visitor management and infrastructure. The

management plan should be developed to encompass an internationally supported conservation strategy and implemented.

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## 6 Monitoring

The proposed monitoring regime specifying indicators, periodicity and location of records is set out in the nomination dossier. All records will be kept at the FSM Office of the National Archives, Culture and Historic Preservation (NACH).

ICOMOS recommends that site monitoring be linked with the regular marine monitoring conducted for the marine sanctuary by the coastal agency. In addition, the recently funded Pohnpei-wide climate change vulnerability assessment should focus on Nan Madol, with regular exchange of data and monitoring between agencies and Non-Governmental Organisations (NGOs), and this should be incorporated into the Nan Madol Management Plan.

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ICOMOS considers that the monitoring system should be extended to include co-ordination with other agencies and programs in the area.

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## 7 Conclusions

The comparative analysis justifies consideration of this property for the World Heritage List; the nominated property meets criteria (i), (iii), (iv) and (vi) but conditions of authenticity and integrity are vulnerable. The property is threatened by vegetation growth (which is countered to some extent by a maintenance program), silting up of waterways and is vulnerable to storm surge. The state of conservation of the stone structures and the likelihood of their increasing collapse is a matter of extreme concern. The boundaries of the nominated property and of its buffer zone are adequate and the property and buffer zone are customarily protected by the Chief of Madolenihmw (the Nahnmwarki). The property has been legally protected since 1980. A management committee has been set up involving all stakeholders including traditional owners and this collaboration will be consolidated by passage of the proposed Bill to create a Nan Madol Historic Preservation Trust with ownership and management under traditional oversight by the Nahnmwarki Chief. Financial and technical resources are limited; there is no trained property manager as yet and while current maintenance is apparently adequate for the area frequented by visitors, it needs to be extended to the whole property. A similar program to remove the silt from the waterways needs to be put in place. As a matter of urgency a detailed assessment should be made of the stability of the walls and contributing processes of disturbance and collapse as a basis for setting out a conservation strategy that can then be phased and costed, and efforts made to find partners and donors to support conservation. Visitor management needs

improvement with a comprehensive tourism strategy for infrastructure, information, tour guides and ticketing. A risk preparedness strategy needs to be developed, and monitoring to be co-ordinated with other relevant agencies and NGOs. The management plan needs to be developed to cover all these issues, and implemented.

In view of the vulnerabilities of and threats to the cultural attributes, and the lack of a conservation policy ICOMOS considers that the property should be inscribed under criteria (i), (iii), (iv) and (vi) and at the same time be inscribed on the List of World Heritage in Danger. This should be seen as a way forward to mobilise international resources to address the conservation problems, within the context of the traditional management of the property.

In its response to ICOMOS' interim report requesting support for recommending inscription on the World Heritage List in Danger at the same time as inscription on the World Heritage List in order to raise the profile of the conservation issues and help to enlist donor support to undertake necessary surveys and studies as a prelude to funds being raised for work to stabilise the monuments in the medium and short term, the State Party noted that while acknowledging the urgency in undertaking conservation works donor support is not guaranteed to follow In Danger Listing. The State Party advised that it would support a recommendation for inscription on the World Heritage List in Danger provided that a desired state of conservation for the removal of the property from the list is clearly articulated at the time of inscription and demonstrably achievable through a programme of corrective measures (as set out in the *Operational Guidelines* Paragraph 183).

ICOMOS notes that since establishing the desired state of conservation and programme of corrective measures will require a reactive monitoring mission to the property, the timeline makes it impractical for this to happen before inscription. This was explained to and discussed with the State Party in the second Skype meeting on 10 March 2016.

## 8 Recommendations

### Recommendations with respect to inscription

ICOMOS recommends that Nan Madol: Ceremonial Center of Eastern Micronesia, Federated States of Micronesia, be inscribed on the World Heritage List on the basis of **criteria (i), (iii), (iv) and (vi)** and at the same time be inscribed on the List of World Heritage in Danger.

ICOMOS also recommends that the State Party invite a mission to the property as soon as possible to agree a Desired State of Conservation for the removal of the property from the List of World Heritage in Danger, based on the cultural attributes of Outstanding Universal Value and to be reached through a detailed assessment of the stability of the walls as a base for setting out a

conservation strategy and corrective measures that can then be phased and costed. Efforts would then be made with the assistance of ICOMOS and UNESCO to find partners and donors to support this conservation project.

### **Recommended Statement of Outstanding Universal Value**

#### Brief synthesis

The megalithic basalt stone structures of the more than 90 islets that form Nan Madol off the shore of Pohnpei Island comprise the remains of stone palaces, temples, mortuaries and residential domains. They represent the ceremonial centre of the Saudeleur dynasty, an era of vibrant Pacific island culture which underwent dramatic changes of settlement and social organisation 1200-1500 CE. Through its archaeological remains, Nan Madol is tangibly associated with Pohnpei's continuing social and ceremonial traditions and the authority of the Nahnmwarki.

**Criterion (i):** The outstanding monumental megalithic architecture of Nan Madol is demonstrated by the wall construction using massive columnar basalt stones, transported from quarries elsewhere on the island, and laid using a distinctive 'header-stretcher technique'.

**Criterion (iii):** Nan Madol bears exceptional testimony to the development of chiefly societies in the Pacific Islands. The huge scale, technical sophistication and concentration of elaborate megalithic structures of Nan Madol bear testimony to complex social and religious practices of the island societies.

**Criterion (iv):** The remains of chiefly dwellings, ritual/ceremonial sites, mortuary structures and domestic sites combine as an outstanding example of a monumental ceremonial centre illustrating the period of development of chiefly societies from around 1000 years ago, associated with increasing island populations and intensifications of agriculture.

**Criterion (vi):** Nan Madol is an expression of the original development of traditional chiefly institutions and systems of governance in the Pacific Islands that continue into the present in the form of the Nahnmwarki system under which Nan Madol is traditionally owned and managed.

#### Integrity

Nan Madol includes all elements necessary to express its outstanding universal value and is of adequate size to ensure the complete representation of features and processes which convey the property's significance. There are no intrusive elements from development or modification, and no reconstructions of the original elements. Due to cessation of use for residential purposes by the 1820s, while retaining religious and traditional significance, the property suffers from overgrowth of vegetation, the effects of storm surge and some stonework collapse. The state of conservation of

stone structures is now of extreme concern, rendering the integrity of the property vulnerable.

#### Authenticity

The property is authentic in terms of location and setting, intangible culture, spirit and feeling, materials, form and design. The overgrowth of the stone structures and their state of conservation means that many of them are unable to be seen, rendering authenticity vulnerable.

#### Management and protection requirements

Nan Madol is legally protected by the federal government and administered by the Office of National Archives, Culture and Historic Preservation (NACH) through the Historic Preservation Office of the Federated States of Micronesia (FSM). It is protected by the state government of Pohnpei under the Pohnpei Historic and Cultural Preservation Act (2002), administered by the Pohnpei Historic Preservation Office. The FSM Constitution acknowledges the customary interests of the traditional chiefs and the property is customarily protected by the Nahnmwarki Madolenihmw.

A management committee has been set up involving all stakeholders including traditional owners and this collaboration will be consolidated by passage of the proposed Bill LB 392 (expected to pass in October 2016) to create a Nan Madol Historic Preservation Trust with ownership and management under traditional oversight by the Nahnmwarki Chief. The Management Plan is expected to be completed with international financial and technical assistance by mid-2017. This will include appointment of a designated property manager trained in cultural resource management and strategies for risk preparedness, conservation and tourism as well as an ongoing maintenance and monitoring program.

#### Additional recommendations

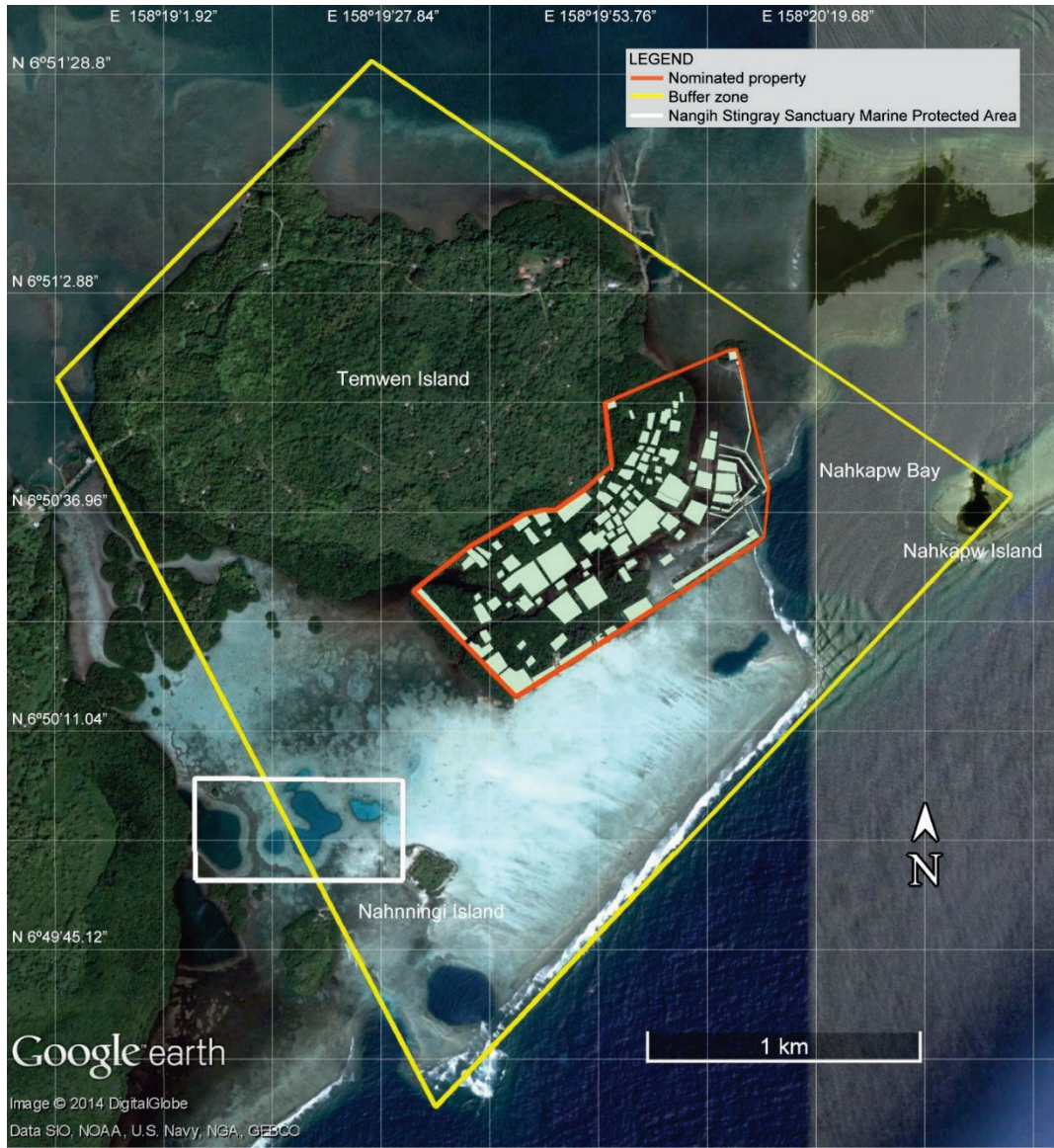
ICOMOS additionally recommends that the State Party give urgent consideration to the following:

- Passing and implementing the new legislation LB 392 (expected by October 2016) which will create a Nan Madol Historic Preservation Trust with ownership and management under traditional oversight by the Nahnmwarki Chief with a Board of traditional authority and will permanently consolidate the resolution of issues regarding ownership and management that was established by the MoU;
- Extending the management system to include a designated property manager trained in cultural resource management;
- Developing the management plan to:
  - Include a risk preparedness strategy;
  - Extend the current maintenance program to the full area of the property including removal of silt from the waterways;

- Include the conservation strategy project and corrective measures required to achieve the desired state of conservation;
- Include a comprehensive tourism strategy to deal with the future impact of tourism on the property.
- Submitting to the World Heritage Centre by 1 December 2016, a report on the implementation of the above-mentioned recommendations for examination by the World Heritage Committee at its 41<sup>st</sup> session in 2017;
- Considering the new UNESCO recommendation on the protection and promotion of museums and collections (17 November 2015) and use the proposed museum to disseminate the Outstanding Universal Value of the property.

ICOMOS encourages international cooperation to support the conservation project.

ICOMOS also encourages the submission of Lelu as a serial component when ownership, protection, conservation, funding and management requirements are resolved.



Map showing the boundaries of the nominated property





Nandowas Islet



Columnar basalt built by in a header-stretcher technique, Nandowas Islet



Dense crop trees planted, Nandowas Islet



Withered trees on a structure made stacked basalt columns, Pahnkedira





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## Phu Phrabat (Kingdom of Thailand) No 1507

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### Official name as proposed by the State Party

Phu Phrabat Historical Park

### Location

Changwat Udon Thani  
The Kingdom of Thailand

### Brief description

Phu Phrabat serial property is located in the western zone of the Phu Phan mountains, a range of hills dividing the Khorat Plateau into two basins. The distinguishing feature of the nominated series is represented by unusual rock formations created by wind erosion of sandstone stratifications. They form the backdrop for prehistoric rock art, dating back to the 1<sup>st</sup> century BCE, and religious Buddhist shrines, the earliest dating back to the Dvaravati period (7<sup>th</sup>-12<sup>th</sup> centuries CE). The most significant shrines are Wat Phra Phutthabat Bua Bok and Wat Phra Phutthabat Bua Ban, both housing a Buddha's footprint and for this reason sites of pilgrimage.

### 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 property of 2 sites.

In terms of the *Operational Guidelines for the Implementation of the World Heritage Convention* (8 July 2015), paragraph 47, it is also nominated as a *cultural landscape*.

## 1 Basic data

### Included in the Tentative List

1 April 2004

### International Assistance from the World Heritage Fund for preparing the Nomination

None

### Date received by the World Heritage Centre

30 January 2015

### Background

This is a new nomination.

### Consultations

ICOMOS has consulted its International Scientific Committees on Rock Art and Cultural Landscapes and several independent experts.

Comments about the evaluation of this property were received from IUCN in December 2015. ICOMOS carefully examined this information to arrive at its final decision and its March 2016 recommendation; IUCN also revised the presentation of its comments in accordance with the version included in this ICOMOS report.

### Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the property from 17 to 24 September 2015.

### Additional information received by ICOMOS

ICOMOS sent a letter to the State Party on 23 September 2015 seeking additional information on: the rationale for the serial approach, the comparative analysis, the intangible heritage of the property, measures for its protection and management, development prospects and projects, and additional descriptive elements.

The State Party responded on 02 November 2015 and the additional information provided has been integrated into the relevant sections of this report.

An interim report was sent by ICOMOS to the State Party on 18 January 2016.

### Date of ICOMOS approval of this report

11 March 2016

## 2 The property

### Description of the Serial Nomination

The nominated serial property comprises two distinct components: one coincides with Phu Phrabat Historical Park, while the other, named Wat Phra Phutthabat Bua Ban, includes three sites associated with Buddhist religious practices.

The setting features forested hills and valleys with areas of uncovered bedrock where peculiar geomorphological features were formed by long erosion processes.

The vegetation cover is varied and includes dry dipterocarp forests (2.47 % of the nominated area), mixed deciduous forest (56.43 % of the total area), dry evergreen forest (scattered patches in humid areas), and pioneer community on the bedrock platform.

### Part 1 – Phu Phrabat Historical Park

Phu Phrabat, which literally means “Mountain of the Sacred Footprints”, is part of the Phu Phan Range, a sandstone hill system located in north eastern Thailand with an average altitude between 320 – 350 m AMSL. As its name and the cultural resources found there demonstrate, the cultural significance of Phu Phrabat is connected to the fact that its natural features have inspired local communities to hold it as sacred.

While the name is associated with Buddha's Footprint worship, evidence of earlier human activities and use are scattered within the nominated property, the most relevant of which are rock paintings dating back to more than 2,000 years ago.

Tectonic and geological processes have given rise to rock stratifications, namely red sandstone from the Mesozoic Era that accumulated above non-marine beds of late Triassic and Cretaceous-Tertiary period siltstone, sandstone, mudstone and conglomerate which formed loose strata on top of the Upper Paleozoic eroded rock platform.

Erosion and weathering of the more recent strata gave rise to peculiar rock shelters and 'natural sculptures' due to the different durability of the rock types: the bedrock base includes a sandstone layer and small-scale conglomerate cross beddings; the intermediate stratum is formed by soft sandstone, siltstone and mudstone, less durable than the rock base and the upper stratum. In relation to the hardness of the rock of each stratum, weathering processes have caused their differential erosion.

Rock shelters and features were chosen by human groups as sites for artistic expressions as early as the 1<sup>st</sup> century BCE; subsequently, in the Dvaravati period (7<sup>th</sup> - 12<sup>th</sup> centuries CE) they became places of worship associated with the Buddha.

Rock paintings and later carved Buddha figures are found in the intermediate softest rock strata, which remain protected by the upper, more resistant rock layer.

Cultural heritage in the nominated component encompasses different types and groups of sites, monuments and features, related to different periods including prehistoric epochs (since the 1<sup>st</sup> century BCE), the Dvaravati period (7<sup>th</sup> – 12<sup>th</sup> centuries CE), Late Lopburi and Post-Lopburi periods (13<sup>th</sup> – 15<sup>th</sup> centuries CE), and the Lan Chang period (16<sup>th</sup> - 18<sup>th</sup> centuries CE). Some of these sites have continued to act as places of worship until the present day.

The nomination dossier identifies nine groups of features within component 1; Non Hin Kiang and Tham Sung, including sandstone rock shelters with rock paintings; Upmong Stupa and Tham Phra Siang, which consists of a Lan Chang deserted stupa and a rock shelter with paintings and several Buddhist worship objects underneath; Tham Din Phiang, comprising rock shelters with paintings; Wat Pho Ta – Wat Luk Khoei, the largest group of natural/manmade features (27 sites) with the longest evidence of continuous use since the 1<sup>st</sup> century BCE; Huai Hin Lat, comprising two rock shelters with paintings; Wat Phra Phutthabat Bua Bok includes rock painting sites, Buddha's Footprints and Buddhist religious buildings believed to date back to eras prior to the Lan Chang period; Non Sao-E includes rock shelters with paintings; Phoeng Hin Dan Yai comprises several rock shelters some of which are painted; Phrabat

Lang Tao comprises rock painting sites; and Phra Phutthabat Lang Tao, which is a natural mark that is believed to have been worshipped in the past as a Buddha's Footprint.

Features dating back to the Prehistoric period (1<sup>st</sup> century BCE) are concentrated in this component and particularly at Tham Wua (animal figures), Tham Khon (human figures), Tham Mue Daeng, and Hip Sop Thao Kong Phan (hands). However, the highest number of drawings consists of geometric or free forms.

A number of these rock formations are surrounded by standing stones, known as Sema stones (from the Pali word *sima* – boundary), which are used in Buddhist religious practice to delimit cult spaces.

#### Part 2 - Wat Phra Phutthabat Bua Ban

Wat Phra Phutthabat Bua Ban comprises a Buddha's Footprint enshrined in a Mandapa, a hall for object worshipping, a rock shelter with paintings, and a group of Sema stones – named Buat Phra Pu (Lord Grandfather's Ordination) - located 100 m north of the worship complex and dated to the Dvaravati period.

Sema stones have been erected around rock shelters and according to a rectangular plan following the eight cardinal directions. These stones are decorated either with carved figures and scenes representing Buddha's past lives, or simpler themes.

This type of temple boundary occurs in clusters in many locations within Thailand and in neighbouring countries, as has been highlighted by recent research on this topic.

#### Other places

The nomination dossier mentions other places, the locations of which are not clarified in the dossier. These include: Ban Nong Kaluem, the birth place of a monk who had also been a spiritual and political leader who founded Champasak (Vat Phou and Associated Ancient Settlements within the Champasak Cultural Landscape, Lao People's Democratic Republic, 2001, criteria (iii), (iv) and (vi)). The site contains large Sema stones with carvings depicting scenes from Dvaravati tradition. Further areas with evidence from the prehistoric to the Dvaravati and Lopburi periods include Phu Ku Wian and Mueang Phan.

Archaeological relics which are believed to be related to Phu Phrabat and Phra Phutthabat Bua Ban are scattered throughout the region.

#### Buffer zone

The buffer zone of the nominated property comprises protected forests (Pa Khuea Nam National Reserved Forest) and agricultural land; 32 communities (some 30,000 inhabitants) live inside the buffer zone, making their living by rice and cassava cultivation. The prevalent ethnic groups are the Thai-Isan and Tai Phuan, who have common roots in Tai-Lao ethnicity, although with slight differences between them.

The rural settlements of local communities feature vernacular dwellings and functional structures with interesting characteristics that have been described in more detail in the additional information provided by the State Party upon ICOMOS's request.

### **History and development**

Archaeological evidence in Phu Phrabat mountain indicates that the first human occupation dates back to the 1<sup>st</sup> century BCE, when settled and agriculture-based communities lived in the area. Their living environment, way of life and beliefs are reflected in the rock paintings that decorate the many rock shelters and outcrops scattered in the area. It is assumed that these shelters were not used as permanent dwellings but as places for religious or ritual ceremonies and possibly as resting places during hunts. Traces of subsequent religious uses have been found attesting to the use of many of these sites in the Dvaravati, Lopburi and Post-Lopburi periods, Lan Chang period, and up until the present day.

The introduction of Buddhism in the region is associated with the Dvaravati culture (7<sup>th</sup> – 12<sup>th</sup> centuries CE) and is attested to by groups of Sema stones which came to be used also in subsequent periods.

The Late and post-Lopburi periods exhibit the realisation of high-relief Buddha images of various sizes and in different postures, reflecting the influences of different artistic traditions, namely Dvaravati, Khmer and Lopburi.

The Lan Chang period coincides with the Laos Kingdom's influence over a large area of present-day Northeast Thailand. Traces of this influence comprise stupas and rock shelters, including Phra Phutthabat Bua Bok.

The late 18<sup>th</sup> century saw the decline of the Lan Chang Kingdom and the rise of Siam, with the subsequent passage of Phu Phrabat under Siamese control.

The 19<sup>th</sup> and early 20<sup>th</sup> centuries saw major restoration works carried out at Buddhist sites, in particular at Phra Phutthabat Bua Bok, where a stupa was reconstructed to resemble the stupa in Phra That Phanom, a monumental and religious compound in north-eastern Thailand.

Phu Phrabat area was protected as a National Monument in 1935 and, since the late 1960's, several archaeological and research campaigns have been carried out. In 1978 the legal protection was extended to include further monuments and in 1988 the process to establish an historical park was initiated; in 1992 the park was officially opened.

## **3 Justification for inscription, integrity and authenticity**

### **Comparative analysis**

The nomination dossier mentions that Phu Phrabat is comparable to many sites, both in Thailand and elsewhere. It then proceeds to examine five properties,

four of which are already inscribed on the World Heritage List. Among them, only three belong to the same geo-cultural region as the nominated property and only one is in Thailand, whilst the other two are located in Africa.

In ICOMOS's view, the comparative analysis included in the nomination dossier is too limited: as the dossier itself states, many sites could be compared with Phu Phrabat, within and outside Thailand.

Therefore, in its letter sent in September, ICOMOS requested additional information on this aspect. The State Party has expanded the comparative analysis by adding one example included in the Tentative List of Sri Lanka - Seruwila to Sri Pada (Sacred Foot Print Shrine), Ancient pilgrim route along the Mahaweli river - and summarising the differences and assumed strengths of Phu Phrabat in respect to the selected examples.

ICOMOS considers that the expanded comparative analysis remains insufficiently developed, in that it did not include other comparable sites within Thailand and in the neighbouring countries.

Additionally, ICOMOS observes that the comparison does not include an analysis or explanation of how the nominated property stands out in respect of the other examples and which are its peculiarities and exceptional features that would justify consideration for the World Heritage List.

Recent research has highlighted the existence of several sites within Thailand, in the neighbouring countries and throughout South East Asia where prehistoric and historic rock art are immersed in areas with sacred uses: in ICOMOS's view they should also be considered as relevant comparators (e.g. Khao Chan Ngam, Pha Taem, Tham Pha Daeng, Tham Ta Duang, Khao Plara in Thailand, Phnom Kulen in Cambodia, the Pak Ou Caves in Laos).

Additionally, since Phu Phrabat is presented as a sacred mountain with ancient evidence of ritual or religious uses, ICOMOS notes that other sacred mountains should have been considered in the comparative analysis. Relevant examples can be found in properties already inscribed on the World Heritage List and many other ones are included in the Tentative Lists of many State Parties within the same geo-cultural region.

ICOMOS notes that the comparison with many of the selected sites does not assist in demonstrating the potential of the nominated property for the World Heritage List: the rock paintings on the Rock Shelters of Bhimbetka, India (2003, criteria (iii) and (v)), exhibit a similar style but their density is higher than in Phu Phrabat; the Matobo Hills, Zimbabwe (2003, criteria (iii), (v) and (vi)), exhibit an exceptional density of rock art in southern Africa dating to 13,000 years BP; the Stone Circles of Senegambia, Gambia, Senegal (2006, criteria (i) and (iii)), consist of four large groups of stone circles

representing an extraordinary concentration of over 1,000 monuments in a 100 km-wide band stretching along the River Gambia for some 350 km.

ICOMOS considers that the phenomenon of Sema stones present in north-eastern Thailand and neighbouring countries is on a similar scale to the Senegambia case. The nomination dossier considers Sema stones unique to the nominated property and Thailand, but in fact ICOMOS notes that they extend well beyond the nominated area, being found throughout the Khorat Plateau in north-eastern Thailand as well as in neighbouring countries, including Laos, Cambodia, and Myanmar.

The continuity of use of the nominated serial property is said to be its specificity but the comparison does not clarify whether its use is continuous and if this has given rise to exceptional tangible or intangible cultural manifestations that transcend national boundaries.

As for the rationale for the selection of the two components and the internal comparative analysis, ICOMOS asked for additional information and, on 02 November 2015, the State Party explained that the two components have been selected as they show interlinkages attested to by the same types of heritage features, namely painted rock shelters, Sema stones and Buddha's Footprints, belonging to the same periods of development.

ICOMOS considers that this explanation does not suffice, in that the selection is not clearly justified nor is it placed within the larger context of any of the cultural phenomena that support the justification for inscription, namely the rock art, and the use of Sema stones in Buddhist practice related to the worship of the Buddha's Footprint and the associated narratives.

While the use of Sema stones to encircle rock shelters might be specific to the nominated property, in ICOMOS's view, the dossier fails to recognise and to explain the overall context of the Sema stone culture in the region, which is nevertheless documented in the relevant scientific literature. A more thorough study on this culture would assist in defining its scope within the region and in identifying clusters of sites that could depict in a more adequate manner this cultural phenomenon, and that could form a solid basis for an internal comparative analysis.

ICOMOS notes that other sites in Thailand may compete with the nominated property for their relevance as centres of Dvaravati culture, e.g., Muang Fa Daed, in Kalasin, Roi Et and Maha Sarakham provinces, seems to exceed any site in the Khorat Plateau in terms of density and quality of Sema stones. In the province of Udon Thani, the same as where Phu Phrabat Historical Park is located, many other important sites exist that the nomination dossier has not mentioned or discussed.

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ICOMOS considers that the comparative analysis does not justify consideration of this serial property for the World Heritage List or for any of its individual components at this stage.

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#### **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 serial property has been regarded as a sacred place by people throughout several centuries and this has left tangible traces of changing beliefs in different forms;
- The oldest evidence of human use dates back to prehistoric times (1<sup>st</sup> century BCE) and is comprised of rock paintings depicting humans, animals, hands, and geometric forms associated with rituals, or temporary dwellings;
- The historic period is here represented by Dvaravati (7<sup>th</sup> - 12<sup>th</sup> centuries CE), with rock formations used as sacred shelters surrounded by purposely placed stones (Sema stones), which indicate religious use of those delimited spaces;
- During the Lan Chang period (16<sup>th</sup> - 18<sup>th</sup> centuries CE), Buddha's Footprint worship was introduced, which is materialised by Buddhist relics enshrined in stupas. This form of Buddhist cult has continued until the present day.

ICOMOS observes that the justification for inscription does not clarify how and to what extent the nominated property stands out in respect to other similar properties that have undergone similar historic-cultural and religious processes, or contribute in a specific manner to the understanding of the evolution of human groups and of their cultural expressions throughout the millennia.

ICOMOS considers that the above-mentioned justification is not sufficiently grounded in solid historical, archaeological or scientific research, and believes that the dossier requires extensive additional research and analysis using a broad range of sources, including updated inventories and rigorous scientific dating methods, to validate the arguments supporting the proposed Outstanding Universal Value. At present, the dossier does not demonstrate that the nominated property exhibits values that transcend national boundaries.

Nevertheless, ICOMOS considers that the cultural phenomenon of Sema stones could have the potential to justify consideration for the World Heritage List but this requires a substantial re-scoping of the nomination.

Finally, ICOMOS considers that the serial approach has not been sufficiently justified, in that the three major themes considered for this nomination are not reflected in a comparable manner by the attributes contained in the two components.

## Integrity and authenticity

### Integrity

The nomination dossier states that the attributes conveying the significance of the nominated property stand in their original location, complete and protected. Although some parts of the property are reported to have suffered some damage, the integrity of the property is deemed to be high. The most important rock painting sites are intact without disturbances and the nominated property is not threatened by new development. On the other hand, being living heritage, temples may be affected by new development projects to meet future needs. This is closely monitored by the Fine Arts Department, the temple management, and the communities.

ICOMOS considers that insufficient research has been carried out and presented in the nomination dossier to illustrate the historic-cultural and geographic scope of the cultural processes that have produced the attributes contained in the nominated property. This weakness, coupled with the too-limited comparative analysis, undermines the claims for the integrity of the nominated property, as the nomination dossier fails to demonstrate that Phu Phrabat includes all elements necessary to express its proposed Outstanding Universal Value and is of adequate size to ensure the complete representation of the features and processes which convey the property's significance (paragraph 88 of the *Operational Guidelines for the Implementation of the World Heritage Convention*).

ICOMOS notes that the limited information presented in the nomination dossier does not justify sufficiently the selection of the two component parts of the series.

Additional information provided upon ICOMOS's request and during the evaluation mission suggests that the interlinkages between the two components are represented by Sema stones, belonging to different epochs, and by a Buddhist shrine, dating back to the 18<sup>th</sup> century and with inherited relationships with the Buddha Footprint found in Phu Phrabat.

ICOMOS considers that this link appears rather weak at this stage and could occur also at other sites in the region, therefore the rationale for the selection of these two components remains not justified at this stage.

With regard to the state of conservation of the property, ICOMOS observes that the park authority has not taken further management or conservation planning actions since 2005: building development that occurred in the past decade has not been assessed vis-à-vis the integrity of the property and its vulnerability.

Buddhist sacred sites and stupas scattered in the nominated property exhibit an uneven state of conservation, with little signs of maintenance.

The nomination dossier reports that the forest has been opened up for agricultural purposes in the past 20 years and subsequent building and infrastructure development (roads, settlements) has reduced both the forest cover and the presence of large animals. Communities living in the buffer zone still use the area for cattle grazing and plant collection.

Nobody lives within the nominated property but more than 30,000 people live in the buffer zone: this, when coupled with the unclear situation regarding restrictions on access and use within the nominated property, suggests that its integrity is vulnerable.

Additionally, summer camps have been mentioned amongst the activities carried out within the nominated property. In this regard, no details on frequency, number of attendees, or activities carried out have been provided nor an assessment of their impact on the attributes of the nominated property has been presented. This is again a factor that may threaten the attributes of the Phu Phrabat serial property.

During the ICOMOS evaluation mission it was ascertained that building activity is currently going on within component 2 to meet tourist needs.

In this regard, ICOMOS considers that tourism facilities should be moved outside the nominated components in the buffer zone and no construction should be permitted within the nominated series, until clear regulations have been issued. The only structures that could be allowed within are small shelters made with light materials and easily removable.

The additional information provided by the State Party on development projects and plans states that no development projects with negative impacts on the nominated property are planned. However, the State Party recognises that the High Speed Khorat–Nongkhai railway line could have indirect impacts caused by urban development related to tourism growth, which calls for immediate preparation of planning and building regulations.

In summary, ICOMOS considers that the nomination dossier has failed to place in the appropriate historic-cultural and geographic context the nominated property with regard to any of the themes selected to support the proposed justification for inscription and this has prevented identification of the appropriate components to depict the cultural phenomena that took place in the region and their associated attributes.

ICOMOS concurs with the State Party's view that tourism increase triggers urban development, as some facilities under construction near the temples within the nominated property demonstrate.

ICOMOS considers that the integrity of the whole series has not been justified and secured at this stage for the nominated serial property, and its components are

vulnerable, both because they are not sufficiently documented and their value is not adequately put into focus, and because affecting factors are not adequately addressed. ICOMOS also considers that the integrity of the individual sites that comprise the series has not been demonstrated at this stage.

#### Authenticity

The nomination dossier holds that the most relevant dimensions of authenticity of the nominated property concern: location and setting of the attributes, that can be found in their original location and setting; material and substance, with attributes dating from the Dvaravati to Lopburi periods and from Lan Chang to the present day (this would hold true for the living heritage attributes); form and design; spirit and feeling, with the beliefs in the Buddha Footprints and sacred mountain worship still practiced today; Usa – Barot legends which confer on rock formations special meanings; and an overall dramatic and romantic atmosphere to the nominated property.

Rock shelters and open Buddhist sites still perform their religious function, the Buddha Footprint site retains its intactness and Wat Phra Phutthabat Bua Bok and Wat Phra Phutthabat Bua Ban continue to operate as temples associated with Buddha Footprint worship since their foundation in the Lan Chang period (18<sup>th</sup> century CE).

ICOMOS considers that a number of changes have been overlooked in the nomination dossier when assessing conditions of authenticity and this may undermine the claims.

For instance, statues at Wat Louk Khei appear to have been carried there from elsewhere. The sacred spaces, which seem to be the centrepiece of this nomination, are delimited by Sema stones, the dating of which, in relation to other stones found throughout Thailand, appears problematic as they lack any carvings that could assist stylistic attribution. The limited number of Buddha statues in the nominated property date back to the Lan Chang period, which is later than the period to which the earliest Sema stones have allegedly been associated with. This indicates a contradiction.

In some other cases, ICOMOS notes that the dating of shrines and of religious sculptures may not coincide but there is no clear information on the history and development of each monument, shrine, temple or other features that could qualify the specificity and authenticity of the attributes of the nominated property.

In this regard, ICOMOS recalls that conditions of authenticity depend on the degree to which information sources about values may be understood as credible or truthful. Knowledge and understanding of these sources of information, in relation to original and subsequent characteristics of the cultural heritage, and their meaning as accumulated over time, are the basic requisites for assessing all aspects of authenticity.

ICOMOS therefore considers that further research is necessary to ascertain in a specific manner the degree of credibility and truthfulness of relevant attributes and other information sources and therefore assess the conditions of authenticity for each individual site and for the series.

ICOMOS considers that the authenticity of the whole series has not been justified at this stage and that the authenticity of the individual sites that comprise the series has not been demonstrated at this stage.

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In conclusion, ICOMOS considers that the conditions of integrity and authenticity of the whole series have not been justified at this stage and this applies also to individual sites.

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#### Criteria under which inscription is proposed

The property is nominated on the basis of cultural criteria (iii), (iv), (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 Phu Phrabat bears witness to different forms of cultural traditions which have evolved and disappeared, or are still thriving. Prehistoric cultural expressions dating back to the 1<sup>st</sup> century BCE still survive in rock art sites. Vestiges from the Dvaravati, Lopburi and post-Lopburi, Lan Chang, Thon Buri and Rattanakosin periods have been found in Phu Phrabat, testifying to the significance of the nominated property as a sacred place.

ICOMOS considers that the nomination dossier does not contain sufficient information on the rock art nor on the subsequent Buddhist phases, i.e. the Sema stones, culture or the Buddha's Footprint worship, to clarify the specific significance of the nominated serial property or of its potential to justify consideration for the World Heritage List under this criterion at this stage.

ICOMOS notes that the dating of the rock art has been called into question and may not all relate to the prehistoric period, but no discussion is provided in the nomination dossier on this aspect; and research indicates that examples of rock art may be found well beyond the boundaries of the nominated property but this again is not mentioned or discussed in the dossier.

With regard to Buddhist practices related to the Aranyavasi tradition in the Dvaravati period, ICOMOS notes that Phu Phrabat is not unique but part of a larger cultural tradition, as at least three further sites exist in a region encompassing northern Thailand (Wat Phu Poottimid and Phu Wiang) and Laos (Dan Sung).

ICOMOS considers that continuity of occupation is not unique to Phu Phrabat; rather it is commonplace in many sites. Additionally this continuity is not verified by archaeological evidence. The comparative analysis has

not demonstrated that the significance of the sacred nature of the mountain throughout the centuries transcends national boundaries.

As for the Sema stones, the nomination dossier fails to recognise that this is a much larger cultural phenomenon that extended throughout Thailand and neighbouring countries, as has already been discussed in the comparative analysis section. ICOMOS however recognises that the Phu Phrabat Sema stones hold the specificity of being placed around rock shelters. This, however, is not sufficient to justify consideration of the nominated property under this criterion, in that a comprehensive discussion on the Sema stone cultural phenomenon and on whether this can be considered a reflection of a cultural tradition is necessary and is currently missing.

ICOMOS considers that further research is needed to bring into focus the relevant cultural themes that could justify consideration of this property under criterion (iii) so as to define the scope of the specific cultural tradition under consideration and set out the framework for the comparative analysis and the identification of the property boundaries and possible components that could reflect an outstanding significance within its geo-cultural region and globally, and therefore demonstrate justification of this criterion.

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ICOMOS considers that this criterion has not been justified for the whole series at this stage.

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*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 adapting natural features, e.g. rock formations, platforms etc., to become shelters or special spaces to serve ritualistic purposes is unique to Phu Phrabat. Light or more substantial adaptations of these features through cutting, smoothing, carving, levelling etc. or demarcating special areas with ritual stones, are said to be examples of exceptional architectural creation that have ingeniously integrated natural features into human artefacts and merge well in the landscape.

ICOMOS considers that the description of the property has not been sufficiently detailed, lacking an adequate inventory documenting the relevant attributes and their use of natural features, the different periods of construction, or their functions to support this claim. Additionally, ICOMOS notes that there are other similar sites in Thailand and neighbouring countries which date from the same period as Phu Phrabat demonstrating a similar evidence of adaptation of the natural environment to suit religious practice.

Additionally, the comparative analysis has not been extensive enough to support the claims for exceptionality or uniqueness in this regard. ICOMOS notes that other

sites in Thailand, Laos and nearby countries still survive with similar characteristics and manmade structures and therefore the comparison should have clarified the reasons why the nominated property would stand out in respect of other similar ones.

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ICOMOS considers that this criterion has not been justified for the whole series or for any of the individual components.

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*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 Phu Phrabat mountain is an unique and outstanding example of human interaction with the environment, resulting in an exceptional form of cultural landscape where picturesque geomorphological features have been bestowed with sacred meanings and have been used for spiritual and symbolic purposes.

ICOMOS considers that the nomination dossier has not documented sufficiently the interaction of humans with their environment and therefore has not adequately illustrated and assessed the results of this interaction in terms of layout, manmade landscape features etc. to support the claims of exceptionality under this criterion.

Furthermore, ICOMOS notes that other sites in neighbouring countries exist demonstrating similar characteristics. The nomination dossier does not make any attempt to link the rock art to any of the known contemporary settled sites and to provide a comprehensive and understandable picture of the settlement pattern related to the flourishing of cultural manifestations or traditions.

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ICOMOS considers that this criterion has not been justified for the whole series or for any of the individual components.

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*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 legends of Usa – Barot and Phra Kued–Phra Phan that stemmed from stories in the *Mahabharata*, as well as Phra Chao Liap Lok and Uranghathat, are well known and associated with the heritage sites within the nominated property. Another local story, associated with the founder of Champasak, bears witness to the association of the nominated property to the Lan Chang kingdom.

In its letter sent on 23 September 2015, ICOMOS requested additional information concerning the intangible heritage that would support this criterion.

The State Party replied on 02 November 2015, providing additional information on the spread of Buddhism in this region and on Buddhist practices, such as the use of forest temples. It then discusses the origin of Sema stones, their associated beliefs, and their use in Phu Phrabat, plus some elements on Dvaravati culture and its linkage with Phu Phrabat materialised by the Sema stones. Further information was also provided on the Buddha's Footprint worshipping tradition, explaining the scope of this form of worship and its origin in Sri Lanka at Sri Pada, as attested to by the Uranghadhatu Legend (17<sup>th</sup>-18<sup>th</sup> centuries CE) and the specific rituals associated with the Buddha's Footprint worship at the nominated serial property.

ICOMOS considers that in terms of adaptation of Buddhist and Hindu mythology, Phu Phrabat is not the most prominent example even within Thailand or in the region, in that other sites have been demonstrated to be associated with much more fully developed examples of these mythological adaptations.

ICOMOS further notes that the low number of visitors per year at Phu Phrabat (approximately 50,000) does not support the claim for the nominated property to be a large-scale pilgrimage site and it is not comparable to the scale of other Buddhist pilgrimage sites throughout Thailand. Additionally, ICOMOS notes that Buddha's Footprints are found at numerous locations in Thailand and South East Asia.

ICOMOS considers that, despite the additional information provided, the justification of this criterion lacks specificity and rigorous research and the arguments put forth to support the claims and to explain the historic-cultural context are not sufficient to demonstrate this criterion.

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ICOMOS considers that this criterion has not been justified for the whole series.

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ICOMOS considers that the serial approach is not justified and ICOMOS considers that the selection of sites is not appropriate and does not reflect adequately any of the arguments put forth to justify consideration of this property.

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In conclusion, ICOMOS does not consider that the criteria have been justified for the series or for any of the individual components at this stage.

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#### 4 Factors affecting the property

The nomination dossier states that the Udon Thani region, where the nominated serial property is located, is undergoing major economic and tourist development due to its strategic location. This implies the expansion of Highway 2348, 37 km away from the nominated property, which has caused urbanisation in the nearby communities and has also affected agriculture. While Phu Phrabat Historical Park is not affected by development directly in that it is protected under the current legislation and managed by the Fine Arts Department, on the other hand, development pressures related to their functions as operating temples affect Wat Phra Phutthabat Bua Bok and Wat Phra Phutthabat Bua Ban, for which requests for new buildings are managed by the Fine Arts Department.

Further important threats mentioned in the nomination dossier concern salt mining. This problem is said to concern Amphoe Ban Phue which, although not included in the salt mining area, is prone to illegal mining by the local people. This can cause ground structural instability and salt water leakage in the rice paddies and in cultivated fields, damaging both the cultural heritage and the living communities.

Weathering is the most relevant form of environmental affecting factors and currently there is no prevention scheme, although Sema stones have been provided with shelters, which, according to the nomination dossier, are not very effective against rainstorms.

More likely disasters include summer storms, hail storms, lightning, forest fires and landslides, although their severity and frequency is said to be medium to low. A number of sites within the buffer zone are prone to flooding.

ICOMOS considers that development pressures may ensue from tourism development, as local communities pin their hopes on this economic sector to make profits, and new tourist facilities are expected in the buffer zone.

The additional information provided by the State Party, upon ICOMOS's request, on development, suggests that no development projects negatively impacting on the nominated property are in place.

However, ICOMOS notes that building activities in the vicinity of temple complexes encountered during the mission should be assessed specifically vis-à-vis the impacts they may have on the specific significance of these attributes. Development pressures associated with tourism promotion should also be closely monitored.

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ICOMOS considers that the main threats to the property are development pressures from tourism and uncontrolled uses by the residents, including illegal salt mining, and limited management responses to counteract negative affecting factors.

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## 5 Protection, conservation and management

### Boundaries of the nominated property and buffer zone

The boundaries of Component 1 encompass a narrow and long area extending from the south to the north and coinciding with Phu Phrabat Historical Park. The western boundary is delimited by naturally-occurring cliffs. The eastern boundary of Component 1 serves as the boundary of the forest park, beyond which spread the farming land in the buffer zone and is clearly distinguishable from the forest. To the north and south, component 1 borders uninhabited wooded mountains. The boundary of the historical park is indicated by the boundary markers erected by the Fine Arts Department.

Component 2 encompasses only three attributes; a temple still in use, a rock shelter with paintings, and a place for Buddhist activities surrounded by Sema stones. The sites sit in forests with the mountain boundary in the east. ICOMOS notes that the boundary of Component 2 neither follows the naturally-formed cliffs, nor has any identifiable natural objects as markers. Instead, the boundary is only a rectangle enclosing the attributes.

ICOMOS requested additional information in this regard and the State Party clarified that the boundary of component 2 is based on the limits established by the Department of Fine Arts for the Registered National Monument Site under the relevant legislation.

ICOMOS notes that the outlining of the boundaries for the two components has been based on protective boundaries already existing and does not appear to have considered the territorial scope of the cultural phenomena that would support the proposed justification for inscription and illustrated by the attributes within.

ICOMOS therefore considers that the boundaries so defined do not fulfil the requirements of paragraph 100 of the *Operational Guidelines for the Implementation of the World Heritage Convention*.

The boundaries of the buffer zone encompass both components and parts of nationally-protected forests and of denuded forests, along with some sub-districts in the vicinity of the archaeological park.

ICOMOS notes that, considering human impacts, the buffer zone fulfils its functions as indicated by its name, thanks to its unique terrain features and interrelations with the mountains and the forest park. The eastern part of the boundaries falls into the reserved forest park and is clearly demarcated. The western and northern boundaries of the buffer zone are defined according to the demarcation lines of administrative regions. The buffer zone houses three villages and its boundaries serve as the administrative demarcation lines of the towns that are one level above the three villages. ICOMOS also notes that, although reasonable in

administrative terms, such demarcation also leads to overlaps in administration.

Finally, ICOMOS observes that the historical park administration has little control over the construction and development of the villages in the buffer zone.

In this regard ICOMOS recalls paragraph 104 of the *Operational Guidelines for the Implementation of the World Heritage Convention* which establishes that “a buffer zone is an area surrounding the nominated property which has complementary legal and/or customary restrictions placed on its use and development to give an added layer of protection to the property”

At the moment, in ICOMOS's view, the buffer zone does not possess an effective level of restrictions and regulations that can ensure the required added protection to the nominated property.

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In conclusion, ICOMOS considers that overall the boundaries of the nominated property and of its buffer zone are not adequate to illustrate adequately the scope and the significance of the cultural expressions supporting the proposed justification for inscription; the buffer zone needs an effective system of complementary legal or customary restrictions to provide the nominated property with an adequate added layer of protection.

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### Ownership

Phu Phrabat Historical Park is owned by the Treasury Department and is under the responsibility of the Fine Art Department. Each temple in the second component is owned and managed by the respective temple foundation.

### Protection

Located in the national reserved forest, Phu Phrabat Historical Park is subject to the National Reserved Forest Act B.E. 2507 (1964) and related laws and regulations concerning the environment, including Enhancement and Conservation of National Environmental Quality Act B.E. 2535 (1992), National Decentralization Act B.E. 2542 (1999), Town and Country Planning Act B.E. 2518 (1975) and Official Information Act B.E. 2540 (1997).

Protective measures in the nominated serial property are said to be implemented by the Phu Phrabat Historical Park Office, an operational unit of the Fine Arts Department.

ICOMOS requested additional information on existing protection regimes and the State Party responded by providing annotated maps illustrating existing forms of protection and rationale for the definition of the buffer zone.

These include a more detailed explanation of the objectives, tasks and chain of responsibilities established by the Enhancement and Conservation of National

Environmental Quality Act at the national and provincial level.

Whilst it is clear that both components of the nominated property are covered by legal protection, from the additional information it emerges that part of the buffer zone does not fall in any protected area. This unprotected part is included in the Landscape Enhancement Zone envisioned by a draft management plan which is not yet in place.

ICOMOS notes that Udon Thani Province and the counties and towns in its jurisdiction have received no specific conservation rules and local governments seem to have not included in their near-future planning the specific plans for the development and conservation of Phu Phrabat Historical Park and its buffer zone.

A number of plans do exist for the area but these do not include protection or conservation measures. They include; Udon Thani Development Plan, a short-term strategic plan for the Development of Tourism, Services and Promotion of Local Culture and Traditions; the Tourism and Sports Development Plan, which, in the period 2001–2015, included a chapter for Phu Phrabat Historical Park for the development of learning and eco-tourism and tourist guide training for local youths; Udon Thani Provincial Administrative Organization (PAO) plan which emphasises the preservation of identity of local communities, and includes the initiative “Visit Phu Phrabat with Tai Phuan”, organized annually from 2009 to the present.

During the ICOMOS evaluation mission, it was clarified that the local governments and related administrations are working on laws and regulations to set restrictions on the residents’ production and life activities that may have impacts on the property area. This demonstrates that the local governments and administrations have begun to pay attention to the need for regulations for the nominated property. Nevertheless, ICOMOS considers that such laws and regulations are yet to be established.

In conclusion, ICOMOS considers that the legal protection in place will be adequate when planning provisions take into account the status of Phu Phrabat Historical Park and of its buffer zone as protected areas under the relevant pieces of Thai legislation. ICOMOS considers that the protective measures for the property will be adequate when regulations for the nominated serial property and its buffer zone under preparation at the local level, will be approved and implemented.

### **Conservation**

Apparently, the existing inventory of the rock art sites and of the figures therein represented dates back to the 1970’s and it is not clear whether research is still being carried out within the nominated property. The nomination dossier does not mention ongoing conservation activities within the nominated property, the last organic programme dating back to the 1980’s and early 1990’s before the establishment of the Historical Park.

ICOMOS notes that neither the park administration nor the local governments have laid down specific plans, measures and techniques for the conservation of the property sites in the nominated serial property. There are no established conservation rules for possible problems in the future development of the park.

Therefore, ICOMOS considers it necessary that a detailed inventory of every figure and site, accompanied by photographic and geometric survey, be planned and implemented. Similarly, a conservation programme should be drawn with clear priorities of intervention and backed by adequate professional and financial resources.

In conclusion, ICOMOS considers that the nominated property urgently needs an updated detailed inventory of all heritage features and a conservation strategy and programme, with clear priorities set out and adequate resources to be implemented. At this stage, the lack of the above makes the attributes of the nominated property highly vulnerable.

### **Management**

Management structures and processes, including traditional management processes

Phu Phrabat Historical Park has been managed by the Park staff via a management plan since 1992, whilst component 2 has no management plan but it is protected and under the care of the Department of Fine Arts. Wat Phra Phutthabat Bua Ban is managed by the temple organisation, under the supervision of the Phu Phrabat Historical Park staff.

The newly-drafted management plan suggests that three responsible organisations should be set up for management purposes: one committee with policy making responsibilities, one committee with an advisory role, and one implementation office. These committees include relevant decision makers at the national and local levels and cover the nominated series and its buffer zone.

ICOMOS however notes that it is not clear how coordination and operation will be granted among the Historical Park Office under the Fine Arts Department, the forest conservation divisions, the local governments at the provincial, county, town and village levels, and the temple-level administrations led by Buddhist monks in the property area.

An office of about 40 people has been established in Phu Phrabat Historical Park. Every property site in the historical park is secured by one worker in charge of cleaning work on the site and of preventing any potential damage caused by tourists to the site. This office however lacks planning instruments and programmes to carry out their activities.

ICOMOS considers that the State Party should ensure that the attributes of component 2 also be adequately

taken care of, especially those which are not under the responsibility of the temple organisation.

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

The management plan for the Phu Phrabat Historical Park was first prepared in 1989 and then updated in 2005. However, since then, no further update has been prepared. The 2005 master plan encompasses seven thematic plans, each covering specific tasks: monument conservation, archaeology study plan, land use, public participation, tourism development and learning, infrastructure development, and landscape development.

In this regard, ICOMOS firstly notes that the existing 2005 master plan does not cover the entirety of the nominated serial property but only Phu Phrabat Historical Park; additionally, it foresees a five-year cycle of renewal but since 2005 no changes have been made.

Additional information provided by the State Party in November 2015 upon ICOMOS's request, clarifies that so far the nominated series has no single management plan.

Additionally, the cartography which the existing and proposed plan relies on is not adequate for management purposes, lacking basic information on the location of the cultural heritage resources, notable places, view points, which the nomination dossier has described as important for their value but not mapped, along with infrastructures and service buildings, the location of which are necessary to properly manage the property. Furthermore, no detailed land use map for the buffer zone is provided.

No mention of a risk preparedness plan or strategy is made in the nomination dossier or in the existing management plan, a gap which should be filled, in ICOMOS's view.

In 2010, a working group was established for the preparation of the nomination dossier. This has included the drafting of a management plan which is expected to replace the current one. This plan divides the nominated property and the buffer zone into three major land use zones: Cultural Heritage Conservation Zone, Nature Conservation Zone and Cultural Landscape Enhancement Zone. Each zone is articulated in sub-zones with specific character and related management objectives.

Visitors to the nominated property mainly consist of Thai and Laotian pilgrims and current infrastructure is reported to be adequate in normal times but becomes insufficient during the peak seasons, corresponding to worshipping dates (3 February and 15 April each year). The average numbers of visitors per year fluctuate between 50,000 and 60,000 with peaks up to 70,000. There are therefore plans to increase tourist accommodation near pilgrimage destinations.

ICOMOS considers that the zoning and measures proposed in the draft management plan should be integrated into the planning system and instruments existing at the county, municipal and sub-district levels, in order to ensure their implementation. As well, a clear hierarchy should be established amongst bodies responsible for the implementation of the management provisions and of their control.

ICOMOS considers that an adequate cartographic basis should be developed with the maximum urgency as an information basis for any form of planning and particularly if building and infrastructure development is envisaged.

ICOMOS also notes that in the nomination dossier a detailed description of views and viewsheds has been provided. ICOMOS considers that measures for the adequate protection of these views should be prepared and integrated into the management system.

Additional information provided by the State Party in November 2015 concerning development plans clarifies the content of the Udon Thani Provincial Development Plan (2014-2017), Tambon Mueang Phan Strategic Development Plan (2016-2020) and Phu Phrabat Historical Park Activity Plan (2012-2016).

ICOMOS notes with concern that the Activity Plan for Phu Phrabat Historical Park includes the development of infrastructure, including a guest house, incinerators, and a Meeting Hall. ICOMOS in this regard considers that a Heritage Impact Assessment should be prepared for these projects in order to ensure that they do not impact negatively on the attributes of the nominated property and its setting.

#### Involvement of the local communities

Local communities are mentioned in different chapters of the dossier.

ICOMOS considers that community participation needs to be strengthened, both in the nomination process and in the finalisation of the management plan through appropriate mechanisms that ensure local communities' effective involvement.

ICOMOS also considers that the management of the nominated property does not appear to be currently effective due to the lack of operational programmes and planning capabilities that prevented the updating of the 2005 management plan. In this regard, ICOMOS believes that a capacity-building strategy addressing the staff of local administrations and park authorities would greatly assist in achieving management effectiveness.

In conclusion, ICOMOS considers that the management system for the overall serial property is not currently adequate and should be strengthened to ensure coordination mechanisms and effective cooperation amongst the different administrative entities; the management body should be granted sufficient

autonomy and flexibility to operate effectively. The proposed management plan should be strengthened through its integration into the spatial planning system and the clarification of the roles and hierarchy among the different administrations, so as to grant a clear management chain and responsibilities. Operational action plans for the documentation and maintenance of cultural sites and their landscape, as well as for the management of the visitors, should be developed and implemented. Furthermore, ICOMOS recommends that a capacity-building strategy be prepared and implemented, so as to strengthen existing management capabilities. Adequate cartographic documentation needs to be prepared for protection and management purposes with the maximum urgency.

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## 6 Monitoring

The nomination dossier provides for a number of indicators to measure the state of conservation of the nominated property and its attributes.

ICOMOS considers that the lack of an adequate documentation basis, such as geometric surveys and maps of the nominated property and of its attributes, limits the possibility of monitoring and data recording, which, as a matter of fact, has yet to be materialized. Additionally, ICOMOS considers that indicators to measure management effectiveness should also be developed.

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In conclusion, ICOMOS considers that monitoring implementation will only be possible and effective when adequate documentation of the cultural heritage sites and resources is available in the forms of maps, drawings, and photographic documentation. ICOMOS further notes that monitoring indicators and mechanisms to measure management effectiveness would assist in the management of the nominated property and its buffer zone.

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## 7 Conclusions

The nomination dossier presents a cultural landscape featuring unusual geological formations onto which have been projected sacred meanings in different epochs, from the 1<sup>st</sup> century BCE, in the 7<sup>th</sup> - 12<sup>th</sup> centuries CE – known as the Dvaravati period - and later in the 13<sup>th</sup> - 15<sup>th</sup> centuries (Late Lopburi and Post- Lopburi periods), and finally in the 16<sup>th</sup> - 18<sup>th</sup> centuries CE (Lan Chang period). The serial property illustrates the continuity of use and sacredness of the region, through rock art expression, Buddhist shrines enshrining Buddha's Footprints and encircled by ritual stones, known as Sema stones, and legends and religious practices.

ICOMOS considers that the nominated property is an appreciable example of how natural features can inspire use by humans; however the nomination has not

succeeded in providing a convincing case for World Heritage listing.

The nomination dossier and the additional information provided upon ICOMOS's request fail to indicate how Phu Phrabat fulfils the selected proposed criteria. Many of the arguments provided to support the proposed Outstanding Universal Value are not unique to this site but common phenomena throughout Thailand and Southeast Asia.

For instance, pilgrimage to Buddha's Footprints and stupas appears to be more prominent at other sites in the region; the rock art does not appear extraordinary in comparison to other locations within Thailand and in the same geo-cultural region, and questions have been raised over their all being dated as prehistoric artistic expressions.

In terms of intangible heritage and the adaption of Buddhist and Hindu mythology to local lore and locations, Phu Phrabat cannot be considered the most prominent example of these either within Thailand or in neighbouring countries, where more developed examples can be found.

In ICOMOS's view, Phu Phrabat alone does not exhibit the potential to justify consideration for the World Heritage List; however, the cultures and traditions represented there and their interactions with the environment, especially those associated with Sema stones and forest temples, are a fascinating phenomenon that occurs at a number of other sites in the region, within and outside Thailand, that may deserve consideration on the basis of a thoroughly revised nomination dossier. This is to be based on a rigorous research that sets out the scope, facets and breadth of the significance of the cultures and traditions and consequently bring into focus possible other sites within Thailand and in neighbouring countries that could be relevant to illustrate in an adequate manner related cultural features and processes.

## 8 Recommendations

### Recommendations with respect to inscription

ICOMOS recommends that the examination of the nomination of Phu Phrabat Historical Park, Kingdom of Thailand, to the World Heritage List be **deferred** in order to allow the State Party, with the advice of ICOMOS and the World Heritage Centre, if requested, to:

- Deepen the research on the theme of Sema stone culture in relation to Buddhism to bring into focus the potential significance of the nominated property in relation to other similar properties within the region.

In the context of the upstream process following consultation with ICOMOS and, if a robust case can be made, then reconsider the scope of the nomination.

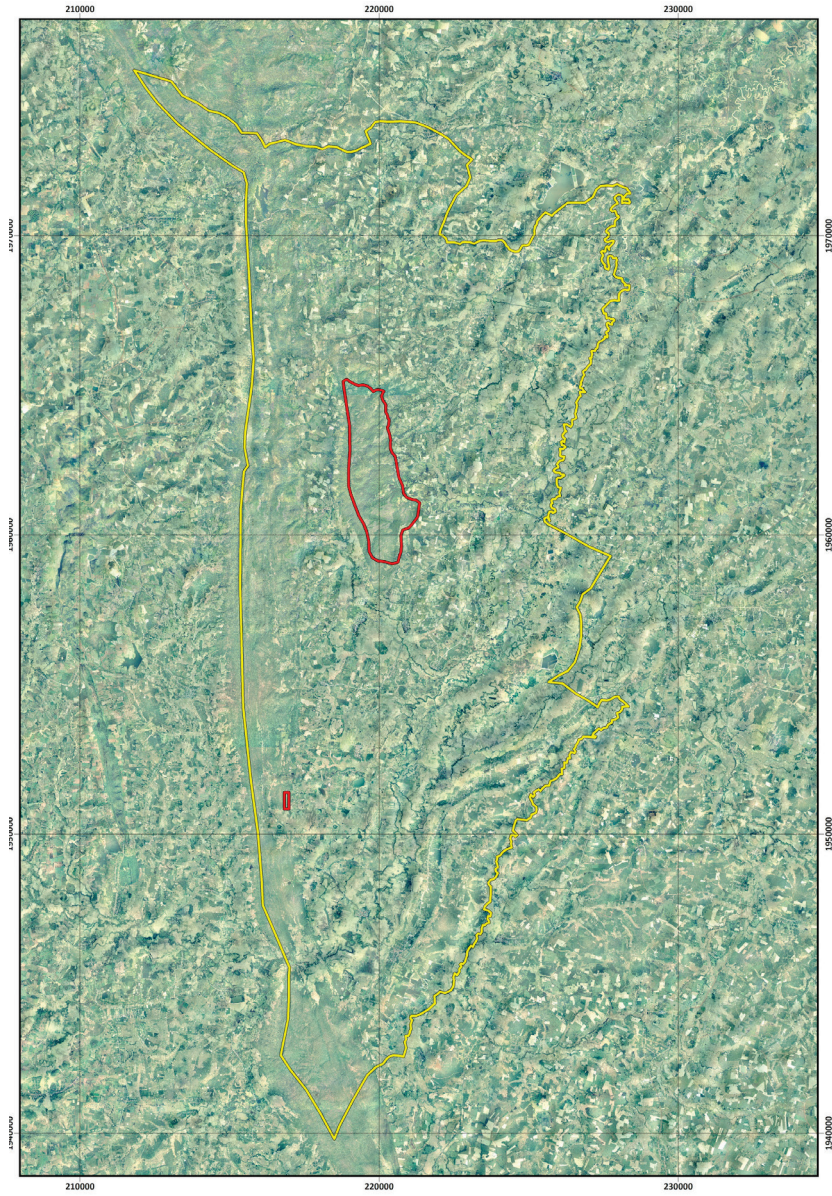
Any revised nomination should be visited by a mission to the site.

**Additional recommendations**

ICOMOS further recommends that, if a new nomination is drafted, the State Party gives consideration to the following:

- Revising the management system according to the new scope of the nomination and elaborating a 10-15 year management plan;
- Clarifying the functions, roles and responsibilities of the different levels of the management structure and ensuring adequate coordination mechanisms among the different administrative bodies responsible for the property;
- Preparing maps at the appropriate scale with the exact positions of all prehistoric and historical relics, monuments and temples, natural landscapes, architectural structures, villages, salt mines, infrastructures and roads in the nominated property and its buffer zone;
- Developing a detailed survey – geometric and photographic - at an adequate scale of all monuments, temples, historic or prehistoric structures, rock-shelters and rock art, including a detailed account for each of them of their state of conservation, forms of decay and affecting factors;
- Continuing academic research on the different facets of the nominated property according to a clear plan.



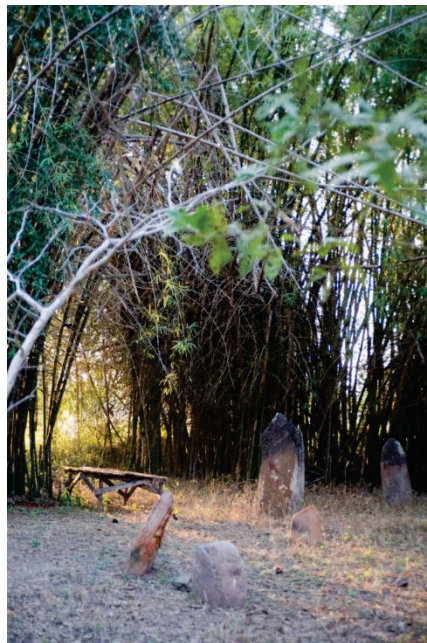


Map showing the boundaries of the nominated properties





Buddha's Footprint enshrined in the stupa of Wat Phra Phutthabat Bua Bok



Sema stones at Ban Hin Tang





Prehistoric rock shelter with paintings



Tham Phra, high-reliefs of images of worship carved onto natural rock



## **IV Cultural properties**

### **A Asia – Pacific**

New nominations

### **B Europe – North America**

New nominations

Nomination deferred by previous sessions of the World Heritage Committee

### **C Latin America - Caribbean**

New nominations

Extension



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## Stećci – Medieval Tombstones (Bosnia and Herzegovina, Croatia, Montenegro, Serbia) No 1504

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### Official name as proposed by the States Parties

Stećci – Medieval Tombstones

### Location

#### Bosnia and Herzegovina:

Municipality of Stolac (FBiH)  
Municipality of Konjic (FBiH)  
Municipality of Nevesinje (RS)  
Municipality of Rogatica (RS)  
Municipality of Novi Travnik (FBiH)  
Municipality of Jablanica (FBiH)  
Municipality of Kalinovik (RS)  
Municipality of Bileća (RS)  
Municipality of Ljubuški (FBiH)  
Municipality of Kladanj (FBiH)  
Municipality of Olovo (FBiH)  
Municipality of Tuzla (FBiH)  
Municipality of Goražde (FBiH)  
Municipality of Trnovo (FBiH)  
Municipality of Sokolac (RS)  
Municipality of Berkovići (RS)  
Municipality of Pale (RS)  
Municipality of Šekovići (RS)  
Municipality of Foča (RS)  
Municipality of Kupres (FBiH)

#### Republic of Croatia:

Municipality of Cista Provo (Split-Dalmatia County)  
Municipality of Konavle (Dubrovnik-Neretva County)

#### Montenegro:

Municipality of Žabljak  
Municipality of Plužine

#### Republic of Serbia:

Municipality of Bajina Bašta  
Municipality of Prijepolje

### Brief description

More than 70,000 distinctive medieval tombstones called *stećci* are found in over 3300 burial ground sites in south-eastern Europe. The serial nomination of 30 sites (containing 4100 *stećci*) has been selected from Bosnia and Herzegovina, western Serbia, western Montenegro, and central and southern Croatia to represent these grave yards, and the regionally distinctive *stećci*, or medieval tombstones, which date from the 12<sup>th</sup> to the 16<sup>th</sup> centuries. The cemeteries are laid out in rows as was the common European custom from the Middle Ages. The *stećci* are mostly carved from limestone, and are found according to five types/shapes; they feature a wide array of decorative motifs and inscriptions that represent both continuities within medieval Europe and older locally-distinctive traditions.

### 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 30 *sites*.

## 1 Basic data

### Included in the Tentative List

Bosnia and Herzegovina - 18 April 2011  
Republic of Croatia - 21 April 2011  
Montenegro - 21 April 2011  
Republic of Serbia - 7 May 2011

### International Assistance from the World Heritage Fund for preparing the Nomination

None

### Date received by the World Heritage Centre

29 January 2015

### Background

This is a new nomination.

### Consultations

ICOMOS has consulted several independent experts.

### Technical Evaluation Mission

An ICOMOS technical evaluation visited 19 of the nominated sites in Bosnia and Herzegovina, 15-22 September 2015; and a second ICOMOS technical evaluation mission visited the remaining 3 sites in Bosnia and Herzegovina, and each of the nominated sites in Croatia, Montenegro and Serbia, 20-27 September 2015.

### Additional information received by ICOMOS

A letter was sent to the States Parties on 7 October 2015 requesting further information on the rationale, methodology and criteria for the selection of the nominated *stećci* sites from the very large number of existing sites, the unique additional contribution of each site component to the proposed Outstanding Universal Value of the serial property, clarification of the 'contact zone' for component 12 (Stare Kuće, Donje Breške, Tuzla in Bosnia and Herzegovina), and the location of inhabitants in relation to the buffer zones for components 23-24 (Velika and Mala Crljivica, Cista Velika, and St Barbara, Dubravka, Konavle in Croatia). The four States Parties responded to these queries on 4, 6 and 12 November 2015.

As requested by the revised *Operational Guidelines*, the States Parties received an Interim Report on 15 January 2016. Further information was provided by the four States Parties on 1 February 2016 in relation to the issues raised. This included revised text for some parts of the nomination dossier (Executive Summary and parts of Chapter 3), further descriptive information about each selected component, further information about the method of selection of the thirty components, information about the number of inhabitants in the buffer zones of several components, and revised maps and plans for

many of the components detailing proposed changes in property boundaries and/or buffer zones.

All additional information provided to ICOMOS by the States Parties is incorporated into the relevant sections of this evaluation report.

#### Date of ICOMOS approval of this report

11 March 2016

## 2 The property

**Note:** Due to limitations on the length of evaluation reports, not all sites in this series have been described. In the nomination dossier and the additional information provided by the States Parties, each of the components is described in text, mapping and images.

### Description

Stećci are medieval tombstones found through almost all parts of Bosnia and Herzegovina, in the western parts of Serbia and Montenegro, and in central and southern Croatia. The stećci represent an artistic and cultural tradition that can be linked with others in Europe, but is particular to south-eastern Europe.

The serial nomination is selected from a total of more than 70,000 stećci at 3300 sites. The nominated property consists of 30 sites containing 4100 stećci within the borders of the four States Parties. In the nomination dossier, the total area of the nominated serial property was 70.88ha (revised by the States Parties in January 2016 to 51.38ha), and the total area of the buffer zones was 1798.42ha (revised by the States Parties in January 2016 to 334.93ha).

The 30 components included in the series are as follows:  
Bosnia-Herzegovina

- [1] Radimlja, Stolac
- [2] Grčka glavica in the village of Biskup, Konjic
- [3] Kalu in Krekovi, Nevesinje
- [4] Borak in the village of Burati, Rogatica
- [5] Maculje, Novi Travnik
- [6] Dugo polje at Blidinje, Jablanica
- [7] Gvozno, Kalinovik
- [8] Grebnice, Radmilovića Dubrava, Baljci, Bileća
- [9] Bijača, Ljubuški
- [10] Olovci, Kladanj
- [11] Mramor in Musići, Olovo
- [12] Stare kuće, Donje Breške, Tuzla
- [13] Kučarin in Hrančići, Goražde
- [14] Boljuni, Stolac
- [15] Dolovi in the village of Umoljani, Trnovo
- [16] Luburića polje, Sokolac
- [17] Potkuk in Bitunja, Berkovići
- [18] Mramorje in Buđ, Pale
- [19] Bečani, Šekovići

- [20] Mramor in Vrbica, Foča
- [21] Čengića Bara, Kalinovik
- [22] Ravanjska vrata, Kupres

Republic of Croatia

- [23] Velika and Mala Crljivica, Cista Velika
- [24] St. Barbara, Dubravka, Konavle

Montenegro

- [25] Grčko groblje, Žabljak
- [26] Bare Žugića, Žabljak
- [27] Grčko groblje, Plužine

Republic of Serbia

- [28] Mramorje, Perućac, Bajina Bašta
- [29] Mramorje, Rastište, Bajina Bašta
- [30] Grčko groblje, Hrta, Prijepolje

The medieval tombstones, known since the 19<sup>th</sup> century as stećci, were created in the period from the second half of the 12<sup>th</sup> century to the 16<sup>th</sup> century, and most were made in the 14<sup>th</sup> and 15<sup>th</sup> centuries. It is assumed that these cemeteries and the stećci ceased to be used during the 16<sup>th</sup> century because of the introduction of practices of confessional differentiation of graveyards (according to the different Christian traditions).

The stećci are mostly made of limestone, which is commonly sourced in the region and suitable for carving (although there are examples made from other types of stone, such as serpentine, slate, conglomerate, and tuff). The heavy stones for the stećci were quarried in the vicinity of the sites where they stand, so the cemeteries are located close to stone sources. Surveys at extant quarry sites suggest that the basic forms were likely to have been formed at the quarry, but that the decorations were carved closer to the cemeteries or at the grave sites.

The sites were mostly formed as 'cemeteries in rows' as was the common European custom from the Middle Ages. The stećci were located on the tops of graves and were oriented in the same direction as the graves, but were not constructed as 'lids' for the graves or sarcophagi as was the tradition elsewhere. Although each grave could contain multiple burials, there is only one stećak per grave site.

The States Parties have identified five basic types of stećci based on their shape, decorative carving and installation: slab, chest, *sljemenjak* (gabled roof stećak), monumental cross and pillar. The chest and slab types are the most commonly found, and are assumed to be the earliest and basic forms. The *sljemenjak* are the most recognisable form and are mostly associated with burials dated to the 15<sup>th</sup> century. The pillar and monumental cross types are fewer and are dated to the late 15<sup>th</sup> and early 16<sup>th</sup> centuries. Some historic toponyms are related to this phenomenon.

The stećci are often undecorated, but can also be adorned with bas-relief carvings, and occasionally also sunk relief (intaglio) carvings. The ornamentation includes various religious and other symbols (such as crosses, weapons, tools, solar and lunar symbols, anthropomorphic lilies and snakes), figurative compositions (such as people dancing, jousting, hunting scenes) or geometric shapes (rosettes, circles).

Inscriptions in the Cyrillic script are found on the stećci, mostly in Bosnia and Herzegovina, and contain both religious and secular content. The stećci were carved by master craftsmen called 'smiths', and in a few examples their names are included in the inscriptions. Other stećci have inscriptions that attribute them to regional nobility, although the analysis presented by the States Parties emphasises the diversity of the people buried in the graves in terms of their class, religion and ethnicity. The nomination dossier states that the inscriptions represent an organic element of Christian epigraphic culture in medieval Europe.

The States Parties explain that when these graveyards were established, they were commonly located away from areas of habitation in places of natural beauty; often alongside or near roads, on prehistoric tumuli, at prehistoric fortified settlements, or near churches or wells. Lone examples are rare, but the number of stećci in each graveyard varies, from family-based groupings to larger community cemeteries. Today, the locations of the selected sites are diverse, and many of them are located in relatively remote settings, and include locations in forests (eg. [4], [8]), on elevated land or tops of hills (eg. [7], [12]), near villages (eg. [11]), or along transportation routes (eg. [23], [30]). A number of the sites are located in or near a national park or biosphere reserve (eg. [2], [25], [27], [28], [29]).

### **History and development**

The States Parties trace the historical development of the stećci to earlier periods, including prehistoric settlement, late antiquity and early medieval periods. However, the practice of laying out cemeteries in rows is a distinctive characteristic of the European Middle Ages and is the historical context for the stećci.

According to the States Parties, south-eastern Europe was a transition zone, influenced by both Eastern and Western Christianity and associated cultural influences, which can be seen in the use of inscribed epitaphs and in the ornamental repertoire. Culturally, the stećci belong to the spread of the Slavic language, as well as Glagolitic and Cyrillic literacy in this region.

The period of use of the stećci was a politically turbulent one in this part of Europe, yet the stećci were used in graveyards for a period spanning several hundred years, and changes over time in their form and decoration can be identified. While the preferences for the different types of stećci were influenced by various factors, the 'slab' form of stećak is the oldest and most widespread and is found from the 12<sup>th</sup> century; followed by the 'chest'

type from the mid-14<sup>th</sup> century; the 'gabled roof' type from the early 15<sup>th</sup> century; the cross form from the mid-15<sup>th</sup> century; and the 'pillar' form from the late 15<sup>th</sup> century.

The nomination dossier provides a summary description of the history of each of the 30 components that comprise the series; and further descriptive detail about each selected component was provided by the States Parties in January 2016.

Scholarly and scientific interest in the stećci dates from the 19<sup>th</sup> century to the present. There has been intense academic interest in the stećci, and there are many publications about their history and distribution. There are continuing debates about the archaeological, artistic and historical interpretations of the stećci. The transboundary project to develop the World Heritage nomination began in 2009. Following an intensive program of meetings and exchanges between the four States Parties, agreed Tentative List submissions were presented by each of them in 2011.

## **3 Justification for inscription, integrity and authenticity**

### **Comparative analysis**

The *Operational Guidelines* require that serial nominations provide a clear rationale for the selection of the components, including information on how each contributes to the Outstanding Universal Value of the property.

The nomination dossier explains that the component sites have been selected to ensure that the characteristics of the stećci are fully represented by the series. There was an intention to demonstrate the large number of stećci by choosing sites with a relatively large number of tombstones. Selection was also based on the desire to include a range of shapes (according to the five main types that have been identified), decorative elements (which were grouped into several categories to guide the selection), and inscriptions (which, while relatively rare are considered to be of extraordinary historical value). In addition to representing this range of characteristics, the sites with the best preserved and most artistically important stećci have been included. Selection of the series has involved comparing the attributes of the more than 3000 sites containing stećci.

During the evaluation of this nomination, information received from the participating States Parties at several points in the process has considerably augmented the nomination dossier in relation to the method of selection of the series.

While the bases of the selection are clearly explained, there is some variation in the selection factors used between the four States Parties. The means of determining the selected sites reflect some aspects of artistic appraisal and historical context, together with a

range of pragmatic concerns (such as legal protection, state of conservation and so on). Not surprisingly, given the larger number of sites to select from, Bosnia and Herzegovina has developed a relatively more detailed and rigorous application of its selection factors (outlined in the Management Plan and in the additional material provided by States Parties in January 2016), taking into account the historical and regional distribution of stećci, representativeness of the sites, and recognition of regional schools/workshops based on the carving techniques. While these are also used by Croatia, Montenegro and Serbia, they are not systematically applied across all the sites containing stećci; and other factors have been added for some of the selected sites, such as local community support, presentation status, availability of documentation and mapping.

Each State Party has helpfully provided expanded explanations for each of the components in their territories. ICOMOS considers that while the additional information about each component has usefully augmented the descriptions, the specific contribution of each site to the series (and its necessity of being included) is not yet clearly explained. Depending on which criterion is considered, factors such as the representation of the different historical periods, and of different workshops or iconographic styles are relevant. It is also important for a consistently applied selection method to be demonstrated for the entire series (in this case, meaning across the territories of all four States Parties).

ICOMOS therefore considers that while the serial approach is justified for this nomination, the rationale for the selection of each component needs to be further deepened using a common set of selection factors which are more closely tied to the proposed Outstanding Universal Value of the series, and clearly expressing the necessity of including each component.

Considering the potential for the representation of stećci on the World Heritage List, the States Parties have developed the comparative analysis along several lines, and this was extended further in the additional information provided in January 2016. A wide range of existing World Heritage properties that specifically recognise tombs are discussed in the nomination dossier, such as the Bulgarian properties of the Thracian Tomb of Kazanlak ((i), (iii), (iv), 1979) and the Thracian Tomb of Sveshtari ((i), (iii), 1985), the Scandinavian Bronze Age Burial site of Sammallahdenmäki (Finland, (iii), (iv), 1999), and the Egyptian properties of Ancient Thebes and its Necropolis ((i), (iii), (vi) 1979) and Memphis and its Necropolis ((i), (iii), (vi), 1979). However, ICOMOS agrees with the conclusions reached by the States Parties that these are of limited comparative relevance due to their much earlier historical periods and different cultural contexts.

More relevant are the more than 50,000 remaining cross-shaped stone monuments called 'khachkars' in Armenia which were used from the 9<sup>th</sup> or 10<sup>th</sup> century to

the 17<sup>th</sup> century. The craftsmanship of the Armenian Cross-Stones Art was recognised in the UNESCO Representative List of the Intangible Cultural Heritage of Humanity in 2010. Also of comparative relevance for the stećci is the abundantly found Irish high or biblical cross which acts as a common artistic and monumental expression of the early Middle Ages. In addition to the different cultural influences evident in the Irish crosses, they are from an earlier period than the stećci, and were used for a wider range of consecrated places than just burials.

The inscriptions on the stećci are traced and compared to various Christian traditions in medieval Europe, including examples in Italy, England, Bulgaria, Sweden and Denmark (including the Jelling Mounds, Runic Stones and Church (iii), 1994). Likewise, the nomination dossier looks at the decorative elements of the stećci in light of examples drawn from a wide array of artistic traditions in Europe, finding both continuities and differences.

The comparative analysis looks at burial sites on the World Heritage List in terms of other aspects, including the extent to which earlier or prehistoric traditions are evident in later practices, such as at the site of Brú na Bóinne in Ireland ((i), (iii), (iv), 1993); mausoleum type burials from varying historical periods in Iran, Kazakhstan, Turkestan, India, Colombia and Serbia; and the 20<sup>th</sup> century cemetery of Skogskyrkogården in Sweden ((ii), (iv), 1994). These are of limited relevance to the comparative context for this nomination.

The nomination dossier acknowledges that a medieval form of sepulchral slab burial stone is commonly found in Serbia and southern Croatia which share some characteristics with the stećci. These are distinguished as being functionally different, forming the 'lid' of the grave, which is not the case for the stećci. In Croatia, these slabs are commonly found in cemeteries associated with churches or located within monasteries.

The nomination dossier considers the traditions of burial in stone sarcophagi in the Early Middle Ages which have some continuities with the gable-roof style of stećci. These can be found in the Dalmatian towns of Zadar and Split (Croatia) and Kotor in Montenegro ((i), (ii), (iii), (iv), 1979). As well as occurring in an earlier period, this style of burial was reserved for rulers rather than for people from all strata of society, and were used in association with churches and monasteries exclusively. It is worth noting in this context several existing Serbian World Heritage properties associated with medieval periods, namely Studenica Monastery ((i), (ii), (iv), (vi), 1986), Stari Ras and Sopoćani ((i), (iii), 1979), and the Dečani Monastery, part of the Medieval Monuments in Kosovo ((ii), (iii), (iv), 2004, 2006).

ICOMOS acknowledges the wide ranging nature of the comparative analysis and the additional information provided. ICOMOS considers that the task of comparison of funerary traditions and medieval artistic



traditions is challenging when three different criteria are under consideration. Clearly many of the artistic elements are found in the sepulchral practices of south-eastern Europe and elsewhere in Europe, yet there are also distinctive qualities and cultural traditions represented by the stećci.

While providing a useful overview, ICOMOS considers that the comparative analysis that is provided is not yet sufficiently systematic or comprehensive, partly due to the diverse criteria and justifications that have been established for the nomination. For example, there are few comparisons with funerary monuments of the 14<sup>th</sup> or 15<sup>th</sup> centuries for western or eastern Europe which seem specifically relevant to consideration of the stećci.

The comparative analysis seems to conclude that the stećci are a unique phenomenon. ICOMOS considers that this conclusion requires a more comprehensive and systematic analysis that directly refers to the justification for Outstanding Universal Value

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ICOMOS considers that the comparative analysis does not yet justify the selection of the sites that comprise the serial nomination. ICOMOS considers that this could be addressed by placing the occurrence of the stećci more explicitly within their historical, cultural and social contexts, and by providing evidence that could more systematically demonstrate how the forms and decoration of the stećci reflect pre-Christian imagery that might be seen to have persisted in this part of Europe more strongly than elsewhere.

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#### **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 stećci and the archaeological evidence at the selected sites form a spectacular expression of a medieval culture, and an impressive number of stećci survive – estimated at 70,000 stećci in 3,300 sites, located throughout much of Bosnia and Herzegovina and parts of Croatia, Montenegro and Serbia;
- The stećci represent a distinctive tradition in south-eastern Europe, and the selected series of 30 sites represents the most well-preserved expressions of this form of medieval sepulchral art, including its iconography and epigraphy;
- The stećci reflect an inter-twining of cultural influences from both the western and eastern European Christian medieval traditions and also earlier prehistoric and local vernacular traditions that are specific to this part of south-eastern Europe;
- The stećci are a unique phenomenon with a high diversity of types, and richness of decorative motifs and inscriptions; and they mark the burials of members of all social strata, regardless of their ethnic, political and religious affiliations;

- The epigraphy and artistic elements of the stećci have influenced modern literature and artistic expressions in south-eastern Europe.

The serial approach is justified on the basis of the very large number of sites containing stećci in this part of south-eastern Europe; and the need to demonstrate their diversity in form and decorative elements over several centuries of medieval European life.

ICOMOS considers that these arguments present an appropriate general framing of the potential Outstanding Universal Value of the selected sites based on the characteristics of the phenomenon of the stećci; however, not all of these reasons are relevant for justifying their consideration above the regional level of significance.

#### **Integrity and authenticity**

##### **Integrity**

In the context of this serial nomination, integrity is evaluated on three different scales: the first is whether the selection of the components has the capacity to communicate the range of aspects required to illustrate the proposed Outstanding Universal Value; the second is whether there is sufficient rationale provided to understand how each selected component contributes to the proposed Outstanding Universal Value; and the third is whether each of the components has the required completeness to fully contribute to the aspect it represents. These aspects are considered in turn below.

The States Parties argue that the collection of selected components allows the large quantity and geographic range of the stećci found in south-eastern Europe to be understood, including the range of types and decorative elements. ICOMOS considers that this rationale is appropriate although additional considerations could usefully be included, such as the historical periods of the use of the stećci, and identified stylistic differences. ICOMOS considers that the use of the serial approach is justified.

In relation to the specific reasons for each site to be included in the series, the information provided in the nomination dossier is not detailed and ICOMOS requested further information on this aspect. While more detailed explanations were provided by the States Parties in January 2016, ICOMOS considers that the rationale for the selection of each component needs to be further deepened, using a common set of selection factors that are more coherently related to the proposed Outstanding Universal Value of the series. This is distinct from important practical considerations such as legal protection and state of conservation.

ICOMOS further notes that for some of the serial components, integrity is vulnerable due to their poor condition and lack of maintenance.

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ICOMOS considers that the individual components of this serial nomination meet the condition of integrity but that the integrity is vulnerable in a number of cases due to their state of conservation. ICOMOS considers that the serial approach is appropriate, but that the selection of 30 components needs to be further reviewed and justified in terms of the significance of the components and their specific ability to contribute to the Outstanding Universal Value of the stećci.

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#### Authenticity

The authenticity of the selected sites is demonstrated by the widespread occurrence of the stećci in south-eastern Europe, the archaeological evidence of the graveyard sites, the diverse types of medieval tombstones and their intact designs and inscriptions. Together, the sites reflect sepulchral art of the Middle Ages under the influence of western Europe and Byzantine cultures, as well as the local cultural and historical development of the Balkan Peninsula. The lack of subsequent intervention or later periods of use (in most cases) supports the authenticity of these sites.

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ICOMOS considers that the condition of authenticity has been met.

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#### Criteria under which inscription is proposed

The property is nominated on the basis of cultural criteria (ii), (iii) 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 States Parties on the grounds that the medieval tombstones represent an artistic expression arising from the intertwining of different cultural influences – the eastern and western Christian traditions, and earlier prehistoric and vernacular traditions of the region where they are found. The practice of establishing burial grounds in rows is common throughout Europe from the Middle Ages. The States Parties argue that the interchange of values is demonstrated by the observation that individuals from different social strata, different ethnic identities and different medieval Christian communities were all buried in this way over a period of more than three centuries.

ICOMOS considers that while it is possible to trace many influences in the use, decorative elements and forms of the stećci, there is little focus on the cultural processes of interchange in the justification for this criterion. ICOMOS also questions whether the stećci – while impressive in their quantity and specificity to this part of Europe – can be seen as an important development in the *monumental arts*. For these reasons, ICOMOS considers that the arguments put forward by the States Parties for this criterion are more relevant for consideration according to criterion (iii).

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ICOMOS considers that this criterion has not been justified.

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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 States Parties on the grounds that the selected components of the series of stećci provide evidence of a specific expression of medieval European artistic and archaeological heritage, and this was elaborated further in the additional information provided in January 2016. The States Parties refer to the large number of stećci (70,000 documented monuments) relating to a specific historical period in south-eastern Europe. The diverse range of forms, reliefs and inscriptions in the selected sites are considered to provide an exceptional historical source and testimony to European medieval culture. The States Parties consider that the stećci therefore represent the cultures and history of the medieval states in this region (Serbian, Duklja-Zeta, Hungaro-Croatian and Bosnian), the growth of the Dubrovnik Republic and the communes on the Adriatic coast under Hungaro-Croatian and Venetian rulers, the establishment of feudal regulations and vassal relations, the emergence of upper and lower nobility and ecclesiastical authority, and the emergence of the Ottoman Empire.

ICOMOS considers that because the stećci belong to a cultural tradition of a specific region and important historical period, the arguments provided by the States Parties are appropriate for this criterion. In particular, the stećci can be understood as important material evidence of the development of the medieval states in this part of Europe. However, more systematic comparative analysis in relation to this potential justification is needed to establish that the serial nomination can meet this criterion over and above its obvious regional values. This will require both a deeper and broader consideration to place the serial property within the European traditions and within the specificities of local influences.

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ICOMOS considers that this criterion has not been demonstrated at this stage, but that it could be demonstrated in future by providing a stronger focus and evidence about the specific historical context of the stećci.

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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 stećci are deeply embedded in local folk tales and traditions, superstitions and customs. These cultural associations survive in the present, despite the long time that has elapsed since the periods when the stećci were made and used, and despite historical interruptions and migrations. This is demonstrated by the names given to the sites (which

indicate high cultural esteem), the use of inscriptions and reliefs in contemporary literature and art, and the long history of archaeological and artistic study of the stećci in this part of south-eastern Europe.

ICOMOS recognises that properties of this kind will typically exhibit intangible associations for the present-day society. However, while the States Parties have explained the cultural importance of the stećci in the region where they occur, the evidence is provided is minimal, and the Outstanding Universal Value of these associations has not been demonstrated.

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ICOMOS considers that this criterion has not been justified.

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ICOMOS considers that the serial approach is appropriate, but that the selection of sites has not been sufficiently justified at this stage.

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ICOMOS does not consider that the criteria have been justified at this stage, although criterion (iii) could be demonstrated following further work on the comparative analysis and the rationale for the selection of the series. ICOMOS further considers that consideration of criterion (iv) could also be relevant to the serial nomination.

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#### **4 Factors affecting the property**

The States Parties have provided an exemplary risk analysis for each of the selected components contained in the management plans. There are many pressures affecting the cemeteries and the stećci, and currently only a few of them exhibit a good state of conservation.

The impacts of natural deterioration are evident at most of the cemeteries, and broken stones occur at many of the sites. Many of the sites are threatened by uncontrolled vegetation and/or erosion of the stones by water, wind and ice. [28] is at urgent risk due to the erosion of the banks of the Drina River; a stabilisation project is planned in collaboration with the Drina-Lim Hydroelectric Power Plan Company (which operates a dam downstream of the site).

Other problems affecting the condition of the stećci include:

- Highways or local roads passing through the properties: [1], [3], [4], [9]
- Damaging growth of lichen and/or mosses on the surfaces of the stećci due to high humidity: [2], [4], [8], [12], [13], [18], [22], [27], [30]
- Holes dug by animals: [4]
- Damage from tree growth: [11]
- Damage from humanly made fires to control vegetation: [3], [16], [17]
- Illegal excavations: [20]
- Damage from visitors walking on the stećci: [3]
- Holiday home developments in the vicinity: [6]

Preventive measures have been taken in only a few cases (eg. [1], [6], [9] and some limited work at [23], [24], [28]). In other cases, some cleaning has occurred, but this is has not been fully effective and more specialist advice is warranted (eg. [30]). Plans for conservation of most of the components are included in the Management Plans.

At present, only a few of the nominated components are subject to visitation on an organised basis. Both of the Croatian sites [23] and [24] are vulnerable to future visitor pressure because they are close to the tourist resorts on the Dalmatian coast; [28] is located in a tourist area, although current visitor infrastructure at the site is minimal; [6], [25], [26] are located in regions popular for winter sports that are experiencing growth in tourism; and other areas containing components of the series are visited for light levels of nature-based tourism that could be extended to include the stećci and cemeteries (eg. [2], [6], [22]). ICOMOS is aware that many local authorities involved in the nomination processes would like to encourage greater levels of local tourism.

The best known and most accessible sites have basic visitor facilities and interpretation, such as small car parking spaces, benches and seats and interpretation panels; and [10] has some site information in the nearby city centre. However, most of the sites have minimal visitor infrastructure, many have no interpretation, and almost none of them have on-site toilet facilities. Many of the selected sites are in remote locations and lack good road access or directional signage. Road traffic adjacent to [23] presents a safety risk to visitors.

Access is difficult for sites [5], [11], [18], [22], [27], [30]; [21] has difficult access but has good basic visitor facilities. Literature for visitors is available for only a few of the selected sites (the 2010 EU HER.CUL program 'Valorization of Medieval Tombstone Cultural Heritage in the Western Balkans' has produced some of these).

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ICOMOS considers that the main threats to the property differ across the 30 components, but that many are subject to insufficiently controlled natural processes of physical deterioration. Fires and road building have impacted on some sites in the past. Visitor levels are currently low for most of the selected sites, although it is a factor for the Croatian sites, and is anticipated to increase in future from the very low base at some of the other component sites. Improved visitor infrastructure, interpretation and access will be needed to support future growth in visitation.

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#### **5 Protection, conservation and management**

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

Property boundaries and buffer zones have been delineated for each of the 30 component sites. These

have been drawn according to cadastral arrangements, complemented by visual survey. Some of the component sites have fences or stone walls that indicate the property boundary, but in other cases, the boundaries are not physically evident on-site.

In the additional information provided by the States Parties in January 2016, maps indicating the boundaries and buffer zones for 13 of the components were shown as altered: [1], [6], [12], [13], [15], [17], [23], [25], [26], [27], [28], [29] and [30]. As noted above, the overall size of the serial property has been reduced from 70.88ha to 51.38ha, and the total area of the buffer zones has been revised from 1798.42ha to 334.93ha.

Some of these changes seem feasible and are consistent with discussions that occurred during the technical evaluation missions, or address mapping anomalies in the presentation of the nomination dossier. However, for the most part, ICOMOS considers that it is impossible to appropriately consider and evaluate these changed boundaries without the opportunity of a new mission. Clearly this is not possible within the short remaining time in the evaluation calendar established by the *Operational Guidelines*. It would therefore be necessary to consider these in the context of a future mission to the relevant properties.

ICOMOS notes the following issues requiring further review for the boundaries and/or buffer zones for some of the selected components:

- [1]: the further information provided by the States Parties in January 2016 appears to propose a more logical boundary and buffer zone for this component than the extremely large area initially proposed in the nomination dossier (20.16ha with a 1600ha buffer zone);
- [6]: the further information provided by the States Parties in January 2016 proposes to significantly decrease the buffer zone in this area, however, ICOMOS is concerned that this might not adequately protect the visual integrity of the site from holiday home building in the surrounding area;
- [19]: the buffer zone is provided only on three sides of the site. This may need to be reviewed to ensure a sufficient buffer zone on all sides;
- [12], [17], [30]: the additional information provided by the States Parties in January 2016 extend the buffer zones to all sides of the sites (where previously these were provided only on three sides of each site). This is likely to be an improvement, but needs on-site checking;
- [22]: the buffer zone could be redrawn to complement the topography of the setting;
- [23], [27]: the additional information provided by the States Parties in January 2016 has extended the buffer zones for these sites, but on-site checking is needed to evaluate these changes;
- [26]: ICOMOS supports the changes provided by the States Parties in the additional information (January

2016) to extend the buffer zone to the south, across the current road;

- [28]: ICOMOS welcomes the willingness of the States Parties to consider proposed changes to the property boundary, however, on-site checking is needed to confirm the adequacy of the revisions proposed in the additional information (January 2016) to protect the visual integrity of this site;
- [25], [26], [27]: the additional information provided by the States Parties clarify some of the problems with the maps provided in the nomination dossier. However, the properties cannot be mapped on the topographic maps provided due to the selected scales. This could be corrected for the benefit of the inventory materials required for World Heritage properties.

Because the proposals by the States Parties for revised property boundaries and buffer zones has occurred very late in the evaluation period, ICOMOS is also concerned to ensure that the necessary legal protection is fully in place for each of the boundaries and buffer zones.

Finally, ICOMOS suggests that, where feasible, associated quarries and landscape settings should be included in the buffer zones for properties where these connections are still extant.

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ICOMOS considers that the boundaries of the nominated property components and their associated buffer zones need further review and revision in order to adequately delineate and protect the nominated sites. ICOMOS notes that this would require a further mission.

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#### **Ownership**

Most of the components of the serial nomination are in state ownership, although ownership varies and there are some that are wholly or partly privately owned including:

- State ownership: [2], [3], [5], [6], [7], [8], [10], [21], [22]
- Mixed ownership state/private: [1], [14], [17], [23], [29], [30]
- Private ownership [9], [11], [12], [16], [18], [19], [20], [25], [26]
- Private ownership (several owners): [4], [13], [15]
- Roman Catholic Church ownership: [24]
- Local community ownership: [27]
- Municipality and private ownership: [28]

#### **Protection**

Each of the States Parties is responsible for establishing legal protection for the nominated components of this property in their territory. In each case, the stećci have been afforded the highest level of national protection, including the buffer zones.

Each of the participating States Parties has signed international and European conventions relevant to the protection and management of the nominated property, including those that concern protection of archaeological heritage, landscape planning, protection of cultural

heritage in situations of armed conflict or natural disaster, and for the prevention of trafficking of cultural material.

Bosnia and Herzegovina: all the nominated sites have been declared national monuments by the Commission to Preserve National Monuments, and boundaries and buffer zones established. Protection measures are stipulated by the Law on Implementation of the Decisions of the Commission to Preserve National Monuments established through the General Framework Agreement for Peace in Bosnia and Herzegovina (Official Gazette of the Federation of BiH, nos. 2/02, 27/02, 6/04, and 51/07; and the Official Gazette of the Republika Srpska nos. 9/02, 70/06, and 64/08).

Croatia: County and Municipality Spatial Plans and the Decisions on protection issues by the Ministry of Culture are supported by the Law on Protection and Preservation of Cultural Heritage. Conservation Departments in Imotski and Dubrovnik are responsible for implementing the protection measures for the nominated components in Croatia.

Montenegro: Legal protection is established by the Law on Protection of Cultural Property (Official Gazette of Montenegro, no. 49/10) and the Law on Spatial Planning and Construction of Buildings (Official Gazette of Montenegro, no. 51/08). The Ministry of Culture establishes the management plans for adoption by the Government.

Serbia: Legal protection is established by the Law on Cultural Property (Official Gazette of the Republic of Serbia, no. 71/94). The Republic Institute for the Protection of Cultural Monuments – Beograd, and the Institute for the Protection of Cultural Monuments in Kraljevo are responsible for the implementation of protection and conservation of the nominated components within Serbia.

ICOMOS considers that the legal protection provided by the participating States Parties is effective.

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ICOMOS considers that the legal protection in place is adequate.

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### **Conservation**

The stećci present a vast resource and focus for research. Inventorying of the stećci has occurred for over a century, but mostly in the post-World War II period, and especially since the 1970s. There is now a significant regional literature about the stećci. Despite this long period of interest, there is still a sense that there is considerable research and documentation yet to be done. The work done for the World Heritage nomination by the participating States Parties has in itself had a beneficial effect on this needed work.

Archaeological excavations have been conducted at only a few of the component sites (eg. [2] [23], [24], [28]).

Few of the component sites exhibit a good state of conservation, mostly due to natural processes of deterioration that are not sufficiently controlled. The limestone is sensitive to the effects of humidity and temperature changes; and many of the stones are eroded and broken, covered with moss and various lichens. There is a lack of maintenance, although the processes of preparing the nomination have allowed some good work to be done on condition assessments and planning of conservation interventions.

As noted above, preventive measures have been taken in only a few cases. To meet a higher standard of conservation, most of the sites will need to be included in active conservation programmes by skilled conservators. These activities are outlined in the Management Plans, but have yet to be implemented in most cases. The financial and human resources (including specialists and trained local people to take care of the maintenance) will represent a substantial commitment for the States Parties, particularly for Bosnia and Herzegovina (where the majority of the selected components are located). It would be desirable to develop a more detailed projection of these resource requirements and timeframes in which they can be provided.

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ICOMOS considers that the needed condition surveys and conservation planning have been completed, and should be implemented; and that continued work is needed to improve the state of conservation of the components of the series.

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### **Management**

Management structures and processes, including traditional management processes

Each State Party has appointed a coordinator, and together they form the International Coordination Body (or 'Transnational Coordination Committee') responsible for the development of common management principles and objectives for the nominated components. Upon inscription, this body will be responsible for coordinating the joint management, according to the roles specified in the management plan. ICOMOS considers that this arrangement is appropriate; and notes the activity plan outlining the agreed coordination, capacity building, research and communications actions in the management plans.

At the regional and local levels, activities are coordinated by the State Coordination Structures and by the site management structures. Financial resources for implementing the management system will be provided by each State Party for the components occurring on their individual territories.

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

The participating States Parties have prepared common Management Plan documents (2013-2023) for the nominated sites within their territories in compliance with existing legal protection for cultural heritage and spatial planning. While not entirely identical in their structure, these plans are clearly formulated according to an agreed approach, and contain a common vision, uniform conservation standards, shared management principles, a range of shared interpretation objectives and models of tourism development. There are also site level management plans for most of the components.

Each of the Management Plans identifies factors and processes of deterioration of the stones, and proposes clear actions for each component site.

There are no data about current levels of visitors to the nominated components. As noted above, visitor levels are very low for many of the component sites, and there are no formal tourism activities. The management plans clearly outline the current tourist infrastructure provided at each component site, but visitor management is otherwise not very detailed in the management plans that accompany the nomination dossier. Several types of potential tourism are considered: cultural tourism, eco-tourism, country tourism and sports tourism, and strategies have been developed around these. For the most part, visitor management is planned and implemented at the site level, via the site management plans, but some further coordination of education, interpretation and promotion might be useful.

ICOMOS considers that the management system is adequate for the safeguarding of the nominated property, although ongoing efforts will be needed to ensure that coordination is maintained across the different levels of management planning. ICOMOS is concerned that the training and financial resources needed to achieve and maintain a good state of conservation across the nominated series will be challenging. Further development of a common approach to the conservation of the stones, and capacity building at the local levels will be beneficial to the conservation of the stećci.

#### Involvement of the local communities

The involvement of local authorities and communities seems variable between the 30 components of the serial nomination, and systematically presented information is not available on this aspect.

While local authorities appear to have been involved in preparing the nomination in most areas, the involvement of local communities is also evident in a few cases. Some good examples of community involvement were noted by the ICOMOS missions, including: at [10], the local NGO 'Karaula' is a partner with the municipality for cultural activities, including the preservation of stećci; at

[21] the local community has assisted with providing visitor infrastructure; at [23] group visits are organised by the local history association; and, at [13] and [23] some activities are done with the involvement of school students. The ICOMOS missions reported good relations between specialists and local communities throughout the visited areas; and sites [2], [5], [25], [28], [29], [30], are regularly cleaned and vegetation controlled by the local community.

Overall, there are many signs of community support for the nomination. However, ICOMOS is uncertain about whether there is effective involvement of local communities in the management of all the component sites, and urges the participating States Parties to build on the existing examples of community involvement, and provide for capacity building and community participation in the management system.

ICOMOS considers that while the management system seems workable, it is not yet fully functioning. The effectiveness of the management system will need to be monitored and evaluated, especially in relation to the coordinated management mechanism.

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In conclusion, ICOMOS considers that the management system is adequate, but is not yet fully operating and needs strengthening, continued coordination and the consistent and long-term involvement of local communities.

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## 6 Monitoring

The nomination dossier outlines a set of seven indicators for monitoring the state of conservation by the participating States Parties. These focus on the condition of the stećci and the effectiveness of conservation measures. While one of the indicators measures the 'impact of development' on a monthly basis, this could be further elaborated, and include levels of visitation (where relevant).

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ICOMOS considers that the specified indicators appropriately focus on the state of conservation of the stećci, but that these could be further augmented by indicators associated with visitation and use to assist with the management of the serial property.

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## 7 Conclusions

The stećci are an impressive phenomenon of the medieval cultures of south-eastern Europe. They represent a remarkable regional spiritual expression and artistic tradition derived through various cultural influences. The use of the serial approach is justified by the astonishing number of stećci found in this part of Europe, the range of types and decorative elements they exhibit, and the long time span of their use. The four States Parties are to be commended for the immense

shared work that has been done to present this serial nomination for evaluation.

While ICOMOS considers that the *stećci*, the graveyards in which they occur, and the historical and cultural significance of the associated funerary practices have the future potential to meet the requirements of Outstanding Universal Value, it is essential that the basis on which this occurs is clearly demonstrated. The recommended further work consists of several key and inter-related aspects that need careful re-formulation.

ICOMOS observes that the *stećci* represent both continuities with other European medieval traditions as well as specificities to older local traditions in south-eastern Europe. In order to establish the significance of the series beyond a regional threshold, the comparative analysis should be augmented by deepening the consideration of the continuities with other European cultural practices, and the specificities and older traditions of the areas where the *stećci* are found.

This should also assist in improving the needed rationale for the inclusion of each of the components in the series, which despite the progress made by the States Parties in the further information provided in January 2016, is lacking in sufficient clarity in relation to the asserted values of the serial property. ICOMOS notes that par. 137 of the *Operational Guidelines* requires that serial nominations demonstrate how each component contributes to the Outstanding Universal Value of the property as a whole in a substantial and specific way. While considerable efforts have been made by the States Parties in relation to this requirement, ICOMOS finds that much of the framework established to aid the selection is based on pragmatic concerns (such as state of conservation, legal protection, number of *stećci*), rather than the significance of the *stećci* and the proposed Outstanding Universal Value of the serial property; and that there are variations in the methods of selection used by each of the four States Parties, rather than applying a coherent agreed approach.

If invited to so do, ICOMOS has offered to work with the States Parties to improve this critically important basis of the serial nomination.

ICOMOS also recommends that the criteria on which this nomination rests be reconsidered. Based on the material that has been presented, ICOMOS does not see future possibilities for inscription according to criteria (ii) and (vi), but criterion (iii) could form the basis of a revised nomination. For criterion (iii) to be demonstrated, ICOMOS recommends that the States Parties provide more explicit consideration of the specific cultural tradition or civilization, particularly in relation to how the tombstones (and graveyards) illuminate in an important way the cultural traditions of the area where they are found. Alternatively, the States Parties might wish to also give renewed consideration to criterion (iv) as part of this review, since it will allow for a more typological valuation of the *stećci* graveyards as a specific type of burial

structure. Given that the selection of criteria shapes the requirements for the evidence to be presented, the comparative analysis, and in some instances, the designation of boundaries, ICOMOS urges the States Parties to carefully review these possibilities, and offers to work with the States Parties on this aspect if requested.

The condition of authenticity is satisfied, and the serial approach is appropriate for the nomination of the *stećci*. As discussed above, further justification of the selection of the 30 component sites is needed so that the condition of integrity can be fully satisfied.

The main threats to the component sites relate mostly to lack of maintenance and insufficiently controlled processes of natural deterioration. This has been recognised by the States Parties, and there are conservation plans provided that are awaiting implementation. The conservation work carried out at several of the sites has been effective at mitigating these threats.

While visitor levels are generally very low, there are some component sites that require attention to visitor pressures; and all sites could benefit from a higher level of visitor infrastructure, including site interpretation. These have been clearly analysed as part of the processes to develop the World Heritage nomination, and actions for future works identified.

ICOMOS has also identified a number of adjustments to the boundaries and buffer zones of the selected sites that could be made in order to better reflect the values of the *stećci*, and to improve their protection, management and presentation. If feasible, it might also be worthwhile to include some of the extant quarries in the buffer zones of selected sites.

Legal protection and the management systems are adequate, with evidence of good coordination between the four States Parties. The monitoring indicators are few, but focus appropriately on the condition of the key attributes of the nominated serial property.

ICOMOS acknowledges that the four States Parties have responded energetically to the issues raised during the evaluation period. This is particularly demonstrated in the additional information provided in January 2016 (which included some revised sections of the nomination dossier). However, the time available to the States Parties and to ICOMOS during the formal evaluation process is not sufficient to reformulate and re-assess a nomination on this scale, and ICOMOS therefore concludes that a recommendation to defer the nomination is necessary in order to resolve these matters. ICOMOS has proposed a future Advisory Mission to the States Parties as a way of reformulating this nomination.

## 8 Recommendations

### Recommendations with respect to inscription

ICOMOS notes that this transnational serial nomination powerfully demonstrates that heritage can be a catalyser for peace, and acknowledges the importance of the efforts made by the four States Parties to work together to propose the inscription of their shared heritage of the stećci for inclusion in the World Heritage List.

While noting the considerable additional information provided by the States Parties in response to ICOMOS' Interim Report, including the revised nominated property boundaries, ICOMOS recommends that the examination of the nomination of Stećci – Medieval Tombstones, Bosnia and Herzegovina, Croatia, Montenegro, Serbia, to the World Heritage List be **deferred** in order to allow the States Parties, with the advice of ICOMOS and the World Heritage Centre, if requested, to:

- Reformulate the justification for Outstanding Universal Value to clearly address criteria (iii) and/or (iv), placing the stećci more clearly within their social, cultural and historical contexts;
- Demonstrate how the forms and decoration of the stećci reflect pre-Christian imagery that might be seen to have persisted in this part of Europe more strongly than elsewhere;
- Further develop the comparative analysis to more explicitly establish the importance of the stećci beyond the regional level, and to support the systematic selection of the components of the series according to their significance;
- Provide a clear and specific rationale for the inclusion of each of the component sites in the nominated series in terms of the proposed Outstanding Universal Value;
- Continue to review and revise the property boundaries and buffer zones as needed to ensure the protection of the visual integrity of the cemeteries and to improve the ability for the sites to be understood within their natural and historical landscape contexts, particularly where there are nearby extant quarry sites and historical settlements/fortresses;
- Implement and strengthen the management system through continued coordination and local community involvement, addressing the maintenance needs of the stećci, and ensuring adequate resourcing and capacity building for local caretakers.

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

ICOMOS remains at the disposal of the States Parties in the framework of upstream processes to advise on the above recommendations, if requested to do so.

### Additional recommendations

ICOMOS recommends that the States Parties give consideration to the following:

- Further improving the consistency of mapping and description of the selected components of the series;
- Augmenting the inventories to include other architectural and archaeological features found within some of the selected sites, such as archaeological material, churches, ruins, tumuli and cairns;
- Continuing to improve the state of conservation at selected sites through the development and implementation of active conservation programs based on the advice of skilled conservators;
- Improving the presentation of the sites through on-site and off-site interpretation and visitor infrastructure;
- Considering changing the name of the serial property to "Stećci Medieval Tombstone Graveyards" in order to place the tombstones in their important contexts.





Map showing the location of the nominated properties within four States Parties



St. Barbara – Dubravka, Croatia



Grčko groblje – Hrta – Prijepolje, Serbia





Grčko groblje - Žabljak, Montenegro



Grčka glavica in the village of Biskup - Konjic, Bosnia-Herzegovina



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## Roman Urbanism of Zadar (Croatia) No 1522

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### Official name as proposed by the State Party

Roman Urbanism of the Zadar Peninsula with the Monumental Complex on the Forum

### Location

Zadar City, Zadar County  
Republic of Croatia

### Brief description

The nominated property encompasses the Monumental Complex erected on the Roman Forum in the centre of the historic Peninsula of Zadar and the rectangular orthogonal street grid which dates back to the foundation of the Roman colony and still features in the urban layout of the Zadar Peninsula. The Forum was built over a period of three centuries and then remodelled over the next 1,700 years to its current composition. As a compendium of various historical architectural periods and different styles of buildings and modes of historical renovation, it forms the religious centre of the city as well as the urban centre of the city's Roman urban design, still visible in its extended orthogonal grid. Key buildings on the site of the Forum are an oratory and a sacristy, built in the 4<sup>th</sup> and 5<sup>th</sup> centuries, the Church of St Donat (9<sup>th</sup> century), the Cathedral of St Anastasia, the Church of St Mary, with its bell tower, capitulary hall and the convent, the bishop's palace, the old seminary and the Church of St Elijah.

### Category of property

In terms of categories of cultural properties set out in Article I of the 1972 World Heritage Convention, this is a combination of an archaeological *site* and a *group of buildings*.

## 1 Basic data

### Included in the Tentative List

1 February 2005

### International Assistance from the World Heritage Fund for preparing the Nomination

None

### Date received by the World Heritage Centre

28 January 2015

### Background

The present nomination reformulates under a different name and focus a previous nomination first submitted in

2012 under the name "Sacral Complex on the remains of the Roman Forum in Zadar".

The World Heritage Committee at its 36<sup>th</sup> Session (Saint Petersburg, 2012) adopted decision 36COM 8B.28 and referred back the nomination to the State Party, recommending it to invite an ICOMOS advisory mission. The advisory mission was invited but this could not take place, due to the fact that the State Party had the intention of resubmitting the revised nomination in 2013, and this would have meant that the nomination would have entered the evaluation phase, during which ICOMOS cannot provide technical expertise and carry out advisory missions.

The revised nomination was resubmitted on 31 January 2013 further to the referral decision. On 17 May 2013, the nomination was officially withdrawn by the State Party, following the ICOMOS recommendation for non-inscription.

In June 2013 a meeting between ICOMOS and the State Party took place to discuss the organisation of an ICOMOS advisory mission, which took place on 16-18 September 2013, with the involvement of the World Heritage Centre. In February 2014, the ICOMOS advisory mission report was transmitted to the State Party.

The findings of the ICOMOS Advisory Mission led to the following recommendation:

In terms of criteria of the World Heritage Convention, the Advisory Mission recommends to the Croatian authorities to not further pursue a nomination of the Sacral Complex on the Remains of the Roman Forum in Zadar to the World Heritage List. ICOMOS would offer its assistance as part of the up-streaming process to review with the Croatian authorities the Tentative List of Croatia to identify the most promising cultural heritage candidates for which nominations dossiers could be prepared in the future.

On 28 January 2015 the State Party submitted the nomination which is the object of the present evaluation report.

### Consultations

ICOMOS has consulted its International Scientific Committee on Archaeological Heritage Management and several independent experts in the fields of archaeology, ancient urban planning, and history of architecture.

### Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the property from 9 to 13 September 2015.

### Additional information received by ICOMOS

On 5 October 2015 ICOMOS sent a letter to the State Party requesting an expanded comparative analysis with regard to Roman urbanism, which is the focus of the present nomination. The State Party responded on

9 November 2015 and the additional information provided is discussed in the relevant sections of this report. As requested by the revised *Operational Guidelines*, the State Party received an Interim Report on 18 January 2016.

#### Date of ICOMOS approval of this report

11 March 2016

## 2 The property

### Description

The present proposal adds to the property previously nominated the orthogonal street grid pattern of the historic core of Zadar, which illustrates the endurance of the Roman urban layout throughout the centuries, and the Benedictine convent of St Mary, with the exception of its reconstructed north wing, today housing the Museum of Sacral Art.

The geomorphology of the eastern Adriatic coast is such that peninsulas that jut out into the sea are a frequent occurrence and can be found in many other locations, where towns have been founded and are still in existence, e.g. at Cavtat (*Epidaur*), Biograd na Moru (*Blandona*), Rab (*Arba*), and Poreč (*Parentium*).

The favourable location of the Zadar peninsula was recognised early on by an Illyrian tribe, the Liburnians, who founded their settlement on this narrow stretch of land.

In the first century BCE, a Roman settlement was established on the Zadar peninsula for war veterans. It is assumed that the orientation of the urban orthogonal structure of the Roman colony was determined using as a reference point the peak of St Michael's Hill on Ugljan Island, opposite the Zadar peninsula, still visible today from the archaeological open area of the former Forum.

Archaeological remains bear witness to the permanence of the urban layout and street pattern: the street grid, the vestiges of the Roman Forum, and, in addition, the location of the emporium has been detected in the ancient port area, approximately in the same place where the Church of Saint Chrysogonus stands today. The perimeter of the Roman fortifications can be determined with certainty only on the northeastern side, while archaeological excavations have identified the location and configuration of the monumental gate, situated to the south, through which the *decumanus maximus* was approached, as well as part of public *thermae*, a few remains of which were detected near the emporium area.

The Roman orthogonal street grid proposed for inscription is materialised by the direction, width and surviving remains of the paving of the *decumanus* and *cardo maximi*, the *cardines* 1, 3, 4, 6 and 8, portions of *cardines* 2, 5 and 6, and the *decumani* 1, 2 and 3. In particular the main *cardo* is still visible at its original level, along the eastern limits of the Forum *tabernae* in the archaeological

area. The street grid formed rectangular city blocks measuring approximately 45 m in length by 25 m in width, each including four to five residential units. The *decumanus maximus* is still today the main street and is named *Široka ulica*, or *Kalelarga* (Broad Street). The Forum included an open square – *Lestrikat* in Croatian – surrounded by a two-storey portico, the basilica and *tabernae*. The sacred area, or *Capitolium*, was located on the north-western part of the Forum.

The visible remains of the Roman Forum, including preserved parts of the original street paving, fragments of Roman columns and walls as well as other architectural fragments presented in an archaeological park, form the oldest parts of the nominated property, dating back to the first three centuries CE.

From the 4<sup>th</sup> century CE onwards, in the Forum area, religious buildings began to be erected; they, through additions and remodelling in the subsequent centuries, today form a monumental complex, which is the centrepiece of the nominated property. The group of buildings includes the Episcopal complex, erected between the 4<sup>th</sup> and 19<sup>th</sup> centuries CE, encompassing the cathedral, dedicated to Saint Anastasia, its bell tower, the baptistery, the archbishop's palace and the seminary. Further ecclesial structures which are part of the nominated complex are the Church of St Donat, built in the 9<sup>th</sup> century on a circular plan, the Benedictine Convent with the Church of St. Mary, its bell tower and the capitulary hall, the Church of St. Elijah, and the buildings erected on top of the former Capitol.

The cathedral dedicated to St Anastasia was originally built in the 5<sup>th</sup> century. However, after its destruction in 1202 during the capture of Zadar by the Crusaders, it was rebuilt in its present form in the 13<sup>th</sup> century, inspired by the religious architecture of Pisa, which Zadar was allied with at that time. The sacristy and baptistery retain some earlier remains of the 5<sup>th</sup> century complex, including parts of the walls and of the ancient floor and its mosaics. Gothic vaulting replaced the original roofing in the 14<sup>th</sup> century. The bell tower annexed to the cathedral is a 15<sup>th</sup> century structure built in a combination of late Gothic and early Renaissance styles. It remained incomplete until, in 1891, the last two Romanesque-style storeys were added.

The administrative centre of the Episcopal complex is the bishop's palace, originally a building of the 5<sup>th</sup> century but in its present form appearing as it was after renovation in 1829-1832, with no apparent remains surviving from its earlier stages. In the very centre of the Forum is the Church of St Donat: erected in the 9<sup>th</sup> century CE, it exhibits a circular ground plan and a central cylindrical space rising over two storeys. The church is built of small stones and rubble in a rich mortar (*opus incertum*) with six massive pillars.

The old seminary, completed in 1748, is of simple and monumental character, built in regular blocks of roughly carved stones. Its importance to the Episcopal complex is

demonstrated by its continuous use for educational activities.

The Church of St Elijah was originally a small medieval church, sold to the Orthodox Serbs in 1754. At that time a campanile in simple Baroque style was added and in 1773 the medieval church was demolished and a new church was built in late Venetian Baroque style.

The Monumental Complex also contains the Church of St Mary and its bell tower and capitulary hall as well as the Benedictine convent. The bell tower, constructed after the victory and peace treaty in Beograd in 1105, remains original for its first two storeys, including early vaulting that rested on two broad crossed belts with a flat rectangular cross-section. The upper storeys of the bell tower are a reconstruction carried out in the years 1438-1453, a very early deliberate facsimile reconstruction of an architectural monument in Europe. The capitulary hall was created as a functional unit along with the bell tower in 1105. As one of the oldest such structures along the Adriatic coast, it survives in its Romanesque layout and architectural elements.

#### Buffer zone

The proposed buffer zone encompasses the Zadar peninsula with the historic town centre, the remains of the Venetian fortifications and of the Forte, erected in front of the city, which is separated from the town by an artificial channel, the main Gate, built to the Venetian architect Sanmicheli's designs, the stretch of sea between the island of Ugljan and the Zadar peninsula, the port area between the peninsula and the mainland, and the new waterfront, named Nova Riva, built on the mainland in the early 20<sup>th</sup> century.

#### The wider setting

The territory surrounding the Roman colony of *Jader* (Zadar) was subdivided according to the usual Roman measure, the *centuria*, and this was applied to the mainland ager as well as to Ugljan Island. The *centuriae* were divided into smaller even parcels. Research has confirmed that the cadaster division of the Zadar ager (territory) was much larger than presumed and, at this stage, only 70 of them can be verified. Aerial photography shows tangible traces of this division in the fields, namely dry-stone walls, land plot dividers, directions of roads, goat paths, and dirt tracks.

Curiously, but seemingly due to the shape and direction of the Zadar peninsula, the orientation of the urban street grid pattern and that of the *centuriatio* do not coincide, differing by a few degrees. However, this anomaly is only mentioned but not discussed in the nomination dossier.

#### History and development

Zadar was first established in the 7<sup>th</sup> century BCE when the earliest settlement was founded by an Illyrian tribe, the Liburnians, who exerted their control over the Adriatic Sea until the Romans arrived. Roman occupation began in 48 BCE, when the city was founded and given its Roman name of *Jadera* or *Jader*, by Octavius Augustus, its first

patron. Under Roman influence Zadar was the second most important city along the Eastern Adriatic coast, after the city of Salona, which was almost completely destroyed during Avar-Slavonic incursions in the early 7<sup>th</sup> century.

In the 4<sup>th</sup> century Zadar was given a new religious core on the site previously occupied by the Roman Forum, which integrated the new Episcopal centre. Little is known of Zadar's early Christian history; however a prominent figure is recorded: Bishop Donat, who was an envoy of the Byzantine Emperor to Charlemagne and who resided in Zadar in the 9<sup>th</sup> century, when the Church of the Holy Trinity, later Saint Donat, was erected with a central plan, presumably inspired by the Palatine Chapel in Aachen. In the 11<sup>th</sup> century this religious complex was expanded along the eastern edge of the Forum, with the construction of the Church of St Mary, an example of early Romanesque style which can also be seen at the northern end of the Forum in the Cathedral of St Anastasia, consecrated in 1175. The first wave of major destruction of Zadar occurred in 1202 as result of the Crusader-Venetian conquest of the town. Zadar subsequently entered into a defensive alliance with Pisa, which also influenced its architectural styles.

In 1409 Zadar was sold by King Ladislav of Naples to Venice, which ruled it until the beginning of the 19<sup>th</sup> century. Between the 15<sup>th</sup> and 16<sup>th</sup> centuries, Zadar was transformed into an important defensive stronghold for the Venetian *Serenissima Repubblica*: older fortifications were reinforced or remodelled and new ones built. The Venetian influences still mark Zadar's urban and architectural appearance in many respects.

After the fall of Venice, Zadar was ruled by the Kingdom of Austria until 1921, and then by Italy. At the beginning of the 20<sup>th</sup> century a large city development scheme, the so-called New Waterfront (Nova Riva) was implemented and several modern seafront buildings erected.

The historic core of Zadar suffered serious damage in 1943 and 1944, when, following Allied bombing, about 60% of the city's historic fabric was destroyed. War damage also affected parts of the monuments inside the nominated property, such as St Anastasia's Cathedral, the baptistery, and St Mary's Church.

After 1945, Zadar became part of the Republic of Croatia, a federal unit within Yugoslavia and was again affected by destruction during the Homeland War of 1991-1995.

World War II and Homeland War destruction did not prevent the retention of the orthogonal grid of the street pattern and of the city blocks during post-war reconstruction and this imprint, which has marked the image of the city throughout the centuries, is still clearly recognisable.

Extensive restoration campaigns were carried out after WWII, in the 1960's and 1980's and in the early 20<sup>th</sup> century.

### 3 Justification for inscription, integrity and authenticity

#### Comparative analysis

The comparative analysis in the nomination dossier examines the two distinct aspects of the present nomination, namely the persistence of Roman urbanism and the presence of a monumental, mainly religious complex on the Roman Forum. For the first aspect, the comparison looks at towns exhibiting a similar orthogonal pattern of the street layout deriving from Roman or Greek influence or foundation, including Stari Grad (*Pharos*), Trogir (*Tragurion*), and Poreč (*Parentium*), concluding that the case for Zadar is outstanding in terms of integrity of the urban layout. With regard to the monumental complex, the nomination dossier finds it difficult to find comparable examples, as, unlike other towns where one period or another prevails, in Zadar the diverse stylistic forms make this complex unique and the reflection of a two-millennium-long uninterrupted continuity of function. However a number of comparators are commented on in the nomination dossier - Poreč, Trogir, Arles, Roman and Romanesque Monuments (France, 1981, criteria (ii) and (iv)), the Roman Monuments, Cathedral of St Peter and Church of Our Lady in Trier (Germany, 1986, criteria (i), (iii), (iv) and (vi)), the Archaeological Ensemble of Tárraco (Spain, 2000, criteria (ii) and (iii)) – but they are considered less complex than in the case of Zadar, where a multi-century monumental amalgam has given rise to an incomparably distinctive character.

ICOMOS noted that the comparative analysis in the dossier did not take into account several other relevant properties, inscribed or not on the World Heritage List, and requested the State Party to expand the comparative analysis by including additional examples that could support the claims regarding the exceptionality of Zadar's Roman urbanism and of its persistence down the centuries.

The State Party has considerably expanded the scope of the comparative analysis by examining further examples in Croatia (Arba/Rab, Curicum/Krk, Aenone/Nin); in Italy (Aosta, Pavia, Piacenza, Parma, Verona, Lucca, which are all examined in some detail, and mentioning briefly Florence, Bologna, Turin and Rimini); in France (Roman Theatre and its Surroundings and the "Triumphal Arch" of Orange, 1981, criteria (iii) and (vi), Historic Sites of Lyons, 1998, criteria (ii) and (iv), and Nîmes); and Spain (Archaeological Ensemble of Mérida (1993, criteria (iii) and (iv)).

The State Party underlines that, in many instances, the Roman street grid is not mentioned amongst the reasons to justify inscription of other properties already inscribed on the World Heritage List. In ICOMOS's view, this indicates that the survival of orthogonal street layouts in these cities has not been seen as a sufficiently characterising feature, to be put forward as a justification for World Heritage recognition, as this is shared by several towns with a Roman origin. The fact that, in

Zadar's case, this feature has become the focus of the nomination does not make, by itself, a strong case for inscription.

ICOMOS also notes that many other surviving towns, including those examined in the supplement to the comparative analysis submitted by the State Party upon ICOMOS's request, exhibit the permanence of the Roman layout and the area of the forum continues to remain at the centre of city life. Some examples also show close similarities, e.g. the City of Verona (Italy, 2000, criteria (ii) and (iv)), where the Piazza delle Erbe is situated on top of the area of the Roman forum (as was the case of Zadar before the destruction of WWII), the *decumanus maximus* still coincides with an important urban axis, and two of the Roman gates are still partly preserved (Porta Borsari and Porta Leoni) and the amphitheatre (Arena) continues to be used.

ICOMOS further considers that in the Archaeological Ensemble of Tárraco which carries exceptional importance in the development of Roman urbanism and the aesthetics of Roman cities, the cathedral of St Mary replaced the ancient centre of worship at the Roman forum, thereby exhibiting a continuation of the religious function from the Visigothic age until the present day.

Another comparator with Zadar, with regard to the erection of religious structures on top of or near to the Roman forum, is the city of Thessaloniki, where the Paleo-Christian and Byzantine Monuments (Greece, 1988, criteria (i), (ii) and (iv)) have been built around the Roman forum, which is much better preserved than the Zadar forum. The first basilica dedicated to Saint Demetrius was built in the 4<sup>th</sup> century CE on top of the Roman *thermae* and the Church of Panagia Chalkeon (11<sup>th</sup> century) was built to the south west of the forum.

ICOMOS considers that Arles and Trier have been distinctly marked by their Roman imprint and still preserve highly significant monuments from that epoch. Both towns, and Trier in particular, as one of the capitals of the Tetrarchy, played an important role in the diffusion of Christianity.

Another important and nearby example to Zadar is Rimini (*Ariminum*), situated on the western coast of the Adriatic. The town has maintained the same main axis for two millennia, running from the Arch of Augustus through the historic centre up to the Ponte di Tiberio, built in 21 AD from Istrian limestone, and the orthogonal arrangement of its streets is clearly visible. ICOMOS considers that Rimini is relevant also for its territory which has retained to a high degree the traces of the *centuriatio*, which is still clearly discernible in a still prevalently agricultural landscape. In Rimini the Church of San Michelino in Foro attests to the subsequent use of the forum to build religious structures.



Further examples where religious buildings were erected on Roman fora can be found in Aosta (sacral cathedral complex) and Lucca (Cathedral of San Michele in Foro).

Finally, in ICOMOS's view, Poreč (*Parentium*) represents a highly relevant comparator for the nominated property, as it encompasses the Episcopal Complex of the Euphrasian Basilica in the Historic Centre of Poreč (Croatia, 1997, criteria (ii), (iii) and (iv)). The Roman town of *Parentium* was founded on a peninsula, like Zadar, the urban layout still retains to a large extent the Roman grid pattern, and the *decumanus maximus* still carries this name today. Additionally, this property contains one of the most important early Christian episcopal complexes.

While the nomination dossier underlines that the outstanding quality of the nominated property, differently to Poreč, lies in its continuous remodelling throughout two millennia, ICOMOS considers that this reworking of monuments and of the central part of the town cannot be considered unique to Zadar, but is rather commonplace in towns with such a long history.

ICOMOS notes that the arguments put forward to justify consideration of this nominated property in respect to the other analysed examples have been carefully constructed to show that Zadar is unique; however, the examples included in the comparative analysis suggest that other comparable cases do exist. Additionally, ICOMOS considers that uniqueness alone cannot be regarded as a discriminating factor for World Heritage recognition, if the property's Outstanding Universal Value is not demonstrated.

The examples selected for the comparative analysis and its supplementary analysis suggest that the Roman Urbanism of the Zadar peninsula with the Monumental Complex on the Forum do not justify consideration of this property for the World Heritage List compared to other examples inscribed or not on the World Heritage List.

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ICOMOS considers that the comparative analysis does not justify consideration of this property for the World Heritage List.

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#### **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 Zadar peninsula has faithfully retained the layout of the Roman urbanism with its orthogonal grid which has been the framework for the successive developments of the town throughout two millennia;
- The permanence of the Roman urban structure is preserved also in its very centre, the Forum, which, since the 4<sup>th</sup> century CE, has witnessed the development of a Christian centre, which grew and was remodelled throughout the subsequent

centuries, whilst still respecting the orthogonal layout, an exception being made for the circular Church of Saint Donat (9<sup>th</sup> century);

- The public and religious buildings erected on the Forum exhibit a variety of architectural and artistic languages, namely early Christian, Pisano-Romanesque, Gothic, Venetian Renaissance and Baroque, 19<sup>th</sup> century historic-revival, and 20<sup>th</sup> century modernism;
- This combination of architectural and artistic languages reflects the wide range of political and cultural influences which have shaped the cultural heritage of Zadar.

ICOMOS considers that, while the statements above are appropriate because they reflect Zadar's reality, on the other hand they cannot support the claim to justify consideration of the nominated property for the World Heritage List, because the comparative analysis has demonstrated that Zadar is not unique with regard to the proposed justification for inscription, and does not stand out in respect to many other similar properties. In fact, many other towns dating back to Roman times have survived throughout the Mediterranean region, whose layouts reveal the original urban planning of a Roman *municipium* or *colonia*. They, with their monuments or monumental complexes, bear witness to uninterrupted continuous settlement for the last two millennia and many of them are already on the World Heritage List.

#### **Integrity and authenticity**

##### **Integrity**

The State Party holds that the nominated property fulfils the requirements for integrity as defined in paragraph 88 of the *Operational Guidelines*. The property would include all elements necessary to express its proposed Outstanding Universal Value, would be of adequate size to reflect the features and processes supporting the justification for inscription, and would not suffer from adverse impacts of development or negligence. The orthogonal street grid has been included in its entirety within the nominated property and the monumental complex encompasses all buildings illustrating the development of Zadar's centre throughout two millennia. The monumental complex shows a good state of repair, despite damage and destruction suffered during WWII and the Homeland War, and the orthogonal grid has been studied and documented using archaeological methods.

ICOMOS notes that what is being nominated is a group of buildings with the orthogonal street grid which has been maintained throughout the centuries and marks Zadar's urban structure. ICOMOS considers that this ensemble is too fragmentary to illustrate the notion of Roman urbanism, in relation to the complexity of this concept, to the reality on the ground, and to other existing comparators. In other words, in ICOMOS's view, the nominated property is of adequate size but the elements included within it do not succeed in ensuring the complete

representation of Roman urbanism and to express Outstanding Universal Value for Zadar under this theme.

ICOMOS further considers that the material remains of several buildings of the Monumental Complex consist of only fragments and limited traces of their initial construction phases, and that the nominated property does not meet the condition of integrity with regard to the illustration of its pre-Romanesque origins. Additionally, ICOMOS considers that the insertion of several 20<sup>th</sup> century architectural structures adjacent to the historic complex, although exhibiting a scale respectful of the surviving historic fabric, offers a fragmented perception of Zadar as an historic town and reduces its historical and visual integrity.

#### Authenticity

The State Party maintains that the relevant dimensions of authenticity for the nominated property include the characteristic elements of Roman urbanism, namely the orthogonal grid, which was respected in all subsequent phases, and the Roman forum, which retained the role of the centre of the town throughout two millennia. The orthogonal grid has been preserved as archaeological evidence and would extend beyond the boundaries of the old city core to include the island of Ugljan and the agricultural land on the mainland. The Roman evidence is also demonstrated via *spolia* incorporated in later monuments and in situ archaeological remains. The buildings of the monumental complex represent different periods. The forum has retained its original function throughout the ages and the monumental complex continues to act as the religious, social and cultural centre of the city; almost all individual buildings have retained their religious use. Location and setting have not changed; the Zadar peninsula has been continuously settled on the same site and the morphology of the peninsula and its relation with its setting has not been altered.

ICOMOS considers that no sufficient historical/archaeological evidence has been presented to demonstrate that the area of the Roman forum has continued to be the centre of Zadar throughout the centuries. The construction of the circular Carolingian church of the Holy Trinity – later St. Donat – demonstrates that the Roman forum had lost its original function, already in the 9<sup>th</sup> century CE, and it did not play a determining role in shaping the organisation of this part of the town. The forum, in fact, was rediscovered only recently, after the destruction caused by World War II.

Additionally, ICOMOS notes that the extent of the damage caused by the War and the restorations and reconstructions carried out in the aftermath undermines the authenticity of many elements of the nominated property and reduces significantly its ability to be understood as truthful testimony of the proposed justification for inscription.

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

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#### 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 Zadar was given by its Roman founders its orthogonal urban layout which has been maintained until today as the basis for the city's subsequent developments under different empires and rulers, and this is manifested in the monumental complex on the Roman forum, which exhibits a variety of architecture and monuments with a predominantly religious function. This is held to be a rare occurrence.

ICOMOS considers that the permanence of the Roman layout in Zadar does not bear witness to an interchange of values, but rather the application of a model which was to be used in all Roman settlements. Also, the different architectural languages used in the churches and religious structures built or remodelled in different phases do not bear witness to a cultural interchange; rather they attest to the reception of architectural and artistic models from cultural contexts expressed by powers that ruled or exerted political and cultural influences on Zadar in different historical periods. The monuments and urban heritage in Zadar, that have resulted from this influence, do not appear to have exerted, in their turn and their own right, influences on the construction of other monuments that could be regarded as outstanding.

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ICOMOS considers that this criterion has not been justified.

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*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 Zadar peninsula exceptionally illustrates an historic urban landscape that originated in Roman times: its orthogonal grid has been preserved and reconfirmed over time and it is proven by archaeological evidence.

ICOMOS considers that the notion of Historic Urban Landscape (HUL) cannot be applied to the nominated property, which consists of a rather small group of buildings and a street orthogonal network, and which does not include features and processes that would substantiate the HUL concept.

ICOMOS further considers that the retention of the Roman orthogonal street pattern does not support the claims for Zadar being an exceptional testimony to a civilisation, as the continuity of the Roman street grid

throughout the centuries is not rare, as the comparative analysis has demonstrated. Also, the orthogonal subdivision of the Zadar ager through the *centuriatio* can be clearly recognised in other areas. Finally, the use of Roman spolia in the Church of Saint Donat cannot be considered an exceptional occurrence, being frequently found in several other monuments from different epochs.

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ICOMOS considers that this criterion has not been justified.

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*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 Roman orthogonal grid and the monumental complex on the Roman Forum form an outstanding historic urban landscape, featuring a unique location on a peninsula surrounded on three sides by the sea and connected to fertile lands on the mainland. This urban landscape is dominated by the architectural complex built on top of the Roman Forum, maintaining a religious function since the 4<sup>th</sup> century CE. The complex includes examples of different architectural styles, namely the early Christian oratory, the Carolingian/Byzantine circular Church of the Holy Trinity (later Saint Donat), the Romanesque cathedral of Saint Anastasia, with its sculptures and frescoes dating from the 12<sup>th</sup> - 13<sup>th</sup> centuries, the Benedictine monastery with the capitulary hall, the bell tower, and the orthodox baroque church of Saint Elijah with an elegant 19<sup>th</sup> century bell tower.

ICOMOS considers that whilst the orthogonal urban grid has indeed shaped the historic centre of Zadar, this cannot be seen as an exceptional or outstanding occurrence, as in several other cities the ancient urban design and street layout have survived. In many instances this is accompanied by still-standing monuments dating back to the same historic-cultural context, as the comparative analysis has demonstrated. The permanence of the centrality of the site of Roman *fora* within city life throughout the centuries is also very commonplace, as has been highlighted by the examples included in the comparative analysis.

While ICOMOS acknowledges the importance of the UNESCO recommendation on Historic Urban Landscape – HUL as being “*an additional tool to integrate policies and practices of conservation of the built environment into the wider goals of urban development in respect of the inherited values and traditions of different cultural contexts*”, there is an agreement that the notion of HUL should be seen as a useful approach that can sustain and strengthen management but cannot be understood as a category of heritage and should not be mentioned as such in the justification for inscription.

The Monumental Complex resulting from rebuilding and reconstruction combines a variety of architectural

structures exhibiting different forms, languages and styles that in themselves cannot be considered an outstanding architectural or urban example illustrating significant phases in human history. Additionally, such an amalgam of different architectural styles is commonplace to many other towns.

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ICOMOS considers that this criterion has not been justified.

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In conclusion, ICOMOS does not consider that the criteria have been justified or demonstrated.

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#### 4 Factors affecting the property

Tourism numbers are expected to increase by an average of 3-5% per year, which in the medium and long-term will generate considerable tourism pressures. Although at present no new tourism-related infrastructures are foreseen, it is likely that further development requirements related to tourism will occur in the future. As outlined in the Management Plan, large-scale tourism is already a source of pressure and the amount of accommodation provided in the historic core is not sufficient to meet the demand.

ICOMOS observes that Zadar is regularly visited by cruise ships and that, during peak visiting hours, the visitor numbers are likely to affect the religious atmosphere and function of the churches within the nominated property. ICOMOS therefore considers it would be useful if a study of the carrying capacities of individual buildings be elaborated.

Vehicular access to the property constitutes a major source of pressure. However, the City of Zadar is committed to its control and the banning of vehicular traffic is anticipated in the south-western part of the peninsula. ICOMOS recommends that the new traffic strategies, the traffic restrictions and the conversion of the parking space south-west of the Forum, are implemented at the earliest opportunity.

In the outer margins of the property as well as its buffer zone the density of the architectural fabric poses a risk from fire. Zadar is also prone to earthquakes. A risk preparedness study for the entire city of Zadar was conducted in 2009; it contains sections relating to the cultural heritage properties, which are being followed.

Although ICOMOS considers that climate change does not pose any immediate risks, long-term changes leading to a higher frequency of winter storms may increase the risk of flooding and that Zadar, like other seafront cities, may be affected by long-term sea level rises.

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ICOMOS considers that the main threats to the property are tourism pressures and tourism-related development.

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## 5 Protection, conservation and management

### Boundaries of the nominated property and buffer zone

The boundaries of the nominated property (4.16 ha) include the orthogonal street grid that shapes the urban layout of the city centre and the Monumental Complex built on top of and around the Roman Forum. It also includes the open archaeological area with the remains of the Roman Forum and the built-up area formerly occupied by the Capitol.

The buffer zone (242.72 ha, of which 68.53 ha is land and 174.19 ha is sea) encompasses the entire Zadar peninsula, the remains of the Venetian fortifications and of the Forte, a stretch of sea between the island of Ugljan and the Zadar peninsula, the port area, and the new waterfront built on the mainland in the early 20<sup>th</sup> century.

ICOMOS considers that the boundaries of the nominated property are consistent with the proposed justification for inscription and encompass the attributes that are related to this justification. ICOMOS equally considers that the expansion of the buffer zone is adequate in terms of size and cultural heritage encompassed but it needs to be covered by protective designations and measures that provide the nominated property with an added layer of protection outside the protected unit of the historic centre, in compliance with paragraph 104 of the *Operational Guidelines*.

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In conclusion, ICOMOS considers that the boundaries of the nominated property and of its buffer zone could be adequate only if appropriate protective designations or mechanisms are in place to ensure an added layer of protection to the nominated property.

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### Ownership

The nominated property is in both public and private ownership: the Episcopal Complex on the Forum and some other buildings on the Capitol area belong to the Archdiocese of Zadar; the Benedictine Church of St Mary, the bell tower and the capitulary hall are owned by the Benedictine Convent of St Mary in Zadar; the Serbian orthodox Church of St Elijah belongs to the Serbian Orthodox Community in Croatia; the open space with the forum remains and the street grid is owned by the City of Zadar; residential buildings in the Capitol zone are in both private and public ownership. The ownership of the Poljana Ivana Pavla II remained unknown when this report was drafted; however a court procedure was initiated in 2008 by the Municipality of Zadar to determine the ownership titles of these cadastral parcels.

### Protection

The historic city of Zadar and its peninsula are designated as a cultural property according to the Law on the Protection and Preservation of Cultural Properties (69/99 and 157/03) and accordingly inscribed on the List of cultural properties of national importance (number Z-3409

of 2007). Within the larger urban preserve, individual architectural structures enjoy the status of protected national cultural properties: the Episcopal complex on the (Roman) Forum (Z-759, 2003), the Church of St Mary with Benedictine Convent (Z-741, 2003) and the Church of St Elijah (Z-762, 2003).

The legal protection at national level, as well as the additional specification in the Spatial Plan of the city of Zadar (as of 2009), provides for constant control by the Ministry of Culture, Directorate for the Protection of Cultural Heritage, Conservation Department in Zadar (KZD), which is responsible for approval of any intended changes to the property or its environment. In situ archaeological buried heritage is also protected under the relevant legal instruments and the planning provisions.

The buffer zone is subject to the protection of a 1,000 meter zone extending into the sea, defined as part of the protective designation for the historic peninsula.

The open area currently still being used as a parking lot to the south-east of the forum is planned to be archaeologically researched and enhanced for public enjoyment.

However it is not clear which are the protective designations and measures for the buffer zone that provide the nominated property with an added layer of protection outside the protected unit of the historic centre, i.e., the stretch of sea in front of the city towards the island, the port area, the remains of the Forte with its urban gardens, and the waterfront.

Considering the visual connection between the urban orthogonal grid and Saint Michael's peak on the Island of Ugljan, mechanisms to protect this visual axis would be advisable.

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In conclusion, ICOMOS considers that the legal protection in place is adequate for the nominated property; however, the protection for the buffer zone will be adequate when appropriate protective designations or mechanisms are put in place to ensure an added layer of protection to the nominated property.

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### Conservation

The most recent records and inventories are held by the Conservation Department in Zadar (KZD); they contain the state of conservation of all listed buildings. According to the legal provision of article 53 of the Law on the Protection and Preservation of Cultural Properties, inventories are to be updated at least every five years.

The overall state of conservation is acceptable, although several of the nominated structures have been built or partially reconstructed very recently. A new roof was added to St. Anastasia's Cathedral in the 1980's and the external facades were rebuilt at that time. Likewise the sacristy and the baptistery were renovated or rebuilt in the 1980's. The bell tower, mostly built in the 15<sup>th</sup> century and completed in 1892, is in good condition. The Church of

St. Donat was thoroughly renovated in the 1960's and 1980's, but suffers from rising damp visible on the inner walls. The bishop's palace, a structure of the early 19<sup>th</sup> century, was renovated between 2008 and 2010 and the seminary was renovated at the end of the 1990's. The Church of St Mary was partly reconstructed in the 1970's. However, its bell tower, which in its lower storeys retains the 12<sup>th</sup> century and, in the upper storeys, the 15<sup>th</sup> century structures, has not undergone any major renovation or conservation treatment and seems in good condition.

A major conservation programme was completed in 2010 with the renovation of the bishop's palace.

In ICOMOS's view, many of the conservation activity carried out during past decades has aimed at achieving a holistic and pleasing appearance for the monuments. In several cases these measures could have been more discrete and sensitive to the historic fabric and ICOMOS recommends opting for a more minimalistic approach in future conservation activities.

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In conclusion, ICOMOS considers that conservation could be considered overall adequate; however it recommends opting for a more minimalistic approach in future conservation activities.

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## **Management**

Management structures and processes, including traditional management processes

The management of the property is coordinated by the competent agency of the Ministry of Culture, the Conservation Department in Zadar (KZD). Strategies are developed in cooperation with the Archaeological Museum in Zadar, the Chairs of History, Archaeology and Art History at Zadar University, the Croatian Restoration Institute, and the Archdiocese of Zadar and the Benedictine Convent of St Mary, which own some of the buildings within the nominated property. Conservation works are executed by the Croatian Restoration Institution.

The nomination dossier reports that a committee – either advisory or advisory/steering in nature – is envisaged for the purpose of coordination and effective management. This is expected to include the Archdiocese, the Benedictine Convent, the Serbian Orthodox community in Croatia, the city of Zadar, the Ministry of Culture – Zadar Conservation Department (KZD), the Zadar Tourist Board, the Institute for spatial planning of Zadar County, the peninsula parish council, and academic institutions. The tasks of this committee include protection and conservation, cultural and social promotion, and improvement of management effectiveness.

Entrance ticketing and rents contribute to the financial resources for the conservation and management of the nominated property. Professional resources are available within the ministerial, owner and local administration offices.

A disaster risk management plan is being prepared. ICOMOS considers this an important step and recommends that this is coordinated also with the spatial plan and the conservation plan.

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

The Spatial Plan for Zadar includes also the Conservation Plan, which contains an analysis of the spatial and historical features of the old city, detailed conservation studies, and conservation and valorisation guidelines. It represents the key instrument for the management of the tangible attributes of the nominated property and its immediate setting. Any intervention within the protected area requires approval by the KZD. Guidelines exist also for advertising, the use of public spaces and urban furniture.

ICOMOS notes that this plan is the key instrument for the management of the nominated property and its buffer zone.

ICOMOS also notes that the area occupied by the Venetian Forte to the south of the peninsula is not depicted in most of the maps in the nomination dossier and in the management plan. This raises the question whether this portion of the city and the rest of the buffer zone is covered by protection and planning instruments assisting their management and providing the necessary added layer of protection.

The Management Plan is configured as an accompanying instrument to those already in place, which are legally binding. It illustrates the values of the nominated property and contains a brief overview of the economic base and potential of the wider area where the nominated property is situated. It also offers information on tourism sectors and trends.

In this regard, ICOMOS notes that the increasing tendency to have small guesthouses in the historic centre, due to the limited accommodation available, which is seen positively by the authors of the management plan, in ICOMOS's view is concerning, as it implies the substitution of permanent residences with second homes or family-run hotels, with the loss of local residents. This leads to the alteration of the socio-economic profile of the inhabitants and users of the historic core and to the loss of important dimensions of integrity and authenticity of what is presented as a multilayered urban environment.

The Management Plan is completed by an action plan with details of activities designed to meet the objectives set out in the Plan. ICOMOS notes that all these actions are planned to be carried out by the Ministry of Culture or KZD: while the commitment of the Ministry of Culture and of its territorial offices is commendable, in a complex entity such as the nominated property, the management plan may be the most appropriate instrument for coordinating activities carried out by a multiplicity of actors and the

action plan could well reflect this coordinating role of the management plan, by merging in one synoptic table all planned activities by the different stakeholders.

#### Involvement of the local communities

Despite a total of more than 5,000 inhabitants living within the property and the buffer zone, the nomination dossier does not give details of any active processes of community participation. ICOMOS considers that a more community-driven management process, drawing in particular on the religious communities, would be an asset.

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In conclusion, ICOMOS considers that special attention is needed to avoid negative impacts from tourism on the socio-economic profile of the nominated property and its associated buffer zone.

ICOMOS considers that the management system for the property should be extended to ensure effective coordination and dialogue amongst all bodies responsible for the nominated property and the buffer zone. The Conservation Plan should cover all of the buffer zone. Furthermore, ICOMOS recommends that the action plan be extended so as to encompass the activities of all relevant stakeholders.

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## 6 Monitoring

The monitoring system has been articulated following the objectives of the management plan and indicators are grouped accordingly.

ICOMOS notes that, in general, indicators are appropriate; however, a more precise periodicity for their monitoring is recommended. Some indicators (e.g. for interdisciplinary collaboration) are not directly measurable and may need some further specifications. For objective 3, indicators for sub-objectives 3.2 and 3.3. do not reflect the complexity of the objective and may need some further reflection and refinement.

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In conclusion, ICOMOS considers that the monitoring system can be considered overall valid, although it would benefit from further development of indicators for the more complex objectives to be achieved. The tourism sector would also need to be included in the monitoring exercise.

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## 7 Conclusions

The newly prepared nomination dossier, although largely based on the previous ones, shifts the focus onto an aspect only laterally touched upon in the previous nominations, that is to say, the permanence of the Roman orthogonal grid as the confirmed matrix for the urban layout and the development of the city throughout the centuries. The Monumental Complex formed by the

Episcopal centre and other religious buildings erected on top of the Roman Forum, on the other hand, attest a continuity of function and of centrality for this area reconfirmed throughout subsequent epochs.

While the town of Zadar certainly exhibits to a large extent the permanence of the orthogonal street grid of Roman origin, in ICOMOS's view this element and the Roman Forum, brought to light during World War II, do not suffice to represent an outstanding example of Roman urbanism, in comparison with other still-existing towns, which present more preserved vestiges, both in terms of monuments and of urban layout, which are able to convey the concept of Roman urban planning.

ICOMOS considers that, even with this change of focus, the justifications provided to demonstrate the Outstanding Universal Value for the nominated property have not made a strong case to demonstrate its uniqueness or exceptionality, as the several examples included in the expanded comparative analysis clearly demonstrate.

The history of Zadar is long and rich but also hit by periods of discontinuity, like many other towns within the area and the region. The ability of the city to persevere despite destruction and reconstruction over time attests to the livelihood of its community; on the other hand, this restless past is mirrored in the variety of architectural languages and styles of the structures within the nominated property. This variety does not succeed in demonstrating any of the criteria proposed, nor has ICOMOS found other possible criteria applicable to this nomination.

ICOMOS in summary considers that the vicissitudes of Zadar have enriched the city with a diverse built heritage, which, however, exhibits a character that does not fit easily in the criteria for inscription in the World Heritage List; also integrity and authenticity of the proposed property are not sufficient to meet the requirements needed to justify consideration of the property for the World Heritage List.

In this regard, ICOMOS regrets that the recommendations of the advisory mission carried out in September 2013 have not been considered by the State Party.

As for conservation and management, ICOMOS considers that several of the conservation and rehabilitation projects carried out in the past were quite extensive and recommends consideration of more discrete approaches to the remaining historic fabric for any future conservation activities.

In terms of management, ICOMOS considers that mechanisms for coordination of all relevant stakeholders need to be put in place. Whilst the Management Plan and the activities of the Conservation Department in Zadar (KZD) address well the current challenges to the physical structures of the religious buildings, ICOMOS

notes that the management and monitoring systems would benefit from an expansion towards the wider context of the site management, including visitor management as well as spatial development considerations.

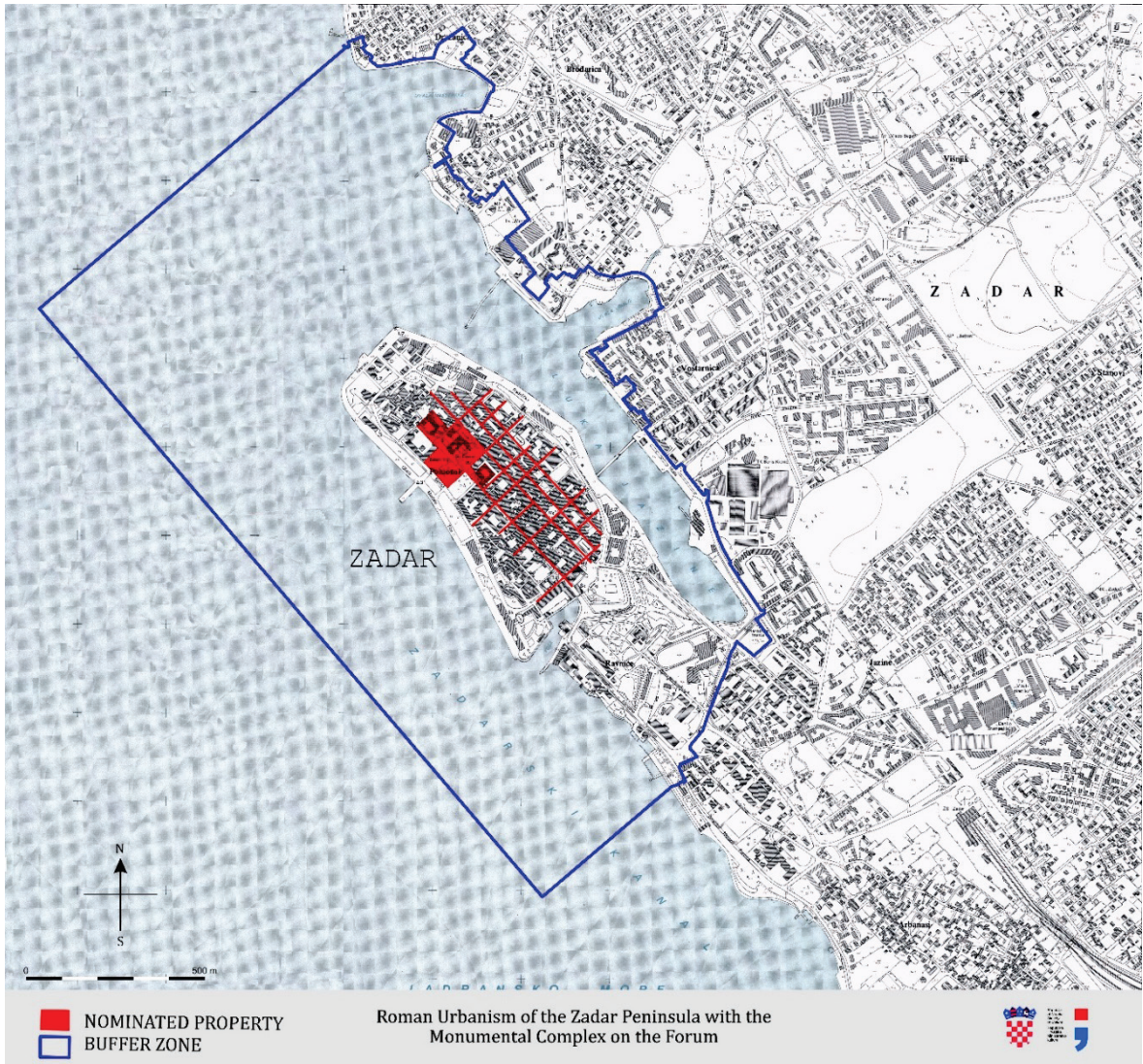
## **8 Recommendations**

### **Recommendations with respect to inscription**

ICOMOS recommends that the Roman Urbanism of the Zadar Peninsula with the Monumental Complex on the Forum, Republic of Croatia, should **not be inscribed** on the World Heritage List.







Map showing the boundaries of the nominated property

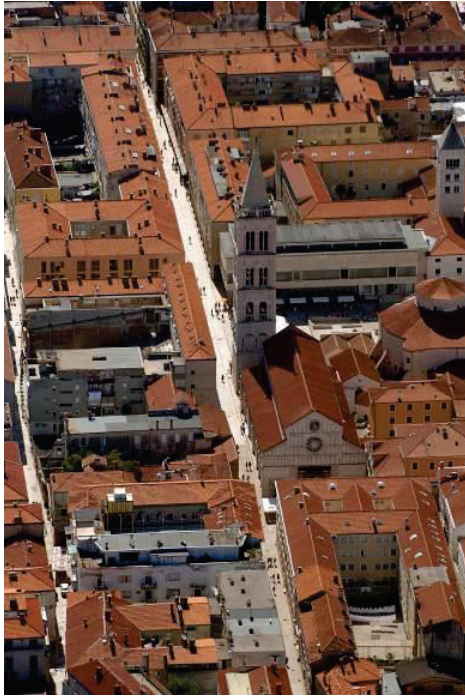




Zadar, aerial view



Monumental complex on the Forum, aerial view



Decumanus Maximus



Cardo Maximus





Fragments of architectural elements of the Forum



Church of St Mary

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## Archaeological site of Philippi (Hellenic Republic of Greece) No 1517

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### Official name as proposed by the State Party

Archaeological site of Philippi

### Location

Municipality of Kavala  
Regional Unit of Kavala  
Region of Eastern Macedonia and Thrace  
Greece (Hellenic Republic)

### Brief description

Founded on a former colony of Thasians by Philip II in 356 BCE, the archaeological remains of the Walled City of Philippi lie at the foot of an acropolis on the ancient route linking Europe with Asia, the *Via Egnatia*. Following the victory led by Octavian and Mark Antony at the Battle of Philippi in 42 BCE outside the city's western walls, the Hellenistic monuments such as the great theatre and the Funerary Heroon were supplemented by Roman public buildings including the Forum and a monumental terrace with temples to its north. Remains of Christian basilicas and the octagonal church testify to the city's importance as a metropolitan see as it became a centre of Christian faith and pilgrimage deriving from the visit and mission of the Apostle Paul in 49/50 CE.

### Category of property

In terms of categories of cultural property set out in Article I of the 1972 World Heritage Convention, this property was initially submitted as a serial nomination of 3 *sites*. At the recommendation of ICOMOS the State Party withdrew the nomination of 2 serial components by letter of 27 February 2016. The property accordingly remains a nomination of 1 *site*.

## 1 Basic data

### Included in the Tentative List

16 January 2014

### International Assistance from the World Heritage Fund for preparing the Nomination

None

### Date received by the World Heritage Centre

30 January 2015

### Background

This is a new nomination

### Consultations

ICOMOS consulted its International Scientific Committee on Archaeological Heritage Management and several independent experts.

### Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the property from 14 to 18 September 2015.

### Additional information received by ICOMOS

A letter was sent by ICOMOS to the State Party on 23 September 2015 requesting additional information on the serial approach, comparative analysis and conservation. A response was received from the State Party on 2 November 2015 and the information has been incorporated below. A second letter was sent on 21 December 2015 requesting further information regarding removal of the battlefield sites, extension of the buffer zone, extension of the Management Plan, and use of the road through the property. A response was received from the State Party on 27 February 2016 and the information has been incorporated below.

### Date of ICOMOS approval of this report

11 March 2016

## 2 The property

### Description

The nominated property comprises the walled city of Philippi, including within it the fortified acropolis as one component of 87.545 ha, and comprised the battlefield of Philippi as two further components to the west - the two hills from which the protagonists fought each other - 2a being 9.669 ha and 2b being 2.902 ha. Component 1 is surrounded by a buffer zone of 161.228 ha and Components 2a and 2b were surrounded by a shared buffer zone of 40.444 ha.

### The Walled City of Philippi (Component 1)

The walled city includes the fortified acropolis above the city where evidence of habitation dates back to the Early Iron Age (1050-700 BCE) and rock sanctuaries with carvings and inscriptions have been dated from the 5<sup>th</sup> century BCE. The walls of the acropolis and the city date to the 4<sup>th</sup> century BCE period of the Macedonian King Phillip II and were extensively repaired during the Byzantine period. There were four gates to the walled city; 'Neapolis' in the centre of the east wall, 'East' in the east wall south of the theatre, 'Krinides' in the centre of the west wall, and 'Marshes' south of this. Segments of a large aqueduct which carried water to the city from the springs to the north-west survive on the southern and western slopes of the acropolis. The 535 mile long Roman highway *Via Egnatia* joining Dyrrachium with Byzantium crossed the city from the Krinides gate to the Neapolis and was the main east-west street (*decumanus maximus*) of the city. Sections of the paving remain today, with large rectangular slabs of marble showing traces of cart wheels. Today the city is entered by the east gate south of the

theatre, through which the modern road (now closed) from Kavala (ancient Neapolis) to Drama passed across the city.

The theatre, dating originally from the period of Philip II is built into the south-east slope of the acropolis abutting the eastern city wall. It was reworked during the Roman period with construction of a three-storey scene building which has recently been restored for modern use. A Macedonian type Funerary *Heroon* (temple) dating from the 2<sup>nd</sup> century BCE and bearing the inscription *Euephenes Exekestou* on its pediment is located in the centre of the city. It was later incorporated into the first Christian place of worship in the city, the 'Basilica of Paul'. Remains of the Roman Forum dating from the 2<sup>nd</sup> century CE have been excavated along the *decumanus maximus* and are bounded on the south by the commercial road. The forum comprised monumental temples and the *curia* (senate), library and law court surrounding a large central square. On the north side were monumental fountains and a public podium was located in the centre, with the colonnaded *stoa* running long the south side. South of the commercial road are remains of the *Macellum* (commercial market) contemporary with the forum. This had a portico colonnade of six Corinthian columns and a central peristyle courtyard. To its west was located the *Palaestra* (sports complex) of which the latrines are notable remains. Much of this area was subsumed into the later construction of a large church known as Basilica B. To the south-east are the remains of an extensive Roman villa known as the 'House of the Wild Animals' due to the pictorial design of the mosaic floors.

Today the ruins of the walled city of Philippi apart from the theatre are most notable for the remains of several substantial churches which together illustrate the development of Christian liturgical practice and architectural symbolism from the Early Christian to late Byzantine period.

The earliest was apparently the 'Basilica of Paul' dating from the early 4<sup>th</sup> century CE; a simple hall type church with an inscribed eastern apse, located to the east of the forum. It is dated by the inscription in its mosaic floor dedicating it to 'Paul, in Christ'. This was succeeded by an octagonal church c 400 CE which in turn was succeeded by the monumental octagonal Cathedral of Philippi dedicated to the Apostle Paul. This was an elaborately decorated structure with mosaic and marble *opus sectile* floors which became the focus of pilgrimage to Philippi. During the reign of Justinian I it was enclosed by walls and included a richly decorated baptistery and fountain court as well as the Hellenistic funerary monument. The remains of the Episkopeion (bishop's residence) are to its east.

The higher level terrace north of the forum contained the temple area, including another possible *Heroon*, the *cella* of which was converted to a cistern and incorporated into the atrium of the large church known as Basilica A in the late 5<sup>th</sup> century CE. This was a three-aisled, timber-roofed basilica with transept, projecting semi-circular apse to the

east, atrium to the west and further west a peristyle courtyard. Following the destruction of Basilica A (post 7<sup>th</sup>-8<sup>th</sup> C) the cistern, traditionally identified as the 'Prison of the Apostle Paul' was converted to a place of worship.

Basilica B, built over part of the commercial market area south of the forum was a domed basilica dating from the 6<sup>th</sup> century CE with an almost square, three-aisled nave and a second dome over the sanctuary containing the altar. The sanctuary had a semi-circular apse to the east and was flanked by two liturgical annexes with semi-circular annexes. Remains of elaborate sculptural decoration and marble finishes reflect influence from the Constantinopolitan churches S. Sophia and S. Eirini. Following its destruction a small church was constructed in the 9<sup>th</sup>-10<sup>th</sup> century CE which incorporated the standing remains of the west entrance and narthex.

Basilica C, located on the slopes of the acropolis west of Basilica A was built in the early 6<sup>th</sup> century CE as a three-aisled basilica, with galleries, narthex and atrium. In the later 6<sup>th</sup> century a transept was created at the east end with annexes to the north.

The Battlefield of Philippi (Components 2a and 2b) (withdrawn by letter of 27 February 2016)

According to the Roman historian Appian, two hills about 2.5 km south and south-west of the walled city mark the Battlefield of Philippi. Component 2a, the larger hill is known today as the Hill of Alexander the Great. Here in 42 BCE took place the Battle of Philippi between opposing forces in the Roman civil war that marked the end of the Republic. Rising out of large expanses of fertile, cultivated fields with low-standing annual crops, the hills bear traces of built constructions (recorded photogrammetrically) that have been interpreted as defensive works. Traces of a possible Roman fortification have been identified west of the Gangites River, together with remains of an arch that may have been part of this or a commemorative/triumphal arch on the *Via Egnatia*. These latter remains are not included within the property. Inscriptions, coins and parts of iron weapons found in the vicinity of the battlefield are held in the Archaeological Museum of Philippi.

ICOMOS considered that the two components could not together satisfy the nominated criteria, and there were issues with the integrity of the battlefield. Following discussions with the State Party, Components 2a and 2b have been excluded from the nomination.

### History and development

The first settlement in the area known as Krinides due to the abundant springs was founded by Thasian colonists in 360 BCE. Located on the route from the coast to the hinterland, with good water sources, access to agriculture, timber, and gold and silver mines, the colony was taken over by Philip II of Macedon in 356 BCE. He installed Macedonian settlers and renamed it Philippi. An inscription records that disputes about the boundary of the colony's *chora* (hinterland) was settled by special decree of Alexander the Great (336-323 BCE). Following the

success of Octavian and Marc Antony in the Battle of Philippi, the city was re-founded by Octavian Augustus in 31 BCE as *Colonia Iulia Augusta Philippensis* and received new settlers from Italy and from Asia, including Jews. The first Christian church was founded by the Apostle Paul in 49/50 CE as recorded in his Epistles to the Philippians. The recognition of Christianity by Constantine as the Empire's new official religion and establishment of the capital of the Eastern Roman Empire at Constantinople in 330 CE revived the Greek character of Philippi. Greek replaced Latin as the official language. Philippi became a Metropolitan see in the 4<sup>th</sup> century CE with 5-7 dioceses in its jurisdiction. Churches succeeded Roman public buildings in defining the city, which became a centre of Christian faith and pilgrimage in the name of the Apostle Paul. However the city began to decline in the late 6<sup>th</sup> and early 7<sup>th</sup> centuries CE following a series of earthquakes.

The city's fortunes revived with the repair of the city walls by Nikephoros II Phokas (963-969 CE) and during the following two centuries the transfer of cemeteries to within the city walls marked its transition from ancient to medieval organisation. In the 14<sup>th</sup> century the region was incorporated in the Ottoman Empire. European travellers noted the ruins between the 15<sup>th</sup> and late 19<sup>th</sup> centuries and scientific research of the area and the city's monuments began in 1861 under Napoleon III. Following the end of the Balkan Wars and incorporation into the Greek State in 1912, the Hellenic Archaeological Service became responsible for antiquities. The French School at Athens began systematic excavation in 1914, at which time the city walls, the towers of the acropolis and the pillars of Basilica B were still visible, and research has continued almost uninterrupted until the present. The property was classified as an 'archaeological site' in 1962.

### **3 Justification for inscription, integrity and authenticity**

#### **Comparative analysis**

The nomination dossier compares Philippi with several sites in Greece, Asia Minor and the Balkans, including those on the World Heritage and Tentative Lists, which like Philippi were either Roman colonies or at their zenith in the Roman and Early Christian period due to their strategic location, or were connected with important historical events, or formed a symbolic point of reference in the dissemination of Christianity. It is a comprehensive discussion and makes clear that these many sites all contribute to understanding how urban areas were formed during the Roman period and how they evolved with the establishment of Christianity and the move of the capital of the Eastern Roman Empire to Constantinople. Greek cities located on the sea and land routes of the Roman Empire were transformed by the erection of major public buildings and later following the mission of the Apostle Paul, who visited most of the cities under discussion, by the addition of churches. Cities such as Thessalonika (World Heritage List, Palaeochristian and Byzantine Monuments of

Thessalonika 1988, criteria (i), (ii) and (iv)), Archaeological Site of Nikopolis (2014) (Greece's Tentative List), Beroia, Amphipolis, Nea-Anchialos (Thebes), Corinth and Gortyn in Crete all contain the remains of a number of early churches. The analysis concludes that Philippi stands out because it suffered far less from later habitation and has been the subject of many years of research and study since the mid-19<sup>th</sup> century. The comparison with Roman/Early Christian cities in Asia Minor including Pergamon and its Multi-Layered Cultural Landscape, Turkey (World Heritage List 2014, criteria (i), (ii), (iii), (iv) and (vi)) and Ephesus (World Heritage List 2015, criteria (iii), (iv) and (vi)) is less convincing in this respect as they also are intact archaeological sites of the period.

The State Party argues that Philippi is primarily distinguished from all the other sites covered in the analysis by the documented connection between the archaeological remains and epigraphic and historical testimony with two significant events: the Battle of Philippi that sealed the end of democracy in Rome, and the founding of the first Christian community on European soil by the Apostle Paul, who is honoured in the area to the present day.

Regarding the battlefield, the Battle of Philippi is compared in the nomination dossier in terms of historical importance with the Battle of Pydna 168 BCE, the Battle of Pharsala 48 BCE, and the Sea Battle of Actium 31 BCE. The additional information from the State Party includes a comparison with additional battlefields including Marathon 490 BCE, Thermopylae 480 BCE, Plataea 479 BCE, Chaeronea 338 BCE, Gaugamela 331 BCE, Cynoscephalae 197 BCE, Milvian Bridge 312 CE and Adrianople/Chrysopolis 324 CE including comparison of the physical remains of all these battlefields with those at Philippi, as well as discussion of the relationship of the battlefields with any subsequent settlements. It is stated that only the Battle of Philippi can be identified accurately in its landscape in a manner that can be verified both by the topographic data as well as by historical accounts. This uniqueness is due to the presence of the two hills that dominate the landscape and formed the central point of the area where the battle was fought. It is stated that the only analogous case in which a military conflict influenced the history of a nearby city to such an extent as at Philippi was Nikopolis in Epirus, founded following the Sea Battle of Actium. But whereas Nikopolis remained a free Greek city, Philippi developed as a Roman colony, representing the incorporation of regions into the Roman Empire.

ICOMOS however considers that the most important and durable evidence of the role of the battle of Philippi in shaping the future of the town to become an important Roman colony and subsequently a centre for the spreading of Christianity is the archaeological site of the ancient city of Philippi itself and not the field where the battle took place.

The serial approach is not justified and the two components together could not satisfy the criteria. ICOMOS considers that only the walled city of Philippi can be justified as an archaeological site in terms of the criteria.

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ICOMOS considers that the comparative analysis justifies consideration of Philippi, the walled city alone for the World Heritage List.

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#### **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 property represents the form and function of a Roman colony as a “small Rome” in the Balkans;
- Philippi was the first Christian community in the West where the first church on European soil was founded by the Apostle Paul;
- The early Christian remains are excellent examples of the early development of architectural church types;
- Philippi is associated with Philip II of Macedon who conquered the original Thasian settlement, promoting its Hellenistic development;
- The Battle of Philippi determined the course of the Republic towards the Roman Empire which conquered the then known world.

ICOMOS considers that also other archaeological sites inscribed or not on the World Heritage List exhibit associations with the Apostle Paul, therefore this aspect does not appear specific to Philippi.

ICOMOS also considers that the historic consequences of the battle at Philippi are best represented by the archaeological remains of the walled city rather than by the Battlefield.

ICOMOS finally considered that the serial approach is not justified by the comparative analysis in relationship to the criteria and therefore, in its interim report of December 2015, ICOMOS proposed the State Party to remove the Battlefield from the nomination.

In its response to ICOMOS' interim report, the State Party has deleted the Battlefield (Component 2) from the nomination.

#### **Integrity and authenticity**

##### **Integrity**

The Walled City includes all elements necessary to convey its values, and is not subject to development or neglect. It does still contain the asphalted modern road, closed in 2014, which passes through the site at a higher level than but essentially following the route of the ancient *Via Egnatia*. However in its response to ICOMOS' second letter the State Party has confirmed that this road will be used only for access within the site, and short-term

planning includes for its dismantling east of the west entrance near the museum.

ICOMOS considers that the proposed works will satisfy conditions of integrity for the Walled City.

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ICOMOS considers that the integrity of the Walled City has been justified.

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##### **Authenticity**

The Walled city was subject to major destruction in the earthquake of 620 CE. Many stones and elements of the buildings of the Walled City including inscriptions and mosaic and opus sectile floors remain in situ from that time, although some stones were subsequently reused in later buildings. Modern constructions and interventions at the site have generally been limited to archaeological investigations and necessary measures for the protection and enhancement of the site. However major restoration-anastylosis has been carried out at the Theatre and the Octagon, Basilica A. and B, and erection of shelters over mosaic floors. In the 1950s the lower cavea of the Theatre was restored and the upper cavea reconstructed to accommodate the Theatre Festival of Philippi-Thasos. Further work was carried out to the *paradoi*, restraint walls, arches, scene building, post *scaenam* wall and orchestra, with improvement of the drainage system and conservation of the underground chambers for animals and gladiators in the 1990s -2000s.

ICOMOS notes that for the most part the principle of reversibility has been respected and considers that the Walled City is authentic in terms of form and design, location and setting.

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ICOMOS considers that the authenticity of the Walled City has been justified.

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

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#### **Criteria under which inscription is proposed**

The property is nominated on the basis of cultural criteria (ii), (iii), (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, town-planning or landscape design;*

This criterion is justified by the State Party on the grounds that due to its long period of occupation, Philippi bears witness to the transition of a Hellenistic city into a Roman colony, and then into a centre of Christianity, preserving architectural and artistic features from each epoch. The city's plan, its buildings, artworks, languages and written testimonies reflect the interchange of cultural concepts, traditions and institutions between Greece, Rome and Christianity.



ICOMOS considers that the reflection of many influences at such a location is not unusual and there is no evidence of what these influences signify in terms of an important exchange of human values. Additionally, the justification does not apply to Component 2, the Battlefield.

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ICOMOS considers that this criterion has not been demonstrated.

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 Philippi is an important milestone for the spread of Christianity in Europe, since it is the place where evangelism first began, spreading the word of the new religion from the eastern provinces westwards. In Philippi Paul the Apostle founded the first Christian church/community and baptized the first Christian in Europe. The site is still today a destination for pilgrimage.

ICOMOS considers that this justification applies to Component 1, the Walled City, but not to Component 2.

Philippi through the remains of its churches is exceptional testimony to the early establishment and growth of Christianity.

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ICOMOS considers that this criterion has been justified for the Walled City (Component 1).

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 monuments of Philippi belong to various architectural types and represent in an exceptional way important stages in the development of monumental architecture during Roman and Early Christian periods. The Forum is the most characteristic example of such a public space in the eastern provinces of the Roman Empire and echoes the Roman architectural tradition. The Early Christian architectural remains are excellent examples of the early development of architectural types such as the octagon church, the transept Basilica, and the domed Basilica. The *Via Egnatia* was one of the most important routes of the ancient world.

ICOMOS considers that the monuments of Philippi exemplify various architectural types and reflect the development of architecture during the Roman and Early Christian period. The Forum stands out as an example of such a public space in the eastern Roman provinces. The Octagon Church, the transept Basilica, and the domed Basilica stand out as types of Early Christian

architecture. However the justification does not apply to Component 2.

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ICOMOS considers that this criterion has been justified for the Walled City (Component 1).

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 Philippi is directly and tangibly connected to major personalities and events that affected the course of history including Philip II of Macedon who made Philippi an important economic and political power in his kingdom, and gave it his name. The Battle of Philippi involving major political figures such as Brutus, Marc Antony and Octavian determined the course of the Republic towards the Roman Empire that would conquer the then-known world. Important Roman emperors (Claudius, Antonius Pius and Marcus Aurelius) adorned it with monumental public buildings. Literary works describe the Battle of Philippi. Apostle Paul founded the first Christian church in Europe at Philippi, inaugurating a new religion in the West that would later exert global influence.

ICOMOS considers that association with important personalities does not fulfil this criterion, therefore this aspect of the proposed justification does not meet the requirements of the *Operational Guidelines*. ICOMOS further notes that the part of the justification related to the association between the Battle of Philippi and the subsequent thriving of Philippi as a Roman colony lies in the tangible evidence of the archaeological ruins of the walled city and is therefore more convincingly demonstrated by criterion (iii).

ICOMOS also considers that the use of criterion (vi) for negative events, as in the case of wars and battles, could be acceptable only in extremely exceptional cases.

Therefore, in its interim report, ICOMOS requested the State Party whether they were ready to remove Component 2, the Battlefield.

The State Party agreed to remove this component from the nomination.

The other aspect of the justification of this criterion for Philippi is that it is associated with Paul the Apostle. In this regard, ICOMOS considers that this association is not peculiar to Philippi, as there are several other early Christian sites that were associated to the Apostle.

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ICOMOS considers that this criterion has not been justified.

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ICOMOS considers that the serial approach is not appropriate.

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In conclusion, ICOMOS considers that criterion (iii) and (iv) have been justified for the archaeological site of the walled city of Philippi.

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#### **4 Factors affecting the property**

The property is not subject to development pressure. Peat and lignite deposits exist in the area and in 2008 a proposal for a new power plant in Kavala was rejected. Future mining pressure is possible. Seismic risk is a serious hazard and is countered to the extent possible by systematic monitoring. Grass fire risk is mitigated by provision of fire extinguishers at the museum and guard houses and cooperation with the local fire services. Expansion of the water supply network is proposed to augment fire protection. The management of rainwater runoff is part of the maintenance system. Rare vandalism has occurred on the acropolis foothills and battlefield hills. This is mitigated by regular inspection by the authorities. Property Component 1 is partly fenced. The Archaeological Museum is fitted with modern protection and surveillance systems. Philippi is the third most popular archaeological site in Greece, but it is not expected that visitor numbers will increase beyond the site's carrying capacity should the property be inscribed on the World Heritage List. There are no permanent residents or facilities for temporary stays within the nominated property or buffer zone.

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ICOMOS considers that the main threats to the property are seismic activity and fire.

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#### **5 Protection, conservation and management**

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

The property boundaries of the Walled City, follow along 10-30 m outside the city wall but are not defined on the ground.

The buffer zone of the Walled City includes the property's immediate surroundings, as well as important landscape features: the entire hill to the north, the plain to the south and the Lydia Baptistery, where a part of the western portion of the ancient cemetery of Philippi is still preserved, with sarcophagi and inscriptions. The buffer zone is not recognisable or defined on the ground.

In response to ICOMOS' second letter, the State Party has extended the buffer zone at the south-eastern corner of the walled city where it previously aligned with the property boundary.

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ICOMOS considers that the boundaries of the Walled City and its buffer zone are now adequate. The boundaries of the nominated property and of its buffer

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zones should be clearly and permanently marked on the ground.

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##### **Ownership**

The Archaeological site of the walled city of Philippi is owned by the Greek State except for around 20 plots in the southern part of the property that are still privately owned, comprising around 10 ha.

##### **Protection**

The nominated property and buffer zone are protected at the highest level under the Antiquities Law 3028/2002 'On the Protection of Antiquities and Cultural Heritage in General' as re-designated in 2012 and as protected zone A in 2013. This covers both State and privately owned land and except for the buffer zone extension in the south-east corner which covers part of the adjacent town is a 'non-construction' zone. The area of the adjacent town is covered by planning requirements to report archaeological finds during works. There is monitoring of farming activity; only shallow-till farming and grazing are allowed and earthworks are completely banned.

ICOMOS notes that the sites are not fully fenced.

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ICOMOS considers that the legal protection in place is adequate. ICOMOS considers that property should be fully fenced.

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##### **Conservation**

Research publications date back to 1861. Records of excavation carried out by the French School of Archaeology in Athens and the Aristotle University of Thessaloniki are kept by the Regional Services (Ephorate of Antiquities of Kavala-Thasos) of the Ministry of Culture and Sports. The inscriptions and architectural elements around the site have been inventoried. Artefacts are on display in the Philippi Museum on site or in storage at Kavala. There is apparently no overall database/inventory for the property. The history of past excavation and conservation programs at the site is set out in the nomination dossier. In response to ICOMOS' second letter, a research plan which co-ordinates the work of all participants has been provided. Archaeological remains have been consolidated with mortar and mosaic floors where not on display under shelters are protected by layers of geotextile and covered with earth.

ICOMOS notes that ongoing maintenance is carried out at the site but considers that this should be increased all over the site. Special attention must be paid to some wall surfaces, floor sections and mosaics, which need to be continually protected, using shelters or other devices in accordance with an overall site conservation strategy.

In response to ICOMOS' second letter the State Party has provided a conservation strategy which identifies the priority projects and shows the allocation and sources of funding for these.

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ICOMOS considers that an overall database/inventory should be compiled. Site maintenance should be increased and special attention is required to wall and floor finishes within the overall site conservation strategy.

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## Management

Management structures and processes, including traditional management processes

The nominated property is managed at the local level by the Ephorate of Antiquities and Special Regional Services of the General Directorate of Antiquities and Cultural Heritage, within the Ministry of Culture and Sports. Nine staff are engaged at the site, co-ordinated by the Director of the Ephorate of Kavala-Thasos and the site director/archaeologist. Up to ten temporary personnel are engaged during the summer season. Specialist expertise is available when required from the Ephorate, the French School in Athens and the University of Thessaloniki. Funding is provided by the Ministry of Culture for staff, maintenance and site works. Additional financial resources are available through the Regional Operational Programme of the Partnership Agreement 2014-2020.

ICOMOS considers that in the event of World Heritage inscription it would be necessary to increase the number of permanent staff at the site and the availability of funds for conservation and maintenance.

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

A Management Plan has been prepared for the property within the context of the World Heritage nomination, with the collaboration of agencies involved in the site's management at various levels and building on the previous proposal drafted in 2010 and completed in 2013 by the Municipality. It will be implemented by a seven member committee including representatives of government and municipal agencies and co-ordinated by the head of the local Ephorate of Antiquities. The Action Plan is provided as a table and covers risk preparedness, conservation, provision of shelters over excavated areas; and in the short term, creation of an entrance on the west side of the archaeological site, creation of a network of visitor paths and additional visitor amenities, improvement of fencing, and expropriation of privately-owned lands within the walls. Visitors enter the site at the east gate where a ticket office and small bookshop provide information. From the west they enter via the Museum, where artefacts are displayed and information is available. The site is explained by non-intrusive information panels and tour guides are available.

Involvement of the local communities

The nomination of Philippi was instigated in 2002 by the efforts of the local community of Kavala and Kavala-Thasos Ephorate. Local people are involved in awareness-raising and educational projects, as well as the

various events held at the site including the Festival of Philippi.

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In conclusion, ICOMOS considers that the management system and plan for the property should be extended to include increased site maintenance and protection of wall and floor finishes. Furthermore, ICOMOS recommends that the property should be fully fenced.

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## 6 Monitoring

Monitoring arrangements are set out in a table in the nomination dossier for the Walled City and include general indicators, method and frequency and location of records. ICOMOS considers that the monitoring system needs to be applied to the database/inventory.

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ICOMOS considers that the monitoring system should be applied to the database/inventory.

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## 7 Conclusions

The State Party argues that Philippi is primarily distinguished by the documented connection between the archaeological remains and epigraphic and historical testimony with two significant events: the Battle of Philippi that sealed the end of democracy in Rome, and the founding of the first Christian community on European soil by Apostle Paul, who is honoured in the area to the present day. The nominated property included both the walled city and the battlefield as a serial nomination. However the ICOMOS Panel found that the justifications for the criteria do not apply to all components of the series as they mainly focus on the ancient city of Philippi. The ICOMOS Panel also found that the most important evidence of the historic importance and durable outcomes of the battle of Philippi is represented by the archaeological remains of the city of Philippi, rather than by the field where the battle took place. Additionally, the ICOMOS Panel considered problematic the inclusion within a World Heritage property of a battlefield, which preserves only slim tangible evidence of the associated event. Therefore, in its interim report, ICOMOS suggested the possibility to remove component 2, the battlefield and the State Party agreed to remove the battlefield. Therefore, the conditions of integrity and authenticity have been justified for the archaeological site of the walled city of Philippi. The buffer zone has been extended where it previously aligned with the property in the south-east corner.

ICOMOS found that the maintenance of such a large archaeological site would benefit from a comprehensive conservation strategy that prioritizes the interventions and the channelisation of resources.

In response to ICOMOS's second letter the State Party has provided a conservation strategy which identifies the

priority projects and shows the allocation and sources of funding for these, as well as a co-ordinated archaeological research plan aimed at better understanding and interpretation of the site.

## 8 Recommendations

### Recommendations with respect to inscription

ICOMOS recommends that the Archaeological Site of Philippi, Hellenic Republic of Greece be inscribed on the World Heritage List on the basis of **criteria (iii) and (iv)**.

### Recommended Statement of Outstanding Universal Value

#### Brief synthesis

The Archaeological site of Philippi lying at the foot of an acropolis in eastern Greece on the ancient route linking Europe with Asia, the *Via Egnatia*, is the remains of the walled colony which developed as a “small Rome” with the establishment of the Roman Empire in the decades following the Battle of Philippi. The Hellenistic theatre and funerary *heroon* (temple) were supplemented with Roman public buildings including the Forum and a monumental terrace with temples to its north. Later the city became a centre of Christian faith and pilgrimage deriving from the visit of the Apostle Paul in 49/50 CE and the remains of Christian basilicas and the octagonal church testify to its importance as a metropolitan see.

**Criterion (iii):** Philippi is exceptional testimony to the incorporation of regions into the Roman Empire as demonstrated by the city’s layout and architecture as a colony resembling a “small Rome”. The remains of its churches are exceptional testimony to the early establishment and growth of Christianity.

**Criterion (iv):** The monuments of Philippi exemplify various architectural types and reflect the development of architecture during the Roman and Early Christian period. The Forum stands out as an example of such a public space in the eastern Roman provinces. The Octagon Church, the transept Basilica, and the domed Basilica stand out as types of Early Christian architecture.

#### Integrity

The walled city includes all elements necessary to convey its values, and is not subject to development or neglect. The modern asphalted road, closed in 2014, which essentially follows the route of the ancient *Via Egnatia*, will be dismantled east of the west entrance to the site near the Museum.

#### Authenticity

The walled city was subject to major destruction in the earthquake of 620CE. Many stones and elements of the buildings including inscriptions and mosaic and opus sectile floors remain in situ from that time, although some stones were subsequently reused in later

buildings. Modern constructions and interventions at the site have been generally limited to archaeological investigations and necessary measures for the protection and enhancement of the site. For the most part the principle of reversibility has been respected and the walled city can be considered authentic in terms of form and design, location and setting.

#### Management and protection requirements

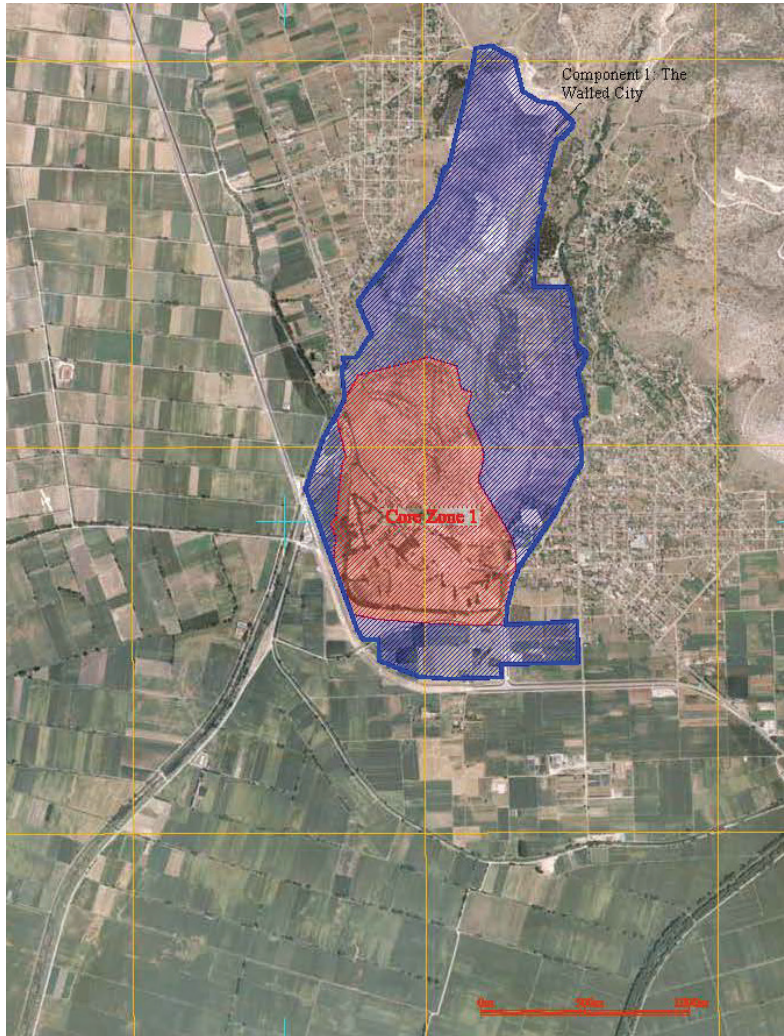
The property and buffer zone are protected at the highest level under the antiquities Law 3028/2002 ‘On the Protection of Antiquities and Cultural Heritage in General’ as re-designated in 2012, and as protected zone A in 2013. This covers both State and privately-owned land and except for the buffer zone extension in the south-east corner which covers part of the adjacent town is a ‘non-construction’ zone. The area of the adjacent town is covered by planning requirements to report archaeological finds during works. The boundaries of the property and buffer zone will be clearly and permanently marked on the ground and the property will be fully fenced.

The property is managed at the local level by the Ephorate of Antiquities and Special Regional Services of the General Directorate of Antiquities and Cultural Heritage, within the Ministry of Culture and Sports. The Management Plan was completed in 2013 and will be implemented by a seven member committee including representatives of government and municipal agencies and co-ordinated by the Head of the local Ephorate of Antiquities. A conservation strategy aimed at unifying and upgrading the property and identifying the priority projects and funding sources will be included in the Management Plan, together with a co-ordinated archaeological research plan aimed at better understanding and interpretation of the site and an overall database as a basis for monitoring and conservation.

#### Additional recommendations

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

- Extending the management plan to include:
  - the conservation strategy identifying the priority projects and showing the allocation and sources of funding for these;
  - the co-ordinated archaeological research plan aimed at better understanding and interpretation of the site;
  - an overall database as a basis for monitoring and conservation;
  - increased site maintenance and protection of wall and floor finishes.
- Marking clearly and permanently on the ground the boundaries of the property components and buffer zones; and fully fencing the property.



Map showing the boundaries of the nominated property





Aerial view of the Archaeological site of Philippi



Aerial view of the Theatre





Theatre



General view of the Octagon complex





View of the Macellum and Basilica B



Basilica C. Marble pavement in the north transept



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## Historical Centre of Cetinje (Montenegro) No 1512

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### Official name as proposed by the State Party

Historical Centre of Cetinje

### Location

City of Cetinje  
Montenegro

### Brief description

The Historical Centre of Cetinje is located between Podgorica, the administrative centre of Montenegro, and the coastal region, at the foot of the Lovćen Mountain, which has a mythical significance for the Montenegrin people. It is connected symbolically and visually to the mountain. It was founded in 1482 by Ivan Crnojević as a defensive settlement which became the nucleus of the state of Montenegro. It was extensively developed in the 19<sup>th</sup> century and was transformed into the capital of the then newly recognized independent state of Montenegro. Today it is given the status of 'Old Royal Capital' and it consists of the 19<sup>th</sup> century urban fabric and historic buildings, together with the parks which integrate the historic centre with its natural setting.

### 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* (09 July 2015), Annex 3, it is also an *historic town which is still inhabited*.

## 1 Basic data

### Included in the Tentative List

06 July 2010

### International Assistance from the World Heritage Fund for preparing the Nomination

2011

### Date received by the World Heritage Centre

30 January 2015

### Background

This is a new nomination.

### Consultations

ICOMOS has consulted its International Scientific Committees on Historic Towns and Villages (CIVVIH) and several independent experts.

### Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the property from 07 to 11 September 2015.

### Additional information received by ICOMOS

A letter requesting additional information was sent by ICOMOS to the State Party on 28 September 2015 on the issues of boundaries, maps, conservation, authenticity, comparative analysis, factors affecting the property, conservation and management. Additional information was received on 30 October 2015. As requested by the revised *Operational Guidelines*, the State Party received an Interim Report on 18 January 2016.

### Date of ICOMOS approval of this report

11 March 2016

## 2 The property

### Description

The Historical Centre of Cetinje is located at the foot of the Lovćen Mountain, in the southern part of the plain of Cetinje, surrounded by hills, between the administrative centre of Montenegro (Podgorica) and the coastal region, and covers an area of 43.91 hectares, with a buffer zone of 34.2 hectares.

Cetinje is the foundation from which the state of Montenegro was created. It was founded in 1482 when Ivan Crnojević moved the capital to the heart of the mountain and it remained the stronghold for the Montenegrin people throughout troubled times. Today it is given the formal status of 'Old Royal Capital' in recognition of its symbolic, cultural and spiritual values for Montenegrins.

The urban fabric developed around the historic core consisting of the monastery, Ćipur, the Biljarda and the Palace. It was formed in the 19<sup>th</sup> century, with an orthogonal network of streets, closed town blocks and urban markets. It includes parts of two national parks, Lovćen and Lake Skadar.

Cetinje is connected visually and symbolically to the Lovćen Mountain, which has a mythical significance for the people of Montenegro and the status of a National Park.

The town developed during the rule of Prince-King Nikola I Petrović Njegoš (1860-1916), protected by the mountain whilst still being connected to the outside world, which was considered the 'Golden Period'. It underwent intense development, from a rural agglomeration into a capital city connected to other European capitals.

The historical core of Cetinje, around which the nominated property was formed, is constituted by three important buildings: the Monastery, the Biljarda and the Palace.

The historical Njegoševa Street (formerly Katunska Street) is the backbone of the town's structure and shaped the town's image, together with the other parallel longitudinal street, Bajova Street. The two main streets intersect with perpendicular ones and form the orthogonal layout of the Historical Centre.

The urban fabric of the town is formed between the intersection of the main and the perpendicular streets, which creates closed urban blocks with residential architecture, characterized by standardized houses of four recognizable types: one-storey, one-storey with attic, two-storey and two-storey with attic. Ground floors are adapted for business purposes, whilst first floors and attics are used for living.

Archaeological findings from the Koronjina Cave in the vicinity of Cetinje belong to the cultural milieu of the impressed-cardium pottery, characteristic of the early development of the New Stone Age in the Adriatic region. The later settlements of the hillfort type, observed around the edges of the Cetinje plain and its close surroundings, as well as the numerous traces and ruins of stone- and earth-mounds in this area, are connected to the period of the Iron Age, the period in which it is possible to anticipate all the processes that will lead to the formation of defined ethnic groups, the most important ones in this area being the Illyrians.

The parks and natural green areas south of the Monastery connected the historical centre with the mountain and the coast, and, during the Austrian-Hungarian period, by the Cetinje-Ivanova Korita-Kotor cable car.

### **History and development**

A number of vernacular settlements were built in the Cetinje plain up until the late 15<sup>th</sup> century, when Cetinje was established as the political and religious base of the Crnojević dynasty. The location was chosen because of its defensive advantages, arising out of fear of the Ottoman Empire.

The Crnojević palace was constructed in 1482, followed by the monastery, and the urban nucleus of Cetinje was formed. Between the 15<sup>th</sup> and 18<sup>th</sup> centuries, armed conflicts with the Ottomans resulted in repeated demolitions and restorations of the monastery and other buildings. In 1701 the monastery was restored, then enlarged in 1704, only to be demolished by the Ottomans in 1714. It was then restored again in 1742. In 1832 the first private house was built, followed by other buildings. A plan of Cetinje from 1860 shows two streets and 34 residential houses.

The recognition of Montenegro as an independent state by the Congress of Berlin in 1878 took Cetinje to a

different level of urbanization as the capital of a sovereign state. Consequently the city witnessed a rapid urban development, an organized urban structure and social and cultural prosperity, which were halted by the First Balkan War in 1912 and then World War I.

Most of the historic fabric of Cetinje was constructed in the period between the 1860's and 1912, which is called the 'Golden Age of Cetinje'.

Between the two World Wars, the city expanded significantly, mainly to the west and north-west. The majority of building activities at this period were single-storey houses.

The period of Socialist Yugoslavia (1943-1991) witnessed industrialization and migrations from countryside to the city and the construction of social housing.

In 1979 an earthquake struck Montenegro and caused severe damage to the Historical Centre of Cetinje. An urban plan was prepared and a decision was made to demolish the heavily damaged Grand Hotel. Also, the Hotel Park in the vicinity of the Blue Palace was demolished.

In 1986 devastating floods struck Cetinje. An underpass was constructed to mitigate damage by future floods in the aftermath of the flood.

The Post-Socialist period (1991-2014) witnessed the recognition of Montenegro as a sovereign state (2006) and the restoration of Cetinje as 'Old Royal Capital of Montenegro'.

The establishment of higher education institutions resulted in the adaptation of a number of historic buildings for new functions.

A parking area was made in the south-east part of the remains of the Crnojević Monastery and the church at Ćipur. Also, a number of illegally-built houses impact upon the integrity of the historic centre.

Conservation plans from the 1980's, after the earthquake of 1979, included major restorations and reconstructions of all affected historic buildings.

A number of privately-owned buildings within the perimeter of the historical centre suffered illegal interventions such as the addition of storeys or replacement of architectural elements of their facades.

## **3 Justification for inscription, integrity and authenticity**

### **Comparative analysis**

Comparisons are drawn by the State Party with World Heritage listed historic cities and non-listed historic cities: on a national level, the city of Kotor, within the

World Heritage property of Natural and Culturo-Historical Region of Kotor, Montenegro (1979, criteria (i), (ii), (iii) and (iv)), is chosen; on a regional level (south-east Europe), the cities of Berat and Gjirokastra, which are inscribed on the World Heritage List as Historic Centres of Berat and Gjirokastra, Albania (2005, 2008, criteria (iii) and (iv)), and the cities of Melnik and Veliko Tarnovo, Bulgaria, are chosen; on the international level the cities of San Marino, San Marino, inscribed on the World Heritage List as San Marino Historic Centre and Mount Titano (2008, criterion (iii)), and the city of Le Locle, within the World Heritage property of La Chaux-de-Fonds/Le Locle, Watchmaking Town Planning, Switzerland (2009, criterion (iv)), are chosen.

The two cities of Cetinje and Kotor complement one another with their diversity, and sometimes their contrasts, which additionally contribute to their values. Kotor is a port town characterized by the circulation of populations and the arrival of new cultures and ideas. Cetinje, on the other hand, was a town of warriors, diplomats and spiritual people. Differentiations are supported also by the two cities' physical-geographical factors and are projected in their different architectural styles.

The comparison with the inscribed Albanian cities of Berat (it's old centre) and Gjirokastra (a well-preserved Ottoman town with a fortress from the 12<sup>th</sup> – 13<sup>th</sup> centuries) could provide a framework for the better understanding of Cetinje's nomination. The cities indisputably have certain similarities with Cetinje and Kotor, but also have important differences.

From Cetinje's comparison with the Bulgarian cities of Melnik and Veliko Tarnovo, some clear similarities emerge. However, there are more differences. Namely, Melnik is a very small town; a village with a few hundred inhabitants, it is important and well known because of the quality of its landscape and architectural heritage. On the other hand, Veliko Tarnovo is ten times the size of Cetinje.

On the international level the city of San Marino is chosen as an example of well-preserved architectural and cultural heritage of a medieval republic. The other city chosen for the comparative analysis on the international level is Le Locle in Switzerland.

In its letter to the State Party requesting additional information, ICOMOS requested that the State Party expand the comparative analysis to include similar towns in the Mediterranean region in order to establish the place of Cetinje in comparison to other typologically relevant cities in the region, with reference to both Ottoman and Christian European urban and architectural cultural identities. The State Party answered that under Chapter 3 of the Nomination Dossier, a comparative analysis was made at the regional level where Cetinje was compared to the relevant cities inscribed on the World Heritage List. Some of these properties are located in the Mediterranean region.

ICOMOS observes that the comparative analysis does not include an analysis or explanation of how the nominated property stands out in respect of the other examples and what are its peculiarities and exceptional features that would justify consideration for the World Heritage List

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ICOMOS considers that the comparative analysis does not justify consideration of this property for the World Heritage List.

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#### **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:

- Cetinje is an example of interchange between local, regional and European traditions and practices in town planning, landscape design and architecture. As a result of this interchange, the Historical Centre underwent a fast growth within a comparatively short period of time, namely from a rural agglomeration into a European capital.
- Following the interplay of influences between local, regional and European traditions and practices, the Historical Centre of Cetinje is an exceptional testimony of town planning, landscape design and architecture, with specific characteristics of the historic urban landscape.
- The Historical Centre of Cetinje is closely associated with phenomena in the area of traditions, ideas, beliefs, and artistic and literary works of outstanding universal significance. The intangible heritage of the property related to preserved artefacts has preserved its original expression, strongly marking the cultural identity and continuation of folk customs and traditions.

While ICOMOS acknowledges the importance of the UNESCO recommendation on Historic Urban Landscapes (HUL) as being "*an additional tool to integrate policies and practices of conservation of the built environment into the wider goals of urban development in respect of the inherited values and traditions of different cultural contexts*", there is an agreement that the notion of HUL should be seen as a useful approach that can sustain and strengthen management but cannot be understood as a category of heritage and should not be mentioned as such in the justification for inscription.

ICOMOS observes that the proposed statement of Outstanding Universal Value is generic and does not clarify how and to what extent the nominated property stands out in respect to other similar properties, nor clarifies how it stands for the interchange of human values.

## Integrity and authenticity

### Integrity

The property encompasses the whole urban structure of the historic centre of Cetinje. ICOMOS considers that it is therefore of adequate size to ensure the complete representation of the features and processes, which convey the property's potential significance.

All major material components that express the values of the property are included within the nomination's boundaries. Overall, 22 out of the 24 listed assets of national importance in the historic town and 18 prospective ones, as well as numerous monuments and memorial signs, are located within the boundaries of the property.

However, ICOMOS considers that development pressure of both the hyper market project and the stadium undermine the integrity of the property as a consequence of their proximity to the property, their sheer volumes, and the traffic density and congestions they are expected to create.

### Authenticity

The great majority of the emblematic public buildings and ensembles in the historic town are restored and well integrated into the urban environment. They are carefully maintained and effectively functioning, either according to their original functions or with new, carefully considered and relevant ones.

The State Party's reply to ICOMOS's request for more information on the restoration, reconstruction and rehabilitation works for a number of the significant buildings in Cetinje includes information of interventions carried out on 4 historic buildings.

Whilst the buildings and urban fabric of Cetinje meet the requirements for authenticity with regards to location and setting, form and design, spirit and feeling, the heavy-handed restorations and reconstructions from the 1980's and later, as well as change of original functions, undermine the authenticity of the attributes which contribute to the value of the property.

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

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### Criteria under which inscription is proposed

The property is nominated on the basis of cultural criteria (ii), (iii) 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 Historical Centre of Cetinje is evidence

of an important interchange of human values, of developments in town planning, landscape design and architecture. Also, that the property is an example of the exchange between local, regional and European traditions and practices in urbanism, landscape design and architecture, which resulted in a specific balance between the closeness of the urban structure and its openness to the values of European civilisation in these areas. As a result of this interchange, the Historical Centre underwent a fast growth within a comparatively short period of time, namely from a rural agglomeration into a European capital. This early and strong European influence generated a rare phenomenon for the Balkan region.

ICOMOS considers that the fact that Cetinje was influenced by late 19<sup>th</sup> century Western European trends of architecture and urban planning does not reflect a specificity for Cetinje and can be considered for many other cities. In addition, no evidences have been presented to highlight the importance of the interchange Cetinje could have expressed on the development of architecture, sculpture and urban planning.

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ICOMOS considers that this criterion has not been justified.

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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 following the interplay of influences between local, regional and European traditions and practices, the Historical Centre of Cetinje is an exceptional testimony of town planning, landscape design and architecture. Also, that the Historical Centre of Cetinje is a cultural property with specific interaction between the urban structure, environment and historical events, which resulted in its formation as an extraordinary urban historical landscape. The semantic power of the historical centre is created by the alignment between the Cetinje Monastery, the Biljarda and the Palace, with strong connection and support from Lovćen, symbolizing the two guiding principles that interlace the entire dramatic history of Cetinje: church/faith and secular power/state.

The comparative analysis has failed to demonstrate and clarify the specific significance of Cetinje, or to which cultural tradition or civilization Cetinje bears testimony. In addition, some of the arguments to support this criterion are related to criterion (ii).

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ICOMOS considers that this criterion has not been justified.

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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 Historical Centre of Cetinje is closely associated with phenomena in the area of traditions, ideas, beliefs, and artistic and literary works of outstanding universal significance. It is here that the first Cyrillic book was printed in 1494 by the Crnojević Printing House, one of the first state printing houses in the world. The Historical Centre keeps three important Christian relics which include the famous icon of Our Lady of Philermos. The intangible heritage of the property related to the preserved artefacts has preserved its original expression, strongly marking the cultural identity and continuation of folk customs and traditions (gatherings at the stone *gumno*, the burning of the Christmas tree “badnjak”, singing accompanied by the *gusle*, etc).

ICOMOS recognizes that the property is associated with events and living traditions and with artistic and literary works. However, the nomination dossier failed to establish an outstanding significance for these traditions and works.

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ICOMOS considers that this criterion has not been justified.

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In conclusion, ICOMOS considers that the criteria and Outstanding Universal Value have not been demonstrated.

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#### **4 Factors affecting the property**

ICOMOS considers that although residential development inside the historic town has already had some visible adverse effects, it is generally under control.

A potentially much larger impact threatening the integrity and authenticity of the property could be expected through the intended and on-going ambitious large-scale interventions inside and close to the nominated property; the ongoing construction of the hypermarket at the entrance to the city; the new underground parking in the Students' Square (on-going development of design documents for the reconstruction of the Square); the reconstruction of the town stadium (concept design according to the Union of European Football Associations (UEFA) and the International Federation of Association Football (FIFA) standards, building permit issued); and the intended new construction of a shopping facility inside the block of the existing covered market.

ICOMOS considers that there is an increasing development pressure in close proximity to the historic centre. In this regard, ICOMOS considers that Heritage Impact Assessments should be prepared for these projects in order to ensure that they do not impact negatively on the attributes of the nominated property and its setting.

The State Party identified the current tourism pressure as that caused by organized groups for one day visits. Accordingly, alterations have been made in the vehicular traffic system to accommodate vehicle access, movement and parking, whilst reducing impacts on the historical centre.

The currently prevailing tourist flow consists mainly of large guided groups coming by bus. The parking area provided at the border of the nominated area is at present considered by the municipal authorities sufficient in size yet not ideal in terms of location. The proposed new location is motivated by the availability of empty space; ICOMOS notes that there is seemingly no consideration for the longer-term movement of buses in close proximity to the historic centre and for the potential disturbance related to increased noise and air pollution, etc.

ICOMOS considers that a comprehensive tourism development strategy for the Historical Centre of Cetinje should be developed to integrate development needs, requirements for heritage protection and opportunities for heritage promotion.

ICOMOS considers that the strategic policy measures mentioned in the nomination dossier, to move the tourist bus parking out of the site to the buffer zone, and building a two-storey underground car park under the Students' Square, are fragmentary and presumably ineffective in the event of traffic flow further increasing in future.

A general current trend in the country is the predominant use of private cars. It seems that no studies have been made on the current number of cars and projected future numbers, or on possibilities for introducing alternative modes of transport. Traffic (tourist buses and citizens' private cars) could be considered the major challenge to the future life of the town. ICOMOS recommends that the State Party undertakes a comprehensive traffic study of Cetinje and its environs.

Recent negative events – the earthquake in 1979 and the flood in 1986 – have drawn attention to the importance of risk management, and effective action has been undertaken. After the big earthquake in 1979, when the Lokanda Hotel was irreversibly damaged and later on demolished, an inventory of all the cultural properties was undertaken in order to identify the actual state of each monument and define necessary repairs. After the 1979 earthquake a new seismic zoning was established in the country (the historic centre of Cetinje is in 8<sup>th</sup> and 9<sup>th</sup> degree zones) and protective measures were prescribed by the urban plan.

The flooding risk is related to the karst character of the land. The flood prevention measures that have been undertaken include the upgrading of the sewage system, which has enabled separate collection of waste and storm water.

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ICOMOS considers that the main threats to the property are development pressures, tourism pressures, environmental pressures and natural disasters.

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## 5 Protection, conservation and management

### Boundaries of the nominated property and buffer zone

The boundaries of the nominated property to the east and south-east are logically defined. There are, however, some other parts where the boundary is not appropriate:

- To the north-west – it is too curved behind the National Museum in order to separate the nominated area from Medovina settlement;
- To the north-east – it cuts part of the plot of the Njegoš Elementary School;
- It is not clear why to the south-west the boundary goes back to the fence of the existing playgrounds and not along the street; and on the south-east why the boundary cuts through existing neighbourhoods.

ICOMOS considers that the delineation needs to be re-considered in all the cases where the boundary goes across existing plots.

On the western side, the boundaries of the nominated area and the boundaries of the buffer zone are very close to each other. In effect, there is no buffer zone on this edge of the property (since the area to the west of the property is protected as a national park).

ICOMOS considers that the delineation of the buffer zone is not appropriate in some cases, as follows:

- To the north – the boundary of the buffer zone has not been supported by clear justification. The plot to the north, the Military Quarters, which has been excluded from the buffer zone, has already provided the site for a hypermarket which has seriously compromised the main entrance to the town from Podgorica. Excluding the football stadium from the buffer zone and planning for a modern stadium complex meeting FIFA requirements to replace the old structure, could bring serious risks to the visual integrity of the property. ICOMOS would recommend including the stadium with the playgrounds and the entrance to the town in the buffer zone;
- To the east, the boundaries could prove to be insufficient for protecting the property as new development is already seen on the slope east from the road;
- To the south, the boundaries seem to come too close to the nominated property area and should be moved southwards, as development pressure is already visible.

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In conclusion, ICOMOS considers that the boundaries of the nominated property and of its buffer zone are not adequate.

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### Ownership

The ownership of the State of Montenegro and the Old Royal Capital of Cetinje concerns approximately 62.4% of the nominated area.

In the perimeter of the buffer zone, the ownership of the State of Montenegro and the Old Royal Capital of Cetinje concerns approximately 55.3% of the total area.

### Protection

The Ministry of Culture, in the form of its specialized 'Administration for Protection of Cultural Property', has the major share of responsibilities in relation to heritage protection.

The historic centre of Cetinje has been protected by national law since 1948 and listed as a cultural property of national significance since 1961.

The legal protection of the nominated property is provided through a large number of official documents of the national legislation and by local regulations. Detailed expert recommendations on necessary interventions and guidelines for taking action are encompassed in the Study on Protection of Cultural Properties of the Historic Core of Cetinje and the Buffer Zone, created for the requirements of the nomination dossier. Other relevant plans comprise:

- Amendments to the Detailed Urban Plan (DUP) and Urban Project (UP) 'Historical Centre of Cetinje' with the Strategic Assessment of Environmental Impact,
- Spatial-Urban Plan of the Old Royal Capital Cetinje with Strategic Assessment of Environmental Impact,
- Special Purpose Spatial Plan of the National Park "Lovćen"

All the local and regional planning documents required by the national legislation, that provide the protection framework for the urban structure, have been recently prepared and/or updated; the new DUP/UP of Cetinje is the first GIS-based detailed urban plan in the country.

The reported illegal construction in some residential buildings has been related to building activities not being legalized (changes of window panes, adding one storey or additional premises in the yard, etc.).

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

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### Conservation

All elements of the property have been inventoried since 1961. All the components of the nominated property have been professionally studied, restoration measures prescribed, and action undertaken or planned. In 2009 the

Government of Montenegro adopted the Programme 'Cetinje – City of Culture 2010 – 2015', developed by the Ministry of Culture, within which, in the last four years, through the new round of investments, considerable funds have been allocated (approximately 10 million euros), largely towards the development of conservation designs and the implementation of conservation measures on the most representative single cultural properties within the Historical Centre. The comprehensive Study on Protection of Cultural Properties of the Historic Core of Cetinje and the Buffer Zone was accomplished in 2014. The property and its components were comprehensively documented by the approximately 800-page study; the current state of all the property components was described, risks estimated, and necessary interventions were defined. Thus a sound baseline has been provided for undertaking future conservation measures.

Most of the buildings are well maintained and functioning, being visibly in a very good state. However, the former Russian Embassy is in a very bad state and urgently needs restoration (funding will be provided by the State for this particular building as the Ministry of Foreign Affairs will move there). An overall restoration is also envisaged of the former French Embassy.

ICOMOS considers that the conservation measures prescribed, programmed and undertaken are relevant. The urban environment is well-maintained. Conservation work is usually funded by the Montenegrin State or international programmes; there are visible results everywhere in the historic town of the ongoing United Nations Development Programme (UNDP) project 'Beautiful Cetinje', which has combined restoration activities with energy-efficiency measures.

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In conclusion, ICOMOS considers that the conservation measures are adequate.

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## Management

Management structures and processes including traditional management process

A heritage management system has been active and continuously developing in the country since 1961.

There is a close and effective coordination between the national and the local level of heritage management; yet the institutional structure of the decision-making process seems to be rather highly centralized.

The Management Agency for the Cultural Property of the Historical Centre of Cetinje is the main body responsible for heritage protection at the local level. The Agency was formally established in 2015. ICOMOS considers that its structure and expert competences should be clarified.

There are currently two specialized Secretariats dealing with heritage protection at the municipal level; the Secretariat of Spatial Planning and Environment Protection, and the Secretariat for Culture and Media of

Cetinje Old Royal Capital, with overall eight employees (including two architects, one civil engineer and one urban/space planner). Two positions are to be filled in the future.

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

The Cetinje Historical Core Management Plan was developed in 2009 and updated in 2015. An Action Plan for the implementation of the Management Plan has also been developed.

ICOMOS considers that detailed monitoring procedures and tools should be elaborated, in order to make them operational.

A lot of resources have been focused on Cetinje during recent years for cultural heritage protection and promotion. Funding was sought for upgrading the outdated technical infrastructure of the town. Financial support has been provided by multiple sources, national as well as international ones; the European Union (EU), UNDP, World Bank, etc. Specialized training on cultural heritage is envisaged in the Action Plan for the staff involved in heritage protection. Municipal staff training is also provided at the state level through the Human Resource Management Agency.

In relation to tourism, ICOMOS notes that an understanding of required tourist accommodation is not clear at the local level. The Grand Cetinje Hotel (built in 1984, with 140 beds) is in a very good location and in bad need of repair – long-postponed because of the delayed privatization process and the lack of investment interest. Three hotels and some rooms-to-rent in private houses in the historic town appear not to meet contemporary standards.

Involvement of the local communities

The importance of local community involvement is acknowledged but there is no clear process for it. It seems to be currently working mostly in the stages of identifying needs and demands, and generating ideas for development. Some local Non-governmental organisations (NGO's), mainly of young people, are actively interested in the nominated property.

ICOMOS considers that the management system for the property should be extended to include the training and appointment of a sufficient number of relevant specialists. Furthermore, ICOMOS recommends that the Management Agency should be supported by the appropriate organizational structure, resources and mandate. Also, that the management plan should be extended to include a comprehensive tourism development strategy.

Taking into account the present and future development projects in the vicinity of the Historical Centre of Cetinje, ICOMOS considers that it would be desirable that the



State Party consider the integration of an Heritage Impact Assessment approach into the management system, so as to ensure that any programme or project regarding the property be assessed.

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In conclusion, ICOMOS considers that the management system for the property will be adequate once it's adapted to include Heritage Impact Assessments for new developments; extended to include a comprehensive tourism development strategy; and fully implemented and supported by the necessary resources

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## 6 Monitoring

The State Party presents nine indicators to be monitored on a periodical basis, including protection and preservation of different components and categories of the property.

The proposed indicators need to be further developed to outline clear prioritization of the numerous objectives and the tools to achieve them; the already provided GIS-based urban plans provide the opportunities for the effective monitoring of the property; a common database for the needs of both heritage protection and urban development has to be compiled and maintained.

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In conclusion, ICOMOS considers that monitoring measures for the property should be further articulated.

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## 7 Conclusions

ICOMOS recognizes the national significance of the historical centre of Cetinje as the foundation from which the state of Montenegro was created following the city's foundation in 1482, and the relationship of Cetinje with the Lovćen Mountain and its mythical and symbolic significance to the Montenegrin people.

ICOMOS notes the significance of the urban fabric and individual buildings of the Historical Centre of Cetinje from the 'golden age of Cetinje' between 1860 and 1916.

However, ICOMOS considers that the foundation of a capital city to manifest the national identity of a newly created or newly liberated nation in the European style in the second half of the 19<sup>th</sup> century could be found in many countries all around the world and is not a convincing basis for Outstanding Universal Value.

The comparative analysis did not establish Cetinje's Outstanding Universal Value as it compared it with cities in the region and Europe, either on the basis of size, being a small capital city, or on the basis of the duality of 'a port city and an inland city'. Furthermore, the duality of an inland capital city and a connected port city can be found all over the world.

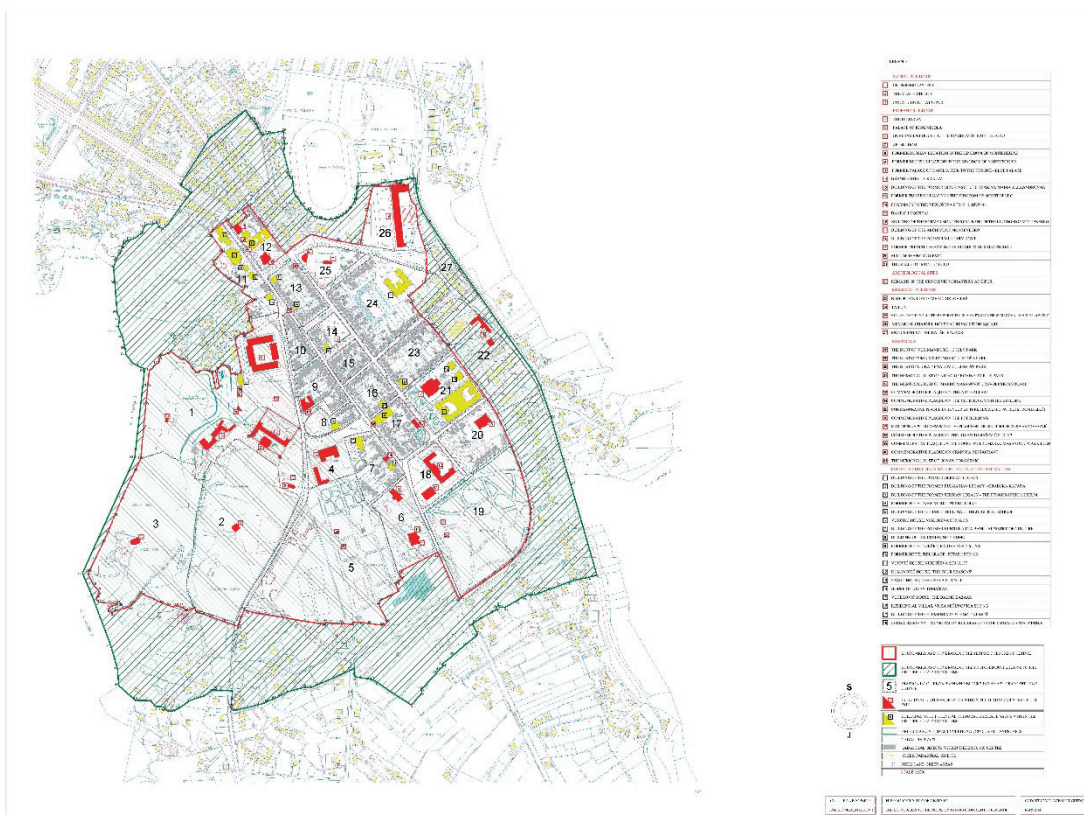
The current nomination dossier argues for the Outstanding Universal Value of the property according to criteria (ii), (iii) and (vi); however, no evidence nor clear explanation have been provided to demonstrate the specificity or uniqueness of Cetinje.

ICOMOS considers that the conditions of integrity and authenticity have not been met due to the impact of development pressures, particularly the intended and on-going ambitious large-scale interventions inside and in the vicinity of the nominated property, and due to the heavy-handed restorations and reconstructions, as well as change of original functions of several buildings in the Historical Centre.

## 8 Recommendations

### Recommendations with respect to inscription

ICOMOS recommends that the Historical Centre of Cetinje, Montenegro, should **not be inscribed** on the World Heritage List.



Map showing the boundaries of the nominated property



Historical Centre



The Cetinje Monastery





The Government House



The building of the Zetski Dom



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## Antequera Dolmens Site (Spain) No 1501

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### Official name as proposed by the State Party

The Antequera Dolmens Site

### Location

Antequera  
Province of Malaga  
Autonomous Community of Andalusia  
Spain

### Brief description

The Antequera Dolmens Site is a serial property made up of three megalithic monuments; the Menga Dolmen, the Viera Dolmen and the *Tholos* of El Romeral, and two natural monuments, La Peña de los Enamorados and El Torcal de Antequera. Built during the Neolithic and in the Bronze Age out of large stone blocks that form chambers and spaces with lintelled roofs (Menga and Viera) or false cupolas (El Romeral), and used for rituals and funerary purposes, the Antequera megaliths are widely recognised examples of European Megalithism. The megalithic structures are presented in the guise of the natural landscape (buried beneath earth tumuli) and their orientation is based on two natural monuments: La Peña de los Enamorados and El Torcal. These are two indisputable visual landmarks within the property.

### 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 five *sites*.

## 1 Basic data

### Included in the Tentative List

27 January 2012

### International Assistance from the World Heritage Fund for preparing the Nomination

None

### Date received by the World Heritage Centre

28 January 2015

### Background

This is a new nomination.

### Consultations

ICOMOS has consulted its International Scientific Committee on Archaeological Heritage Management and several independent experts.

### Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the property from 20 to 24 September 2015.

### Additional information received by ICOMOS

An interim report was sent to the State Party on 21 December 2015 requesting further information on development projects, extension of boundaries, protection and Heritage Impact Assessment. The State Party responded to these queries on 23 February 2016. The information is incorporated into the relevant sections of this evaluation report.

### Date of ICOMOS approval of this report

11 March 2016

## 2 The property

### Description

The Antequera Dolmens Site, located at the heart of Andalusia in southern Spain, covers 2,446.30 hectares and comprises three megalithic monuments and two natural elements. Two megaliths, Menga and Viera Dolmens, are located on a slightly elevated space, overlooking the fertile depression of Antequera. About 1,700 m to the east of Menga is the *Tholos* of El Romeral, from which the foothills of the Sierra de El Torcal rise up, about 8.5 km to the south. Each of the three tombs retain their original tumulus and they are representative of the two great Iberian megalithic architectural traditions: lintelled architecture (Menga and Viera) and the architecture of false cupola ceilings (El Romeral); and they are also representative of a variety of architectonic types: passage tombs (Menga and Viera) and corbel dome tombs (El Romeral).

Approximately 7 km to the north-east of Menga is the impressive mountain of La Peña de los Enamorados, renowned for its anthropomorphic profile that resembles a gigantic recumbent human head looking up to the sky. The two mountainous formations, La Peña de los Enamorados and El Torcal, which functioned as an orientational backdrop when Menga and El Romeral were laid down, are both natural landmarks in the region as well as important archaeological complexes that provide evidence of a significant human presence in the southern Iberian Peninsula between the Neolithic period and the Bronze Age. Altogether, the nominated property with its buffer zone covers an area of 13,234.00 hectares.

### The Menga Dolmen

Conceived as a large-scale gallery dolmen, Menga consists of a mound almost 50 m in diameter which covers a megalithic chamber 27.5 m long and up to 6 m wide. With the height of the gallery increasing from 2.7 m at the entrance to 3.5 m in the chamber, Menga represents a type of megalithic architecture which has a chamber and corridor with three great pillars aligned along the longitudinal axis of the chamber. The estimated total combined weight of its 25 orthostats, 5 capstones and three pillars is 835 tonnes. Menga was deliberately

oriented towards the mountain of La Peña de los Enamorados and possesses examples of symbolic prehistoric art that are paralleled at La Peña and other southern Iberian sites.

#### The Viera Dolmen

Viera is a megalithic monument with a gallery-grave where one can identify three different sections, separated by two doors, with its total length being 21.5 m. Its tumulus has a maximum diameter of some 50 m and reaches a height of 4 m. In terms of megalithic architecture, Viera is laid out as a simple long corridor, roughly rectangular in shape, which at its far end leads into a chamber that has a range of graphic and sculptural elements. Viera has the only surviving example on the Iberian Peninsula of painted and bas-relief engraved decoration in a style documented in some hypogean tombs found in France and Italy.

#### The *tholos* of El Romeral

El Romeral, with a 26 m long passage that leads to a large corbelled chamber (5.20 m in diameter and almost 4 m high), is the largest *tholos* (i.e. a circular chamber with a vaulted ceiling) on the Iberian Peninsula. In terms of megalithic architecture, El Romeral is a great example of a *tholos* with a corridor and a double chamber whose false cupola ceilings were rendered with an approximation technique using strings and dry stonewalls made from small stones. El Romeral faces towards another unique landmark, El Camorro de las Siete Mesas, the highest point of the El Torcal mountain range.

#### La Peña de los Enamorados

La Peña is an elevated point of the Baetic mountain range, which rises to a height of 880 m above sea-level and occupies an area of 117 hectares. Historically, the mountain has been a landmark of the utmost importance due to its location and shape, serving as a "terrestrial lighthouse" for travellers moving from east to west (between Seville and Granada) or from north to south (from Malaga to Cordoba). La Peña is visually related to Menga, which faces towards the large cave of Matababras, a sanctuary found with traces of schematic art, which reinforces the binomial of Megalithism and rock art. La Peña's profile against the sky strongly suggests an anthropomorphic figure (it resembles a human face facing the sky) and it has featured prominently in the local traditional narratives (legends, songs and literature).

#### El Torcal

The mountain range of El Torcal is situated some 11 km to the south of the district of Antequera in the Subbaetic ranges, at a height of between 800 and 1,136 metres above sea level. Its main feature is the karstic formations that foster a wide diversity of habitats that are home to many endemic plant species. There are numerous chasms and caves and other underground features, including the cave of El Toro, which houses valuable archaeological sites from the Neolithic period and the Copper Age.

## History and development

#### The Menga dolmen

Archaeological evidence suggests that Menga was built during the 4<sup>th</sup> millennium cal. BCE, but there is no direct empirical proof of its use during the Bronze Age. Known since the 16<sup>th</sup> century AD, Menga was declared a National Monument in 1886 and in 1923 received, together with Viera, the highest level of official protection as National Monuments. Menga has been the subject of the largest number of studies, archaeological excavations and conservation and restoration work. After a partial intervention in 1968 (plaster rods were put in place, interior electrics installed), several archaeological surveys took place in 1986, 1988 and 1991, which affected both the tomb and the tumulus. A later restoration and emergency intervention between 2001 and 2002 focused on the treatment of the stone fabric: cleaning, consolidation and restoration.

#### The Viera dolmen

The currently available radiocarbon-dated chronology suggests that Viera was built in the last third of the 4<sup>th</sup> millennium BCE, and that it witnessed activity, possibly of a religious or funerary nature, in both the Copper and Bronze Ages. Discovered in 1903 by the brothers Antonio and José Viera, the dolmen was subject to restoration of the tomb and its tumulus, and landscaping of the surroundings, between 1940 and 1941. The latest large restoration intervention at Viera was in 2003 to repair the fractures in capstones 3, 4 and 5, the collapsing of the lateral orthostats D6, D7, D8 and D9, and dampness caused by the poor sealing of previous archaeological surveys.

#### The *tholos* of El Romeral

The construction period of El Romeral is attributed to the Chalcolithic period (c. 3300-2200 BCE.). Since no scientific study has focused on this *tholos*, the finer details of its chronology and history as a monument are essentially unknown. El Romeral was discovered by the Viera brothers in 1903 and classified as a Monument in 1931. In the 1940s it was the object of an important consolidation intervention in which some of the broken capstones and certain masonry walls were replaced. In 2002, conservation work was undertaken, which affected some of the capstones, the lintel at the entrance, part of the masonry and the floor surface.

#### La Peña de los Enamorados

Despite being a famous natural monument since the 16<sup>th</sup> century CE, it was only in 2006 that surface field surveys uncovered the importance of the northern part of La Peña during the Neolithic Period, reflected in the rock-face shelter of Matababras. Based on the morphology of the motifs represented, the provisional chronology proposed for this site is the late 4<sup>th</sup> and early 3<sup>rd</sup> millennium BCE. The prehistoric site of La Peña was declared a Property of Cultural Interest classed as an Archaeological Zone in 2011.



Prehistoric occupation of El Torcal

Discovered in 1972, El Toro cave was excavated in 1977, 1980, 1981, 1985 and 1988. The cave is, at the moment, the best documented site in the region of Antequera for research into the first settlement of the area by food-producing communities – which laid the foundations of the society that would go on to erect the ensemble of megaliths of Antequera and set up the political, territorial, socio-economic and symbolic structures that can be seen in the whole area from the first half of the 4<sup>th</sup> millennium BCE.

### 3 Justification for inscription, integrity and authenticity

#### Comparative analysis

The State Party's methodological focus for the comparative analysis is based on the study *The World Heritage List: Filling the Gaps - An Action Plan for the Future* published by ICOMOS in 2005. Accordingly, the nominated property is compared to 23 similar properties inscribed on the World Heritage List and Tentative Lists using a typological framework (archaeological heritage), a regional-chronological framework (Megalithic and Neolithic Periods) and a thematic framework (Monumental sculpture, dolmens).

The State Party states that there is an underrepresentation of Megalithism from the Neolithic Period in the World Heritage List; there are only three megalithic constructions (dolmens) inscribed on it (i.e. the Taxila in Pakistan (1980, criteria (iii) and (vi)), the Heart of Neolithic Orkney in the United Kingdom of Great Britain and Northern Ireland (1999, criteria (i), (ii), (iii) and (iv)), and the Gochang, Hwasun and Ganghwa Dolmen Sites in South Korea (2000, criterion (iii))); and that there are only four inscribed properties from the period of Neolithic Megalithism and all but one of these are found in the British Isles (the Brú na Bóinne – Archaeological Ensemble of the Bend of Boyne in the Republic of Ireland (1993, criteria (i), (iii) and (iv)); the Heart of Neolithic Orkney in Scotland (1999, criteria (i), (ii), (iii) and (iv)); the ensemble formed by Stonehenge, Avebury and Associated Sites in the United Kingdom of Great Britain and Northern Ireland (1986, criteria (i), (ii) and (iii)); and the Megalithic Temples of Malta in Malta (1980, 1992, criterion (iv))). The comparative analysis concludes that due to their dimensions, design features and links to the landscape, the three Antequeran megaliths stand out from all of the other megaliths known in European Prehistory.

ICOMOS notes that the comparative analysis of Antequera Dolmens Site is presented in a clear and concise manner with a relevant selection of sites. ICOMOS shares the views of the State Party.

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 colossal scale of megaliths characterised by the use of large stone blocks that form chambers and spaces with lintelled roofs (Menga and Viera) or false cupolas (El Romeral) attest to exceptional architectural planning from those who built them and create unique architectural forms.
- The intimate interaction of the megalithic monuments with nature, seen in the deep well inside Menga and in the orientation of Menga and El Romeral towards presumably sacred mountains (La Peña de los Enamorados and El Torcal), emphasise the uniqueness of this prehistoric burial and ritual landscape.
- The three tombs, with the singular nature of their designs, and technical and formal differences, bring together two great Iberian megalithic architectural traditions and a variety of architectonic types, a rich sample of the extensive variety within European megalithic funeral architecture.

ICOMOS considers that the serial approach is justified as providing three megalithic monuments and two natural elements with which they are closely related and which contribute to their meaning, amounting to a remarkable inter-relationship between funerary monuments and natural landmarks.

ICOMOS considers that despite a certain degree of inadequacy in the use of relevant criteria, the core argument presented in the nomination dossier for the justification of Outstanding Universal Value is appropriate.

#### Integrity and authenticity

##### Integrity

The State Party notes that the nominated property has been the object of conservation, consolidation and restoration interventions, but in no way has its integrity been altered, with the wholeness and intactness of each monument preserved. ICOMOS considers that the integrity of the series is challenged by the peri-urban industrial/commercial modern setting in which the three megaliths are located, which have been significantly altered in the past two decades by urban and infrastructure development. The location and scale of the unfinished museum building structure on the site between the burial mounds and Cerro Marimacho has affected the integrity of the setting of both monuments.

Menga is remarkably intact with its entire covering mound in place, and the mound and tomb of Viera is almost intact, missing only the lintel of its portal. Although the monuments have been subject to several excavations and interventions, the records of such interventions are scattered and incomplete. ICOMOS

notes that a dedicated research project is under way to recover as much as possible of those records that do exist and that can be assembled at this time.

The mound and interior of El Romeral is equally well presented but the integrity of the setting is somewhat diminished by virtue of it being separated from the dolmens of Menga and Viera by industrial/commercial warehousing development. ICOMOS notes that there are plans to remediate the impact of this setting.

The natural sites of La Peña de los Enamorados and El Torcal have substantially maintained their natural state of conservation, both in their geomorphological karstic configuration, the uniqueness of their flora and fauna and the richness of their archaeological sites, without having experienced any human intervention. ICOMOS considers that the integrity of the whole series has been justified; and that the integrity of the individual sites that comprise the series has been demonstrated, but it is vulnerable.

#### Authenticity

ICOMOS considers that, in the case of each of the three tombs, their form and design have remained remarkably unaltered in spite of necessary repairs to the fabric and some protection interventions, together with the installation of lighting (very sensitively achieved) and drainage along the floor of Viera dolmen.

The location of Menga and Viera has been peri-urban for centuries, at the edge of the rising ground on which the city of Antequera developed. Zoning of the land for industrial/commercial warehousing development has led to rapid development in the past two decades and this has had a negative impact on the location and setting of the nominated property.

The sites of Menga, Viera and La Peña each possess prehistoric art, expressing both a tangible and intangible heritage in their own right. La Peña has two particular legends attached to it. The first and most well-known is described in the nomination dossier. The second, La Peña the 'sleeping giant', is seen as a very ancient expression of the male in the landscape, while the almost equally anthropomorphic rock (only as seen from the east/southwest) on which the town of Archidona is located, can be seen as the female. La Peña 'faces' north and Archidona 'faces' south. El Torcal also has its intangible heritage in stories of imagined giants and strange creatures 'caught' in its karstic rock formations or roaming its strange karstic landscape.

ICOMOS considers that all components of the nominated property have a tremendous *genius loci* and sense and spirit of place. The authenticity of each and every one of the component parts in this series is unquestionable.

ICOMOS considers that the authenticity of the whole series has been justified; and that the authenticity of the

individual sites that comprise the series has been demonstrated.

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In conclusion, ICOMOS considers that the conditions of integrity and authenticity of the whole series have been justified; and for individual sites, the conditions of integrity and authenticity have been met.

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#### Criteria under which inscription is proposed

The property is nominated on the basis of 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 three megalithic monuments of Antequera are some of the most notable and globally recognised examples of megalithic architecture. The most representative example is the Menga dolmen, one of the largest known dolmens; an exceptional example of colossalism and a unique architectural solution, with interior pillars. It is one of the highpoints of lintelled architecture in late European Prehistory, with a truly astonishing internal space that has no parallel in world megalithism.

ICOMOS considers that the number, size, weight and volume of stone blocks transported and assembled in the basin of Antequera, using rudimentary technology, and the architectural characteristics of the monuments formed by these three megaliths, makes the Antequera Dolmens one of the most important engineering and architectural works of European Prehistory and one of the most important and best known examples of European Megalithism. As such, the dolmens of Menga and Viera and the tholos of El Romeral definitely represent a prime example of the creative genius of humanity.

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ICOMOS considers that this criterion has been justified for the whole series.

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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 position of Antequera as the natural junction of long-distance routes, seas and continents, the point where different traditional cultures converged, led, in late Prehistory, to the birth of a culture that interacted with the landscape and that also produced extraordinary megalithic architectural monuments. Additionally, the Antequera Dolmens Site contributes original and exceptional elements of universal value to the typologies and construction characteristics of its monumental funerary architecture representative of the two great Iberian megalithic traditions: lintelled architecture in the cases of Menga and Viera, and the

architecture of El Romeral's false cupola ceiling. Such notable typological diversity is also due to Antequera's location: an important centre of confluence between the worlds of the Atlantic, the Mediterranean, Africa and Europe.

ICOMOS shares the view that Antequera had a strategic importance, being the region where Mediterranean and Atlantic influences meet in the southern Iberian Peninsula. It also acknowledges the typological diversity of the megalithic architecture of Antequera. However, as acknowledged in the nomination dossier, ICOMOS considers that there is very limited knowledge and data (dating and archaeological evidence) regarding the Neolithic inhabitants of the lands of Antequera who joined forces to construct the megalithic monuments. The nomination dossier has not sufficiently demonstrated the considerable exchange between different populations in southern Spain, during the Neolithic and Chalcolithic periods, which led to the birth of a culture that interacted with the landscape and produced the megalithic monuments. However, ICOMOS considers that in this justification and the nomination dossier in general, the information provided makes a better fit for its justification under other criteria. Hence ICOMOS considers the nomination of Antequera Dolmens also under criteria (iii) and (iv).

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ICOMOS considers that this criterion has not been demonstrated.

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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 was not suggested by the State Party but ICOMOS considers that the nomination dossier provides elements to substantiate that Antequera Dolmens Site provides an exceptional insight into the funerary and ritual practices of a highly organised prehistoric society of the Neolithic and Bronze Age in the Iberian Peninsula. The Dolmens of Antequera materialize an extraordinary conception of the megalithic landscape, being exponents of an original relationship with the natural monuments to which they are intrinsically linked. Differentiating themselves from the canonical orientations towards sunrise, this original relationship shows anomalous orientations of its megalithic monuments: Menga is the only dolmen in continental Europe that faces towards an anthropomorphic mountain such as La Peña de los Enamorados; and the *Tholos* of El Romeral, facing the El Torcal mountain range, is one of the few cases in the entire Iberian Peninsula where the orientation is towards the western half of the sky. This criterion is suggested in the sense that the assembly of the three megalithic monuments together with the two natural monuments represents a very distinctive cultural tradition which has now disappeared.

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ICOMOS considers that this criterion has been justified for the whole series.

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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 was also not suggested by the State Party but ICOMOS considers that the nomination dossier provides elements to justify this criterion on the grounds that the Antequera Dolmens Site is an outstanding example of a megalithic monumental ensemble, comprised of the three megalithic monuments (the Menga and Viera dolmens and the tholos of El Romeral), that illustrate a significant stage of human history when the first large ceremonial monuments were built in Western Europe. The three different types of megalithic architecture seen in this ensemble of dolmens, which are representative of the two great Iberian megalithic traditions (lintelled architecture in the cases of Menga and Viera and the architecture of El Romeral's false cupola ceiling), and the unique relationship between the dolmens and the surrounding landscape of Antequera (the three megalithic monuments are buried beneath earth tumuli and two megaliths are oriented towards the natural monuments of La Peña de los Enamorados and El Torcal), reinforces the originality of this property, arguably one of the world's most significant expressions of the megalithic phenomenon.

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ICOMOS considers that this criterion has been justified for the whole series.

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ICOMOS considers that the serial approach is justified.

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In conclusion, ICOMOS considers that the nominated property meets criteria (i), (iii) and (iv) and conditions of authenticity and integrity.

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#### **Description of the attributes**

The attributes carrying the Outstanding Universal Value of the property are:

- The three megalithic monuments used for rituals and funerary purposes;
- The two natural monuments, La Peña de los Enamorados and El Torcal, which are visual landmarks conceptually connected to Menga and El Romeral, functioned as a 'terrestrial lighthouse' for travellers in prehistoric times as well as the karstic formations that foster a wide diversity of habitats that are home to many endemic plant species;
- Chasms, caves (including El Toro), other underground features and symbolic prehistoric art (in La Peña de los Enamorados and Menga) and other archaeological artefacts (microlithic tools);
- The natural landscape where the megalithic structures are buried beneath earth and the ritual landscape of prehistoric times between megaliths and the natural mountain formations (La Peña de los Enamorados and El Torcal) with an extraordinary geomorphological configuration;

- The intangible heritage (local traditional narratives, legends, songs, literature) associated with La Peña de los Enamorados and El Torcal.

#### 4 Factors affecting the property

Based on the observations of the technical evaluation mission, ICOMOS considers that there are three major development pressures:

- a) Development pressure due to ill-advised industrial/commercial urban development within the view sheds between the component parts (the northernmost area falls directly within the line-of-sight of La Menga to La Peña) and the proposed future extension of this commercial/industrial area (now under review) and commercial/industrial development, as well as the very poor public realm presentation in the immediate surroundings of the site of El Romeral. ICOMOS notes that there is the potential for a review of the current zoning and adoption of important actions that are not contained within the nomination dossier, such as:
  - A plan to minimise the growth of industrial development within the area between La Menga and La Peña;
  - A plan to ameliorate the impact of the existing industrial development around El Romeral;
  - A plan to reduce the expansion of the commercial/industrial development in the area and to re-locate logistic activity to a new area to the northwest of the city, associated with the new high-speed railway line.
- b) Development of a very large and unfinished museum building within the property in which Menga and Viera are located. The museum structure dominates at the site and it impedes the view to La Peña from certain points close to the tombs.
- c) Widening of the long-extant road to the south of the site (the historical main route out of the city eastwards), where the current site entrance to the dolmens of Menga and Viera is located.

These three points were raised in the ICOMOS letter sent to the State Party on 21 December 2015 and the State Party has provided satisfactory additional information. The State Party has presented the summary of the preliminary study of the criteria for the development of the Special Protection Plan of Antequera Dolmens Site, which will set out guidelines for the different zones that have an impact on integrity of the nominated property. The drafting of the Special Plan that is already underway is scheduled to be completed within 30 months. Additionally, a plan is presented for the declassification of over 113 hectares of urban developed land (including Industrial Manchilla, Widening Romeral, Tertiary Villa) and its new classification as Land Not for Residential Development of Special Protection. This will

require modification of the General Urban Land Use and Zoning Plan for the Municipality of Antequera (2010), which is scheduled to take at least 36 months to its completion.

Additionally, the impact of the unfinished museum building will be mitigated through the reduction of the built-up volume (in 35.90%) through the elimination of the entire first floor, simplification of existing volumes and reduction in number of exterior finishes. To improve the integration of the Museum into the surrounding landscape, the project will include the design of a green roof, subtle alterations to the topography around the perimeter of the building and cultivation of plant species that are native to the area. This is all part of the phase two of the Landscape Management Project of the Premises 1 of the Archaeological Ensemble, completed in December 2015.

The nomination dossier includes a detailed analysis of current visitor numbers and their origins. With less than 100,000 visitors to the monuments annually, the sites of Menga and Viera are well able to cope. El Torcal attracts visitors in similar numbers (86,846 visitors in 2013) and the sharp increase experienced in the number of visitors over the last three years could cause problems for the environment in the future. A limited number visit the *Tholos* of El Romeral. The main threats and impacts to the Nature Reserve of El Torcal therefore derive from excessive public use and, in particular, the practice of certain sporting activities, such as climbing. There is no public access to La Peña de los Enamorados.

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ICOMOS considers that the main threats to the property are development and tourism pressures.

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#### 5 Protection, conservation and management

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

ICOMOS notes that in all cases the boundaries of the nominated properties are clearly delineated by the roads surrounding them, as indicated on the overall map of the series and the land-use planning maps. The protection and controls in place at each and every location are sufficient to ensure that potential inappropriate developments are mediated.

The boundary around the dolmens of Menga and Viera is dictated by the roads that surround them and is appropriate. The proposed boundary around El Romeral was very confined and ICOMOS was of the view that the boundaries should be extended in order to enhance the integrity of the nominated component. In the supplementary information provided to ICOMOS in February 2016 the State Party indicates that the boundary around El Romeral has been extended from 0.60 hectares to 3.90 hectares.

ICOMOS further notes that the boundaries of La Peña and El Torcal have been defined for natural and environmental reasons but these components also encompass the archaeological sites that are also protected. The proposed boundaries are understandable and supportable on the ground.

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

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### **Ownership**

The megalithic tombs in Menga, Viera and El Romeral belong to the Autonomous Government of Andalusia. With regard to the natural components, La Peña de los Enamorados is privately owned (although some plots are under municipal ownership) as is most of the El Torcal Nature Reserve in Antequera.

### **Protection**

The various levels of legal protection for each component part are very well set out in the nomination dossier. All three burial monuments have been protected as National Monuments since 1923. In 1985 all three tombs were declared Assets (Monuments) of national Cultural Interest (BIC) under the new legislation entitled the Spanish Historic Heritage Law (16/1985). La Peña does not have national protection but, since 1985, is protected in the same manner as the tombs. El Torcal has a national protective designation as a Nature Reserve (Royal Decree 1978) and a number of local designations.

ICOMOS considers that the main issues in the buffer zone are mainly related to the deterioration of the setting of the burial monuments. The legal protective provision, however, provides mechanisms and an 'environment' within which the protection of designated areas and commercial and building development are mediated.

Two issues deserve special attention:

- Proposed new building and commercial warehousing development within the lands designated commercial/industrial.
- The poor quality of the public realm (i.e. unsightly access route into the site) around El Romeral.

ICOMOS considers that these points have been addressed by the State Party in their outline of the zones under consideration for the Special Plan submitted as part of the additional information requested by ICOMOS in February 2016.

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ICOMOS considers that the legal protection in place is adequate. ICOMOS considers that the protective measures for the property, its buffer and landscape zones are adequate but could be improved.

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### **Conservation**

ICOMOS notes that the component parts of the nominated property are now all very well conserved, to a high

standard conceptually and technically. All three burial monuments are remarkably well-preserved, stable and well-conserved. The natural component parts, which remain almost wild, are also very well preserved and are being actively managed. As yet, no conservation interventions have occurred on the painted rock art, but studies are in progress to monitor change and especially to identify any changes incurred by increased visitor numbers. The cave of El Toro is remarkably stable at present but plans to open the cave to visitors are being actively developed. If it is opened, changes to its microenvironment will have to be carefully monitored.

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ICOMOS considers that the state of conservation of the nominated property is satisfactory. All component parts are very well preserved. Conservation has been conducted in a manner that has preserved the essential attributes and values of the monuments.

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### **Management**

Management structures and processes, including traditional management processes

A Steering Committee was set up in 2010 for the Antequera Dolmens Site, which is made up of representatives for administrations and owners of the different properties included in the World Heritage proposal, with CADA (Archaeological Ensemble of the Antequera Dolmens) being the agency solely responsible for representing and monitoring the management of the Site

ICOMOS notes that, on the ground, it all works very well at this stage. The Visitor Centre and the offices located on the site in which the dolmens of Menga and Viera are located form the communications hub and practical base from which that site (the full landholding) and the site in which El Romeral is located are managed and maintained on a day-to-day basis.

Whilst in private property, the protection of La Peña is managed by its designation as an archaeological site (a Property of Cultural Interest / BIC) land use planning law. Access to this area for archaeological research is managed through permits and licences.

A wide range of protective provisions govern the management of El Torcal nature reserve property, and its archaeological sites are designated in their own right as Property of Cultural Interest / BIC.

ICOMOS notes that the nominated property has an adequate overall management framework for all components of the nominated property.

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

The Archaeological Ensemble of the Antequera Dolmens (CADA) is the specialist body in charge of implementing a

concerted management programme, including the drafting of the Strategic Master Plan for the Dolmens of Antequera Archaeological Ensemble (completed in 2011).

The Dolmens of Antequera have been the focus of intense research for a very long time. At this juncture, the monuments and their relationship with the landscape (La Peña and El Torcal) are very well understood. What is not clearly understood is the nature of ancillary activity in the immediate environs of the monuments. A greater care must be taken with regards to archaeological context, specially during the proposed construction work on the museum.

ICOMOS considers that it would be desirable that the State Party consider the integration of an Heritage Impact Assessment approach into the management system, so as to ensure that any programme or project regarding the property be assessed in relation to its impacts on the Outstanding Universal Value and its supporting attributes. Additional information provided by the State Party in response to the ICOMOS December 2015 letter indicates that according to the legislation (Law 7/2007 of 9 July, on the Integrated Management of Environmental Quality) a Heritage Impact Assessment will be required in the process of developing the Special Plan and revising the General Plan for Urban Zoning.

ICOMOS further encourages the State Party, through CADA and the Steering Committee of Antequera Dolmens Site, to ensure the coordination of the various planning instruments (particularly the Special Plan and the General Urban Plan) regarding the management of each of the component parts of the nominated property in order to enhance the management of the property.

The current visitor centre at the dolmens of Menga and Viera provides ample space for small groups and has an attractive audio-visual presentation of the serial property. In addition, there are dedicated guides to take groups up to the tombs. The proposed plans for the development of the museum (finance approved) will support the visitor experience at both dolmen sites, providing a full display on the nominated property in detail as well as a regional archaeological and cultural context for the property. El Torcal has a discrete and sensitively designed visitor centre and dedicated routes that provide sufficient capacity for its growing visitor numbers.

#### Involvement of the local communities

ICOMOS notes that the local business and tourism management communities within the city have enthusiastically embraced the branding exercise promoted by the local authority, but they were not involved in the preparation of the nomination and are not involved in any meaningful way in the management of the property. This means that there is likely to be a quite limited understanding of the site (in its cultural and archaeological sense) locally. The environment around the site and its recent development demonstrates this lack of awareness.

The establishment of CADA in 2010, in particular, provided a management structure for interdisciplinary work and facilitated the preparation of the nomination dossier. A range of highly qualified architects, planners, archaeologists, technical scientists, administrators, and conservators have been involved with – and continue to be involved with – research work at all the sites (component parts) and practical day-to-day management at four of these. There are at least three dedicated guides at the Menga and Viera Dolmens, together with two administrators and several maintenance personnel. The nominated property is very well staffed at present.

The reserve of El Torcal has a staff of rangers and the centre has a number of dedicated staff who operate it on a day-to-day basis. This component is also a very well managed site.

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ICOMOS considers that the management system for the serial and individual elements of the property is adequate.

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## 6 Monitoring

A thematic area classification of indicators related to the asset's conservation is presented in the nomination dossier, grouped under conservation of the archaeological ensemble and its environment, citizen and institutional participation, and management and cultural involvement. Whilst ICOMOS considers that the indicators presented under each category are adequate to monitor the state of conservation of the property, the State Party should also include further indicators related to the impact of tourism, and potential impact from development, mainly for the dolmen sites.

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ICOMOS considers that the monitoring and indicators are adequate but that these should be augmented by additional indicators related to the impacts of tourism and development on the attributes of the nominated property.

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## 7 Conclusions

ICOMOS recognises the Outstanding Universal Value of the Antequera Dolmens Site which meets criteria (i), (iii) and (iv). ICOMOS also considers that despite the integrity of the three megalithic monuments being challenged by the peri-urban industrial/commercial modern setting in which the three megaliths are located, which have been significantly altered in the past two decades by urban and infrastructure development, the required conditions of integrity and authenticity of the whole series and individual sites have been met and necessary mitigation measures to address the existing threats are in place.

## 8 Recommendations

### Recommendations with respect to inscription

ICOMOS recommends that the Antequera Dolmens Site, Spain, be inscribed on the World Heritage List on the basis of **criteria (i), (iii) and (iv)**.

### Recommended Statement of Outstanding Universal Value

#### Brief synthesis

The Antequera Dolmens Site is a serial property made up of three megalithic monuments: the Menga Dolmen, the Viera Dolmen and the Tholos of El Romeral, and two natural monuments, La Peña de los Enamorados and El Torcal de Antequera. Built during the Neolithic and the Bronze Age out of large stone blocks that form chambers and spaces with lintelled roofs (Menga and Viera) or false cupolas (El Romeral), and used for rituals and funerary purposes, the Antequera megaliths are widely recognised examples of European Megalithism. The megalithic structures are presented in the guise of the natural landscape (buried beneath earth tumuli) and their orientation is based on two natural monuments: La Peña de los Enamorados and El Torcal. These are two indisputable visual landmarks within the property.

The colossal scale of megaliths characterised by the use of large stone blocks that form chambers and spaces with lintelled roofs (Menga and Viera) or false cupolas (El Romeral) attest to exceptional architectural planning from those who built them and create unique architectural forms. The intimate interaction of the megalithic monuments with nature, seen in the deep well inside Menga and in the orientation of Menga and El Romeral towards presumably sacred mountains (La Peña de los Enamorados and El Torcal), emphasise the uniqueness of this prehistoric burial and ritual landscape. The three tombs, with the singular nature of their designs, and technical and formal differences, bring together two great Iberian megalithic architectural traditions and a variety of architectonic types, a rich sample of the extensive variety within European megalithic funeral architecture.

**Criterion (i):** The number, size, weight and volume of stone blocks transported and assembled in the basin of Antequera, using rudimentary technology, and the architectural characteristics of the monuments formed by these three megaliths, makes the Antequera Dolmens one of the most important engineering and architectural works of European Prehistory and one of the most important and best known examples of European Megalithism. As such, the dolmens of Menga and Viera and the tholos of El Romeral definitely represent a prime example of the creative genius of humanity.

**Criterion (iii):** Antequera Dolmens Site provides an exceptional insight into the funerary and ritual practices of a highly organised prehistoric society of the Neolithic and Bronze Age in the Iberian Peninsula. The Dolmens

of Antequera materialize an extraordinary conception of the megalithic landscape, being exponents of an original relationship with the natural monuments to which they are intrinsically linked. Differentiating themselves from the canonical orientations towards sunrise, the megalithic monuments shows anomalous orientations: Menga is the only dolmen in continental Europe that faces towards an anthropomorphic mountain such as La Peña de los Enamorados; and the Tholos of El Romeral, facing the El Torcal mountain range, is one of the few cases in the entire Iberian Peninsula where the orientation is towards the western half of the sky. This assembly of the three megalithic monuments together with the two natural monuments represents a very distinctive cultural tradition which has now disappeared.

**Criterion (iv):** Antequera Dolmens Site is an outstanding example of a megalithic monumental ensemble, comprised of the three megalithic monuments (the Menga and Viera dolmens and the tholos of El Romeral), that illustrate a significant stage of human history when the first large ceremonial monuments were built in Western Europe. The three different types of megalithic architecture seen in this ensemble of dolmens, which are representative of the two great Iberian megalithic traditions (lintelled architecture in the cases of Menga and Viera and the architecture of El Romeral's false cupola ceiling), and the unique relationship between the dolmens and the surrounding landscape of Antequera (the three megalithic monuments are buried beneath earth tumuli and two megaliths are oriented towards the natural monuments of La Peña de los Enamorados and El Torcal), reinforces the originality of this property.

#### Integrity

The three Antequera megaliths conserve all their constitutive elements and still conserve their unitary character. Therefore they are of adequate size to express their universal value as outstanding examples of megalithic architecture. The three monuments are in good condition and their original structures are almost entirely intact, both the interior rocky structure as well as the tumuli that cover them. Over time, a number of conservation, consolidation and restoration interventions have been carried out that are recognisable and have been preceded by, or have coincided with, archaeological research phases and qualified technical analyses. However, the peri-urban industrial/commercial modern setting in which the three megaliths are located, which have been altered in the past two decades by urban and infrastructure development challenges the integrity of the series. With regard to the natural sites, they have largely maintained this condition in terms of geomorphological configuration and singularity of flora and fauna, without experiencing any considerable anthropic transformations.

#### Authenticity

The series of investigations that have been carried out are conclusive and unanimous with regard to ascribing



the monuments to the said era, the authenticity of the chambers' stone materials and the area where the tumuli are found. The form and design of each of the three tombs have remained remarkably unaltered in spite of necessary repairs to the fabric and some protection interventions. All components of the nominated property have a tremendous genius loci and sense and spirit of place. The authenticity of each and every one of the component parts in this series is unquestionable. Also, the coexistence in Antequera of the two great megalithic traditions on the Iberian Peninsula and Western Europe has been certified: the Neolithic tradition of lintelled structures and the Chalcolithic tradition of false cupola chambers.

#### Protection and Management requirements

Both the megalithic monuments as well as the natural spaces have been listed and preserved with the relevant protection, heritage or environmental laws, whether these are national, regional or local, which provides them with the required institutional conservation measures. The dolmens of Menga and Viera, and the tholos of El Romeral have individually been declared as Monuments and are also an Archaeological Area that has been declared an Asset of Cultural Interest (BIC). La Peña de Los Enamorados, considered a BIC by the Ministry of Law due to the rock paintings that it contains, is also declared an Archaeological Area BIC. Meanwhile, the El Toro cave (in El Torcal) is currently in the process of gaining status as an Archaeological Area BIC. Due to its natural values, La Peña de los Enamorados is also classified as an Outstanding Site, whilst El Torcal has been declared a Natural Reserve (one of the highest levels of protection provided for by regional environmental law) and a Special Protection Area, and is thus included in the Natura 2000 Network of nature areas within Europe. This is a mainly publicly owned space managed by the Environment and Water Agency, which reports to the Autonomous Government of Andalusia. As a Natural Reserve included in the Andalusian Network of Protected Natural Areas (RENPA), it has its own Natural Resources Management Plan (PORN).

Legal protection is also guaranteed for the buffer zone, given that measures derived from heritage laws themselves have been added to urban planning conditions with a view to protecting the area. The Management Plan for the property includes interventions concerning the conservation and enhancement of the megalithic monuments and their surroundings, which are included in the Master Plan for the Archaeological Ensemble of the Dolmens of Antequera, together with the measures included in the aforementioned PORN for El Torcal. The heritage management process is restricted to three areas: the Archaeological Ensemble, La Peña de los Enamorados and the area of El Torcal. All of them are publicly owned, with the exception of La Peña, which is privately owned; however, under the legal system for Archaeological Zones declared as Properties of Cultural Interest, actions and public management

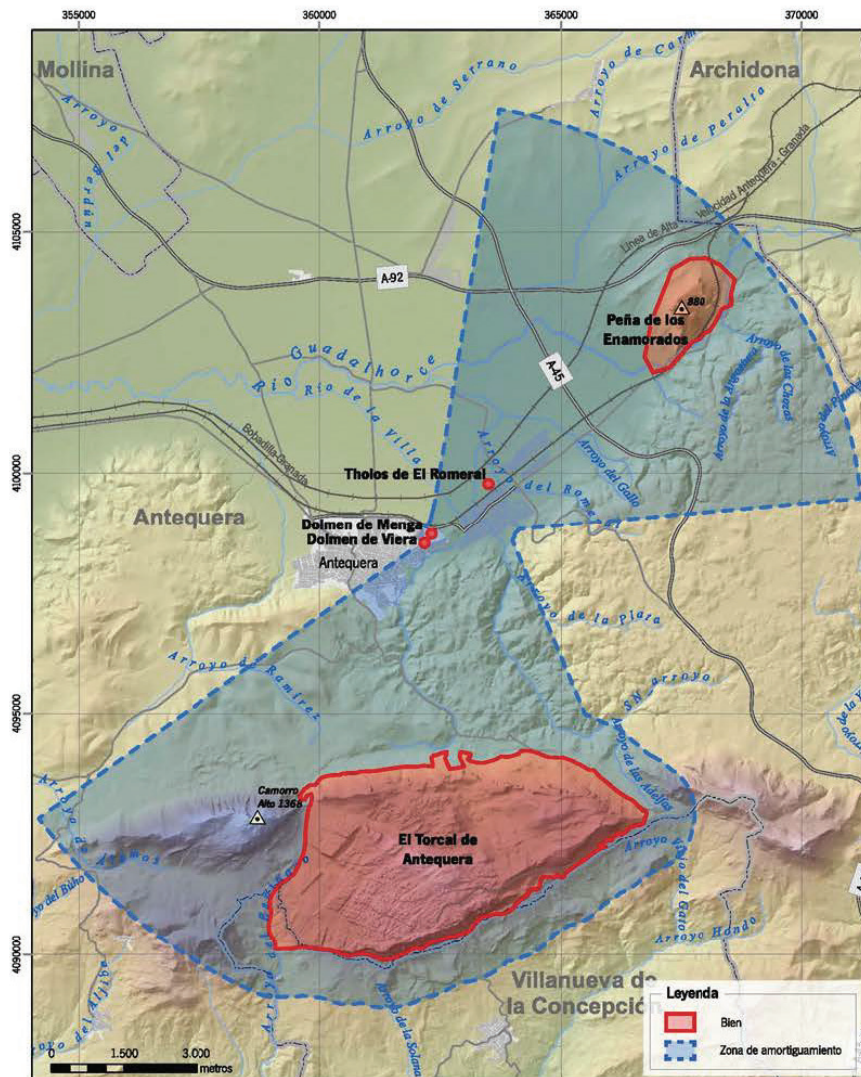
measures may be implemented to maintain and enhance the site. A Special Protection Plan of Antequera Dolmens Site is under preparation and will set out guidelines for the different zones that have an impact on integrity of the property.

A Coordination Council has been set up for the Antequera Dolmens Site, which is made up of representatives of the administrators and owners of the different component sites, with CADA (Archaeological Ensemble of the Antequera Dolmens) being the agency solely responsible for representing and monitoring the management of the Site.

#### Additional recommendations

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

- Finalising the Special Protection Plan of Antequera Dolmens Site and revising the General Plan for Urban Zoning in order to address the major development pressures that affect the property;
- Developing monitoring indicators to assess the impact of development and tourism on the attributes of the serial property;
- Ensuring the coordination of the various bodies and planning instruments involved in the management of each of the elements that comprise the property in order to enhance its management;
- Integrating an Heritage Impact Assessment approach into the management system, so as to ensure that any programme or project be assessed in their impacts over the Outstanding Universal Value of the property;
- Submitting to the World Heritage Centre and ICOMOS by 1 December 2019, a report on the implementation of the above-mentioned recommendations.



**Sitio de los Dólmenes de Antequera**  
 Propuesta de inscripción de bienes en la Lista del Patrimonio Mundial y su zona de amortiguamiento

**Plano 1. Plano general**

Superficie del bien: 2.446,30 ha + 10.787,70 ha (Zona de amortiguamiento)  
 Agencia responsable: Consejería de Cultura, Junta de Andalucía.

**Cartografía base:**  
 Datos Espaciales de Referencia de Andalucía.  
 Instituto de Estadística y Cartografía de Andalucía.  
 2013.

**Sistema de referencia espacial:**  
 European Terrestrial Reference System 1989,  
 Huso 30 N  
 Proyección UTM

Revised map showing the boundaries of the nominated properties



El Torcal in Antequera



Outside the Menga dolmen





Right side of the Menga dolmen chamber towards the interior



Perforated door in the Viera dolmen corridor



Autumn equinox the Viera dolmen



Access door to the chamber in the tholos of El Romeral

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## Archaeological Site of Ani (Turkey) No 1518

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### Official name as proposed by the State Party

Archaeological Site of Ani

### Location

Eastern Anatolia, Province of Kars  
Turkey

### Brief description

Ani is located in the northeast of Turkey, 42 km from the city of Kars, on a secluded triangular plateau overlooking a ravine that forms the natural border with Armenia. This medieval city that was once one of the cultural and commercial centres on the Silk Road, is characterized by architecture that combines a variety of domestic, religious and military structures, creating a panorama of medieval urbanism built up over the centuries by successive Christian and Muslim dynasties. Inhabited since the Bronze Age, Ani flourished in the 10<sup>th</sup> and the 11<sup>th</sup> centuries AD, when it became a capital of the medieval Armenian kingdom of the Bagratids and profited from control of one branch of the Silk Road. Later, under Byzantine, Seljuk, and Georgian sovereignty, it maintained its status as an important crossroads for merchant caravans, controlling trade routes between Byzantium, Persia, Syria and central Asia. The Mongol invasion, along with a devastating earthquake in 1319 and a change in trade routes, marked the beginning of the decline of the city. It was all but abandoned by the 18<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 *site*.

In terms of the *Operational Guidelines for the Implementation of the World Heritage Convention* (8 July 2015) paragraph 47, it was nominated as a *cultural landscape*. It is now nominated as an archaeological *site*.

## 1 Basic data

### Included in the Tentative List

13 April 2012

### International Assistance from the World Heritage Fund for preparing the Nomination

None

### Date received by the World Heritage Centre

30 January 2015

### Background

This is a new nomination.

### Consultations

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

Comments about the evaluation of this property were received from IUCN in December 2015. ICOMOS carefully examined this information to arrive at its final decision and its March 2016 recommendation; IUCN also revised the presentation of its comments in accordance with the version included in this ICOMOS report.

### Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the property from 9 to 14 November 2015.

### Additional information received by ICOMOS

A letter was sent to the State Party on 23 September 2015 requesting a map showing all the nominated buildings, an expanded comparative analysis, a justification for inscription under criterion (v), additional information on the proposed boundaries, the restoration of the city walls and Seljukian Palace, the impact of livestock grazing on the property, and the ownership profile of the land in both the nominated property and the buffer zone. A response was received on 2 November 2015 providing the requested information. An ICOMOS interim report was sent to the State Party on 18 January 2016, outlining the status of the evaluation process and issues that had been raised regarding the application. In response to this report additional information on the comparative analysis, Strategic Conservation Master Plan, maps of the revised buffer zone and staged conservation works within the walled city, as well as a substantially revised and edited nomination dossier (in particular the sections concerning the executive summary, the identification of the property, description and justification for inscription) was received by ICOMOS on the 5 and 9 February 2016. This information is incorporated into the relevant sections below.

### Date of ICOMOS approval of this report

11 March 2016

## 2 The property

**Note:** Due to limitations on the length of evaluation reports, not all monuments in the nominated property have been described in this report. The nomination dossier provides a thorough description of the various types of building that are found in the nominated property.

### Description

Ani is located in Eastern Anatolia, 42 km from the city of Kars, on a remote triangular plateau defined by the Bostanlar Creek to the northwest, Ocaklı Village to the north, Miğmiş Creek to the northeast and Arpaçay River

to the south, which forms the natural border between Turkey and Armenia. The nominated property comprises 250.7 hectares, with architectural remains that combine a variety of domestic, religious and military structures, creating a panorama of medieval urbanism built up over the centuries by successive Christian and Muslim dynasties.

Ani is put forward as a two-component serial nomination. Component one, which is the principal nominated area of the nominated property, consists of architectural remains located in three zones: the citadel, the outer citadel (walled city) and the area outside the city walls. Component two consists of rock-carved structures on the slopes of one of the valleys surrounding the city, the Bostanlar Creek.

The *Citadel* stands on a high flat-topped hill at the southeast end of Ani and was surrounded by the city walls, presumed to be from the 7<sup>th</sup> century AD, when the Kamsarakan dynasty ruled Ani. The existing structures of the ancient city within the citadel include the extensive ruins of the Kamsaragans Palace, the ruins of at least five churches (Palace church, Midjnaberd church, Sushan Pahlavuni church, Karimadin church and the church with Six Apses) and the ruins of several unidentified buildings. The *Kamsaragans Palace* was also the residence of the Bagratid rulers of Ani and their successors. The palace is in ruins today.

The best-known monuments of Ani are scattered in the *outer citadel (walled city)*, the area between the citadel and the *Smbat city walls* that surrounds the northern side of the city. Among these are the Fire Temple (Ateşgede), the Cathedral (Asdvadzadzin Church, Fethiye Mosque), the Gagik (Surp Krikor, Gagikashen) Church, the Church of the Holy Apostles (Surp Arak'elots, Caravanserai), the Church of the Holy Redeemer (Surp Amenap'rkitch, Halaskar, ruined), the St. Gregory of Abughamrents (Surp Krikor, Polatoğlu) Church, the Tigran Honents (Surp Krikor Lusavorich, Nakışlı) Church, the Virgin's (Bekhents, Surp Hripsime, Kusanac) Monastery, the Maiden's Monastery (Aghjkaberd, Surp Hovhannes, Zak'aria Church; Maiden's Castle), the Georgian (St. Stephanos) Church, the Rock-Cut Chapel, the Ebu'l Manucehr Mosque, the Emir Ebu'l Muammeran Complex, the Royal Bathhouse (Seljuk Baths), the Small Bathhouse, the Seljuk Palace (Tacirin, Pahlavuni, Baron, Ebu'l Muammeran Palace), the domestic architecture, the market, the Oil Press (for linseed oil, Bezirhane) and the Silk Road Bridge. These buildings and architectural remains belong to various religions and cultural groups (i.e. Persians, Greeks, Arabs, Armenians, Georgians, Byzantines, Seljuks, Mongols and Ottomans) that inhabited Ani mostly between the 9<sup>th</sup> to 13<sup>th</sup> centuries AD.

The *Fire Temple*, built from basalt stone blocks and situated between the Surp Arak'elots Church and Georgian Church, is thought to be a Zoroastrian temple constructed between the 1<sup>st</sup> and 4<sup>th</sup> centuries AD. This is probably the oldest structure in Ani and the first

Zoroastrian fire temple in Anatolia.

The *Ramparts of Smbat II*, arguably the most visually impressive part of Ani, consist of a line of double walls in the northern section of the city, that reach up to 5 metres in height in places, according to the slope of the land. The walls were constructed during the reign of Smbat II (977-989) and then substantially strengthened during the Gagik I (990-1020), Ebu'l Manucehr (1064-1110) and Ebu'l Muammeran periods. The city walls have six entrance gates which are named the Uğurun Gate, Kars Gate, Lion Gate, Satrançlı Gate, Acemağılı Gate and Miğmiğ Creek Gate. Lion Gate, which was possibly the main entrance of the city in the past, is located at the western side of the walls and is the main entrance for visitors to Ani today.

The *Cathedral* is located in the upper level of the Arpaçay valley at the southern edge of the city. Its construction started in the year 989 AD under King Smbat II and was completed by the year 1001. The Cathedral was the work of Trdat, one of the most celebrated architects of medieval Armenia, and combines architectonic elements from Byzantium and Armenia. During the siege of 1064 the Turks converted the Cathedral to a mosque and renamed it the *Fethiye Mosque*. It was returned to Christian usage in 1124 under the Georgians and inscriptions tell of restoration work carried out in the early 13<sup>th</sup> century. The devastating earthquake of 1319 brought down the cupola and may have marked the end of the building's formal religious use.

The *Emir Ebu'l Muammeran Complex* was built following the Seljukian Sultan Alpaslan's concession of the administration of the city to the Shaddadid principality after he conquered Ani in 1064. The complex is based around a rectangular planned small mosque, existing at foundation level. It was constructed between 1164 and 1200 AD by Shaddadid Şahinşah, the son of Ebul Manucehr, the first Ani Bey in the Shaddadid family, who reconstructed Ani and therefore took the title of Emir Ebu'l Muammeran. The Ebul Muammeran Mosque was demolished completely in 1917 and only a ruined section of the mosque minaret can be seen today.

The *Silk Road Bridge*, with an estimated construction date in the 10<sup>th</sup> century AD, provided a two-storey passage, joining the road which led to Arpaçay through Armenia to Ani, in front of the Dvin Gate. The arch of the bridge, which was constructed of smooth cut tufa stones, has been demolished completely. Only the bridge abutments on both sides of the river and traces of the pathway can be seen today.

The area *outside the city walls*, mostly on the valley slopes surrounding the city, has a great number of rock-carved structures including chapels, burial chambers, warehouses and pigeon houses. There are also water storage chambers, wine and oil cellars, stables and a large chamber that has been identified as a caravanserai. Some of the caves around the Bostanlar



Creek were used as houses until the 1950s.

Ani was originally nominated as a cultural landscape. The original nomination dossier provides a detailed description of the individual buildings and makes reference to the natural environment, flora and fauna, including the topographical position of Ani. However, ICOMOS notes that no description and analysis of the urban morphology, the townscape and the functions of this medieval historic city is provided in the nomination dossier, which makes it difficult to understand the scope and extent of the nominated property. The supplementary information provided by the State Party in February 2016, where Ani is put forward as an archaeological site, adds significantly to the description of the site and a plan of Ani indicating the location of 117 structures is presented in the revised nomination dossier.

ICOMOS notes however, that there is no correspondence between the map representing the 117 architectural structures at the property and the list of photographs provided in Annex 7.a. of the nomination dossier. Also, the additional information does not provide a map indicating the location of the more than 800 underground caves and tunnels that are mentioned in the revised nomination dossier. ICOMOS also notes that it is not clear from the description which elements are clearly visible on the ground and which are not. Therefore, ICOMOS considers that despite the improvements, the supplementary information is still not fully satisfactory with regards to the description of the nominated property and an expert field mission to the site is required to review and confirm the additional information provided in the refocused and revised nomination dossier.

### **History and Development**

Archaeological evidence suggests that the site of Ani was inhabited from the Early Iron Age (1200-1100 BC). The permanent settlement, however, only started with the construction of the Citadel, at the southern tip of the triangular plateau, in the 4<sup>th</sup> century AD, during the Kamsarakans Period.

To the Citadel's north stand the ramparts erected by Ashot III in 960–961 CE. Ashot III (953-977), a scion of the Armenian Bagratid dynasty, made Ani his capital in 961. This was a milestone for Ani, which grew rapidly from a small village into a city as a consequence of the Silk Road trade that shifted from old centres, such as Dvin and Nakhichevan, southwards due to on-going wars between Byzantines and Arabs. Ashot's grandson Smbat II (977-988 CE) made important contributions to the development of the city, including the construction of the nearly 5 km long double ramparts to the north, and a number of churches. During the reign of Gagik (989-1020 CE), brother of Smbat II, Ani experienced its golden age and the transfer of the *Katholikos* (Catholicos, Patriarchy of the Armenian Apostolic Church) to Ani in 992 CE attributed a religious mission to

the city, which became famous as the 'city with 1001 churches'.

The location of the city on the Silk Road, as one of the gateways into Anatolia, contributed not only to the rapid growth of the city but also made it a strategic political and military target. Bagratid rule in Ani ended when the Byzantines annexed Ani in 1045 CE. Barely twenty years later, in 1064 CE, the Seljuks conquered the area. By 1072 CE, they had installed a vassal dynasty at Ani, the Shaddadid emirs of Kurdish origin. The Ebu'l Manuçehr Mosque (Mosque of Minuchir) is the best-known monument associated with this period. The Shaddadids defended Ani from repeated Georgian incursions until 1199 CE, when Queen Tamar's armies took the city. Subsequently ruled by the Georgian-Armenian dynasty of princes, Ani flourished again, with constructions such as the Church of Saint Gregory (Church of the Abughamrents; Chapel of Sushan Pahlavuni; Polatoğlu Kilisesi) in 1215 CE, sponsored by the merchant Tigran Honents.

The advent of Mongol rule in 1239 CE until 1358 CE, Ilkhanids and Calayirs between 1358 CE and 1380 CE, and Karakoyunlus between 1380 CE and 1386 CE, which turned Ani and many cities in the region into warzones, combined with a devastating earthquake in 1605 and the reorientation of trade routes to southern Anatolia and Mesopotamia, led to the eventual decline and abandonment of Ani as a viable city. Ani became part of the Ottoman Turkish Empire between 1579 and 1918.

ICOMOS notes that the original nomination dossier does not refer to recent historical events that have had an impact on the nominated property. In the official Turkish historiography put forward, Ani's connections to an Armenian past are acknowledged sparingly, with historical inaccuracies. ICOMOS commends the State Party for the additional information provided which attempts to rectify this situation, indicating for instance the occasional cultural use of Ani since the year 2000. Nonetheless, ICOMOS is of the view that the inclusion of important events concerning the complex history of Ani post-1918 is still required to fully understand the political and cultural context in which the nominated property sits today.

## **3 Justification for inscription, integrity and authenticity**

### **Comparative analysis**

The extensive comparative analysis put forward by the State Party in the original nomination dossier is structured under three major headings – medieval walled cities, Armenian sites, and individual buildings. With regards to Medieval Armenian settlements, Ani is compared with ancient Armenian capitals ruled by the Bagratid dynasty (Dvin, Bagaran, Shirakavan, and Kars), all in Anatolia and Armenia, as well as other cultural centres in the region (Mren, Ketchivan, Tignis,

Magazberd, Sis), concluding that Ani is the largest and most advanced in many qualities and the best-preserved remains of the Medieval Kingdom of the Bagratids. Ani is further compared with the World Heritage sites of the Armenian Monastic Ensembles of Iran, Iran (inscribed in the list in 2008 under the criteria (ii), (iii) and (vi)), and the Cathedral and Churches of Echmiatsin and the Archaeological Site of Zvartnots, Armenia (inscribed in the list in 2000 under the criteria (ii) and (iii)), and with historic walled cities which are living cities today (Nicaea, Ankara, Sinope, Konya, Dyarbakir, Baku), concluding that Ani as an archaeological site has a higher level of authenticity and purity since it was largely unoccupied from the 13<sup>th</sup> century onwards. After comparison of Ani as a whole, the individual monuments of the nominated property are compared with relevant sites. Different typologies of churches and mosques are compared with equivalent monuments of the same typology from Armenia, Turkey, Turkmenistan and Uzbekistan.

ICOMOS considers that the comparative analysis is insufficient to demonstrate that the property is an outstanding example of a cultural landscape. The comparison of Ani with historic walled cities that are living cities today (e.g. Nicaea, Ankara, Sinope, Konya, Dyabakir, Baku) and medieval 'mega cities' (e.g. Constantinople, Bagdad or Damascus), or the comparison of individual elements of Ani with elements of other properties, is considered inadequate and irrelevant. Considering that Ani is essentially a medieval historic city that was once one of the cultural and commercial centres on the Silk Roads, ICOMOS considers that an augmented comparative analysis of a refocused nomination dossier should compare the nominated city to other multi-cultural cities and urban centres along the Silk Roads in order to demonstrate its exceptionality. This should describe how Ani contributed to, and was shaped by, the Silk Roads' trade.

In the augmented comparative analysis provided by the State Party in February 2016, Ani is first compared with the "medieval fortified towns", the so-called "ghost towns" or "lost cities" and similar archaeological sites that are already inscribed on the World Heritage List, so as to demonstrate that Ani provides a complete picture of medieval architectural development and is the most representative example of its type of fortified settlement in this cultural region, being distinguished from other "medieval towns" by its authentic state since the abandonment of the site in the early 17<sup>th</sup> century. ICOMOS commends the State Party for the substantial improvement in the revised comparative analysis. However, ICOMOS considers that, despite listing 13 sites from different geo-cultural regions, with some exceptions (e.g. Petra), the comparative analysis needs strengthening with regards to the comparison of Ani with properties that express similar values encapsulated in the same criteria as the ones put forward by the State Party to justify the nomination of Ani.

ICOMOS further notes that the comparison of Ani with urban centres and cities located on the Silk Roads concludes that Ani is unique amongst them because all of the others are living cities today, and have been continuously developed until modern times. However, ICOMOS considers that the comparative analysis falls short in explaining how Ani compares to other similar multi-cultural cities and urban centres along the Silk Roads outside of Turkey.

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ICOMOS considers that the comparative analysis will fully justify consideration of this property for the World Heritage List provided that it focuses on the comparison of Ani with properties expressing similar values, such as other multi-cultural urban centres, along the Silk Roads outside of Turkey.

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#### **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:

- Ani is a unique medieval settlement that has strong traces of Armenian history, culture and architecture, between 961-1045 CE when it became the capital of the Bagratid dynasty, and an important centre for Turkish history since it was conquered in 1064 AD.
- The location of the city on the Silk Roads, as being one of the gateways to Anatolia, contributed to the rapid growth of the city as well as the transmission and amalgamation of different cultures. Architectural traditions that evolved in the Caucasus, Iran, Turkestan and Khurasan, were translated into stone, creating a unique medieval city.
- The religious monuments of Zoroastrian, Christian and Muslim influence, as well as public and domestic buildings, are witnesses to Ani's multiculturalism. It was a multi-cultural centre, with all the richness and diversity of Medieval Armenian, Byzantine, Seljuk and Georgian urbanism, architecture and art development.
- Rock-cut dwellings constructed in the valley take advantage of the natural topography and show great skill in their construction and a symbolic interaction with the surrounding landscape.

ICOMOS considers that the justification originally provided by the State Party is not grounded on sufficient evidence to substantiate the consideration of the property as a cultural landscape. Although the characteristics of urban elements and features (individual buildings, rock-cut dwellings) are set out, the overall urban ensemble does, however, need to be better understood through more specific details of its form and layout. The supplementary information provided by the State Party in February 2016 responded to this need, providing more clarity on how the multiple cultural traditions are reflected in the urban layout of the city, and how the individual monuments inter-relate with the overall pattern of the city. ICOMOS also acknowledges that the supplementary information

include a revised justification of Outstanding Universal Value for the nominated property.

ICOMOS further notes that the justification for inscription as outlined in the third point ('multiculturalism') could apply to several other multi-cultural centres along the Silk Roads. ICOMOS considers that this point, as well as the others summarizing the justification that were put forward by the State Party, may well prove to be appropriate, however they will only be adequately justified once the comparative analysis has fully demonstrated how the nominated property stands out in respect to other similar properties inscribed, or not, on the World Heritage List.

### **Integrity and authenticity**

#### **Integrity**

The State Party considers that all the elements that constitute the basic values of Ani are located within the boundaries of the nominated area. The city walls, religious and domestic buildings, as well as the rock-cut constructions along parts of the Arpaçay and Bostanlar Creeks, are all located within the boundaries of the 1<sup>st</sup> Degree Archaeological Conservation area.

ICOMOS notes that the majority of structures having monumental characteristics are still standing on site. However, there is not a single monument that is not facing serious structural problems of stability, either missing parts of the fabric, due to seismic action or human destruction, or problems of unsuccessful reconstruction interventions. In addition, the property has problems which affect its integrity due to the continuation of the traditional way of life of the local villagers (e.g. pastures within the archaeological site, stables inside the rock-cut caves) as well as the quarrying machinery on the east side of Arpaçay Creek (in Armenia) which has considerable impact on the visual integrity of the landscape.

ICOMOS further considers that the property's integrity as presented is not yet adequate considering the highly vulnerable state of conservation of key attributes of the nominated property. However, ICOMOS is of the view that the conditions of integrity could be met, provided a comprehensive conservation strategy and action plan (for individual monuments) outlining the corrective measures required to control and mitigate the impact of deterioration processes on the property, is undertaken.

ICOMOS acknowledges the Strategic Conservation Master Plan for the nominated property provided as part of the supplementary information but considers that Plan needs finalisation. The Plan is discussed further below.

ICOMOS considers that the integrity of the whole series and that of the individual sites that comprise the series will be met when the key instrument for implementing a comprehensive conservation strategy (i.e. Strategic Conservation Master Plan) is finalised and in place.

#### **Authenticity**

The State Party considers that, generally speaking, the authenticity of the property has been retained, considering that the structures that remain standing retain their original form, but it also acknowledges that earthquakes, the harsh climate and human destruction have, to a limited extent, affected its overall authenticity.

However, with regards to authenticity of material, substance and workmanship, ICOMOS is concerned that a large amount of new fabric was introduced in a number of restoration projects, causing significant loss of the original building fabric of a number of monuments (e.g. the Smbat II city walls after restoration in 1995, or the Seljuk Palace after the 1999 restoration). In these restoration projects there was extensive use of stone masonry that is entirely different in size, colour and quality from the original and there is no archaeological evidence to show that the rebuilt monuments are true to their original form.

In addition, ICOMOS considers that the degree of authenticity and ability of the nominated property to truthfully convey the significance of Ani is still reduced by omissions of significant stages of the history and development of the property in the nomination dossier.

Nevertheless, ICOMOS agrees with the State Party that the remoteness of the uninhabited city of Ani provides a mostly unaltered window onto the past.

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ICOMOS considers that the authenticity of the whole series and for the individual components have been justified, although they remain vulnerable due to the variable state of conservation and adverse effects of past restoration efforts on some of the elements.

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In conclusion, ICOMOS considers that the condition of integrity of the whole series and that of the individual sites that comprise the series will be justified once the tools for implementing a comprehensive conservation strategy are in place. However, the condition of authenticity of the whole series and for individual sites has been justified, despite being vulnerable due to the variable state of conservation and adverse effects of past restoration efforts on some of the elements.

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#### **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 Ani was a meeting place for Armenian, Georgian and diverse Islamic cultural traditions that are reflected in the architectural design, material and

decorative details of the monuments. The remains of this multi-cultural life in Ani are easily traced in the use of architectural techniques and styles belonging to different civilizations. New styles, which emerged as a result of cross-cultural interactions, have turned into a new architectural language peculiar to Ani – the “Ani school”. The creation of this new language expressed in the design, craftsmanship and decoration of Ani has also been influential in the wider region of Anatolia and Caucasia.

ICOMOS acknowledges the supplementary information provided by the State Party with the revised justification for criterion (ii) and partially agrees with the State Party that the history of the region wherein Ani is located, at the Silk Roads, was a meeting point and melting pot for diverse cultures. However, ICOMOS is of the view that what has not yet been fully demonstrated is how these elements of ‘cultural exchange’ have come to be of outstanding importance when compared to many other places with similarly strong multicultural and economic centres.

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ICOMOS considers this criterion will be fully justified for the whole series once the comparative analysis has been expanded upon.

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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 Ani was a centre for a multi-national and multi-religious population who left their artistic and architectural traces there. Ani bears exceptional testimony to Armenian cultural, artistic, architectural and urban design development and it is an extraordinary representation of Armenian religious architecture, reflecting its techniques, style and material characteristics. Ani is also a significant place for Turkish history. Grand Seljuk traditions met with structures in Ani for the first time and spread to Anatolia from there.

ICOMOS acknowledges the additional information provided by the State Party with the revised justification for criterion (iii) and considers that Early Medieval Ani had a strong Christian and Armenian identity, while the impact of its specific geopolitical location on the crossroads between different civilizations and historic processes can be traced in its multi-cultural layers – Zoroastrian, Byzantine and Seljuk – preserved at the site.

Although the revised justification provided by the State party is potentially appropriate, ICOMOS considers that this criterion can only be fully justified once the comparative analysis has been strengthened.

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ICOMOS considers that this criterion will be fully justified for the whole series once the comparative analysis has been further developed.

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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 with its military, religious and civil buildings, Ani offers a wide panorama of medieval architectural development thanks to the presence at the site of almost all the architectural types that emerged in the region in the course of the six centuries from 7<sup>th</sup> to 13<sup>th</sup> centuries AD. It is also considered a rare settlement where nearly all of the plan types developed in Armenian Church architecture between the 4<sup>th</sup> and 8<sup>th</sup> centuries AD can be seen together. The urban enclosure of Ani is also an important example of a medieval architectural ensemble with its monumentality, design and quality.

ICOMOS acknowledges the supplementary information provided by the State Party with the revised justification for criterion (iv) and considers that this criterion will be met once the comparative analysis has been strengthened.

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ICOMOS considers this criterion will be fully justified for the whole series once the comparative analysis has been further developed.

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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 Ani exhibits a unique example of human use of the natural topography. Triangular in plan, sitting atop a narrow plateau above the confluence of rivers, deep valleys formed by the rivers, the city walls and low bastions bordering the city, rock-cut dwellings, chapels and pigeon houses, are the crucial elements that contribute to the creation of the unique cultural landscape of Ani.

ICOMOS considers that the rock plateau surrounded by cliffs and rivers plays a significant role in the overall set-up of the medieval urban settlement, expressing an intentional utilisation of the natural environment. The rock-cut dwellings contribute to the diversity of the architectural typologies preserved in Ani. However, ICOMOS is of the view that the skilful use of the natural topography for the built environment of Ani as an outstanding representation of human interaction with the environment or an outstanding example of traditional land-use practice, has not been demonstrated. There is a great diversity of magnificent rock-cut complexes of the same period in the region, and it is not clear from the original nomination dossier if Ani is a strong representative of this tradition.

Supplementary information was provided by the State Party in February 2016 in response to ICOMOS's request for an augmented justification of criterion (v). However, ICOMOS notes that this information did not strengthen the justification for the use of this criterion.

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ICOMOS considers that this criterion has not been justified for the whole series and is inadequate to substantiate the potential outstanding universal value of the nominated property.

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ICOMOS considers that the serial approach has not been justified and the selection of sites is not appropriate at this stage.

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In conclusion, ICOMOS considers criteria (ii), (iii) and (iv) will be fully justified for the whole series once the comparative analysis has been further developed.

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#### **4 Factors affecting the property**

Stone quarries on the Armenian side of the border, at the east and south side of the Arpaçay Creek, have been operated extensively in the past and the explosions have had a negative impact on the static condition of the monuments in the nominated property. Although the use of explosives has ended, ICOMOS notes that the mining activity by mechanical means is still continuing and the negative effects of the deposition of products of mining are visible on the opposite side of the river, just across from the south-eastern side of the city walls. ICOMOS acknowledges that these are not included in the buffer zone as they fall outside Turkish territory. However, ICOMOS considers that international cooperation for the protection of the monuments and essential views across the river should be encouraged to ensure protection of the property's landscape character in all directions.

Part of the 1<sup>st</sup> Degree Archaeological Conservation Site area which touches the west boundaries of the archaeological site (Bostanlar Creek area) and the area south of the archaeological site borders, above the Arpaçay Creek, are both defined as pasture area on the Conservation Plan and on the Ownership Plan, and used by the villagers as pasture. However, in these areas there are a considerable number of rock-cut structures that are threatened by their use to house animals. Despite the existence of a guard at the entrance gates of the property (Smbat II city walls), the animals continue to enter the site through the unsecured wire fence that has been breached in several places and through many points where the city walls have collapsed. ICOMOS notes that large areas of the site are not controlled and protected efficiently.

Ani is located in a 2<sup>nd</sup> degree seismic belt. The city has suffered from several earthquakes through its long history and these have caused structural damage.

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ICOMOS considers that the main threats to the property are stone quarrying, animal stabling in rock-cut structures, and earthquakes.

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#### **5 Protection, conservation and management**

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

The nominated property covers an area of about 250.7 hectares classified as a 1<sup>st</sup> Degree Archaeological Conservation Site area, the highest level of legal protection as regards conservation status, and has a buffer zone of 292.8 hectares designated a 3<sup>rd</sup> Degree Archaeological Conservation Site area.

ICOMOS notes that, as presented in the original nomination dossier, there is a gap on the lower southwest side of the property. Here the boundary of the nominated property following the slopes of Büyük Altıncı coincides with the buffer zone boundary. A similar problem occurs on the extreme southeast part of the buffer zone boundary, converging on Arpaçay Creek. The supplementary information provided by the State Party indicates that the 3<sup>rd</sup> degree archaeological conservation zone boundaries for the Archaeological Site of Ani have been extended to 432.45 hectares by the Regional Conservation Council's decision dated 23<sup>rd</sup> of December 2015 and numbered 1105. ICOMOS commends the State Party for its efforts to ensure that the additional buffer zone is legally protected and for providing a map illustrating the extent of the new buffer zone.

However, ICOMOS notes that no written description or photographs of the extension to the proposed buffer zone are provided. Therefore, although the additional buffer zone may well be adequate, ICOMOS considers that a field mission will be required to review the proposed changes to the boundaries of the buffer zone, on site.

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In conclusion, ICOMOS considers that a field mission will be required to review the proposed changes to the boundaries of the buffer zone.

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##### **Ownership**

The entire 85 hectares area surrounded by city walls belongs to the State and is assigned to the Ministry of Culture and Tourism. Of the remaining land outside the city walls, 0.9 hectares belong to the State, 73.8 hectares are forage areas, Provincial Special Administration owns 7.4 hectares, 23 hectares are privately owned, and 6.1 hectares belong to the Village Legal Entity. The remaining 54.5 hectares are in the scope of out of land registration. In its response to ICOMOS's request for further clarification on the implication of the different land ownership regimes for conservation of the nominated property, including the existing arrangements for conservation of buildings such

as the Virgins' Monastery, which are located on the area designated 'out of land registration scope', the State Party replied that the matter requires detailed academic research.

### **Protection**

According to the nomination dossier, the Ministry of Culture and Tourism, which is the main responsible government body for conservation and management of the site, is organized at both central and local levels. The General Directorate of Culture Heritage and Museums centrally regulates the activities of its local branches and fulfils certain tasks regarding monument restoration and World Heritage issues. Local branches, which are relevant in this case, are the Kars Regional Council for Conservation of Cultural Heritage, the Erzurum Directorate of Surveying and Monuments, and the Directorate of the Kars Museum. All conservation and development activities take place according to the national Law on the Preservation of Cultural and Natural Property, with the approval of the Regional Conservation Council.

The nominated property has been registered on the national inventory since 1988 as a 1<sup>st</sup> Degree Archaeological Conservation Site. Additionally, certain parts of Ocaklı village, adjacent to the site, were designated as a 1<sup>st</sup> Degree Archaeological Conservation Site, while the rest of the village, together with the agricultural areas to the east and northeast and grazing areas to the west, were registered as a 3<sup>rd</sup> Degree Archaeological Conservation Area in 2010. Since then, the development of settlement in the village and the effects of farming and animal husbandry have been controlled.

ICOMOS considers that despite the problems in preventing animals from grazing at the site, the protection measures at both the national level and in particular for the nominated property are adequate and will, if consistently reinforced and implemented, prevent negative impacts to the property.

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In conclusion, ICOMOS considers that the legal protection and the protective measures are in general adequate, but mechanisms need to be put in place to make the protection more effective.

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### **Conservation**

The protection measures taken in recent years by the State Party have greatly protected the most important monuments of the nominated property. Despite the Turkish authorities' huge undertakings, ICOMOS observes that there are still serious conservation problems to be addressed. As ICOMOS noted during the technical evaluation mission, visiting some of the monuments is problematic due to the non-preparation (cleaning) of the surroundings (e.g. Gagic Church, Surp Arak'elots Church). Visiting some monuments is even dangerous, due to the instability of the walls and overlying constructions (e.g. city walls, Surp Arak'elots

Church, Palace Church) or because of the dangerous paths leading to them (e.g. Maiden's Monastery).

Two structures are currently undergoing restoration: the Surp Amenap'rkitch Church (1035 CE) and the Cathedral (989–1001 CE). This restoration is conducted within the framework of a partnership between the Ministry of Culture and the World Monuments Fund, with support from the US Department of State's Ambassadors Fund for Cultural Preservation. The cooperation was announced in 2009 and has been realized since 2012. The restoration of Surp Amenap'rkitch Church and Cathedral ("Ani Cathedral Project Preparation Work" and "Monitoring of Ani Cathedral Structural Movement Project") is the most advanced restoration project in the archaeological site, including emergency measures, evaluation of research and investigation results, intervention for the stabilization and rehabilitation of the static condition of the monument, and everything is conducted in an exemplary manner.

Despite these encouraging developments, there are still serious issues remaining to be addressed. At the Cathedral, there are problems connected with the completion of missing parts of the main supporting columns and of the destroyed fabric and the definition of the form of the missing dome. ICOMOS recommends that a restoration plan for the dome be developed with the cooperation of Armenian specialists, who have deep knowledge and have made comparative studies of relevant monuments, analysing in detail their systems of geometric design.

With regards to the small-scale monuments, for which officially the process of consolidation and conservation has been completed, ICOMOS notes that many important monuments still face maintenance problems due to substantial gaps in terms of restoring the original appearance/form as well as practical deficiencies. For instance, the use of cement mortar is evident in many places on the wall exterior surfaces of the Tigran Honents Church, restored to its current condition between 2008 and 2010.

Currently, preservation work at Ani targets the emergency condition of vulnerable structures and thus proceeds monument by monument. ICOMOS considers that the nominated property lacks a detailed study that presents the needs of each listed monument, by type of intervention (consolidation, partial reconstruction), intervention areas, priorities scaled on action plan (urgent, mid-term, long-term), the cost budget operations and possible sources to finance such conservation works.

The supplementary information provided by the State Party responded to this need by presenting a Strategic Conservation Master Plan for the nominated property. This plan divides the intervention into short-term (2016-2022), medium-term (2022-2027) and long-term (2018-onwards) goals. Based on a set of reasons for their

prioritization (importance and uniqueness of the monuments, their structural condition, location on the visitation route, nature of past restoration interventions, availability of approved projects, as defining elements of the city's integrity, visitor safety, and stabilization of existing structures), eight monuments are identified as a priority (the Ebu'l Manu'çehr Mosque, Tigran Honents Church, Surp Amenap'rkitch Church, St. Gregor (Polatoğlu) Church, Great Cathedral (Fethiye Mosque), City Walls and Bastions, Seljuk Palace). Specific actions and interventions for each monument are presented under "Conservation, Presentation and Social Policies & Principles". ICOMOS commends the State Party for its efforts in producing this Master Plan.

However, ICOMOS is of the view that the Master Plan needs improvement as it presents proposed actions without a proper assessment of the state of conservation of the monuments. For instance, with regards to Tigran Honents Church, which benefited from consolidation and restoration projects between 2008 and 2010, the only planned action in the conservation plan is "fulfilling floor covering researches for entrance, bema and niches". However, ICOMOS has noticed with regards to the intervention, which officially has otherwise been completed, that:

- The uncompleted restoration of the dome and fixing of a temporary protective shelter in the form of a truncated pyramid at the site constitutes a distinctive feature - a result that undermines the authenticity, integrity, and the final appearance of the monument.
- The roof of the existing part of the narthex has been restored with a different type of stone slab and is thus aesthetically unpleasing.
- The shelters, placed to protect the frescoes on the western façade of the church and on the south side of the narthex, are fixed in an inappropriate way and are practically ineffective: they need to be replaced with a single, larger, suitably-designed shelter construction.
- The use of cement mortar is evident on several parts and joints of the wall exterior surfaces.

Similar situations are noticeable on almost all the other monuments identified as being priority for intervention in the Strategic Conservation Master Plan. Therefore, ICOMOS recommends that the State Party improve the Master Plan by presenting a more comprehensive evaluation of the conservation needs of each listed monument. ICOMOS further considers that in order to ensure the effectiveness of the finalised Master Plan, a field mission would be required to evaluate the adequacy of the assessment of the state of conservation of individual monuments and related proposed interventions outlined in the Strategic Conservation Master Plan.

In conclusion, ICOMOS considers that the overall conservation of the nominated property is currently the main urgent problem faced by the archaeological site as

a whole. The Strategic Conservation Master Plan which presents long-term conservation strategy supported by a detailed road map on how to turn around the fortunes of the nominated property through stabilising and conserving the historic buildings, still needs to be finalised.

## Management

Management structures and processes, including traditional management processes

ICOMOS notes that there is a complexity to the responsibilities referred to different decision-making bodies and monitoring concerning the effectiveness of the whole mechanism. ICOMOS considers that the planned results can be achieved in good time if the Coordination and Audit Board, formed in 2014 and authorized to approve and supervise the implementation of the management plan, is able to mobilize effectively all the actors involved in the implementation of the project and can ensure appropriate economic conditions.

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

The Management Plan for the nominated property was approved on 30 March 2015. During the planning process of the Plan two stakeholder workshops took place: the first workshop on capacity building (4-9 December 2009) and the second workshop on management plan development (29 May-2 June 2010). The action plan of the Management Plan illustrates the priorities, the responsible institutions, the related institutions, the terms and the financial resources.

According to the nomination dossier, Ani received a total of 25,000 visitors (including 13,000 foreigners). ICOMOS observes that the tourist infrastructure at the site is basic. There is a fixed area planned for a new visitor reception centre with a suggested parking area with a capacity for 30 automobiles and 13 buses. The signage is quite rudimentary and in a poor state. There are no outdoor sheltered areas for recreation or sight-seeing and, in the case of inclement weather, a visit becomes problematic to impossible. There are no toilets inside this extensive archaeological site, where the walking distances between the monuments are long.

ICOMOS recommends that the State Party, as part of the already approved Landscaping Project for an area of 69.9 hectares within the nominated property, constructs the new visitor reception complex further on from the Ramparts of Smbat II so as to minimize the effect of the structure on the general view of the property; constructs a protective shelter for visitors to rest at the end of the long visitor route, in an appropriately selected place; and improves the explanatory signposts to the monuments at footpath crossroads so as to guide visitors.



## Involvement of the local communities

ICOMOS notes that there are a number of local people engaged in the nominated property as permanent personnel: two ticket officers, one shop assistant, seven cleaners and four security staff. In addition, 40 people are employed seasonally (2-3 months) on excavations. This brings them into contact with the archaeological site and its importance. However, ICOMOS observes that local residents have not been informed so far about the Management Plan, with the exception of the Ocaklı Village Governor.

ICOMOS recommends that the State Party ensure the involvement of all relevant stakeholders, that are directly and closely associated with the property, in the management of Ani. ICOMOS further acknowledges and encourages the cooperation and involvement of Armenian specialists, who have a deep knowledge of Armenian architecture, in the restoration and conservation work at Ani.

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In conclusion, ICOMOS considers that the management system for the property is adequate and that the management plan provides a good basis for the implementation of specific action plans and protection strategies, but the coordination between different decision-making bodies needs strengthening.

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## 6 Monitoring

The nomination dossier presented a number of aspects that would be considered key indicators for measuring the state of conservation of the property, that are to be monitored regularly by the local branches of the Ministry of Culture and Tourism, such as the Kars Museum, the Kars Regional Conservation Council, as well as the related excavation team and technical control team within the General Directorate. ICOMOS considers that the set of indicators proposed by the State Party are mainly addressed to monitoring the state of conservation of the archaeological components, but these should be further elaborated once the scope and Outstanding Universal Value of the property have been defined and related to the attributes.

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In conclusion, ICOMOS considers that these indicators are not adequate to support the effective monitoring of the state of conservation of the nominated property.

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## 7 Conclusions

The nominated property has the potential to demonstrate Outstanding Universal Value, but the original nomination of the property as a cultural landscape was inadequately developed. Hence, it failed to demonstrate that Ani is an outstanding example of a cultural landscape. The supplementary information provided by the State Party addressed this issue by submitting a substantially

revised nomination dossier where Ani is nominated as an archaeological site.

Despite the commendable improvement in the revised nomination and other additional information provided by the State Party, ICOMOS considers that the justification for inscription of Ani as a multicultural and economic centre along the Silk Roads is not yet substantiated by sufficient and focused comparative analyses, based on the values of the nominated property, to demonstrate that Ani stands out in respect to other similar properties inscribed, or not, on the World Heritage List. ICOMOS further considers that the overall conservation of Ani is the main urgent concern but that the state of conservation and the overall integrity of the property would potentially improve with the improvement and finalisation of the Strategic Conservation Master Plan for the nominated property.

ICOMOS acknowledges that the State Party has responded energetically to the issues raised during the evaluation period. This is particularly demonstrated in the additional information provided in February 2016, which offered a much clearer understanding of the nominated property. However, ICOMOS considers that it is impossible to appropriately consider and evaluate these changes without the opportunity of a mission and the time available to the State Party and to ICOMOS during the formal evaluation process is not sufficient to reformulate a nomination on this scale. ICOMOS therefore concludes that a recommendation to defer the nomination is necessary in order to resolve these matters.

## 8 Recommendations

### Recommendations with respect to inscription

While ICOMOS acknowledges that the State Party has responded energetically to the issues raised during the evaluation period, ICOMOS considers that it is impossible to appropriately consider and evaluate these changes without the opportunity of a mission and the time available to the State Party and to ICOMOS during the formal evaluation process is not sufficient to reformulate a nomination on this scale.

ICOMOS recommends that the examination of the nomination of Archaeological Site of Ani, Turkey, to the World Heritage List be **deferred** in order to allow the State Party, with the advice of ICOMOS and the World Heritage Centre, if requested, to:

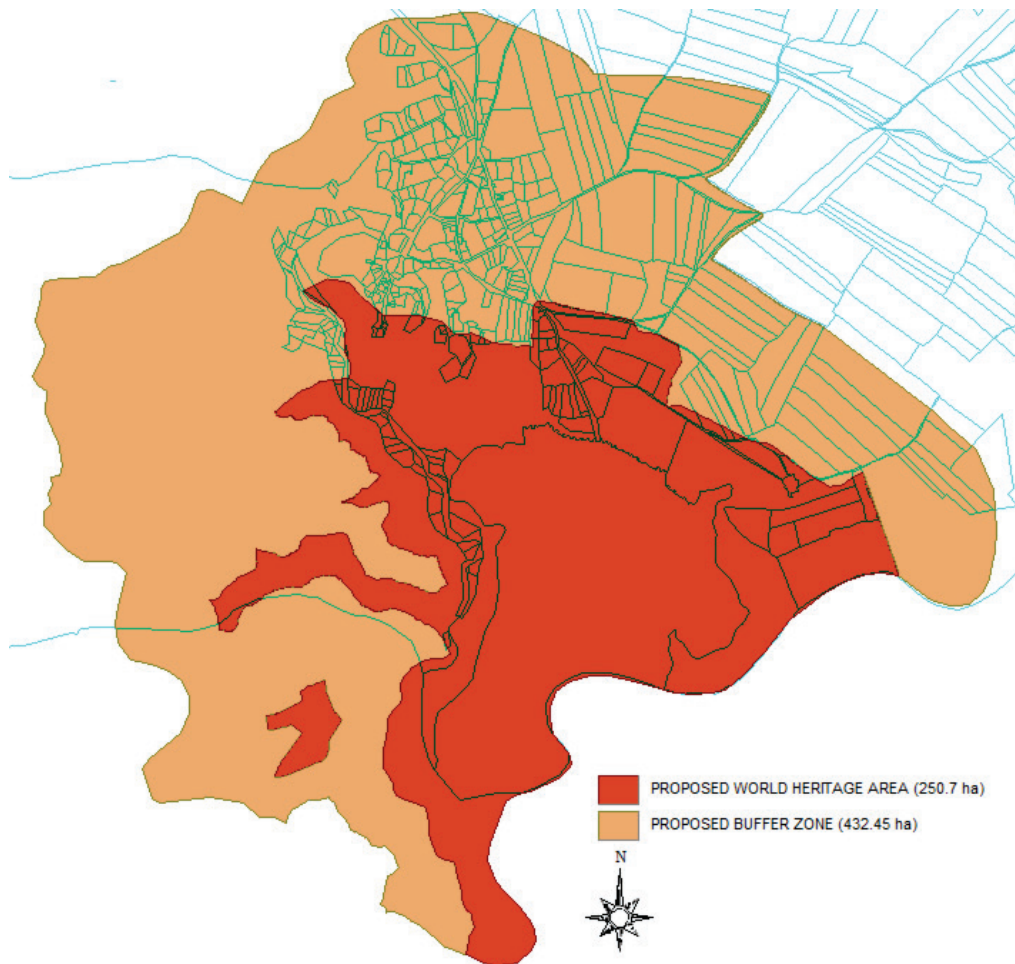
- Improve the description of the historic city of Ani in order to enhance the understanding of the scope and extent of the nominated property, including:
  - List of photographs to illustrate the 117 architectural structures indicated in the revised nomination dossier;
  - Map indicating the location of the more than 800 underground caves and tunnels that are

- mentioned in the revised nomination dossier;
  - Description of the areas and elements added in the proposed extended buffer of the nominated property.
- Further present an accurate and balanced representation of the complex history and development of the nominated property;
  - Further improve the comparative analysis to fully demonstrate how the nominated property compares to other typologically-relevant properties in a defined geo-cultural area;
  - Further improve the Strategic Conservation Master Plan in order to present a more comprehensive needs assessment of each listed monument, as well as the required interventions and priority areas, as the basis for conservation and monitoring of the property;
  - Find alternative solutions for the current inappropriate use of pasture areas and of the rock-cut caves in Bostanlar Creek and Arpaçay Creek within the 1<sup>st</sup> Degree Archaeological Conservation area;
  - Improve the interpretation and presentation of the nominated property;
  - Ensure the involvement of all relevant stakeholders in the management of the nominated property, as well as international cooperation for conservation and restoration work;
  - Develop a monitoring plan for the seismic activity of the micro-zone of the nominated property;
  - Integrate a Heritage Impact Assessment approach into the management system, so as to ensure that any project regarding the property be assessed in their impacts over the attributes that would potentially convey the Outstanding Universal Value of the property.

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

ICOMOS remains at the disposal of the State Party in the framework of upstream processes to advise on the above recommendations, if requested to do so.





Revised map showing the boundaries of the nominated property



Virgins Monastery



Cathedral (Fethiye Mosque)





Tigran Honents Church, scenes related to life of St. Krikor Lusavoric



Tigran Honents Church



Tatarcik Creek, rock carving structures



Silk Road Bridge



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# Gibraltar Neanderthal Caves and Environments (United Kingdom) No 1500

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## Official name as proposed by the State Party

Gibraltar Neanderthal Caves and Environments

## Location

Gibraltar  
United Kingdom

## Brief description

Located on the eastern side of the Rock of Gibraltar, steep limestone cliffs contain four caves with extensive archaeological and palaeontological deposits that provide evidence of Neanderthal occupation over a span of more than 125,000 years. These caves have provided extensive evidence of Neanderthal life, including rare evidence of exploitation of birds and marine animals for food; and use of bird feathers and abstract rock engravings, both indicating new evidence of the cognitive abilities of the Neanderthals. The sites are complemented by their steep limestone cliff settings, and the present-day flora and fauna of Gibraltar, much of which can be also identified in the rich palaeo-environmental evidence from the excavations. While long-term scientific research is continuing, these sites have contributed substantially to the debates about the Neanderthal and human evolution.

## 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

27 January 2012

### International Assistance from the World Heritage Fund for preparing the Nomination

None

### Date received by the World Heritage Centre

27 January 2015

## Background

This is a new nomination.

## Consultations

ICOMOS has consulted its International Scientific Committee on Archaeological Heritage Management and several independent experts.

## Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the site from 16 to 20 September 2015.

## Additional information received by ICOMOS

A letter was sent to the State Party on 28 September 2015 requesting further information on the delineation of the buffer zone, inclusion of sea waters in the buffer zone, criteria used to assess the historical significance of graffiti, detail of plans to establish viewing platforms at the Europa Advance Batteries, protection of archaeological remains associated with Moorish and Spanish fortifications, redundant infrastructure associated with former military functions, current and proposed visitor centre functions, and the involvement of the Ministry of Defence in the management of the property. The State Party responded to these queries on 20 October 2015.

As requested by the revised *Operational Guidelines*, the State Party received an Interim Report on 21 December 2015. Further information was provided by the State Party on 22 February 2016 in relation to the issues raised, including clarifications about the inclusion of underwater caves in the property boundary; protection of visual integrity and extension of the buffer zone to include sea waters adjacent to the nominated property; provision of a five-year archaeological research strategy; plans for retention of archaeological deposits within Gorham's and Vanguard Caves; further information about IbeX Cave; and update on the condition surveys of historic buildings within the nominated property.

All additional information provided to ICOMOS by the State Party is incorporated into the relevant sections of this evaluation report.

## Date of ICOMOS approval of this report

11 March 2016

## 2 The property

### Description

The nominated property is located on the eastern side of the Rock of Gibraltar on the Mediterranean coast, suspended between the south-western tip of the Iberian Peninsula and the coast of North Africa. It covers 28 ha of limestone cliffs and caves, surrounded by a buffer zone of 313 ha. The vertical extent of the nominated property rises from the modern sea level to the highest point of the Rock of Gibraltar and demonstrates a geomorphological history spanning two million years.

Since the discovery of the first hominid skull in the 19<sup>th</sup> century (later identified as Neanderthal), Gibraltar has been an internationally-known location of archaeological and palaeontological research. Excavations of deposits in caves on Gibraltar have yielded evidence of occupation spanning more than 125,000 years.

There are more than 200 caves occurring on Gibraltar, and 46 of these are located within the property, occurring in two main clusters – the Gorham's Cave Complex (28 caves) and the Main Cliff, Southern Peak (18 caves). Many of the caves in the nominated property are wholly or partly submerged by the sea, but these do not contain archaeological deposits in most cases, except for a few with some material associated with 'historic' periods. Of the remaining caves in the nominated property, only some contain archaeological deposits (from any period of human history).

The four caves that are the central element of this nomination all occur within the Gorham's Cave Complex (Gorham's Cave, Vanguard Cave, Hyaena Cave and Bennett's Cave). These four caves have extensive evidence of Neanderthal occupation and in the case of Gorham's Cave also evidence of Early Modern Human occupation. Several other caves in the nominated property that do not contain Neanderthal material, contain Early Modern Human deposits (including Martin's Cave and the Goat's Hair Twin Cave, both located within the nominated property boundary).

A programme of archaeological research over 25 years has demonstrated that Gorham's and Vanguard Caves together provide detailed insights into Neanderthal life over more than 100,000 years. These two caves are of particular quality in providing evidence of the Neanderthal way of life and cognitive capacities. Continuity can be demonstrated between the flora and fauna in and around the property today and many of the species identified in the deposits associated with Neanderthal activity in the caves. The nominated property features the limestone cliffs in which the caves are set, along with fossil sand dunes, fossil beaches, scree slopes and shorelines, all contributory to understanding the environmental context of Neanderthal occupation and the changes in geomorphology, climate and sea levels since that time.

The nominated property consists of the four caves in their landscape setting that contain archaeological material associated with Neanderthal and/or early modern human occupation (Gorham's, Vanguard, Hyaena and Bennett's Caves); and the present-day flora and fauna of Gibraltar, including many species identified in the palaeo-environmental evidence recovered from the excavations in the caves. These are considered in turn:

#### Gorham's, Vanguard, Hyaena and Bennett's Caves

These four caves are the primary focus of the values of the nominated property. Excavations undertaken at Gorham's and Vanguard caves have provided extensive evidence of Neanderthal occupation, including rare evidence of the exploitation of bird and mollusc resources and a rock engraving in Gorham's Cave. In addition to the richness and extent of the deposits, these rare finds have stimulated further scientific debates about the Neanderthals. Gorham's cave is the largest cave, a sea cave with Neanderthal deposits that span the period 32,000-40,000 years ago. Vanguard Cave extends this

sequence and has been dated between 127,000- 75,000 years ago. The findings include the largest collection of fossil bird species from this period anywhere in the world.

#### Limestone Cliffs

The caves containing evidence of the Neanderthal occupation of Gibraltar are set within 426-metre high Jurassic limestone cliffs. These provide a record of environmental and sea level changes over three million years, encompassing the Quaternary and part of the Pliocene.

#### Gibraltar's Flora and Fauna

Pollen, charcoal and animal fossils recovered from the excavations in the caves match many of the plant species growing on the limestone cliffs today, as well as local and migrating birds, and marine and inter-tidal species. The State Party considers that these commonalities demonstrate continuities between the present and the periods of Neanderthal occupation, providing a testimony to the 'world of the Neanderthals'.

There are several components of interest located within the proposed buffer zone, including some sites where Neanderthal material has been recovered but have limited or no further scientific potential (Forbes' Cave, Ibex Cave and Devil's Tower Rock Shelter), and the 14 ha Catalan Bay Sand Dune, now restored after having been covered for most of the 20<sup>th</sup> century by metal sheets to collect rainwater.

Two further sites have been found on Gibraltar with evidence of Neanderthal occupation (Beefsteak Cave and Europa Point 1). These are legally protected, but are located outside the buffer zone. They are considered to be of higher significance as explained below.

#### History and development

The Rock of Gibraltar is located at the confluence of the Mediterranean Sea and the Atlantic Ocean, between the continents of Africa and Europe. It has been a recognised landmark since ancient times; and has been a focus of conflict, strategic importance and conquest for centuries of human history.

Paleontological research at Gibraltar began in the 19<sup>th</sup> century, and the rich fossil record has been of international scientific interest to the present. The first hominid skull (later identified as Neanderthal) was discovered at Forbes' Quarry in 1848, eight years before the discovery of the specimen in the Neander Valley in Germany which gave the Neanderthal its name. Further finds of Neanderthal fossil remains were made at Devil's Tower in 1926.

Archaeological excavations began in the 19<sup>th</sup> century and continued sporadically after that time, including the first excavations of Gorham's Cave in the 1950s; but it is the archaeological research conducted since 1989 that has confirmed the importance of the Gibraltar cave sites. Gorham's Cave has been systematically excavated since that time (starting in 1989, and new sections begun in

1997); and Vanguard Cave was first excavated in 1995-1998. Forty-four academic institutions from ten different countries have partnered with the Gibraltar Museum in the 'Gibraltar Caves Project', which has also been supported by European Union funding sources.

As described above, of the nine Neanderthal sites on Gibraltar, four are within the nominated property and are those with the greatest scientific significance and research potential (Gorham's, Vanguard, Hyaena and Bennett's Caves). The five others have lesser scientific potential for various reasons: Forbes' Cave is a small rock shelter located at the edge of the northern boundary of the proposed buffer zone that was quarried in the 19<sup>th</sup> century and now has no remaining archaeological deposits; Devil's Tower Rock Shelter is located on the north-eastern boundary of the proposed buffer zone and was fully excavated in the 1920s resulting in the recovery of a partial skull of a Neanderthal child; Beefsteak Cave is located beyond the proposed buffer zone to the south of the nominated property and has produced a small amount of stone tools dated to 90,000 years ago; Europa Point 1 is located outside the proposed buffer zone, near the southern tip of Gibraltar, and is an eroded remnant of a larger cave with a small deposit of stone tools in the cave floor; and Ibex Cave, an isolated rock shelter, located within the proposed buffer zone is a Neanderthal hunting and butchery site in fair condition, with very little archaeological deposits associated with the Neanderthals.

The Gibraltar complex of cave sites is recognised internationally because of the number of caves with evidence of Neanderthal activity and for their ability to span 100,000 years of Neanderthal occupation from the last interglacial to the latest surviving Neanderthal populations around 30,000 years ago, apparently living in isolation at a time when modern human-Neanderthal contact was taking place elsewhere. Evidence from the nominated property has also contributed to scientific debates about the Neanderthals, including concerning their cognitive abilities.

Prior to the property coming into the ownership of Her Majesty's Government of Gibraltar it was owned by the United Kingdom's Ministry of Defence. As a result, the nominated property has a range of military heritage features reflecting the history of Gibraltar since the 18<sup>th</sup> century, as well as a series of redundant tunnels and disused quarries.

### **3 Justification for inscription, integrity and authenticity**

#### **Comparative analysis**

This nomination responds to initiatives of the World Heritage Committee and the Advisory Bodies to increase the inclusion of properties that have the ability to contribute to knowledge of human evolution and prehistory in the World Heritage List. The comparative analysis has made use of the ICOMOS World Heritage

thematic study on potential fossil hominid sites, and the outcomes of UNESCO's 'HEADS' thematic program (*Human Evolution: Adaptations, Dispersals and Social Developments*).

Of the Neanderthal sites identified in these studies, only the Sites of Human Evolution at Mount Carmel: The Nahal Me'arot / Wadi el-Mughara Caves in Israel (2012, criteria (iii), (v)) has been inscribed on the World Heritage List.

The State Party compares the nominated property with sites representing Neanderthals and Neanderthal-modern human transition (Mount Carmel, Israel); sites representing Neanderthals and potentially the Neanderthal-modern human transition (La Chapelle-aux-Saints, Le Moustier in Prehistoric Sites and Decorated Caves of the Vézère Valley (1979, (i), (iii)) and La Ferrassie, France; Monte Circeo, Italy; and Krapina, (Croatia); sites representing only Neanderthals (Shanidar, Iraq); and sites representing Neanderthals only or Neanderthals and potentially the Neanderthal-modern human transition (Crimean Caves as part of the Cultural Landscape of "Cave Towns" of the Crimean Gothia (Tentative List), Ukraine; El Sidrón, Spain; El Castillo, Spain; Zafarraya, Spain; Neander Valley, Germany; Saccopastore, Italy; Amud, Israel).

ICOMOS notes that the State Party has also briefly considered a number of additional properties on the World Heritage List that demonstrate processes of human evolution across similar time periods (or longer), including early modern human occupations: Willandra Lakes Region, Australia (1981, (iii), (viii)); Peking Man Site at Zhoukoudian, China (1987, (iii), (vi)), Lower Valley of the Omo, Ethiopia (1980, (iii), (iv)), Sangiran Early Man Site, Indonesia (1996, (iii), (vi)), Lake Turkana National Parks, Kenya (1997, (viii), (x)), Fossil Hominid Sites of South Africa, South Africa (1999, (iii), (vi)), Archaeological Site of Atapuerca, Spain (2000, (iii), (v)), and Ngorongoro Conservation Area, United Republic of Tanzania (1979, 2010, (iv), (vii), (viii), (ix), (x)); as well as Tentative List properties in Ethiopia, Kenya, South Africa and Italy. However, these do not directly address questions about the Neanderthals, so ICOMOS considers that the comparisons made by the State Party are appropriate.

The State Party further considers that the caves containing Neanderthal and early modern human evidence on Gibraltar contain exceptional ecological richness and evidence of behavioural ecology over a long time span. In addition, the State Party asserts that the relict environments have persisted to the present day – particularly the cliff vegetation and birds – and that this offers an 'unrivalled' insight into the Neanderthals.

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

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### 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 cave sites in the nominated property contain exceptional, long and high-resolution sequences of archaeological and paleontological evidence of the Neanderthals and early modern humans;
- The presence of evidence of the cognitive capacities of the Neanderthals, including the only documented example of a Neanderthal rock engraving;
- The only known evidence of the Neanderthal exploitation of marine mammals and birds for food and the only sequence that demonstrates the use of bird feathers in ornamentation;
- Evidence of the arrival of early modern humans to Gibraltar;
- The natural setting of the caves contains a high number of species of flora and fauna that are also found in the fossil and pollen records from the periods of Neanderthal occupation, allowing the property to function in ways that are equated to both a 'laboratory' and an 'archive'.

ICOMOS considers that the justification of this property on the basis of its scientific significance and potential associated with the Neanderthals is appropriate. Although not a central orientation of this nomination, ICOMOS considers that the State Party conceptualisation of the property as a 'living laboratory' and an 'archive', the references to the Neanderthals as a 'people' and the archaeological evidence at this property as their 'home' is likely to generate scientific controversy and interest, but is unnecessary for the evaluation of Outstanding Universal Value.

### Integrity and authenticity

#### Integrity

The nominated property includes the four most important caves containing evidence of the Neanderthal and early modern human occupation of Gibraltar and their landscape setting.

ICOMOS considers that all elements necessary to express the values of the property are included in the nominated boundary; and that the nominated area includes sufficient consideration of the setting of the caves in relation to the topography and vegetation of Gibraltar, including the limestone cliffs, fossil sand dunes, fossil beaches, scree slopes, shorelines and flora and fauna.

The nominated property also contains military heritage features reflecting the history of Gibraltar since the 18<sup>th</sup> century. Assessments of redundant military infrastructure and graffiti are occurring to determine whether some

redundant elements can be removed to improve the visual integrity.

The State Party provided additional information in January 2016 regarding mechanisms for ensuring the visual integrity of the property, reiterating the statutory protection arising from the Nature Reserve and Marine Special Area of Conservation designations; the processes in place to consider new proposals; and the requirements for Environmental Impact Assessments, Heritage Impact Assessments and public consultations. The setting of the nominated property to the south (Europa Advance Road) had been improved by the removal of redundant facilities and revegetation.

#### Authenticity

The authenticity of the nominated property is supported by the presence of stratified archaeological deposits in the caves, the landforms that contain the caves, and the cliff vegetation and fauna that can be associated with the environmental conditions of the past.

Systematic archaeological research has been undertaken on the sites on Gibraltar for more than 25 years and is ongoing at Gorham's Cave and Vanguard Cave where discoveries have contributed significantly to the ongoing scientific debates about the Neanderthals. The important archaeological and environmental evidence gained from these excavations underpin the authenticity of the nominated property.

The caves and archaeological and palaeo-environmental deposits they contain are largely intact. The deposits in Hyaena and Bennett's Caves are largely undisturbed, and approximately 90% of Vanguard Cave and 70% of Gorham's Cave remain unexcavated, providing the basis for a long-term research programme of international interest.

The results of archaeological excavations indicate the timing and character of the major phases of occupation, as well as providing evidence about the lifestyle of the Neanderthals, such as the only known examples of exploitation of birds and marine mammals for food and evidence for symbolically based behavior in the abstract pattern engraved at Gorham's Cave.

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

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### 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 property provides an exceptional testimony to the cultural traditions of the Neanderthals

and early modern humans through a period spanning more than 125,000 years. This is expressed by the rich archaeological evidence in the caves (particularly Gorham's and Vanguard Caves), including stone tools, hearths, and cut and fractured bones and molluscs. Archaeological findings at Gorham's Cave have also included rare rock engravings that can be dated to more than 39,000 years ago. The cave deposits contain substantial evidence of the climatic and environmental conditions during this span of time, including fossil vertebrates (with an especially diverse representation of avian species), molluscs, pollen and charcoal. The archaeological and scientific potential of the caves continues to be explored through archaeological research. The State Party argues that these sites provide opportunities for understanding Neanderthal life, including their capacity for abstract thinking.

ICOMOS considers that the nominated property provides an exceptional testimony to the occupation, cultural traditions and material culture of Neanderthal and Early Modern Human populations.

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ICOMOS considers that this criterion has been demonstrated.

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*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 specific combination of fossil and geological features, together with Gibraltar's present-day environmental resources (such as bird and plant species) demonstrate in an exceptional way the environmental context of Neanderthal life.

ICOMOS considers that while the State Party has provided an excellent documentation of the natural components of the nominated property, and has provided detailed scientific evidence of the palaeo-environmental characteristics drawn from the excavations on Gibraltar, these are not strongly presented in relation to this cultural criterion.

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ICOMOS considers that this criterion has not been demonstrated.

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ICOMOS considers that the nominated property meets criterion (iii) and conditions of authenticity and integrity.

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#### **Description of the attributes**

The attributes of the property are the striking cluster of caves containing archaeological deposits that provide evidence of Neanderthal and early modern human occupation of Gibraltar (Gorham's, Vanguard, Hyaena and Bennett's Caves); and the landscape setting of the caves which assists in presenting the significance of this

property (including the landforms and living flora and fauna components). The artefacts and excavated materials housed in the Gibraltar Museum are also associated with the values of the nominated property.

#### **4 Factors affecting the property**

Development pressure is minimal, and there are no developments proposed in the nominated property. The property is uninhabited. There is some redundant military infrastructure which could be removed, but the State Party has indicated that no further infrastructure will be provided.

The environmental pressures are potentially significant, especially in relation to sea level rises and flooding associated with climate change. These pressures are recognised by the State Party and a Risk Preparedness plan based on the World Heritage Resource Manual on this topic has been prepared, and a Preliminary Flood Risk - Assessment was prepared in 2011. Pollution from ships is a low risk, as are the risks arising from rock falls and erosion.

Gibraltar has been a tourist attraction since the 19<sup>th</sup> century. While there are more than 11 million visitors to Gibraltar each year, the topography and difficulty of access limit visitor access to the sites in the nominated property. Tourism to Gibraltar focuses mostly on aspects located elsewhere, such as the Barbary Macaques, the sites of St. Michael's Cave, the Moorish Castle, and Great Siege and World War II tunnels. Current visitation to the Upper Rock represents only 7-8% of the visitor population; and visitation to the nominated property is smaller still: in recent years numbering 24,000 to the Mediterranean Steps; 200 to Gorham's Cave; approximately 3,500 view the caves from the sea via boat tours; and 12,500 to the Gibraltar Museum. It is likely that visitation could increase – especially to the Museum and other visitor facilities to be developed outside the property boundary – but visitation to the property is anticipated to be low, and visitor pressure is not a problem at present.

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ICOMOS considers that the main threats to the property are sea level rises, flooding and other effects of climate change. While visitor pressure is not a current threat, it is likely that visitation will increase and will need monitoring.

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#### **5 Protection, conservation and management**

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

The nominated property is located within the Gibraltar Nature Reserve (Upper Rock Nature Reserve) and its boundaries follow natural topological features. In the additional information received from the State Party, it was confirmed that, although difficult to indicate in mapping formats, the boundary includes caves that are

part of the cliff landform that are now underwater due to the lesser sea levels in modern times.

The buffer zone includes the immediate setting of the nominated property and protects key views. It provides an additional resource pool of the flora and fauna that characterise the property. The boundaries of the buffer zone are clearly delineated and lie almost entirely within the Gibraltar Nature Reserve: the Upper Rock buffer zone, eastern buffer zone (including the Catalan Bay Sand Dune, the cliffs above the dune and talus slopes in the north-east corner) and a narrow zone located to the south of the nominated property.

The maps supplied by the State Party show a small strip of land omitted from the buffer zone on the eastern side. ICOMOS requested further information from the State Party about this, and was satisfied by the explanations provided by the State Party that the area includes a road, low cliffs and groins as well as existing buildings at Both Worlds and Catalan Bay village. The buffer zone boundary aligns with the edge of the sand dune to the east of Sir Herbert Miles Road and protects attributes that are functionally important for natural plant species and bird habitat.

ICOMOS requested further information from the State Party about the possibility of incorporating sea waters to the east of the nominated property in the buffer zone. Although protection of this marine area is provided by local and European Union marine protected area mechanisms, ICOMOS considered that explicit protection of the Outstanding Universal Value of the property should be ensured by extending the buffer zone to include this area of the sea. ICOMOS also noted information provided by the State Party about continuing underwater archaeological research in this area and considers that, while no evidence of Neanderthal deposits have yet been located, extension of the existing buffer zone could also provide for this future possibility.

In response to requests from ICOMOS, the State Party advised in additional information provided in January 2016 that the eastern buffer zone has been extended to include sea waters immediately adjacent to the nominated property. An area of sea waters of approximately 300 metres wide has been included in the buffer zone in order to provide the requested additional protection, and aligns the buffer zone in this area with the edges of the Town Plan Zones (as revised in 2015). The State Party advised that this new boundary for the buffer zone coincides with the -10 metre contour.

There are a small number of leased properties located in the Upper Rock zone which operate as visitor attractions and are regulated by Town Planning processes.

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

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### **Ownership**

The nominated property is State-owned. Most of the nominated property is owned by the Government of Gibraltar, and a small section of the nominated property is owned by the United Kingdom Ministry of Defence. Some small areas within the buffer zone are leased to the operators of visitor and community facilities.

### **Protection**

The nominated property and most of the buffer zone is located within the Gibraltar Nature Reserve (Upper Rock Nature Reserve). The area of sea adjacent to the property is located within the Eastern Marine Conservation Zone, protected as a marine area of conservation under Gibraltar and European Union legislation. The property and its buffer zone are given legal protection by Gibraltar Heritage Trust Act (1989), the Nature Protection Act (1991) the Town Planning Act (1999), the Town Planning (Environment Impact Assessment) Regulations (2000), and the Nature Conservation Area (Upper Rock) Designation Order (2013). The individual caves containing evidence of Neanderthal and early modern human occupation are protected as Schedule 1 Category A (maximum protection) sites under the Gibraltar Heritage Trust Ordinance.

The sea waters adjacent to the property are designated in part as a European marine Special Area of Conservation and are protected under the Marine Nature Reserve Regulations (1995), the Marine Strategy Regulations (2011) and the Marine Protection Regulations (2014). Anchorage for ships is located in a designated area located 2 km offshore.

Planning and development are regulated by the Town Planning Act and by implementation of policies in the Gibraltar Development Plan 2009. Planning controls and procedures are enforced by the Development and Planning Commission (established under the 2009 Act) with full public participation.

Legal protection is further supported in the 2014 Town Planner's amendment of the Gibraltar development plan which identifies specific policies to safeguard the attributes of the nominated property and its values, including explicit provision for consideration of proposals in terms of their potential impact on the Outstanding Universal Value (once the property is inscribed in the World Heritage List).

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ICOMOS considers that the legal protection in place is adequate. ICOMOS recommends that Heritage Impact Assessment processes be established and applied to future proposals for change to facilities located within leased lands in the buffer zone.

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### **Conservation**

A baseline condition survey of the whole property was compiled in 2015 with an extensive photographic record. An archaeological and condition survey of military and fortification buildings located within the nominated property was completed at the end of 2015, and the report

was provided to ICOMOS by the State Party in January 2016. These buildings include the Europa Advance Batteries (18<sup>th</sup> century to World War II), the Mediterranean/Martin's Battery (19<sup>th</sup> century to World War II), Advance Light Aircraft Site (World War II), and four AROW Street sites (World War II). The report establishes the basis for future monitoring of the condition of these buildings, and outlines brief recommendations for each of them.

Archaeological research is continuing at Gorham's Cave and Vanguard Cave. These caves and their deposits have been surveyed in detail, and all excavations are extensively recorded. Access platforms have been constructed to protect the archaeological deposits and security gates have been installed at these sites. The Gibraltar Museum is the primary repository for the archaeological archive.

Archaeological excavations are small in scale and are subject to considerations of the conservation of archaeological deposits. However, as is always the case, archaeological excavations are ultimately an irreversible process, which puts significant onus on excavators to comprehensively recover and report on available evidence. While acknowledging that the deposits are substantial, ICOMOS considers that it is necessary to outline the means by which the objectives of continuing scientific/archaeological research and excavation are balanced with the need to retain *in situ* deposits for long-term future examination. ICOMOS requested further information about how the research objectives will provide for long-term retention of some areas of archaeological deposits.

A Research and Conservation Strategy has been prepared and guides the International Research and Conservation Committee to assess the archaeological research at Gorham's and Vanguard Caves. It provides for an annual assessment of research and the development of conservation plans. In January 2016, the State Party provided an additional Appendix to Volume 4 of the Nomination dossier. This five-year Archaeological Excavation Action Plan for 2016-2020 outlines the planned work and addresses the questions posed by ICOMOS about the balance of excavation and conservation of deposits. The Action Plan establishes a maximum volume for removal during this 5-year period (0.082% of the Palaeolithic deposits); and stipulates that at least 50% of each identified archaeological level will be retained *in situ*. An annual program is established by the Action Plan that includes post-excavation assessment and analysis, and publication of outcomes. This Action Plan will assist the International Research and Conservation Committee in its advisory role, and in monitoring the condition of the caves and their deposits.

It is understood that no excavations are planned for Hyaena and Bennett's Caves. However, ICOMOS considers that it could be useful to establish whether they have a similar scientific potential to Gorham's and Vanguard Caves using non-invasive methods.

Under the current Management Plan there has been a proactive programme undertaken by the Gibraltar Museum and other Government Departments (working together through the World Heritage Steering Committee and Executive Management Group) to improve the physical condition of the nominated property. This includes stabilisation of steps and cliff faces and installing removable stainless steel mesh on vertical surfaces with the potential to erode, clearance of rubble that had accumulated at the base of cliffs and at cave entrances, and protection of delicate deposit surfaces. New access steps, balustrade and security gate have been installed at Gorham's Cave complex, new access paths to Gorham's Cave and Vanguard Cave have been constructed, and new matting, ladders and scaffold walkways have been installed to protect the archaeological deposits. A landfill site in a disused quarry is being cleared in preparation for use as a car park adjacent to the proposed viewing platforms at the Europa Advance Batteries, and landscaping to improve the visual quality of the main vehicular approach route from the south through the buffer zone has been undertaken. Renovation and repainting work to the façade of Monkey's Cave Convalescent Hospital has been undertaken to lessen its visual impact.

All parts of the property are well-maintained and the condition and visual integrity of the nominated property and its significant features are good, supported by an active conservation programme set out in the Management Plan.

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ICOMOS considers that conservation is adequate. The five-year Action Plan should be regularly updated in order to: assist with the monitoring of the state of conservation of the property; strengthen the role of the International Research and Conservation Committee; underpin the annual review and planning processes; and ensure continued maintenance of scientific standards for excavations and dissemination of results.

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## Management

Management structures and processes, including traditional management processes

Her Majesty's Government of Gibraltar has appointed the Gibraltar Museum, through its Director, to manage the nominated property. A governance structure has been established, headed by the Executive Management Group which includes relevant government agencies and oversees implementation of the management system; and the Gibraltar Museum's multi-disciplinary World Heritage team, which is responsible for day-to-day management activities. The Executive Management Group reports to a Steering Committee which includes a wide spectrum of stakeholders. The State Party proposes to convert the Steering Committee to an Advisory Forum with a similar composition and role if the nomination is successful. ICOMOS welcomes the advice from the State Party indicating that the Advisory Forum will meet quarterly (rather than annually as indicated in the nomination



dossier). The United Kingdom's Ministry of Defence participates in the World Heritage Steering Group.

Levels of resourcing, including staffing are reviewed annually. The recurrent budget for the management of the nominated property is provided by Her Majesty's Government of Gibraltar (£450,000 in 2014-1015). The initial staffing of the Gibraltar Museum's World Heritage team with a direct role in management of the property is fifteen people with diverse areas of expertise relevant to the conservation and management of the property. The international team working on the excavations is highly qualified and experienced, and are supported by local specialists. The Gibraltar Tourist Board has a staff of 77, and licenses 440 guides; and the Department of the Environment's 28 staff include the Upper Rock team, and environmental monitoring and environment protection staff.

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

A Management Plan is in place and serves as a basis for the development and delivery of the management system. The Management Plan is organised around eight policy objectives and provides a detailed rolling programme of proposed works and monitoring indicators. The establishment of an integrated management database and archive using the Government of Gibraltar's Geographic Information System (GIS) for mapping is identified as a top management priority and this is detailed in the Management Plan.

The Management Plan is supported by the Risk Preparedness plan, the Research and Conservation Strategy and the integrated visitor strategy. The Risk Preparedness Plan has been developed and is integrated with existing disaster and risk preparedness plans for Gibraltar, including the Marine Contingency Plan.

There is also a Management Plan for the Gibraltar Nature Reserve which is being revised to cross-reference the proposed World Heritage Management Plan.

While the Mediterranean Steps are open to the public, access to the caves is strictly controlled, and visitors must be accompanied by a guide approved by the Director of the Gibraltar Museum. The carrying capacity of the property will be reviewed annually, and there are plans to utilise non-intrusive monitoring technology to support access restrictions.

Tentative Listing of the nominated property has proven to be a stimulus for improved visitor planning and interpretation for Gibraltar as a whole. The central element of the strategy is the Gibraltar Museum, which has been open since 1930 and presents information on the history and archaeology of Gibraltar, acts as the repository for archaeological excavations and provides laboratory facilities for researchers. There are some seasonal issues with traffic congestion at the Upper Rock, and the State

Party is currently working on revisions to the Upper Rock Management Plan to address these matters.

The draft integrated visitor strategy aims to maximise access while minimising impacts on the nominated property and its setting. New visitor and research facilities have been proposed at Parson's Lodge and the Moorish Castle, as well as a new storage facility for archaeological samples within the World War II tunnel complex at Hay's Level (near the Moorish Castle). Other components of the strategy are: new walking routes (including guided walks and a new five-million-year transect), specialised boat trips to allow viewing of the caves from the water, enhanced signage, construction of viewing platforms at the Europa Advance Batteries (following removal of a redundant recycling facility), education programs, improvements to the Gibraltar Museum and enhanced web access.

ICOMOS is aware that some of these proposals are being reconsidered (such as the proposed visitor centre at Parson's Lodge) due to practical issues, and considers that the integrated visitor strategy should be revised as a priority. The effects of dispersing the interpretation across several locations and facilities could be given additional attention; and Heritage Impact Assessments should be completed for proposals involving new buildings or adaptive re-use of historic structures.

Involvement of the local communities

There is a long tradition of community involvement in nature and heritage conservation in Gibraltar, and non-government organisations with interests in the values of the nominated property have supported the development of the nomination and are involved in the Steering Committee, including the Gibraltar Heritage Trust (which has 3000 members) and the Gibraltar Ornithological and Natural History Society. The recent establishment of the Europa Point campus of the University of Gibraltar is also an important new partner within the local community.

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ICOMOS considers that the current management is effective and that the management system for the property is adequate. ICOMOS notes that the Management Plan for the Gibraltar Nature Reserve is being revised and considers that it will be critically important that it is consistent with the proposed World Heritage Management Plan, and that the retention of the Outstanding Universal Value is given clear priority across these documents. ICOMOS further notes that the integrated visitor management strategy requires revision and adoption; and that the integrated management database should be revised and finalised as an urgent and immediate priority to ensure ongoing effective management of the nominated property.

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## 6 Monitoring

Monitoring for the nominated property commenced in 2014, augmenting previously existing monitoring of the

natural attributes within the Gibraltar Nature Reserve. Forty-three indicators have been developed by the State Party, including indicators related to cave conditions (including archaeological deposits), cliff stability and fauna/bird species. Monitoring is assisted by the Department of the Environment (in its monitoring of the Gibraltar Nature Reserve), and by the Gibraltar Ornithological and Natural History Society (which monitors bird migrations).

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ICOMOS considers that the monitoring system is adequate although some aspects have only been recently established.

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## 7 Conclusions

The global scientific debates about the place and role of the Neanderthals in human evolution are continuing, and the nomination of this property could be seen as premature for that reason. However, ICOMOS considers that research at the nominated property has already contributed significantly to these debates, and it can be expected that archaeological and paleontological evidence from future excavations will continue to do so.

In the view of ICOMOS, the Outstanding Universal Value of the nominated property - Gibraltar Neanderthal Caves and Environments – has been demonstrated according to criterion (iii). The attributes that express this value are the striking cluster of caves containing intact archaeological deposits that provide evidence of Neanderthal and early modern human occupation of Gibraltar and the landscape setting which assists in presenting the natural resources and environmental context of Neanderthal life. The property includes the elements necessary to express its Outstanding Universal Value. The sites are authentic and will continue to provide evidence for Neanderthal life through archaeological and related research.

ICOMOS notes that some management planning processes are still underway, and notes the Action Plan for ensuring an appropriate balance between the objectives of scientific discovery and longer-term preservation of significant deposits. The management plan and associated systems, conservation practices and policies and awareness of the key issues of interpretation and visitor management demonstrate the capacity to manage the site in ways that can be relied upon to preserve the Outstanding Universal Value of the property.

## 8 Recommendations

### Recommendations with respect to inscription

ICOMOS recommends that the Gibraltar Neanderthal Caves and Environments be inscribed on the World Heritage List on the basis of **criterion (iii)**.

## Recommended Statement of Outstanding Universal Value

### Brief Synthesis

Located on the eastern side of the Rock of Gibraltar, steep limestone cliffs contain four caves with extensive archaeological and palaeontological deposits that provide evidence of Neanderthal occupation over a span of more than 125,000 years. These caves have provided extensive evidence of Neanderthal life, including rare evidence of exploitation of birds and marine animals for food; and use of bird feathers and abstract rock engravings, both indicating new evidence of the cognitive abilities of the Neanderthals. The sites are complemented by their steep limestone cliff settings, and the present-day flora and fauna of Gibraltar, much of which can be also identified in the rich palaeo-environmental evidence from the excavations. While long-term scientific research is continuing, these sites have contributed substantially to the debates about the Neanderthal and human evolution. The attributes that express this value are the striking cluster of caves containing intact archaeological deposits that provide evidence of Neanderthal and early modern human occupation of Gibraltar and the landscape setting which assists in presenting the natural resources and environmental context of Neanderthal life.

**Criterion (iii):** The Gibraltar Neanderthal caves provide an exceptional testimony to the occupation, cultural traditions and material culture of Neanderthal and Early Modern Human populations through a period spanning more than 125,000 years. This is expressed by the rich archaeological evidence in the caves, the rare rock engravings at Gorham's Caves (dated to more than 39,000 years ago), rare evidence of Neanderthal exploitation of birds and marine animals for food, and the ability of the deposits to depict the climatic and environmental conditions of the Island over this vast span of time. The archaeological and scientific potential of the caves continues to be explored through archaeological research and scientific debates, providing continuing opportunities for understanding Neanderthal life, including their capacity for abstract thinking.

### Integrity

The boundary includes all elements necessary to express the Outstanding Universal Value of this property, including the setting of the caves in relation to the topography and vegetation of Gibraltar (limestone cliffs, fossil sand dunes, fossil beaches, scree slopes, shorelines and flora and fauna). The property is vulnerable to sea level rises, flooding and other effects of climate change.

### Authenticity

The authenticity of this property is demonstrated by the substantial stratified archaeological deposits in the caves, the landforms that contain the caves and demonstrate the geomorphological history of Gibraltar, and the cliff vegetation and fauna that can be associated with the environmental conditions of the past.

## Management and protection requirements

The property and most of the buffer zone are located within the Gibraltar Nature Reserve (Upper Rock Nature Reserve). On the land, the property and its buffer zone are given legal protection by Gibraltar Heritage Trust Act (1989), the Nature Protection Act (1991) the Town Planning Act (1999), the Town Planning (Environment Impact Assessment) Regulations (2000), and the Nature Conservation Area (Upper Rock) Designation Order (2013). The individual caves containing evidence of Neanderthal and early modern human occupation are protected as Schedule 1 Category A (maximum protection) sites under the Gibraltar Heritage Trust Ordinance.

Development is regulated by the Town Planning Act and by implementation of policies in the Gibraltar Development Plan (2009), including the 2014 Town Planner's amendments. Planning controls and procedures are enforced by the Development and Planning Commission.

The area of sea adjacent to the property is included in the buffer zone and is located within the Eastern Marine Conservation Zone, protected as a marine area of conservation through European Union legislation (European Marine Special Area of Conservation), and Gibraltar legislation (Marine Nature Reserve Regulations (1995), the Marine Strategy Regulations (2011) and the Marine Protection Regulations (2014)).

The property is managed by the Gibraltar Museum. The Executive Management Group (comprised of relevant government agencies) oversees implementation of the management system, assisted by the Museum's multi-disciplinary World Heritage team. The Executive Management Group reports to a Steering Committee (Advisory Forum) which includes a wide spectrum of stakeholders. The International Research and Conservation Committee assists in establishing research programs and reviewing scientific outcomes. Levels of resourcing, including staffing are reviewed annually.

Management plans are in place for the World Heritage property and for the (larger) Gibraltar Nature Reserve. The latter will be revised to ensure compatibility with the World Heritage inscription and to ensure priority is given to the retention of the Outstanding Universal Value of the property. The management system is further supported by the Risk Preparedness Plan, Research and Conservation Strategy and Integrated Visitor Strategy. A five-year Archaeological Excavation Action Plan (2016-2020) outlines the planned work and addresses the need to balance excavation and the conservation of deposits.

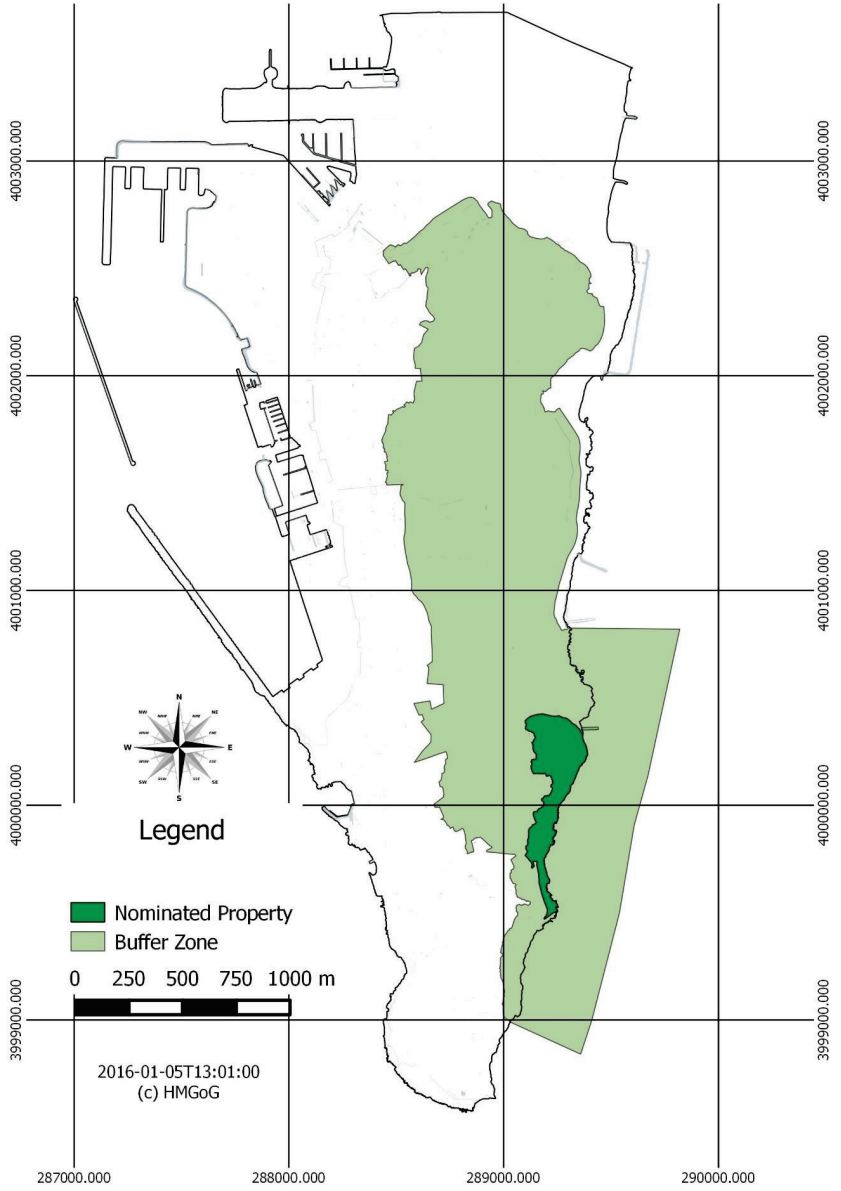
While visitor pressure is not a current threat, it is likely that visitation will increase. Access to the caves is strictly controlled, and visitors must be accompanied by a guide approved by the Director of the Gibraltar Museum. Monitoring is in place and the carrying capacity of the property is reviewed annually. Implementation of the

Integrated Visitor Strategy will improve the visitor experiences and presentation of the Outstanding Universal Value.

## Additional recommendations

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

- Regularly updating the five-year Archaeological Research Action Plan to: assist with the monitoring of the state of conservation of the property; strengthen the role of the International Research and Conservation Committee; underpin the annual review and planning processes; and ensure continued maintenance of scientific standards for excavations and dissemination of results;
- Establishing Heritage Impact Assessment processes for future proposals for new buildings, adaptive re-use of historic structures and planned changes to facilities located within leased lands in the buffer zone;
- Continuing the assessment of the heritage significance of the features of military history, graffiti and infrastructure located within the nominated property in order to clarify which elements can be removed or adapted to other site management purposes;
- Completing and implementing the integrated management database as a priority to ensure ongoing effective management of the nominated property;
- Revising the integrated visitor strategy in light of changed proposals for visitor management, ensuring coherence in light of the delivery of interpretation in a number of locations;
- Completing the current revisions to the Management Plan for the Gibraltar Nature Reserve ensuring that it is consistent with the provisions of the World Heritage Management Plan, and that the retention of the Outstanding Universal Value is given clear priority across both documents;
- Considering investigating the scientific potential of Hyaena and Bennett's Caves using non-invasive methods;
- Fully implementing the monitoring of the nominated property, ensuring a focus on the attributes of Outstanding Universal Value.



Revised map showing the boundaries of the nominated property



Caves at sea level



Gorham's Cave





Bennett's Cave



Solutrean cave paintings in Gorham's Cave – Red Deer Stag





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## Key Works of Modern Architecture (United States of America) No 1496

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### Official name as proposed by the State Party

Key Works of Modern Architecture by Frank Lloyd Wright

### Location

Oak Park and Chicago, Illinois  
Spring Green and Madison, Wisconsin  
Los Angeles and San Rafael, California  
Mill Run, Pennsylvania  
Scottsdale, Arizona  
New York, New York  
Bartlesville, Oklahoma  
United States of America

### Brief description

The components of the series of ten buildings by the prolific architect, Frank Lloyd Wright (1867-1959) have been selected as his masterpieces – the most iconic, fully realised and innovative buildings that reflect distinctive and highly original modern forms particular to Wright's vision. They were constructed over a period of some fifty years.

### 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 ten *sites*.

## 1 Basic data

### Included in the Tentative List

30 January 2008

### International Assistance from the World Heritage Fund for preparing the Nomination

None

### Date received by the World Heritage Centre

23 January 2015

### Background

A nomination for two Taliesin houses (Taliesin East and Taliesin West) was submitted in 1991. This nomination was evaluated by ICOMOS and then considered by the Bureau who reported it to the 15<sup>th</sup> Session of the World Heritage Committee. The decision of the World Heritage Committee was that:

*The Bureau deferred the examination of this nomination pending the results of a topic-by-topic study of contemporary architecture.*

In its evaluation, ICOMOS noted that the two Taliesin houses were not the most famous of Frank Lloyd Wright's houses and recommended deferral in order to allow the 'competent authorities to provide additional information and possibly redefine the proposal'. It also suggested that: '*a comprehensive study of Wright's whole body of work be conducted, permitting comparative judgments of his executed commissions to be made. Such a study could be coordinated with the proposed World Heritage study of criteria for the inclusion of contemporary cultural properties*'.

### Consultations

ICOMOS has consulted its International Scientific Committee on 20<sup>th</sup> Century Heritage and several independent experts.

### Technical Evaluation Mission

Two ICOMOS technical evaluation missions visited different parts of the property: the first from 1 to 13 September 2015 and the second from 11 to 23 September 2015.

### Additional information received by ICOMOS

The State Party submitted supplementary information on 2<sup>nd</sup> October 2015, in response to queries by mission experts. A letter was sent by ICOMOS to the State Party on 12 October 2015 to request further details on the maps of National Historic Landmark listed areas, the rationale and protection of buffer zones, the development of monitoring indicators, the details and timetable for development of management and conservation plans, the conservation documentation and conservation approaches, the visitor Management Strategy for the overall property, the development of Disaster Risk Preparedness and the plans for component sites. The State Party replied on 11 November 2015, and their response to these points has been included in this report. An interim report has been sent to the State Party by ICOMOS on 18 January 2016.

### Date of ICOMOS approval of this report

11 March 2016

## 2 The property

NOTE: The current nomination dossier included inconsistencies regarding factual information and also discrepancies between text and the graphic material. The missions did not find it possible to verify all data and some mistakes may remain. Wherever possible during the missions, the inconsistencies were shared with the State Party.

### Description

Frank Lloyd Wright (1867-1959) was a prolific architect who designed during his life over 600 buildings. The ten buildings that have been chosen for this series were selected from some 400 that still survive.

The series as a whole is seen to represent the genius of the architect Frank Lloyd Wright. The precise rationale

for the selection of the individual components has not been clearly set out apart from each of them being seen as a masterpiece of Wright's work, and for the way each reflects the functional needs of the client, a coherent design narrative, and a relationship with their setting.

The ten buildings have been described in the dossier in chronological order, reflecting the date of their design. The final building was constructed after Wright's death. They encompass residences, places of worship, schools, cultural institutions and government buildings.

The ten sites are as follows:

- Unity Temple, Oak Park, Illinois, designed 1905, constructed 1906-1909;
- Frederick C. Robie House, Chicago, Illinois, designed 1908, constructed 1910;
- Taliesin, Spring Green, Wisconsin, begun 1911, constructed 1911-1959;
- Hollyhock House, Los Angeles, California, designed and constructed 1918-1921;
- Fallingwater, Mill Run, Pennsylvania, designed 1935, constructed 1936-1939;
- Herbert and Katherine Jacobs House, Madison, Wisconsin, designed 1936, constructed 1936-1937;
- Taliesin West, Scottsdale, Arizona, begun 1938;
- Solomon R. Guggenheim Museum, New York, New York, designed 1943, constructed 1956-1959;
- Price Tower, Bartlesville, Oklahoma, designed 1952, constructed 1953-56;
- Marin County Civic Center, San Rafael, California, designed 1957, constructed (posthumously) 1960-1969.

*Unity Temple, Oak Park, Illinois, designed 1905, constructed 1906-1909.*

Unity Temple was constructed in the Chicago suburb of Oak Park to the west of the city, where Wright lived and worked between 1889 and 1909. It sits on a corner plot of the urban grid pattern, facing one of the main roads. The church was constructed for the Unitarian Universalist Congregation of Oak Park.

Built entirely out of monolithic reinforced concrete, the building consists of two rectangular blocks, one for the church and the second for teaching and office spaces, linked by an entrance foyer. The main space was designed to accommodate four hundred worshippers in multiple levels of seating under a coffered ceiling lit by twenty-five art glass skylights. Wright designed interior and exterior finishes, as well as lighting fixtures and furniture, all of which are still in place.

*Frederick C. Robie House, Chicago, Illinois, designed 1908, constructed 1910.*

The Robie House was designed for Frederick C. Robie, the young heir of an electricity supply company. It is sited on a corner plot of the University of Chicago campus to the south of Chicago city. This horizontal house with low pitched roof, massive central chimney,

long rows of low windows and continuous roofed balconies that over sail the ground floor rooms, is the largest of a group of similarly formed houses in Oak Park, which are identified with the Prairie School of Architecture that Wright and others developed in the first decade of the 20<sup>th</sup> century. The term "Prairie" was seen to symbolise the expansive qualities of the Illinois and the Midwest prairie landscapes. The houses had open plan living rooms, no cellars and little storage space to avoid clutter.

*Taliesin, Spring Green, Wisconsin, begun 1911, constructed 1911-1959.*

Taliesin was constructed by Wright as his home and studio on land that had belonged to his mother's family, the Lloyd Joneses, in a hilly rural area of Wisconsin. It was begun in 1911 and became his summer studio after Taliesin West was built in 1938. The buildings now reflect major re-building work after two major fires as well as expansion over a period of some fifty years. Taliesin is a small estate of some 197.822 hectares. As well as the house and studio the estate includes Hillside Home School, the drafting studio, galleries, theatre, and Midway Barn, Tan-y-deri, the residence for his sister and the related windmill.

The buildings with low pitched roofs, stone clad walls, and overhanging balconies cascade irregularly down the hill from a tower like belvedere. They have views across a lake to more hills beyond or to an enclosed hill garden designed by Wright.

*Hollyhock House, Los Angeles, California, designed and constructed 1918-1921.*

Hollyhock House sits on the top of Olive Hill at the eastern edge of the Hollywood district of Los Angeles. Built around a pillared courtyard, this large house is ornamented with hollyhock motifs in cast concrete and stained glass. The house was built as a nucleus for a cultural centre at the moment when Hollywood was taking off as a movie centre. Only part of the original plan was realised. The form of the house reflects Spanish patio house traditions and has references to ancient Amerindian Mayan forms. The large courtyard was designed for theatrical performances and the surrounding roof terraces linked by stairways and bridges provided viewing platforms for drama and dance. Wright designed furniture for the open plan living and dining rooms, most of which remains in the house.

Many of its architectural features seem to herald later works in Los Angeles such as the so-called 'textile-block' houses although Hollyhock Houses cannot be said to represent these.

*Fallingwater, Mill Run, Pennsylvania, designed 1935, constructed 1936-1939.*

Fallingwater is sited on top of a small waterfall in the southern Laurel Highlands, The house was built as a weekend retreat for Edgar and Liliane Kaufmann, owners of a department store in Pittsburgh.

The three storey house sits on reinforced concrete slabs, apparently cantilevered from a central chimney, and covered with random stone paving. The slabs provide the interior floors and extensive open terraces overlooking the small gorge. The vertical walls are of locally quarried stone. Extensive plate glass windows of the large main living room and smaller studies and bedrooms, provide thin barriers between the inside and outside.

*Herbert and Katherine Jacobs House, Madison, Wisconsin, designed 1936, constructed 1936-1937.*

This small house was the first of Wright's so-called Usonian houses, of which over 300 were built. They aimed to be modest single storey American suburban dwellings, with open plan living room and dining/kitchen. Often L-shaped and usually with a small garden, they were constructed from standardised building components. They were specifically designed for the American landscape, with a strong visual connection between indoor and outdoor spaces.

The Jacobs house has a flat roof and plywood walls clad both internally and externally with horizontal ponderosa pine boards and recessed redwood battens. It presents an almost blank wall to the street but has expansive glass windows at the rear facing the garden.

*Taliesin West, Scottsdale, Arizona, begun 1938.*

Began in 1938 as Wright's winter home and as a studio for the Taliesin apprentices, Taliesin West started as a simple camp in its desert setting. Over the last two decades of Wright's life it developed extensive permanent buildings of angular forms with walls faced with rough local rubble stone (constructed by unskilled apprentices) and with translucent roofs. The extensive complex of interconnected spaces includes studios, conference rooms, dining room, apartments and guest rooms as well as Wright's large beamed living room.

*Solomon R. Guggenheim Museum, New York, New York, designed 1943, constructed 1956-1959.*

The museum sits opposite Central Park and occupies one block of the New York City grid plan in an affluent neighbourhood.

The building consists of three major components: the main spiral-shaped rotunda, the smaller, circular administrative office wing and the cantilevered bridge that connects the two.

The dominant spiral of the rotunda coils round five times beneath a twelve sided domed skylight. The design of the entire complex is based on circles, triangles, and lozenges. The Guggenheim is constructed of concrete reinforced with steel rods.

The original driveway was closed off later to create a museum store. The office volume was converted into further galleries for the permanent collection. In 1992 an addition was built that was more or less based on

Wright's original master plan. Further underground space was added in 1996.

*Price Tower, Bartlesville, Oklahoma, designed 1952, constructed 1953-56.*

The Price Tower was built as a company headquarters and to provide rentable spaces in a small city. It is still the only tower in the area surrounded by low rise buildings. The central part of the tower housing the elevators was conceived as the trunk of a tree, and from this nineteen tapered floors were cantilevered. The embossed, copper cladding and sun louvres can be interpreted as leaves.

*Marin County Civic Centre, San Rafael, California, designed 1957, constructed (posthumously) 1960-1969.*

The Marin County Civic Center was built posthumously under the supervision of Wright's apprentices William Wesley Peters and Aaron Green. The Centre consists of an administration building to the south and a longer hall of justice building to the north, linked by a domed rotunda. In the immediate vicinity are terraces, gardens and a waterfall, marked by a polygonal spire. After Wright's death some design changes were made such as the addition of skylights over the atria and the colour of the roof. Furniture and built-in cabinetry were designed by Aaron Green.

The Center is still used for administrative and judicial purposes.

### **History and development**

The nomination spans work by Frank Lloyd Wright during just over half a century from 1906 to 1959.

At the beginning of this period, although architecture in the United States was still largely dominated by American reintegration of Neo-Classical and Gothic Revival European styles, there were some architects who were inspired to design buildings that reflected Art Nouveau ideas that had emerged in Europe, and who were trying to integrate new ideas in design with the technologies afforded by the Industrial Revolution. They included architects such as Frank Furness (1856-1924), H.H. Richardson (1838-1886), John Wellborn Root (1850-1891), and Louis Sullivan (1856-1924), as well as the younger Wright. It was Louis Sullivan who took on Wright as an apprentice and became Wright's early mentor.

In 1893, Wright left Adler and Sullivan's practice and set up his own practice. By 1901, Wright had completed some fifty houses, but it was only in the last two years before 1901 that his ideas on creating a distinctive architecture for the American house became reality in what has become known as the 'Prairie' style. The Thomas House and the Willits House are seen as the first two examples of this fully fledged style.

The Prairie style houses – the name reflecting the large open spaces of the prairie lands around Chicago – were long, low, with squat chimneys, overhanging eaves and

spacious open plan living areas and many windows connecting the inside to the outside. They also reflected the influence Japanese architecture had had on Wright. Many more Prairie houses followed in Oak Park, where Wright lived and worked such as the Arthur Heurtley House in 1902, and elsewhere such as the nominated Frederick C. Robie House, in southern Chicago, constructed in 1910.

At this time, Wright left the United States for Europe and spent a year working on the publication of a monograph of his work in and around Chicago. Its publication in 1910 introduced Wright's work to architects outside the United States and to those in Europe, in particular. On his return to America in 1910, Wright began to seek new influences beyond that of the Midwest prairies, as he extended his own style.

Modern movement architecture was evolving in Europe – architecture driven not just by ideas of the enlightenment, by a reaction to the excesses of 19<sup>th</sup> century decoration, by rapid social and economic change, and by the opportunities afforded by new materials and techniques, but also by the need for architecture to reflect more closely new ideas and ideologies. After World War I (1914-1918), architects such as Le Corbusier, in France, began to establish their reputations through articulating new architectural principles and language that largely abandoned the concepts of style, based on proportions, symmetry, repetition, etc. and promoted instead the design of buildings that were rational and timeless.

As is noted in the nomination dossier, although the buildings Wright designed during the 1920s and 1930s could be said to have played a central role in the development of this new approach to architecture, he himself was also “constantly at odds with it [the Modern Movement].” In his *An Organic Architecture: The Architecture of Democracy*, published in 1939, Wright set out his own six principles that were to:

1. Eliminate interior walls and open up the space to incorporate multiple functions;
2. Celebrate the individual through as many styles of architecture as there are individuals;
3. Harmonize buildings with their surroundings;
4. Derive the colours of a building from nature;
5. Allow the materials of a building to express their properties;
6. Ensure buildings reflect traits such as honesty, truth and grace.

### **3 Justification for inscription, integrity and authenticity**

#### **Comparative analysis**

The comparative analysis is based on identifying the key attributes of the series in relation to each of the nominated criteria and comparing these with properties

on the World Heritage List, on Tentative lists and with other properties on neither.

The attributes of the series that convey its Outstanding Universal Value are considered to be:

- Forms Expressing Function;
- Dynamic Space and Form ;
- Organic Expression;
- Adaptation to Modern Requirements;
- Organic Influence.

The works of architects, considered to be the masters of modern and post-modern architecture, are considered in terms of how their work reflects these five attributes. The architects include Le Corbusier, Alvar Aalto, Oscar Niemeyer, Walter Gropius, Ludwig Mies van der Rohe, Victor Horta, Antoni Gaudí, Louis I. Kahn, Richard Meier and others.

Wright's work is seen to differ from that of Horta, Gaudí and the Bauhaus architects, in that his buildings and defy stylistic categorisation and indeed bear very little resemblance to each other stylistically. Furthermore, as represented on the World Heritage List, the works of Horta, Gaudí and the Bauhaus, were all constructed over limited periods and within limited geographical areas. And Mies van der Rohe's buildings are seen to reflect rational classicism in contrast to Wright's anti-classical approach.

The two architects who are seen to have the most in common with Wright are Le Corbusier and Aalto. Comparing Wright's work to that of Le Corbusier, it is suggested that both reflect an extraordinary level of innovation, Le Corbusier in terms of materials and Wright in terms of contextual significance, and they both created dynamic spaces and memorable forms, while comparing Wright with Aalto, shows how both were exponents of organic architecture.

The conclusion drawn from these comparisons is that Wright is set apart as an idiosyncratic genius.

Comparison of the whole series is followed by comparisons of the individual buildings within the series with the work of other architects as well as with other work by Wright himself. The comparisons with other architects are not particularly helpful as it is the series as a whole that is being nominated.

ICOMOS notes that the comparisons between those sites selected and other works by Wright should have been more helpful in setting out how the sites for the series were chosen. The discussion does not explain how each of the chosen sites contributes to the series as a whole in an essential way. Individual sites are compared with other similar typological buildings or with buildings in similar geographical locations. For instance, the Unity Temple is considered against other building which can be seen as contributing to the evolution of the

Unity Temple's design, rather than how the Unity Temple contributes to the series as a whole.

Nor does the analysis suggest how the component sites are linked other than by their architect.

What the comparisons aim to show is that all component sites are 'unique' in terms of the way Wright responded to his brief or to the demands of the site.

Only for the Prairie houses and the Usonian house, for which Wright built a number of examples, does the analysis also attempt to show how the components selected were the most outstanding or most well-known of the many similar types of houses constructed. The Robie House is compared with a few of Wright's other Prairie Houses and it is suggested that it is by far the most outstanding example of that style as well as being unparalleled within Wright's oeuvre until the appearance of Falling water. However Falling Water is not a Prairie House. Furthermore it is noticeable that none of the Prairie Houses in Oak Park are mentioned by name in the analysis. While the Usonian Jacobs House, although not the only low cost house built by Wright from manufactured components, is shown to be the one that had the most flexibility and attracted most attention from middle class families.

All the other are seen to be unique in their conception or response to their site. Taliesin East is seen as an ongoing experiment for the development of Wright's architectural ideas and to have no comparators just as Taliesin West is seen to be incomparable in terms of an ensemble of buildings within a desert landscape. Hollyhock House is seen as a unique and specific response to the needs of a theatrical client and its mid-west location and has no comparators within Wright's oeuvre. Fallingwater is seen as the only building of Wright's to express the International Style modernism, and it is suggested that no other of his works exemplify such breath-taking drama, while the spiralling form of the Guggenheim, it is suggested, was instantly lauded as a masterpiece and is seen as unique in Wright's oeuvre because of its spiral form. The Price tower employed concrete in an innovative way and is Wright's only realised design of a tall building.

ICOMOS notes that what the comparative analysis underscores is that the value of the series as a whole, as currently presented, is rather less than the sum of its parts. The components as presented are linked by their architect Frank Lloyd Wright, rather than by any social or economic factors. Each of the components is a different response to particular circumstances and together they chart the development of the architect's oeuvre and in many ways are milestones on an architectural journey. Some may be outstanding but what has not been demonstrated is how these along with other buildings can be seen to convey attributes that collectively can be seen as outstanding, separate from the architect that created them but reflecting his association.

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ICOMOS considers that the comparative analysis has not so far justified consideration of this serial property for the World Heritage List but might support some of the individual buildings. ICOMOS considers that for a series, a more focused analysis is needed based on a more clearly defined justification for Outstanding Universal Value that extends beyond the architect himself.

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#### **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 Key Works of Modern Architecture by Frank Lloyd Wright:

- Are the most iconic, fully realized, and innovative of the more than four hundred existing buildings designed by Wright (1867-1959);
- Located in seven states, they respond to more than fifty years of dramatic cultural and technological change with distinctive and highly original modern forms;
- Designed for a range of urban, suburban, and rural environments and for clients from all backgrounds and walks of life, these works, which include a variety of building types, embody a single-minded vision of architecture as space created for human use, rich in emotion and sensitive to their surroundings;
- Are masterworks, particular to Wright's vision that fused a variety of influences in a way that made a powerful impact on global architecture in the 20<sup>th</sup> century.

ICOMOS considers that the underpinning of the justification for this series is the architect Wright and his single-minded vision rather than the buildings themselves. The 'masterworks' are said to be best of Wright's work in showing how his buildings responded to their environment, and reflected a fusion of variety of influences. It is the architect that is the sole link between the series rather than cultural, social or functional links over time.

Although the buildings are also said to have had a powerful impact on global architecture, precisely what that impact is not set out either in general nor even in terms of the individual component sites. It is not at all clear what the attributes of the potential Outstanding Universal Value are and how they are reflected in each of the components.

ICOMOS does not consider that a case has been made for the series in terms of how the individual buildings have been selected and contribute to that series in an essential way.

Wright's work was incredibly diverse; putting examples of it together into a series with an overarching theme has led to very high level of generalities being suggested as

the links between the component sites, all of which ultimately come back to the architect and his approach rather than the buildings themselves.

### **Integrity and authenticity**

#### **Integrity**

As a 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 State Party. Integrity thus relates to the ability of the 10 selected sites to represent and reflect the necessary attributes of Outstanding Universal Value.

As stated above, there is a lack of clarity as to what the attributes of the potential Outstanding Universal Value are, and how they are reflected in each of the components. Give that that is the case, evaluating the integrity of the series is problematic as there is no clear sense of what the individual components of the series add up to as a whole.

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.

There is some inconsistency in this series as to what extent the setting of the component sites convey part of their value and should be included within the boundary and where it is merely supportive and should be in the buffer zone. This relates to the lack of definition of how each component contributes to the series. Although the draft statement of outstanding universal value refers to 'organic architecture' including the 'full integration' of the 'connection to the natural setting', the attributes of potential Outstanding Universal Value have not been clearly set out, and it is therefore not easy to say whether or not all the attributes are within the boundaries.

For instance at Fallingwater, the natural environment around the house is within the nominated area, whereas at Hollyhock House and Marin County Civic Center it has not been included within the boundaries. There is also inconsistency between the way additions have been considered – some are within the boundary and others not, even when designed by Wright's office. This again relate to the lack of definition of value and attributes for each site.

At Taliesin, the boundary only includes the main house and offices and the immediate gardens, terraces and open land within the circular drive surrounding the main house, while excluding the other Taliesin structures such as the drafting studio, the Hillside school and theatre, Midway Barn, Tan y deri, the windmill and the apprentice cottages, which are in the buffer zone, and said "*not directly related to the Outstanding Universal Value of the house and have diminished values of integrity and*

*authenticity*", although these elements are part of the consciously designed landscape and its dynamic interaction with the buildings.

Similarly at Taliesin West, the site excludes portions of buildings and spaces that show the growth and change of the campus within its landscape. Although the nomination dossier states that "*changes are an essential part of the integrity to the significance of the property (...) Taliesin West was fluid and experimental from the outset, never intended to be "complete"*" (p. 274), there has to be clearer understanding of what contributes to the essence of what Wright created, and what should be within the boundaries and be sustained, and what can change over time. There is a fundamental issue to be resolved here in relation to changes made by Wright and continuing changes.

These consistencies need resolving as well as the overall Outstanding Universal Value before overall integrity can be adequately evaluated. In term of whether any of the attributes is vulnerable or under threat, it can be said that all the attributes within the current boundaries are virtually intact.

#### **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.

As stated above, there is a lack of clarity as to what the attributes of the potential Outstanding Universal Value are, and how they are reflected in each of the components. Give that that is the case, evaluating the authenticity of the series is problematic as there is no clear sense of what the overall series is aiming to convey and thus it is not possible to evaluate how well it conveys its value.

For each individual site, authenticity relates to how well the attributes of the site can be said to reflect their contribution to the overall outstanding universal value of the series. This again is difficult in specific terms. What can be said is that each of the sites has remained largely unchanged since their construction. In some sites, the level of remaining original materials is high, but in most, however, changes have been made and while the original forms remain sufficiently intact, and the modifications can be seen to be reasonable, and proportionate in relation to supporting the continued use of the building, there have been considerable changes to materials and the changes have not always been documented in an accessible and detailed way.

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. At the Price Tower a change of use from office to hotel has brought changes but original materials and finishes on the 3<sup>rd</sup>-16<sup>th</sup> floors had been already largely lost before the hotel moved in, although many light fixtures remains. Nevertheless part of the original interior materials and finishes has been preserved on the lower two levels and in the elevator lobbies on all the floors and overall sufficient materials remain sufficiently intact to reflect the original ideas of the building.

In other sites, structural problems have had to be resolved that have led to changes in structures and materials. Almost since its construction, water penetration was a problem at Unity Temple, with Wright himself undertaking initial repairs. Many subsequent interventions mean that the authenticity of materials and substance is not intact, but overall the form of the building remains largely true to the intentions of the architect.

The Jacobs House has experienced significant changes to its building fabric since construction. Major portions of the concrete slab foundation have been replaced, large sections of the roof structure have been strengthened with steel girders as diagonal bracing and king posts, the various roof coverings have repeatedly failed and the current roof is DuPont Fibertite, recently applied, with contemporary flashing details and an additional bargeboard detailing to the roof edge, and the windows have been replaced by double glazed units. The cantilevered carport and its foundation piers have been rebuilt. Internally Frank Lloyd Wright himself replaced the original Upson ceiling panels with redwood board and batten early after completion of the house. The house has been extended at both ends. Nevertheless overall the spirit of the original intention prevails and the repairs can be read as proportionate.

At the Robie House, there have been significant changes to its building fabric since construction; however, its form and footprint have been retained and its materiality sympathetically handled.

One site where conservation issues could impact on authenticity is at Taliesin East. The authenticity of the materials and substance of the house have been well sustained, but the wider estate, which is inextricably linked to the house faces a range of conservation challenges which potentially impact the values of the house. The whole estate needs to be seen as an entity needs and managed and conserved as a cultural landscape.

At Taliesin West, the harsh desert environment has led to repeated replacement of certain building elements – such as the canvas roof and the wooden beams of the drafting room and its adjacent pergola which have been replaced with contemporary materials for durability and sustainability. However, the original desert masonry continues to be visually paramount within the complex.

The desert landscape to which Taliesin West responded is now under development pressures. During Wright's time, its landscape setting had begun to change, with high tension wires built in close proximity to an important view, causing Wright to direct a major re-orientation of the growth of the campus complex. Today urban development is increasingly close, and the property has been zoned for suburban scale subdivision. The long views of the powerful desert landscape, still convey a strong sense of place, but changes in the nearer landscapes are beginning to impact negatively.

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ICOMOS considers that the conditions of integrity and authenticity have not been fully met.

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#### **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 series constitutes an outstanding creative contribution both to 20<sup>th</sup> century architecture and to the history of architecture as a whole. Acclaimed as masterworks by architects, scholars, and critics virtually from the time of their construction, the buildings reconceived architectural requirements in modern terms, with symbolic forms expressing the function of the structure, designed around the needs of the individual. The buildings also use dramatic forms that reflect structural daring and create a seamless flow between interior and exterior spaces. The series expresses the philosophy of organic architecture, where all aspects of the buildings – including function, form, materials, technology and setting – are fully integrated to create the whole.

ICOMOS acknowledges that Wright has long been acclaimed as one of the great 20<sup>th</sup> century architects. However for a series to justify criterion (i) it is the series as a whole that should add up to a masterpiece and where the buildings collectively might be said to demonstrate a stylistic highpoint or an exceptional example of creative genius. The link cannot be the architect. The way the criterion is currently justified is to suggest that all ten elements of the series are masterpieces of Wright's work and the series as a whole is reflecting the philosophy and practices of the architect, in terms of an organic approach, the needs of the individual and the way the building linked the interior to the exterior.

The ten sites cover a huge timespan – from 1905 to the latest building designed in 1957 and posthumously finished in 1969 –, and they cover a wide spectrum of building types. They are hugely different from each other in every aspect. Their only common denominator is the architect who designed them during his long career.



The various attributes suggested relating to Symbolic Form Expressing Function, Dynamic Space and Form and Organic Expression could be said to be present in many other buildings by Wright and in those of other architects and they cannot be said to equate to creative genius.

Although a few of the individual buildings might have the capacity to justify this criterion, such as Robie House, Fallingwater, and the Guggenheim Museum, the series as a whole cannot be said to add up to an expression of creative genius.

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ICOMOS considers that this criterion has not been justified.

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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 buildings in this series exhibit an important interchange of human values in their outstanding and exceptionally influential contributions to the development of modern architecture. The designs adapted both Western and non-Western design precedents and models to meet modern architectural requirements and responded to distinct regional conditions and settings in deeply original ways, spreading the principles of "organic architecture." These include form as a reflection of the building's function, simplicity and repose, celebration of individual uniqueness, and connection to the natural setting. Together, these buildings exhibit a profound response to distinctive twentieth-century geographic and cultural conditions of life in the United States that resonated far beyond its borders. The masterful integration of form, materials, and site influenced several generations of architects around the world.

ICOMOS considers that although the word 'modern' is in the title, it is not defined in the dossier. The phrase 'modern architectural requirements' is equally unclear. Wright's early work before 1914 could be said to reflect better changing social and economic conditions rather than the precepts of the Modern Movement.

Undoubtedly Wright was influenced by ideas from Europe and also from Japan and these may be detected in some of his early works, particularly those from Japan, but not in all of sites within the series. Wright's work in general was hugely influential for other architects but quite how is not defined, nor can it be said to be the case that this series reflects the way his influence has been taken up by others. Some individual buildings have been influential such as the Robie House, Fallingwater, and the Guggenheim Museum, but certainly not the series as a whole.

Moreover that influence was very different in the early stages of his career from later on. His early Prairie

houses encapsulated not just ideas of living close to nature, and of being inspired by natural landscapes, they responded effectively to changing expectations by their owners to live in a comparatively more simple and inclusive way, without formal divisions between different parts of the house, and with less of the clutter that had become mandatory in the late 19<sup>th</sup> century. His later buildings such as Fallingwater and the Guggenheim were influential as dramatic objects that somehow reflected the freedom of architecture and the way modern materials could create beautiful forms and enclose memorable spaces.

For the other components sites, it is much more difficult to pin down their influence other than in a general way as part of Wright's oeuvre.

ICOMOS does not consider that the idea of series as a whole reflecting an outstanding interchange of ideas has been justified.

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ICOMOS considers that this criterion has not been justified at the present time.

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ICOMOS does not consider that the serial approach has been justified.

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In conclusion, ICOMOS does not consider that the criteria have been justified at this stage.

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#### **4 Factors affecting the property**

For most sites, there is no evidence of current adverse development pressures in the site or in the buffer zone and wider settings. Nevertheless as economic circumstances could change this situation, it is necessary to ensure protection for settings is adequate through appropriate buffer zones and measures for the wider setting (See boundaries below).

The one main exception is Taliesin West. The nearby City of Scottsdale has expanded and is heading towards the site. Currently the site is just separated from the suburban sprawl, but will impact it eventually as even the buffer zone is zoned for development. There is also potential for the impact of development at the Robie House, where the missing and height of potential new development in the immediate neighbourhood could overshadow the relationship of the building to its urban setting.

Earthquakes are a serious threat for both Californian properties: they are almost certain to happen at some time; damage could be huge and perhaps irreversible but preventive measures have been taken.

After the 1994 Northridge earthquake an extensive conservation and stabilization program was carried out at Hollyhock House and the most recent project (2009-2012) included additional seismic retrofitting.

At the Marin Civic Center, as part of the seismic retrofit project some internal walls have been changed in order to accommodate cross bracing, or have been replaced by concrete shear walls.

Winds are primarily a threat to Price Tower as the property is located in a tornado zone. The probability that it will be hit is not rated very high but such hazards cannot be ruled out. Damage could be huge and perhaps irreversible. There are few if any preventive measures that might be taken.

Flooding is mainly a threat for Fallingwater but disaster preparedness plans are in place, including for the collections.

Fire is the main threat to sites that lack of fire suppression strategies and where related systems are designed for life-safety and not necessarily to save the buildings or the collections. The Guggenheim Museum is the only building with a reliable fire suppression system in place.

ICOMOS notes that while certain aspects of risk management have been well attended to in some component sites, overall there is a lack of risk management analysis and plans for all the sites. These should encompass not only the buildings but, where appropriate, their contents and setting, and also after hours surveillance.

ICOMOS considers that there are few threats to the overall series, but significant natural threats to some of the components and significant development threats to Taliesin West.

## **5 Protection, conservation and management**

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

Unity Temple, Oak Park

The boundary of the site and of the buffer zone are adequate.

Frederick C. Robie House

The boundary of the site encompasses the original building plot.

The buffer zone of 1.315 ha includes properties to the north and west but excludes adjacent land to the south and east at Woodlawn Gardens where development may have an impact. The basis of the delineation of the buffer zone is not clear on visual or historical grounds, nor why Woodlawn Gardens have been excluded.

The proximity and impact of potential development of Woodlawn Gardens, requires further consideration on the view sheds of Robie House. The potential scale and massing of a new building diagonally opposite the Robie

House may prove to be a matter of concern. The scope of the Buffer zone requires further consideration.

Taliesin, Spring Green

The site includes the hilltop, with the main house and offices and the immediate gardens and terraces and open land within the circular drive, but excludes Midway Barn, two apprentice cottages, the Romeo and Juliet windmill, and Tan-y-deri (the house Wright designed for his sister), the Hillside Home School, drafting studio with dormitory rooms, and theatre building – all of which are in the buffer zone. Cutting the estate in this way works against the idea of it being an entity in harmony with its landscape.

Furthermore the rectilinear lines of the buffer zone bear no relationship to the undulations of the landscape and exclude part of the designed landscape setting of the buildings.

The boundaries of both the site and the buffer zone need re-assessing in relation to a clear understanding of the value of the estate as a whole.

Hollyhock House, Los Angeles

The boundaries barely include all the attributes necessary to express, read and understand the value of the property as far as the built elements are concerned. While the visual integrity of the house as the nucleus of a larger art and cultural centre in a landscaped setting has been maintained, this is reflected by the buffer zone rather than the nominated area.

The buffer zone appears to be satisfactory but a clearer rationale needs to be provided for protection of the wider setting.

Fallingwater

The boundary of the property is satisfactory but needs better definition. The buffer zone is satisfactory.

Herbert and Katherine Jacobs House, Madison

The boundary follows the edge of the original lots.

The small buffer zone of 0.699 ha includes only the residential properties that immediately adjoin the site to the north and west, and the public roadway to the south and east. The setting is the immediate surrounding residential area which appears likely to continue as a low-scale residential neighbourhood, where pressure for redevelopment is minor. Nevertheless the buffer zone should encompass the buildings facing the site.

Taliesin West, Scottsdale

The boundary of the property is small and only protects part of the overall complex – that is structures designed and built by Wright during his lifetime. In two instances, the boundary separates an original Wright-designed structure from a later addition: the Cabaret Theater and Wright's office are part of the nominated property, but the 1962 Music Pavilion is not; and at the Living Quarters, the boundary separates the nominated private

rooms used by the Wrights from a post-1960s addition for apprentice apartments.

The buffer zone is all land owned by the Taliesin West Trust and amounts to 198.087 hectares. There is no particular visual analysis or historical reasoning presented to support it, other than ownership. The site is surrounded by low scale suburban development, and it is understood that the buffer area is similarly zoned.

Both the boundary of the site and that of the buffer zone need reassessing in relation to a clear understanding of the value of the estate as a whole.

Solomon R. Guggenheim Museum, New York

The nominated area is satisfactory. The proposed buffer zone is not large enough to provide protection to the nominated site, to provide sufficient control of future development in the surrounding area, and/or to ensure the visual integrity of the property.

Price Tower, Bartlesville

The nominated area is satisfactory.

The proposed buffer zone is not large enough to provide protection to the nominated site, to provide sufficient control of future development in the surrounding area, and/or to ensure the visual integrity of the property. A proposal to create a Price Tower Conservation District, thereby expanding the buffer zone to the south and west, is under consideration by the City of Bartlesville. This would limit new construction and additions to existing structures to 21 meters in height.

Marin County Civic Center, San Rafael

Although the relationship of the buildings to the landscape is crucial to the value of this component, the boundary is somewhat arbitrary in terms of what has been included and would benefit from some revision.

The proposed buffer zone is not large enough to provide protection to the nominated site, to provide sufficient control of future development in the surrounding area, and/or to ensure the visual integrity of the property.

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ICOMOS considers that the boundaries of several of the nominated component sites and of several buffer zones need some re-assessment on the basis of a clearer understanding of the value of each of the sites.

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### Ownership

Two components sites are owned by local government entities; the others are in private ownership, including by non-profit organisations, foundations and an individual as follows:

- Unity Temple is owned by Unitarian Universalist Congregation, a private, non-profit organization;
- Robie House is owned by the University of Chicago, a private, non-profit organization;

- Taliesin is owned by the Frank Lloyd Wright Foundation, a private, non-profit organization;
- Hollyhock House is owned by the City of Los Angeles, a government entity;
- Fallingwater is owned by the Western Pennsylvania Conservancy, a private, non-profit organization;
- The Herbert and Katherine Jacobs House is privately owned by James M. Dennis;
- Taliesin West is owned by the Frank Lloyd Wright Foundation, a private, non-profit organization;
- The Solomon R. Guggenheim Museum is owned by the Solomon R. Guggenheim Foundation, a private, non-profit organization;
- Price Tower is owned by Price Tower Arts Center, a private, non-profit organization;
- The Marin County Civic Center is owned by the County of Marin, a political subdivision of the State of California, governed by the Marin County Board of Supervisors, a governmental entity.

### Protection

All of the sites are listed on the National Register of Historic Places and recognized as National Historic Landmarks (NHL). This is the highest possible national protection. It may not always be the most effective one as it only affects actions resulting from decision making on a Federal level. Hence, the nomination dossier explains that *"in the United States, the strongest legal protections for privately owned historic properties reside at the local government level or through private conservation easements. All of the sites in this series have such local or private protections (...)"* (p.340). Some of the sites are also protected on a state (not federal) level. Local protection is set out below under each site.

For buffer zones, no relevant federal regulations apply. Curbing spatial development in urban areas is locally arranged either by 'ordinances' by local government(s) that apply generally or by 'easements' between local government(s) and single private parties. ICOMOS considers that what remains unclear are the protective arrangement beyond the buffer zone in the wider setting.

Unity Temple, Oak Park

Local protection is through a conservation easement titled Conservation Right, 1987. The Conservation Right is binding on all future owners of the property. Under the Oak Park Historic Preservation Ordinance, changes to the exterior of Unity temple are restricted and regulated as it was designated an Oak Park Historic Landmark and Interior Landmark in 1996.

The buffer zone, in the east, west, and south, is protected by Oak Park's Ridgeland-Oak Park Historic District which regulates the appearance of building facades, as well as any proposed alterations. The buffer zone to the north of Unity Temple falls within the Frank Lloyd Wright Historic District that establishes a maximum building height of 13.716 m, a minimum 6.096 m building setback, and no greater than 45% lot coverage for any development projects.

#### Frederick C. Robie House, Chicago

The Frank Lloyd Wright Trust has an agreement with the University of Chicago to restore, preserve, operate, and administer the Robie House for the benefit, enjoyment, education, and inspiration of the public. It remains unclear as to how this agreement extends to the protection for the buffer zone and the wider setting.

#### Taliesin, Spring Green

Taliesin is protected through a Historic Preservation Covenant Agreement between the Frank Lloyd Wright Foundation, as owner of the site, and the State Historical Society of Wisconsin, to preserve the architectural, historical, and archaeological integrity of the property.

The buffer zone is protected by local zoning regulations of Iowa County and the Town of Wyoming, which retain those areas as agricultural land/open space.

#### Hollyhock House, Los Angeles

Local protection is provided through the Code of the City of Los Angeles, Historical Buildings and Structures.

The buffer zone has been protected since 1926 by the City of Los Angeles through a gift 'Agreement', and is also designated a Los Angeles Historic-Cultural Monument, which implies protection through the CEQA, a California state law.

#### Fallingwater, Mill Run

A deed restriction and a trust agreement provide protection for both the site and the buffer zone.

#### Herbert and Katherine Jacobs House, Madison

The house is protected by a historic preservation covenant dated 2010, between the owner and the State Historical Society of Wisconsin, that creates a valid and enforceable restriction on Jacobs House in perpetuity.

#### Taliesin West, Scottsdale

The site is the subject of an historical preservation easement in perpetuity, between the Frank Lloyd Wright Foundation as owner and the Arizona State Historic Preservation Officer and the Arizona State Parks Board. The easement requires the Foundation to retain, maintain and enhance the architectural historic and cultural features of the site. The easement covers structures designed and built by Wright during his lifetime.

#### Solomon R. Guggenheim Museum, New York

The museum is protected as an Individual and an Interior Landmark under the Landmarks Preservation Law of the City of New York.

Protection for the buffer zone comes from the Carnegie Hill Historic District which provides protection for any proposed change to properties within the zone.

#### Price Tower, Bartlesville

On a local level, the building is protected through a Preservation and Conservation Easement between the

owner and the Frank Lloyd Wright Building Conservancy (FLWBC), an Illinois non-profit corporation, with the objective to preserve and maintain the facades and most of the original interior features.

For the proposed buffer zone a draft 'ordinance' is under preparation, due for completion in 2016. Some important views to and from the building are not protected by the proposed buffer zone. It is known that Wright wanted to stay away from the tall downtown buildings of Bartlesville, in order to create a free standing 'tower on the prairie'. This aspect is essential to the integrity of the setting of the building. Spatial development of the properties across the surrounding streets may have an impact on essential sight lines, affecting the stand-alone character of Price Tower.

#### Marin County Civic Center, San Rafael

This is protected through the 1992 Marin County Civic Center Open Space ordinance that preserves the aesthetic quality of the buildings and grounds, and by the California Environmental Quality Act (CEQA) a state law that requires state and local agencies to identify significant environmental impacts of their actions and to avoid or mitigate those impacts, if possible.

The buffer zone surrounding is a public site owned and regulated by Marin County, and protected both through the county's open space ordinance as well as a designated California Historic Landmark, although the open space ordinance applies to the area West of Civic Center Drive only.

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ICOMOS considers that the legal protection in place is adequate for the nominated sites and the buffer zones, although may need amending in relation to proposed re-assessment of boundaries, while there is a lack of clarity for the protection of the wider setting.

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#### Conservation

NOTE: The terms 'preservation' and 'restoration' in American English refer to 'conservation' and 'reconstruction' or replication in British English. The latter words have been used in this report.

The archives of Wright's studio Taliesin Associated Architects are kept at Avery Library, Columbia University in New York, also including the archival materials that remained in Taliesin West until recently.

The overall condition of the sites is good or very good. In most buildings large scale replacement of finishes has taken place in the past and for some large scale restoration has been undertaken. Most of these works over the last decades have been planned on the basis of expert (structural) consultancies and carried through by qualified contractors. Nonetheless on a technical level synthetic surface coatings on mineral substrates, such as plaster and stucco, appear to have been widely used rather than traditional materials, and ICOMOS notes that full justification for this approach has not been provided. For some sites details of what repairs have been carried out have not been archived.

For the future, ICOMOS considers that most sites need conservation plans to inform conservation work, both projects and on-going maintenance, and also a system of documentation that provide baselines as well as a history of interventions.

#### Unity Temple, Oak Park

Due to the extensive water penetration and problem associated with materials failure over many years, Unity Temple has seen a wide range of changes to its exterior surfaces as well as significant repairs to the concrete roof slabs. The nomination dossier notes that *'nearly seventy percent of the original material was replaced with comparable materials on the south slab'*.

All of the main structural components and systems are now reported to be in good condition. A further major three stage project is now underway, the first stage to strengthen the structure; the second to address climate control, mechanical, electrical and plumbing systems; and the third, to restore the interior. The project is based on extensive research and documentation, which have informed the development of a Master Restoration Plan.

#### Frederick C. Robie House, Chicago

The fabric of the Robie House is in good condition and well maintained following various campaigns of work to reverse changes made by previous owners and return the structure to its form shortly after construction, including reconstruction of built-in furniture. Detailed research has supported this work.

There is currently no documented conservation approach, but the preparation of a Conservation Management Plan is proposed, and funding has been secured for its development from the Getty Conservation Institute's Keeping It Modern programme.

#### Taliesin, Spring Green

Across the estate and within the house complex, the state of conservation is variable and there is evidence of deferred maintenance. ICOMOS considers that several major conservation issues require systematic resolution.

Whilst there is evidence of various extensive works campaigns, these have been oriented toward responding to emergency needs. There is little evidence of a documented conservation approach and long-term planning and prioritisation of conservation works at the site. Although there have been many plans prepared over the years, none appear to provide a long term strategic approach to conservation.

The surrounding estate setting is well managed, with cropping now being carried out by a tenant farmer and the surrounding hillsides being returned to the visual state they were in during Wright's time. The conservation of the pond/dam is a major challenge. A preservation policy is being prepared for the estate.

#### Hollyhock House, Los Angeles

A four year restoration campaign was completed in 2015. This included replacing the entire roof structure, remaking the art glass skylight, and restoring or replacing interior and exterior plaster and as necessary. The preparatory Historic Structure Report (2010) now provides 'baseline documentation'.

As with other buildings, there is no evidence of an agreed conservation approach to guide future maintenance and preservation works. No cyclical maintenance plan or conservation management plan is in place for the house, or for the immediate settings or the collections. For the time being, maintenance is carried out on a needs basis.

For the exterior built elements such as retaining walls, pergolas and planters, conservation and maintenance has been rather pragmatic and material authenticity has not always been the prime concern.

#### Fallingwater, Mill Run

In the 1990s, cracks and deflections in the floor slabs were proven to be structural failures, as the floors were not cantilevered as had been thought. Radical structural repairs were carried out over a period of years to 2002. This included post-tensioning of the floor overhangs. This work was executed without any visual impact. The master terrace parapet walls were reinforced with carbon fibre as were the reinforced concrete beams of the upper terrace. The final exterior finish is a synthetic coat of paint.

The site is meticulously kept and maintained which is indicative of the fact that the present preservation management has been very effective even though no longer-term cyclical maintenance plan or conservation management plan is in place. Conservation works and large-sale maintenance follow three-year plans and are carried through by expert (structural) consultants and specialised repair and maintenance contractors. Routine maintenance is carried out on a needs basis. No major repair projects are planned to take place shortly. A landscape master plan has meanwhile been completely implemented.

#### Herbert and Katherine Jacobs House, Madison

The fabric of this house is maintained in excellent condition by its current owner, who has spent the past twenty-five years systematically restoring/reconstructing and then maintaining the house, with guidance from a heritage architect as necessary.

#### Taliesin West, Scottsdale

The experimental nature of some building materials and the inexperience of some of the apprentice builders, combined with the harsh desert environment, make maintenance a daily necessity and have led to short lifespans for building components. Concerns about the site's conservation led to its inclusion in the 2010 World Monument Fund "Watch List".

A comprehensive preservation plan is currently under development. This will evaluate the changes and additions that have been made to the original buildings after Wright's lifetime and it is hoped that it will develop a clear conservation philosophy and approach.

Solomon R. Guggenheim Museum, New York

Between 2005 and 2007 an extensive preservation program was undertaken to resolve consistent cracks in the outer shell of the rotunda. Since then, the condition of the shell is carefully monitored through a diagnostic laser technique. The plaster skin has been carefully restored, including its board mark surface texture, grain etc. The final finish is a synthetic Mapelastoc coating. Although the original buff colour had been researched, a decision was made to retain the lighter grey colour that had been more recently associated with the building and this choice has attracted criticism.

A conservation management plan appears not to be in place and maintenance is continuously carried out on a needs basis for a few years ahead by the in-house maintenance department. No 'baseline documentation' is available to assist future maintenance and conservation works and there is no evidence of an agreed conservation approach to guide future maintenance and preservation works. An ambition to prepare an Historic Structures Report has not yet been followed up.

Price Tower, Bartlesville

Before ownership of Price Tower was bequeathed to the Price Tower Arts Center in 2001, a thorough conservation campaign was undertaken but no comprehensive record has been kept of repairs and conservation works performed at that time. Since 2001 almost no further repairs have taken place and the exterior surfaces are now coated with an elastomeric agent. When the hotel moved in around 2001 most interior walls and ceilings were newly finished with contemporary materials.

Although the nomination dossier states that '*current preservation and cyclic maintenance of the structure is guided by a documented building preservation plan*' (p. 327), no up to date plan has been provided. A copy of a 2015 Price Tower Preservation Plan was provided to ICOMOS. This is an updated version of a similar document from 2005 that involves little new information resulting from the 2011 '*condition survey of exterior facades*' or other recent studies. The document states that guidelines for the exterior and the more recently refurbished interiors are forthcoming.

The Plan remains a very general document that will be insufficient to advance conservation management beyond the level of maintenance and repair on a needs basis. There is no identification of ongoing (structural) budgeting or financial support for future conservation works and repairs. The conservation planning that is in place now does not provide the kind of consistent, comprehensive and specific guidelines that anticipate

the maintenance and repairs of the building and budgets for a number of years ahead.

Although there is huge institutional knowledge on the historicity of the existing fabric and building parts, no comprehensive overview of the works and repairs that could serve as a 'baseline documentation' for planning future works has been produced as evidence of the more comprehensive record of works since 2001. Also, there is no clear general conservation approach to guide future maintenance and preservation works.

Marin County Civic Center, San Rafael

Periodical maintenance to the exterior include coating of the terrace floorings and roofing repairs, and paintwork of the plastered concrete facades, for which an acrylic paint is being used.

Replacement of the roofing is scheduled and budgeted to take place within three years. No up-to-date cyclical maintenance plan or conservation management plan has been presented, and maintenance is continuously carried out on a needs basis by the in-house engineering and maintenance department. There is no evidence of an agreed conservation approach to guide future maintenance and preservation works, nor is 'baseline documentation' available to assist future maintenance and conservation works.

For the landscaping in the wider area a master plan has been prepared that will have an effect on the immediate setting of the property. The proposals are carefully developed to strengthen the historic character of the site whereas some species will have to be replaced by local vegetation as not all the species chosen by the Wright studio can survive the local climate. The master plan has not yet been implemented but will have a positive effect on the essential features of the property.

In summary, many of the sites lack a context for the conservation work, in terms of documentation of previous interventions, an agreed conservation approach to guide future conservation and maintenance, and a rationale for decision making.

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ICOMOS considers that while the overall conservation of the sites is mostly good, in many sites conservation interventions appear to take place on a needs basis and there is little evidence of conservation planning; agreed conservation approaches to guide future maintenance and preservation works, as well as 'baseline documentation' should be put in place for all sites.

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## Management

Management structures and processes, including traditional management processes

For serial nominations within one country, the *Operational Guidelines for the Implementation of the World Heritage Convention*, 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.*

According to the nomination dossier, *'the unifying management structure for the serial property is the Frank Lloyd Wright World Heritage Council, consisting of one representative from each of the sites plus the executive director of the Frank Lloyd Wright Building Conservancy'*, operating in an advisory capacity and functioning as the umbrella management and communications structure for the serial property. *'The purpose of the Council is to serve as a collaborative resource for the preservation of the sites included in the Wright serial nomination.'* (p. 356).

The Council adopted an annual report form in 2013 that is to be completed annually by each site. These written reports are intended to provide information on issues that might impact integrity and authenticity; management issues; pressures related to the environment, development, visitation; monitoring activity; and documentation matters. According to the nomination dossier, annual reports were completed in 2013 and 2014 but only one sample report for one site, Fallingwater, for the year 2015 has been provided. Further operations of the Council are believed to be pending until a final decision about inscription has been made.

ICOMOS considers that no evidence of a strong unifying and proactive management structure has been presented, and no evidence provided of any meetings between representatives of the various sites in the production of the nomination dossier, or on plans for the way forward.

What also remains unclear is the relationship between the wide range of organisations related in one way or another to Frank Lloyd Wright's legacy and how they are involved in the series. Clarification is needed as to the contributions of the FLW (Preservation) Trust, the FLW Foundation, the FLW Building Conservancy and its World Heritage Committee, the FLW School of Architecture, the FLW Legacy Fellows, Taliesin Presentation Inc, the Taliesin Fellowship, the FLW Conservancy and possibly others.

For a series of this size and complexity, it is essential that a fully functioning coordinated management system is in place that can oversee the management of the series and coordinate conservation and other approaches.

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

For individual sites, the nomination dossier states that *'Each site has a sound management plan that has been responsible for the current state of good conservation of each of the sites in this series.'* (p. 281) It has been not

been possible to verify this statement; the management instruments (plans, documents, guidelines) in place for the individual sites are widely diverging and cannot readily be seen as over-arching management plans that set out the management system and provide a clear rationale and guidance for all aspects of management and conservation. The Plan for the Price Tower is the exception in that it does guide management but still does not cover budgeting or conservation. This needs to be formally submitted. There is also a need for sites to have adequate documentation of past interventions as a baseline for monitoring.

Cyclical planning appears to be a challenge for most of the component sites, apart from Fallingwater and the Guggenheim Museum. The necessary funds have so far been raised but there is mostly no identification of ongoing (structural) budgeting or financial support for conservation works and repairs. This means it is not possible to say that there will be availability of *'funding to implement conservation work when needed'*.

Below are detailed comments on individual sites:

#### Unity Temple, Oak Park

The Unity Temple Restoration Foundation is responsible for completing the comprehensive rehabilitation of the building, and providing an approach for its preservation into the future. The Unity Temple Unitarian Universalist Congregation which continues to use the building as its spiritual home and is responsible for regular maintenance. Both organisations are well resourced.

A Master Conservation Plan exists; this needs to be complemented the development and implementation of a cyclical maintenance plan, as part of an overall management plan that includes other aspects such as visitor management and risk preparedness.

#### Frederick C. Robie House

The Frank Lloyd Wright Trust manages the Robie House. Conservation/Management plan is being prepared. It is understood that this will be focused on the conservation aspects and provide a key strategic tool for proactive decision making. To complement this, there is also a need for a management plan that deals with the everyday running of the site as a visitor attraction and includes visitor management and risk assessment.

It is understood that the Trust is preparing a Strategic plan but the scope of this is unclear.

#### Taliesin, Spring Green

Taliesin Preservation, Inc., manages the estate, is owner and operator of the visitors centre, and is in charge of the conservation of the site.

As well as the need for a conservation plan to guide interventions, there is also a need for a management plan to deal with the overall management of buildings and estate, as well as visitor management and risk assessment.



Hollyhock House, Los Angeles

The site is managed under an operating agreement between the City of Los Angeles Board of Recreation and Parks Commissioners, the Department of General Services, and the Department of Cultural Affairs. The Board of Recreation and Parks Commissioners is responsible for gardening, landscaping, and irrigation. ICOMOS was told that the Board of Recreation and Parks is the primary steward of the property but that the director of the General Services Department decides on the annual budget for the house. The management structure seems therefore rather confused. A general management plan that might clarify the management structure has not yet been drawn up. This could also set out a long-term vision on marketing, visitation, sponsorships, funding and so on.

Although the building is well restored, well-kept and maintained, the same cannot be said of the grounds and the immediate setting. There are doubts about the long term transparency and effectiveness of the overall management structure. A general management plan needs to be provided.

Fallingwater, Mill Run

The site is managed by the owners, the Western Pennsylvania Conservancy (WPC), a private, non-profit organisation. A Fallingwater Advisory Committee, founded by the son of the original owner oversees the quality conservation management decisions. A general management plan as such has not been provided however management is guided by a 2008 Strategic Plan and by annual Operational Goals.

Herbert and Katherine Jacobs House, Madison

Current management is a personal arrangement that will cease with the current ownership, and the recording of the owners' knowledge of the conservation and management of the property is needed to inform the development of a conservation and management plan, setting out the future conservation maintenance and interpretation for the property.

Taliesin West, Scottsdale

The Frank Lloyd Wright Foundation Taliesin West uses the site for its educational activities. Operations, including preservation and facility management, are scheduled through a yearly planning process. Changes to the accreditation system of university architecture schools are presently under consideration: a sympathetic partnership is being sought by the Trust.

No management plan has been prepared and one is needed to address the significant challenges the site faces.

Solomon R. Guggenheim Museum, New York

A general management plan as such has not been provided, the only plan is a Capital Project Plan (2013-2018). The overall day to day management structure appears effective.

Price Tower, Bartlesville

Price Tower Arts Center, a private, non-profit organisation with 501 (c) 3 status, manages this site. Strategic and annual plans are approved within a board committee structure. A Strategic Plan 2015-2020 has been draw up to promote both the arts centre and the building. A copy of the Plan was handed to the ICOMOS technical evaluation mission. This is a forward looking management tool, although financial sustainability remains a challenge. Conservation planning does not provide a comprehensive schedule or guidelines for the maintenance and repair of the building for a number of years ahead.

Marin County Civic Center, San Rafael

A general management plan as such has not been provided. Building maintenance and preservation are implemented through the County's Department for Public Works, while the Parks Department maintains the grounds. The site is well managed. Conservation planning does not provide a comprehensive schedule or guidelines for the maintenance and repair of the building for a number of years ahead.

There is almost no mention of local communities in the nomination dossier, other than of the benefits they might receive as a result of inscription, and no formal involvement of local communities in the management processes.

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ICOMOS considers that an active overall management system for the series needs to be put in place; for individual sites, management needs to be put on a more formalised basis through the development of management plans allied to conservation plans.

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## 6 Monitoring

Monitoring indicators are in place for each component site. These relate largely to defects of the building structures and, for Taliesin West, invasive species in the landscape. The indicators do not relate directly to the Outstanding Universal Value of the series or to the way that each of the sites contributes that Outstanding Universal Value.

ICOMOS considers that this approach for indicators needs to be adjusted once a clear understanding of the value of the series has been put in place and the attributes of the various sites have been well articulated.

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ICOMOS considers that the current monitoring indicators are useful but do not clearly relate to Outstanding Universal Value and need to be augmented.

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## 7 Conclusions

Frank Lloyd Wright undoubtedly is one of the most influential architects of the 20<sup>th</sup> century. Unlike Le Corbusier, he did not work around the world and his influence emanated from work in his home country. Even though his work may have influenced the Modern Movement, he was not wholly an exponent of it and was, as he himself said, “*constantly at odds with it* [the Modern Movement]”.

The sites that have been chosen are considered to be the most iconic, fully realized, and innovative of Wright’s surviving work, masterworks that made a powerful impact on global architecture in the 20<sup>th</sup> century. What the nominated series does not quite make clear is why these sites were considered to be masterworks, precisely what influence Wright’s corpus of buildings had, or its scope and what it rested upon. The justification is linked to broad generalities such as Forms Expressing Function, Dynamic Space and Form, Organic Expression, Adaptation to Modern Requirements and Organic Influence which could be applied to many architects.

The nomination has not put forward a convincing justification for the series in term of what the ten sites add up to and why the whole is greater than the sum of its parts. The need for this is set out in paragraph 137c) of the Operational guidelines which says: it is ‘*the series as a whole – and not necessarily the individual parts of it – which are of Outstanding Universal Value*’.

*Operational Guidelines* paragraph 137 a) sets out how the component parts of a series ‘*should reflect cultural, social or functional links over time*’. Currently the only link put forward in the nomination dossier is that of the architect. It is places that are inscribed on the World Heritage List for the ideas and associations that they convey. The development of a third nomination dossier for a series of Le Corbusier’s buildings has demonstrated that it is possible to analyse and articulate why certain works by an architect can together as a series provide an exceptional testimony to the influence of an architect in his cultural context.

If a series is to be nominated successfully for Frank Lloyd Wright, ICOMOS considers that there is a need for a fundamental re-appraisal of his work, what it stands for, its influence, and the cultural context within which it was created, in order to define how a series of sites (not necessarily the one currently nominated) might be considered to convey the way one or more exceptional facets of his oeuvre influenced the architecture of the 20<sup>th</sup> century and the Modern Movement.

As ICOMOS is of the view that it is appropriate to consider further how Wright’s work might be the subject of a revised serial nomination, it would be ready and willing to work along collaborative lines with the State Party to consider possible ways forward.

Such discussions could also encompass ways to achieve active coordinated management for a series which is currently lacking, as well as more structured management and conservation for individual component sites.

## 8 Recommendations

### Recommendations with respect to inscription

ICOMOS recommends that the examination of the nomination of Key works of Modern Architecture by Frank Lloyd Wright, United States of America, to the World Heritage List should be **deferred** in order to allow the State Party, with the advice of ICOMOS and the World Heritage Centre, if requested, to:

- Undertake a fundamental appraisal of Frank Lloyd Wright’s work, what it stands for, its influence, and the cultural context within which it was created, in order to define the rationale for a series of sites (not necessarily the one currently nominated) that might have the potential to justify Outstanding Universal Value through conveying the way one or more exceptional facets of his oeuvre influenced the architecture of the 20<sup>th</sup> century and the Modern Movement;
- Put in place active coordinated management for the series as well as more structured management for individual components;
- Define boundaries and buffer zones for component sites in relation to the attributes of potential Outstanding Universal Value.

ICOMOS would be ready and willing to work along collaborative lines with the State Party to consider possible ways forward in the spirit of the upstream processes.

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



Map showing the location of the nominated properties



Unity Temple



Robie House





Herbert and Katherine Jacobs House



Hollyhock House



Taliesin



Fallingwater House

## **IV Cultural properties**

### **A Asia – Pacific**

New nominations

### **B Europe – North America**

New nominations

Nomination deferred by previous sessions of the World Heritage Committee

### **C Latin America - Caribbean**

New nominations

Extension





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# The Architectural Work of Le Corbusier (France, Argentina, Belgium, Germany, India, Japan, Switzerland) No 1321 rev

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## Official name as proposed by the States Parties

The Architectural Work of Le Corbusier  
An Outstanding Contribution to the Modern Movement.

## Location

Argentina

La Plata, Province of Buenos Aires

Belgium

Antwerp, Flanders

France

Paris, Île-de-France

Poissy, Île-de-France

Boulogne-Billancourt, Île-de-France

Pessac, Aquitaine

Marseille, Provence-Alpes-Côte d'Azur

Roquebrune-Cap-Martin, Provence-Alpes-Côte d'Azur

Saint-Dié-des-Vosges, Lorraine

Ronchamp, Franche-Comté

Éveux, Rhône-Alpes

Firminy, Rhône-Alpes

Germany

Stuttgart, Baden-Württemberg

India

Chandigarh, Punjab

Japan

Taito-Ku, Tokyo

Switzerland

Corseaux, Vaud

Geneva, Geneva

## Brief description

The Architectural Work of Le Corbusier is a transnational serial property, consisting of seventeen sites, chosen because together they represent an outstanding response to some of the fundamental issues of architecture and society in the 20<sup>th</sup> century. They were implemented over a period of half a century, in the course of what Le Corbusier himself described as "patient research".

Chosen from the work of Le Corbusier that survives in eleven countries on four continents, the sites in seven countries on three continents, are said to attest to, for the first time in the history of architecture, the

internationalization of architectural practice across the entire planet.

The component sites are all innovative in the way they reflect new concepts, all had a significant influence over wide geographical areas, and together they are seen to have disseminated ideas of the Modern Movement throughout the world.

## 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 *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

India: 23 October 2006

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

27 January 2015

### Background

This is the third nomination to be presented for a transnational series of the work of Le Corbusier.

The first nomination, submitted in 2008, entitled *The Architectural and Urban Work of Le Corbusier*, presented twenty-two sites under seven themes.

The World Heritage Committee in Decision: 33 COM 8B.19 (Seville, 2009) referred this first nomination back to the States Parties in order to allow them to:

- Strengthen the justification of the Outstanding Universal Value to demonstrate the influence of the works of Le Corbusier on the architecture of the 20<sup>th</sup> century and the Modern movement.

A second nomination, submitted in 2010, was entitled *The architectural work of Le Corbusier: an exceptional contribution to the Modern Movement*. In this nomination, nineteen component sites were set out chronologically.

The World Heritage Committee, in decision 35 COM 8B.40 (Paris 2011), deferred this second nomination to allow the States Parties to:

- Meet the objections stated with regard to this proposal, including the development, through a constructive dialogue with the World Heritage Centre in conjunction with the Advisory Bodies, of a common notion of Outstanding Universal Value of the site.

Between 2011 and 2013, ICOMOS, with representatives of the International Scientific Committee on 20<sup>th</sup> Century Heritage, and the involvement of some members of the ICOMOS World Heritage Working Group, undertook many meetings with representatives of all the involved States Parties in which there were intensive discussions on the shortcomings identified in the first two dossiers and on how progress might be made. There has also been greatly enhanced collaboration between States Parties (ten international meetings each year, in addition to the regional or local meetings) since 2012.

By December 2013, as it was considered that the discussions had gone as far as they could go, ICOMOS wrote as follows to the States Parties:

“ICOMOS recognizes that the participating States Parties have made a significant investment of time, resources and cooperative activity over the past 18 months. Based on the work that has been produced, ICOMOS considers that the process of resubmission of the nomination planned for 2015 should not be further delayed, and thanks all participating States Parties for the collaborative process.”

The third nomination submitted in January 2015, entitled *The architectural work of Le Corbusier, an exceptional contribution to the Modern Movement*, reflects a large amount of work undertaken by States Parties to respond to the requests of the World Heritage Committee. This has been based on intensive expert discussion, including with ICOMOS, and also on new research.

#### Consultations

ICOMOS consulted its International Scientific Committee on 20<sup>th</sup> Century Heritage and the International Scientific Committee on Documentation and Conservation of buildings, sites and neighbourhoods of the Modern Movement (DoCoMoMo).

#### Technical Evaluation Missions

Five evaluation missions were undertaken by ICOMOS: to India from 2 to 6 October 2015, to Japan from 18 to 21 August 2015, to Argentina from 9 to 13 September 2015, to Germany from 27 to 30 November 2015, Switzerland from 1 to 2 October 2015, to Belgium on 29 September 2015 and to France from 21 September to 9 October 2015.

#### Additional information received by ICOMOS

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 Chapelle 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 Firmigny-Vert was also submitted.

For the third nomination, extra material has been received from the States Parties on 22 February 2016, in response to the interim report sent by ICOMOS on 18 January 2016, on boundaries and buffer zones, implications of recent development at Molitor and Ronchamp, conservation plan for Chandigarh, new building to the rear Maison Curutchet, monitoring indicators, impact of forthcoming new Heritage Law in France and final shape of series.

#### Date of ICOMOS approval of this report

11 March 2016

## 2 The property

#### Description

The third revised nomination is virtually a new nomination, particularly in terms of the way the sites are presented in relation to the justification for Outstanding Universal Value, and the explanations for the conceptual basis of the choice of component part of the series.

The nomination is shorter and clearer and sets out precisely how the attributes of each component site contributes to the proposed Outstanding Universal Value of the overall series. The emphasis is on the way the sites convey the innovative nature of the buildings and the influence they have had all over the world as a reflection of the new architectural ideas and approaches promoted by Le Corbusier. This is in contrast to the previous nominations which tended to present the buildings for what they contributed toward the architect's development.

The number of sites has been reduced from 19 to 17 (there were 22 in the first nomination). Three have been omitted:

- Villa Jeanneret-Perret, La Chaux-de-Fonds, Switzerland
- Pavillon Suisse à la Cité universitaire, Paris, France
- Maisons Jaoul, Neuilly-sur-Seine, France

And one site has been added:

- Complexe du Capitole, Chandigarh, Punjab, India

The nomination is based on the idea that the Modern Movement, despite its diversity, is a major and essential socio-cultural and historical entity of the 20<sup>th</sup> century, which has to a large degree remained the basis of the architectural culture of the 21<sup>st</sup> century. It suggests that from the 1910s to the 1960s, the Modern Movement, in meeting the challenges of contemporary society, aimed to:

- Instigate a unique forum of ideas at a world level;
- Invent a new architectural language;
- Modernize architectural techniques;
- Meet the social and human needs of modern man.

The series of the Architectural Works of Le Corbusier is seen to have provided an outstanding response to these challenges. The component sites have been selected to reflect how these four challenges were addressed in a particular exceptional way.

From 65 buildings or groups designed by Le Corbusier that survive today, the 17 sites included in the new submission are:

- 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 et loge du jardinier, Poissy, France*
- 1930 *Immeuble Clarté, Geneva, Switzerland*
- 1931 *Immeuble locatif à la Porte Molitor, Paris, France*
- 1945 *Unité d'habitation, Marseille, France*
- 1946 *Manufacture à Saint-Dié, Saint-Dié-des-Vosges, France*
- 1949 *Maison du Docteur Curutchet, La Plata, Argentina*
- 1950 *Chapelle Notre-Dame-du-Haut, Ronchamp, France*
- 1951 *Cabanon de Le Corbusier, Roquebrune-Cap-Martin, France*
- 1952 *Complexe du Capitole, Chandigarh, India*
- 1953 *Couvent Sainte-Marie-de-la-Tourette, Évieux, 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*

These are described in relation to the four main concepts.

*Instigate a unique forum of ideas at a world level*

Some buildings immediately assumed an iconic status and attracted worldwide interests and had world-wide influence. These include the Villa Savoye, as an icon for the Modern Movement; Unité d'habitation in Marseille as

a major prototype of a new housing model based on the balance between the individual and the collective; Chapelle Notre-Dame-du-Haut, Ronchamp, for its revolutionary approach to religious architecture; the Cabanon de Le Corbusier as an archetypal minimum cell based on ergonomic and functionalist approaches; and the Maisons de la Weissenhof-Siedlung became known worldwide, thanks to the resounding critical success of the Werkbund exhibition.

Some buildings acted as catalysts for spreading ideas around their own regions, such as Maison Guiette, Belgium, that spurred the development of the Modern Movement in Belgium and the Netherlands; the Maison du Docteur Curutchet that exerted a fundamental influence in South America and continues to do so; the Musée National des Beaux-Arts de l'Occident in Tokyo, the prototype of the globally transposable Museum of Unlimited Growth, which cemented ideas of the Modern Movement in Japan; while the Complexe du Capitole, had a considerable influence across the Indian subcontinent, where it symbolized the country's accession to modernity.

Many of the sites reflect new architectural concepts, principles, and technical features. Examples are the minimum house, of which the Petite villa au bord du Léman, 1923, is an early expression; the minimum living cell is crystallized in the Cabanon de Le Corbusier; the five points for a new architecture are transcribed iconically in Villa Savoye; the glass-walled apartment building has its prototype in the Immeuble Molitor; and the concept of balance between the collective and the individual, as set out in the Athens Charter, has its prototype in the Unité d'habitation.

*Invent a new architectural language*

Some of nominated sites created two major trends in the Modern Movement – Purism and Brutalism – and others initiated a move towards a sculptural form of architecture which is still influential in the early 21<sup>st</sup> century. For instance, the inaugural use of Purism – forms and colours as a means of structuring interior space – can be seen in the Maisons La Roche et Jeanneret, Cité Frugès, and the Maison Guiette, while the Unité d'habitation is seen to have played a pioneering role in promoting the trend of Brutalism, and Ronchamp and the Complexe du Capitole promoted sculptural forms.

In 1927, Le Corbusier published in Germany *the Five Points of a New Architecture*: pilotis, roof garden, open plan, ribbon windows and free design of the façade. This short manifesto was adopted around the world and spearheaded the Modern Movement.

Maisons La Roche and Jeanneret constructed in 1923 can be seen as the forerunners of the Five Points, which were fully articulated at the Villa Savoye.

The Immeuble Molitor is an example of the application of these principles to a residential Block, while they were also applied to minimal houses, such as the Cité Frugès

or the loge du jardinier at the Villa Savoye. Later in his career, Corbusier reinterpreted the five points in the Maison Curutchet, in the Couvent Sainte-Marie-de-la-Tourette and in the Musée National des Beaux-Arts de l'Occident.

Corbusier's use of space was also seen to revolutionise design more than in any other works of the Modern Movement.

#### *Modernize architectural techniques*

Innovation and experimentation with materials and the standardisation and industrialisation of architectural components were also seen as key aspects of Le Corbusier's new approaches.

The Maisons de la Weissenhof-Siedlung demonstrate the architectural and spatial capacities generated by the independent structure of concrete beams, while pre-stressed reinforced concrete was used in the Couvent Sainte-Marie-de-la-Tourette, and in the Complexe du Capitole, concern for natural air-conditioning and energy saving, led to the use of sunscreens, double-skinned roofs, and reflecting pools for the catchment of rainwater and air cooling.

Many of Corbusier's building also exemplify the search for standardisation – part of the search for perfection. For instance the Unité d'habitation de Marseille was a prototype intended for mass production, while the Petite villa au bord du Lac Léman set out the standard for a single span minimal house, and le Cabanon de Le Corbusier the standard, minimum unit for living.

The Modulor was a harmonic system based on human scale, designed by Le Corbusier. This was used for all his buildings after 1945, including for the exterior spaces of the Complexe du Capitole which reflect the silhouette of a man with raised arm.

#### *Meet the social and human needs of modern man*

Le Corbusier's buildings were designed around the new needs of 'modern man in the machine age', both individual and collective living, both at home and at work, and in both public and private spaces.

Examples include the Manufacture à Saint-Dié which created light new workspaces, in contrast to those of a traditional factory; and Maison Guiette, which experimented with an open conception of space. As demonstrated in the avant-guard housing at the Cité Frugès, and the affordable Maisons de la Weissenhof-Siedlung, these new approaches were not intended for a tiny fraction of society but rather for the population as a whole. By contrast the Immeuble Clarté was intended to revolutionise middle class housing.

Le Corbusier revised and published *the Athens Charter* for the reform of urban planning. This had been drawn up by the International Congress on Modern Architecture (CIAM) in 1933, based on *Radiant City* which Le Corbusier had worked on from 1932.

*The Athens Charter* was responsible for revolutionising thinking on architecture and urban planning in the second half of the 20<sup>th</sup> century.

The Complexe du Capitole, the focal point of the plan for Chandigarh, is seen as the most complete contribution to the principles of *Radiant City* and the *Athens Charter*.

The following are brief descriptions of each of the components:

#### *1923 Maisons La Roche et Jeanneret, Paris, France*

The Maisons La Roche et Jeanneret 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 Le Corbusier Foundation. 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 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 Le Corbusier Foundation which restored it in 1975. It is now a museum.

#### *1924 Cité Frugès, Pessac, France*

The Cité Frugès 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 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 the Le Corbusier's only building. Maison Guiette is still lived in as a house and there is no public access.

Over time, the immediate environment of the house has developed differently from originally anticipated. Behind the garden a series of three tower blocks were built in the 1967 and the whole property is now in an awkward urban setting, within a transport interchange. Since the 1960s, the R1 main ring road and tunnel crosses almost underneath the house, and a semi-public parking lot for 200 cars is at its western side. The situation has not been improved by the new tram route built in front of the house in 2011-2012.

#### *1927 Maisons de la Weissenhof-Siedlung, Stuttgart, Germany*

The Maisons de la Weissenhof-Siedlung, 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 the 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 is an exact counterpart of the proposal for minimum housing made by Le Corbusier and Pierre Jeanneret at the second congress of the CIAM 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 in white, although originally it may have been tinted in several colours. Further research is being carried out on the polychrome walls, with the aim of partial restitution.

Nearby is a small gardener's 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.*' This small house has recently been restored, including its coloured exterior. The Villa Savoye is open to the public.

#### *1930 Immeuble Clarté, Geneva, Switzerland*

The Immeuble Clarté 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.

#### *1931 Immeuble locatif à la Porte Molitor, Paris, France*

The Immeuble locatif Porte Molitor was constructed for middle-class clients in 1931 on an exceptional site in the Bois de Boulogne. Restricted by the restrained pale stone buildings of the neighbourhood which it adjoins, the building, with its narrow 13 m 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.

Since the second nomination, an enormous rugby stadium has been constructed right in front of the glass façade effectively blocking all view of the Bois de Boulogne.

*1945 Unité d'habitation, Marseille, France*

Founding work of architectural Brutalism, Unité d'habitation was a major prototype of a new housing model based on the balance between the individual and the collective and intended for mass production.

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, a synthesis of four decades of his thinking on collective living. Seventeen storeys high and designed to house 1,600 people, the Unité d'habitation 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.

*1946 Manufacture à Saint-Dié, Saint-Dié-des-Vosges, France*

The Manufacture à Saint-Dié 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. The new building adjoins the remains of the old factory. The building is still in use as a textile factory.

*1949 Maison du Docteur Curutchet, La Plata, Argentina*

The Maison du Docteur Curutchet 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 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. It has become an icon of Christian sacred architecture, revolutionizing religious architecture in the 20<sup>th</sup> century.

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. He saw the church as a remote pilgrimage place. 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.

Since the second nomination, a new visitor centre (Porterie) and a new monastery (St Claire), both designed by Renzo Piano in 2009-2011, have been built into the western slope of the hill. Part of the Porterie is in the nominated area, while the monastery is in the buffer zone. A new entrance gate has replaced the historical entrance gate and the old Fermerie, used as a porter's lodge, has been demolished. These new interventions have changed fundamentally the relationship of the chapel with its landscape, as envisaged by Le Corbusier.

*1951 Cabanon de Le Corbusier, Roquebrune-Cap-Martin, France*

The Cabanon de Le Corbusier is a very small cottage at the edge of the sea, extending to no more than 15 m<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.

*1952 Complexe du Capitole, Chandigarh, India*

The Indian Prime Minister, Jawaharlal Nehru, commissioned a new capital for the Indian province of the Punjab following the Partition of India into two countries, India and Pakistan, in 1947, as this separated the Indian part of Punjab from its capital Lahore. Nehru wanted the new capital, Chandigarh, to be a 'symbol of India's freedom'.

The new city stands against the backdrop of the Shivalik Hills. The nominated Capitol Complex is at the centre of one side of the grid plan city layout. Three monumental reinforced concrete buildings, the High Court, the Assembly and the Secretariat, and four monuments, the Open Hand Monument, Geometric Hill, the Tower of Shadows, and Martyrs Memorial, are set on a vast concrete plaza. All the monuments, except the Open Hand Monument, straddle the central axis that connects the Assembly with the High Court Building. The nominated area also includes landscaped areas that separate the Capitol Complex from Uttar Marg, the main



street. The buildings were constructed over a period of about 15 years. For the most part the buildings are used as originally intended.

Corbusier's plan included a Governor's Palace and Museum of Knowledge, for which designs were produced but neither built.

*1953 Couvent Sainte-Marie-de-la-Tourette, Éveux, France*

The Couvent Sainte-Marie-de-la-Tourette 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 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 the 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 (1955-1969) was designed and mainly built by Le Corbusier; the Municipal Stadium (1955-1968) 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 (1960-1965 and 1968-2006) was designed by Le Corbusier (only as sketches) and built entirely after his death by his successor; and the Swimming Pool (1966-1969) was designed in the spirit of Le Corbusier by André Wogensky.

## **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 1905-1907. 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 (1917-1928)**

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), Petite villa au bord du lac Léman (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 Plan 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 (1928-1940)

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 (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 (Congrès Internationaux d'Architecture Moderne), 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 (1944-1965)

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-des-Vosges (1946-1950) and the two Maisons Jaoul at Neuilly (1951), which illustrate a new movement known as Brutalism. Religious buildings date from this period: the Chapelle Notre-Dame-du-Haut at Ronchamp (1950), the Couvent Sainte-Marie-de-la-Tourette 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).

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. Le Corbusier's later designs included 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, while other projects were constructed, such as the Pavillon de Zürich in Switzerland (1963-1967) and the Church of Firminy, which was completed in 2006.

## 3 Justification for inscription, integrity and authenticity

### Comparative analysis

The Comparative analysis in this third nomination dossier is completely new. It aims to determine whether the combination of Outstanding Universal Value and attributes put forward in the nomination is already represented on the World Heritage List, and whether a comparable series may be proposed for inclusion in the future. It also sets out a justification for the selection of sites in the series.

The comparative analysis is set out in three stages:

1. 20<sup>th</sup> century architecture on the World Heritage List and on Tentative Lists (as of 1 January 2015);
2. A comparative analysis of the properties proposed in these two lists and of 20<sup>th</sup> century architectural heritage in general;
3. A comparative analysis of the components selected from the work of Le Corbusier, allowing clarification of the selection process used for the proposed property.

Of 35 properties inscribed as part of 20<sup>th</sup> century heritage, almost a third of these are listed for reasons other than their architectural qualities. Only 22 properties are listed for their outstanding contributions to the development of 20<sup>th</sup> century architecture and urbanism. These are all considered in relation to the four concepts. In relation to the generation of global ideas, the conclusions drawn are first that it is necessary to consider the buildings as disseminating the written ideas of the architects that produced them, secondly that unquestionably, it was Le Corbusier who became established as the main theoretical contributor and disseminator of this new architectural thinking, and thirdly each component part of the series contributed to the international development of the Modern Movement

and this impact often went beyond mere questions of form or material to an expression of fundamental concepts which can be readily appreciated.

In relation to the invention of a new architectural language, the analysis outlines the evolution of the new formal architectural language of Modernism, from the Purism of the twenties to the sculptural forms of the sixties via Brutalism, from avant-garde to dominant model after World War II. It suggests that for over fifty years, the work of Le Corbusier was at the forefront of its development and that no other single properties or sites, or series, either on the World Heritage List or elsewhere, can reflect the same global influence or the breadth of issues associated with the new language.

In relation to modernising architectural techniques, the ideas of standardisation and industrialisation are seen to have originated in the 19<sup>th</sup> century and been pursued by other architects before Le Corbusier, such as Walter Gropius, but it is suggested that while others were more concerned with the image of industrialized architecture than with promoting transformation of construction methods, Le Corbusier aimed to define standard types, modules, and reproducible models. No other properties on the World Heritage List convey this aspect of the Modern Movement.

In responding to the social and human needs of modern man, it is suggested that the issues of housing for modern man and housing for the greatest number of people constituted the major challenge facing 20<sup>th</sup> century societies in general and modern architecture in particular. No other property on the World Heritage list reflects this issue; and on the Tentative Lists, the only single example is Frank Lloyd Wright's Usonian House (now part of a nomination).

The dwelling houses in the series are seen to mark not only emergence of a new art of living, but also examples of collective living, including a prototype for widespread reproduction. The series also reflects the principle of a balance between the individual and the community, an idea now central to the thinking of modern planners and architects. This is also not reflected on the World Heritage List or Tentative Lists with the possible exception of the university campuses of Caracas (Venezuela, Ciudad Universitaria de Caracas, 2000, criteria (i) and (iv)) and Mexico City (Central University City Campus of the *Universidad Nacional Autónoma de México* (UNAM), 2007, criteria (i), (ii) and (iv)) and that of Bogota (Tentative List), all of which meet these humanist goals in their design and planning but to a far lesser degree than components of the nominated series.

The analysis also considers who might be considered to be the main founder of the Modern Movement and suggests that Le Corbusier, through his works and the stands he took, built himself a unique place, occupied by no other architect within the small circle of the founders of the Modern Movement, and was acknowledged as its flag bearer.

The analysis compares other properties inscribed in relation to one specific architect. For each of these the Outstanding Universal Value is inseparable from the personality of each of their creators – whether Vauban, Gaudi or Horta –, but also cannot be understood without taking into account their respective cultural worlds and the influence that the works had.

It is pointed out that The Architectural Work of Le Corbusier is the first transnational file involving seven countries and three continents: Europe, Asia and America. Because Le Corbusier is the first architect in the history of mankind to have acquired this global importance, it is suggested that his contribution to architecture can only be understood at this level.

In terms of justifying the selection of component parts for the series, the analysis sets out a chart of 59 properties built by Le Corbusier and analyses how they might contribute or not to the proposed Outstanding Universal Value, whether conditions of authenticity are met, and whether they have adequate conservation and protection. This clearly sets out the relevance of the selected components but also includes others such as Centrosoyuz in Moscow, USSR (1929) that contribute to Outstanding Universal Value but do not currently have adequate conservation and protection.

ICOMOS considers that the comparative analysis adequately demonstrates that the nominated series in relation to its proposed Outstanding Universal Value does not have comparators either on or outside the World Heritage List, and also considers that the selection of components has been adequately justified.

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ICOMOS considers that the comparative analysis justifies consideration of this serial property for the World Heritage List, and the selection of its components.

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#### **Justification for inscription**

According to the States Parties, the 17 nominated sites that comprise The Architectural Work of Le Corbusier were designed and built between a pioneering period in the birth of the Modern Movement – the early 1920s – and the mid-1960s, when this architecture had begun to be challenged, having passed from avant-garde status to that of a globally dominant architectural style.

The series is seen to be of Outstanding Universal Value for the way it:

- Reflects the history of the Modern Movement through half a century;
- Demonstrates a radical break with styles, design methods, technologies, and construction practices of previous centuries;
- Crystallizes some of the major concepts of modern architecture for the first time on a global level such as a new architectural language, the free plan, free façade and roof terrace, the concept of space/time,

the industrialization and standardization of building, the democratization of architecture;

- Laid the foundations of architectural Purism and Brutalism, two major aesthetic components of the Modern Movement;
- Displays constant sculptural inventiveness, presaging the beginnings of sculptural architecture;
- Attests to a strategy of research and constant experimentation with materials such as concrete and glass, with the standardization of structural and facing components, and with the industrialization of building techniques;
- Includes several standard modules and prototypes that were designed to be mass-produced.

ICOMOS considers that the series supports this justification but also considers that the buildings within series acted as catalysts for spreading ideas around their own regions, and together spurred the development of the Modern Movement as a truly global force.

### **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 17 selected sites to represent and reflect the necessary attributes of Outstanding Universal Value.

In contrast to the two earlier nominations, ICOMOS considers that the nomination dossier now adequately demonstrates how the series might be seen to reflect the way Le Corbusier's buildings built in seven countries and three continents might be seen to reflect not only the development and influence of the Modern Movement but the way they were part of its transmission around the world.

#### **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. For some this is historical loss; where there is greatest concern is where this loss has happened during the course of the nomination process.

For Cité Frugès (Pessac), new buildings on the site of three destroyed standardised houses by Le Corbusier within the nominated property were inconsistent with the architect's concepts. One of them has already be bought by the municipality and demolished, 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'*.

There are historical losses (for instance, in Cité Frugès, Pessac, where three structural elements were destroyed within the nominated plot), but planning morphology/parcels of these area is not changed.

At 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. The setting of this site is fragile.

At the Maisons de la Weissenhof-Siedlung, Stuttgart, war-time destruction and post-war reconstruction, has led to the collective integrity of the model settlement being affected by the loss of ten houses out of twenty-one.

The two examples of recent loss of integrity are la Chapelle Notre-Dame-du-Haut à Ronchamp and Immeuble locatif à La Porte Molitor. At Ronchamp, where Le Corbusier's structure overlaid a centuries-old pilgrimage site, the integrity of the site has been compromised by a new visitor centre and a nunnery by the architect Renzo Piano near the chapel. Although the latter can be said to reinforce the traditional use of the area, its realisation has impacted visually on the approach to, cutting into the contemplative hillside setting of Le Corbusier's structure, competing with it and removing the original rising pathways. This has led to a serious loss of integrity. This extensive development was commented on adversely in the first evaluation but the work still went ahead.

At Immeuble locatif à la Porte Molitor a rugby stadium has been constructed right in front of the glass façade of the apartment block. This enormous structure immediately opposite the site, effectively compromises the setting of the site in the way it blocks all the views of the Bois de Boulogne which were such a feature of the apartments through their innovative glass facades at the time of their construction, and leads to a serious loss of integrity.

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.

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ICOMOS considers that the integrity of the whole series has been justified; and that the integrity of the individual sites that comprise the series is good in most cases, with some vulnerabilities, but with serious losses of integrity in the sites of Immeuble locatif à la Porte Molitor, and la Chapelle Notre-Dame-du-Haut at Ronchamp, where the development impacts need to be mitigated.

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## 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 how they contribute to the overall Outstanding Universal Value.

In contrast to the two earlier nominations, this current dossier shows clearly the way the overall series adds up to more than its component parts.

### 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.

At Cité Frugès, on three plots houses were constructed with traditional houses instead of Corbusian structures (one of these has now been demolished in September 2015 and there are plans to rebuild in more appropriate style). Elsewhere in the urban landscape, there is a partial loss of authenticity through neglect and interior changes. Further registration of individual houses is needed (in addition to already listed structures) in order to consolidate the authenticity of this component site.

At l'Unité d'habitation, the fire of 2012 destroyed a small part of the building. This has now been totally reconstructed to the original design, but with some reduction in authenticity.

The authenticity of the existing Capitol Complex in Chandigarh could be impacted if either or both of the governor's palace or the museum of knowledge were now to be constructed, an eventuality that has apparently been discussed. Even though plans exist, the lack of opportunity for the architect to be engaged in discussions on the building work would compromise their authenticity.

At the National Museum of Western Art in Japan (NMWA), the original intention for the forecourt of the Museum appears to be as a wide open space. Forecourt planting in 1999 tends to detract from the presentation of the building, its key views and the setting. Given the care that went into the reconstruction of the forecourt paving, including reinstating the modular system, the planting seems inconsistent with the conservation approach of NMWA. This planting could be reviewed in the future in order to strengthen authenticity.

The most problematic cases are those of la Chapelle Notre-Dame-du-Haut at Ronchamp and Immeuble locatif à la Porte Molitor.

The recent new developments at Ronchamp have a highly negative impact on the authenticity of this world-famous

chapel. Le Corbusier intended the chapel to be a place of silent meditation approached on foot along a winding path. At the entrance of the site, there is now a visual competition between the new constructions and the works of Le Corbusier, it is impossible to avoid the new large Porterie, the metal gates around the nunnery, and the harsh concrete walls of the car park that cut into the slopes. Although the new structures could have been sited much further down the hill and still allowed visitor to stroll on foot to the chapel, this option was not taken.

These interventions have severely compromised the authenticity of la Chapelle Notre-Dame-du-Haut at Ronchamp and undermined its ability to convey Le Corbusier's ideas. It is no longer a remote pilgrimage chapel, a serene object in the landscape approached gently on foot. The new roads and paths cut across Le Corbusier's established paths and destroy the fundamental relationship of the building with its landscape and its ability to convey the idea of the church as a remote site being reached after a stroll up the hill.

At Molitor the enormous rugby stadium has been constructed right in front of the glass façade, which is the main attribute of the building for the innovative way it conveyed light, air and spaciousness into the interior. The almost entirely glass facades, built using single glazing, wired glass or glass blocks, was at the time of its construction an unique example.

Permission was given in 2011, during the planning of the current nomination, for the construction of the stadium within a *Site inscrit*. Distant panoramas of Paris historically seen from the windows and balconies of the building have now been blocked by the body of the stadium. This stadium has severely compromised the ability of this site to convey its value.

### General

Some of the sites 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, such as the Masters' houses of Kandinsky/Klee at Dessau (Germany), the Villa Tugendhat at Brno (Czech Republic), and the Rietveld Schröder House in Utrecht (The Netherlands), reveals that these also share similar slightly 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.

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 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, while the Museum in Japan was considerably modified to strengthen its earthquake resistance. Nevertheless overall, the modifications can be seen to be reasonable, and proportionate, in relation to supporting the continued use of the building

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ICOMOS considers that the authenticity of the overall series has been demonstrated, and that for most sites while some modifications have been made their authenticity remains; this cannot however be said for the Chapelle Notre-Dame-du-Haut at Ronchamp where the new interventions have cut across the ability of the site to convey Le Corbusier's ideas and planning and led to considerable loss of authenticity; or for Immeuble locatif à la Porte Molitor where the new stadium has taken away the ability of the apartment block to demonstrate the way a glass façade brought views into the building and has also caused a considerable loss of authenticity. In both these sites, mitigation measures are needed to reverse these impacts.

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ICOMOS considers that the conditions of integrity and authenticity for the series have been fully justified; and for individual sites, the conditions of authenticity and integrity have been largely met, apart from two component sites, the Chapelle Notre-Dame-du-Haut at Ronchamp and Immeuble locatif à la Porte Molitor.

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#### **Criteria under which inscription is proposed**

The property as a whole is nominated on the basis of cultural criteria (ii) 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 States Parties on the grounds that The Architectural Work of Le Corbusier exhibits an unprecedented interchange of human values, on a worldwide scale over half a century, in relation to the birth and development of the Modern Movement.

The Architectural Work of Le Corbusier revolutionized architecture by demonstrating, in an exceptional and pioneering manner, the invention of a new architectural language that made a break with the past.

The Architectural Work of Le Corbusier marks the birth of three major trends in modern architecture: Purism, Brutalism and sculptural architecture.

The global influence reached by The Architectural Work of Le Corbusier on four continents is a new phenomenon in the history of architecture and demonstrates its unprecedented impact.

This influence is all the more powerful as The Architectural Work of Le Corbusier was further propagated by the architect's many writings, immediately disseminated and translated throughout the world. This unique complementarity between the built work and the publications made Le Corbusier the main spokesman for the new architecture and led to his work becoming a worldwide source of inspiration.

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ICOMOS considers that this criterion has been justified for the whole series.

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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 directly and materially associated with ideas of the Modern Movement, of which the theories and works possessed outstanding universal significance in the 20<sup>th</sup> century. The series represents a "New Spirit" that reflects a synthesis of architecture, painting and sculpture.

The Architectural Work of Le Corbusier materializes the ideas of Le Corbusier that were powerfully relayed by the International Congress of Modern Architecture (CIAM) from 1928.

The Architectural Work of Le Corbusier is an outstanding reflection of the solutions that the Modern Movement sought to apply to the major challenges of the 20<sup>th</sup> century:

- invent a new architectural language;
- modernize architectural techniques;
- respond to the social and human needs of modern man.

The contribution made by The Architectural Work of Le Corbusier to these major challenges of the 20<sup>th</sup> century is not merely the result of an exemplary achievement at a given moment, but the outstanding sum of built and written proposals steadfastly disseminated worldwide through half a century.

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ICOMOS considers that this criterion has been justified for the whole series.

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ICOMOS considers that the serial approach and the selection of the series have been justified.

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ICOMOS consider that the criteria and the Outstanding Universal Value have been demonstrated for the series.

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## 4 Factors affecting the property

There are no generic factors facing all elements of the nomination. The factors are specific to individual sites.

In the second dossier, it was stated that at five sites – Cabanon de Le Corbusier, Maison Guiette, Villa Savoye, Immeuble locative à la Porte Molitor and la Chapelle Notre-Dame-du-Haut à Ronchamp – there were projects in the sites or in 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.

As set out below, ICOMOS considers that in two cases, the promised studies have not reduced or eliminated impact and major projects have had serious and detrimental effects.

### La Chapelle Notre-Dame-du-Haut at Ronchamp

In the first evaluation, it was noted that the most substantial and imminent proposed development was at this site for buildings designed by Renzo Piano to be constructed within the Bourlémont hill on which the Chapelle Notre-Dame-du-Haut stands, and thus within the nominated site. These were to 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. The second dossier explained how the owners of Ronchamp sold part of the site to the Association of Friends of St. Colette, owners of the Monastery of St. Claire of Besançon, in order to develop the nunnery.

There were many objections to the scheme, including from the Le 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. ICOMOS communicated concerns about the proposal to the State Party in a letter sent on 19 December 2008.

The proposals were nonetheless given permission in March 2008 and the buildings have now been constructed. ICOMOS considers that this intervention is greatly regrettable and has a considerable and highly detrimental impact on authenticity and integrity as set out above. ICOMOS does not consider that these impacts should be accepted and that mitigation measures must be developed and implemented in order to allow this component site to convey fully the attributes for which it was nominated.

### Villa Savoye

The recent mission reported that a large 'Pôle culturel et multimédia' project is being planned to be opened in 2019. The pre-project details were submitted following the mission. The proposed centre will have several functions, and be of significant scale. It could potentially disturb the integrity of the surroundings of the property

and impact on historic views from the upper terrace. The project is at an early stage and has yet to be fully assessed. As the setting of the villa has already been compromised by a lycée and a sports field, ICOMOS considers that detailed Heritage Impact Assessment must be carried out, before any commitment is given to this project, and submitted for review.

### Immeuble locatif à la Porte Molitor

Since 2008 – and without any mention of details in the second dossier – a large-scale rugby stadium was built in 2013 directly in front of this apartment building. The enormous structure immediately opposite the site, effectively obscures all the views of the Bois de Boulogne, which were a feature of the apartments at the time of their construction. The massive new stadium is on land that is protected as a 'site inscrit'. This construction, as well as overwhelming the site, calls into question the effectiveness of the protective measure for the setting of this site and others.

### L'Unité d'habitation, Marseille

A huge velodrome of intensive architectural form, and bright white colour has been constructed just outside the limits of the buffer zone. From some vantage points on the upper level of the l'Unité d'habitation it intrudes strongly into views. Its construction suggests that there was insufficient visual analyses and impact assessments undertaken before permission was given, and that current zoning restrictions are inadequate. There is also a risk of redevelopment of the 'Renault' and 'Peugeot' sites in the vicinity. As in certain nearby zones buildings could be constructed up to 32 metres in height, if these heights were reached there could be potential risks for the property if original visual corridors are not respected. There is an urgent need for the setting and views to be more clearly defined and appropriately protected.

At Maisons La Roche et Jeanneret the visual appreciation of the site is diminished by car parking in the Square du Docteur Blanche. There is also pressure from intensive vertical or large-scale development in adjacent urban areas in the buffer zone.

### Maison du Docteur Curutchet

In the first evaluation it was stated that the principal threat to the Maison du Docteur Curutchet is the pressure of the dynamic urban context. Many of traditional houses have been replaced with new high buildings, especially downtown. An apartment block more than double the height of the property had been built right at the edge of the curved 1930s building that adjoins the property and there are further tall buildings at the corner of the block. A new building is under construction in the street immediately behind the house. The current protection appears to be inadequate to control development beyond the small buffer zone.

### National Museum of Western Art

Although more developed land to the east of the Museum has been included within the buffer zone, visual analysis of potential impacts on the NMWA need to be a



critical part of impact analysis for any future development proposals in or near the buffer zone.

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.

A new security problem has developed at Ronchamp. With the development of the visitor centre and monastery, the porter's lodge was demolished leaving no inhabited house on the site. This has had the unfortunate effect of encouraging vandalism and opportunistic attempts at theft. Le Corbusier's Moon window was smashed into pieces in January 2014 and the Chaplain's house has been broken into.

The delicate atmosphere of the hill and its age-old pilgrimage tradition is now at risk due to the twin uses of the place, and to the improved road access, not only to the Monastery but – for the nuns – also to the Chapel. There is an urgent need for the installation of physical and other protection of the coloured windows and other elements on the site and measures taken to control access particularly at night.

The nomination dossier identifies four component sites that are subject to seismic risks to varying degrees. For some such as the National Museum in Tokyo, extensive work has been undertaken to strengthen the building and this has had a substantial impact on the built fabric.

No implications of climate change have been identified.

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ICOMOS considers that the main threats to the property are development pressures in the property, buffer zone or wider setting, which in two sites have been realised.

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## **5 Protection, conservation and management**

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

France

For the sites in France, the revised nomination dossier contains detailed and recently drawn maps in colour for each component and its buffer zone indicating the geographical position, both at a local and a regional scale. The revised maps provides a revision of the buffer zones, which are now no longer defined as circles but based on local circumstances and the visibility of the properties. The demarcations are now all defined in a more or less logical relation to their local topographical, historical and urban situations. The effectiveness of these revised buffer zones is supported by additional urban planning measures, although in some instances these

have yet to be fully implemented – as also set out below.

In four sites, the buffer zones had been reduced from the 2009 and 2011 nomination dossier: Immeuble locatif à la Porte Molitor, the Maisons La Roche et Jeanneret, Villa Savoye and l'Unité d'habitation. These reductions appeared to relate to the pressures from urban development.

In response to a request from ICOMOS, the State Party of France has amended the buffer zones for Molitor, Maison La Roche et Jeanneret, Villa Savoye, the Chapelle Notre-Dame-du-Haut at Ronchamp, the Centre de Firminy and Cabanon de Le Corbusier.

At Ronchamp, the newly defined boundaries of the nominated area and the buffer zone in the revised nomination dossier were more comprehensive than before but needed to be more precise near the Porterie. Small adjustments have now been made to the buffer zone as discussed during the mission relating to the need for clearer demarcation based on visible landscape features and the inclusion of some small identified 'gaps'.

At Couvent Sainte-Marie-de-la-Tourette, the boundaries of the site have been amended to ensure all attributes have been included such as the monastic cemetery (in the south-west direction), the main entrance alley and the planning axis (Allée Cavalière).

At Maisons La Roche et Jeanneret, following the mission, the nominated area has been enlarged to include the Square du docteur Blanche as historically this was an integral planning element. The revised nomination only included a small buffer zone, which had been reduced by almost a hundred hectares since 2009. At the request of ICOMOS, this has now been enlarged.

At l'Unité d'habitation, following the mission, the south-west boundary of the nominated site was adjusted to remove a private house, which has never been a part of Le Corbusier's planning structure.

Subsequent to the ICOMOS technical evaluation mission, the buffer zone has been extended.

At Villa Savoye, in the revised nomination, the buffer zone had been diminished from 376.156 ha to 128.167 ha. At the request of ICOMOS, this has now been extended zone to include historically supportive areas.

At Cabanon de Le Corbusier and Roquebrune Cap-Martin, minor modification to the buffer zone have been made following the ICOMOS technical evaluation mission to include the grave of Le Corbusier.

At Immeuble locatif à la Porte Molitor, in the 2011 nomination dossier, the buffer zone was 67.033 ha and, according to the ICOMOS technical evaluation mission, had now been diminished to 47.916 ha - although no buffer zone was marked on the formal plans.

New plans submitted show the buffer zone extended to include early 20<sup>th</sup> century public and residential buildings (between avenues du Parc des Princes/General Sarraill and avenue Murat) which were historically in direct visual contact with the nominated building. A revised map has been produced which now includes the new stadium.

#### Switzerland

In the original dossier, the three sites in Switzerland all had buffer zones of 100 m radius and were 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 100 m 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 100 m should be reconfigured. The revised dossier shows an enlarged buffer zone but the protection given to this extended area is not set out. The State Party of Belgium has clarified that there is no specific protection relating to the proposed buffer zone. However, the Government of Flanders will look into the possibility of extending the current protection of the Maison Guiette as a monument with a 'transition zone' (*overgangszone*).

#### 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. Following the mission, the small buffer zone was enlarged to include a triangular block defined by Calle 54, Calle 2 and Diagonal 78, in order to avoid further rising tall buildings in the background of the Casa Curutchet.

#### Japan

The buffer zone for the National Museum has been extended to include the Tokyo University of Arts, Ueno Station area, JR East lines and an area further to the east, in response to comments in the ICOMOS evaluation of 2011. It is still the case, though, that the extent of the buffer zone has been related to the planning context rather than a historical or visual analysis of the NMWA site.

The visual analysis from three viewpoints is incorporated as an annex of the revised dossier. Following the mission, further satisfactory clarification has been provided on the eastern section of the buffer zone within the East Side Zone of the Special Scenic Development

Zone under the Landscape Act, in relation to the potential visual impacts of development both from and to the nominated site.

#### India

Following the ICOMOS technical evaluation mission, in order to more fully convey the intent of the proposed inscription as a Capitol Complex, not just as an ensemble of Capitoline buildings and monuments, the boundary has been extended to include the mound and the pedestrian linkage from the Jan Marg to the Capitol Plaza. This allows the approach to the Capitol Complex to be via a central path flanked by landscaped hills on either side. Such a path was central to Le Corbusier's ideas.

Following the mission, clarification has been provided on the protection offered to the wider setting of the property beyond the buffer, particularly in relation to the Shivalik hills and the village of Kansal.

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ICOMOS considers that the boundaries and buffers zones are adequate.

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#### Ownership

Most of the nominated properties are privately owned. Three belong to the Le Corbusier Foundation (Maisons La Roche and Jeanneret in Paris, Petite villa au bord du lac Léman in Geneva, Immeuble locative à la Porte Molitor in Paris). The Ronchamp Chapel belongs to the private Association Oeuvre Notre-Dame-du-Haut. The Manufacture Duval is privately owned by the same production firm as commissioned the building. The Immeuble Clarté, Geneva is owned by its residents.

The Villa Savoye at Poissy, the Weissenhof houses in Stuttgart, the Cabanon at Roquebrune-Cap-Martin, the Museum in Tokyo, and elements of the site at Firminy belong to the respective States Parties or to public authorities.

#### Protection

Many of the components received early protection in their respective countries, mostly in the two decades following Le Corbusier's death. Some, like the Maisons de la Weissenhof-Siedlung in Stuttgart and the Unité d'habitation in Marseille, were given protection during Le Corbusier's lifetime.

The revised nomination dossier provides a helpful chart that sets out for each component the relevant forms of legislative protection.

#### France

In France a new Law on '*Liberté de création, architecture et patrimoine*' (CAP), is expected to be approved in mid-2016. This might introduce significant changes for heritage protection. The Law CAP could transform all major protection zones established at the national level (Secteur Sauvegardé, ZPPAUP and AVAP) and on which the nomination dossier is based, into '*Cité Historique*', which means that some World Heritage

properties would be protected within the Urban Code instead of the Heritage Code. Further details need to be provided by the State Party to clarify the implications.

As set out above under boundaries, where the buffer zones have been extended they now have a combination of national and local protection.

The Maisons La Roche et Jeanneret are both protected according to the Historic Monuments Act (*classement*), including the exterior and interiors. The national protection includes a buffer zone of 500 m.

The Villa Savoye and gardener's 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 500 m. The areas facing the River Seine are protected as *Sites et Monuments Naturels* by the decision of the Ministry of Environment.

The exterior (facade and roof) and the public spaces of the Immeuble locatif à la Porte Molitor are protected according to the Historic Monuments Act (*inscrit*). The apartment of Le Corbusier is protected (*classement*). The building should also be protected. The buffer zone is protected as a *site inscrit*. Nonetheless this has not prevented the construction of a huge stadium immediately in front of the glass facade of the site.

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).

There is currently no or inadequate protection for the small garbage facility building and for the garden and its structures.

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 buffer zone is currently in transition from ZPPAUP protection zone to AVAP (*Aire de Valorisation de l'Architecture et du Patrimoine*) with the same boundary. At the same time, the whole protection system could be transformed into "*Cité Historique*" as envisaged in the Law on "*Liberté de création, architecture et patrimoine*", which is currently being debated and which could become law in mid-2016.

The Couvent de 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 500 m 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, and the office. The buffer zone is awaiting the implementation of supportive protection.

The Cité Frugès, Pessac, is protected according to the Historic Monuments Act (*classement*). Ten individual buildings are being considered for protection. Though significant progress has been achieved compared with 2008, protected buildings consist of only 28% of the housing stock. For private owners in Pessac, increased protection could provide access to increased grants for restoration.

The buffer zone is still protected by seven specific zones (within ZPPAUP). As with Firminy-Vert the whole protection system could be transformed into '*Cité Historique*' as envisaged in the Law on '*Liberté de création, architecture et patrimoine*' which is currently being debated and which could become law in mid-2016.

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, as well as the outdoor cross, benches and movable objects. In 1999, the Chapel ensemble was the first to receive the '*Patrimoine du XX<sup>ème</sup> siècle*' label. The local authorities have developed adequate supportive regulations for the buffer zone and the adjacent natural reserve. Nonetheless the recent development partly in the site and partly within its buffer zone brings into question the effectiveness of the protection.

At l'Unité d'habitation, Marseille, the construction of a huge velodrome has impacted on some views from the apartments, suggesting that the protection of the setting could be strengthened.

#### Switzerland

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 Immeuble 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. The property is also now protected by Federal law.

In order to protect its setting, district planning rules control the height and volume of possible new constructions. This has been effective.

#### 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.

The regional plan indicates that the area around the house, except for the Park and Ride area nearby the house, is zoned mainly for residential use and that the present green areas will be maintained. These regulations provide an effective framework in general for the buffer zone.

#### 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 an Historical 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 (Building), Class A. The entire garden of the NMWA is protected a Registered Monument (Place of Scenic Beauty). The scope of the Important Cultural Property (Building) designation does not include the reconstructed elements of the two staircases and forecourt however, along with the Main Building; they comprise part of the Registered Monument (Place of Scenic Beauty). This is because the Law does not allow reconstructed elements to be protected.

The whole of the buffer zone falls within the Special Scenic Development Zone under the Landscape Act and two zones of the City Planning Act: the Urban Planning Park and the Scenic Zone in which building is restricted and landscape conservation is supported.

#### India

Each of the three buildings and four monuments is protected as Grade 1, the highest heritage classification India. The entire complex as a whole has also been given the highest classification as a heritage precinct. The boundaries of the nominated property lie within the Grade 1 heritage precinct. The protective measures for the buffer zone and the wider setting are satisfactory.

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. At some sites, this protection needs strengthening.

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ICOMOS considers that in theory the protective measures for the property are largely adequate and for the buffer zones need strengthening at some sites, although the recent permissions given for developments at Ronchamp and Molitor suggest that the planning processes are not being applied in a way that fully considers impact on the value of the component sites in relation to the Outstanding Universal Value for which the series has been nominated.

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#### Conservation

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 Le Corbusier Foundation mostly holds documents for after 1917.

The ICOMOS technical evaluations missions undertaken were able to compare the state of conservation in 2008 with the situation today and to understand what conservation projects had been undertaken in the intervening years.

#### France

For most of the sites, the state of conservation is good.

Since 2008, at Saint-Dié-des-Vosges, partial repair has been executed and more work is planned.

Extensive restoration was undertaken at the Couvent de Sainte-Marie-de-la-Tourette, between 2006 and 2013. After the completion of the construction works, the Dominican monastery has never been the object of intensive transformations and extension. Restoration projects for upper terrace and some other parts of the building were carried out in the 1980s, and between 1995 and 1998. Significant conservation campaign covers 2006-2013.

At the Chapel at Ronchamp further work is needed to improve the overall conservation of the site.

At the Villa Savoye, the gardener's house has been fully restored. In the main house, no further work has been undertaken on researching or re-instating the original colour scheme in the interior.

For Maisons La Roche et Jeanneret, during recent restoration work between 2008 and 2014, the original colour schemes and textures have been restored on the basis of scientific research.

The one site where there are conservation issues is the Chapel at Ronchamp. The ICOMOS mission reported that little conservation work had been undertaken since 2008, in spite of there being an agreed conservation

plan. It appears that funding has been diverted to the new monastery. ICOMOS considers that there is now an urgent need for action to be taken by the owners, in collaboration with the Le Corbusier Foundation with the advice of relevant experts, to reinstate regular maintenance and to implement the agreed conservation programme for the Chapel and its ancillary buildings.

At Manufacture de Saint-Dié, Mr. Duval, the son of the original client, actively conserves the original character of the building. Although there are no immediate risks, ICOMOS recommends that a conservation plan be drafted for the benefit of future owners and managers.

#### Switzerland

Since 2008, the conservation of the two Swiss components has improved as a result of recent and well documented restorations. Only the rooftop apartment at Immeuble Clarté needs repair and upgrading, which is soon to be undertaken by the same architect as for the rest of the building.

In the case of the Immeuble 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.

#### Belgium

The house is basically well conserved.

#### Germany

The double house, now serving as a museum, is maintained in a good condition since its thorough restoration, as is the garden.

The single family house and its garden are in a fair condition. Since 2008, the deteriorated concrete 'window' construction on the rooftop of the single-family house has been faithfully repaired. Further work is needed to conserve and return the concrete bench near the chimney and to address a cracked kitchen window and a few other defects.

Overall there is a need in the medium to long term for a large project to fully restore this single house.

#### Argentina

Although state of conservation of Maison du Docteur Curutchet is good, ICOMOS recommends that a comprehensive documentation of the property is undertaken as a basis for a detailed conservation plan to guide future interventions.

#### Japan

For the National Museum of Western Art, 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.

#### India

The monuments are generally in a better state of conservation than the buildings. Of the buildings, the Assembly is in the best condition, with the concrete relatively well maintained, while the High Court and the Secretariat, which both see substantial use and traffic, are not as well maintained. The industrialized building components, such as steel components of the glass curtain wall and the insect screens of the aerators, have tended to rust. This has made the windows largely inoperable and thus unusable for climatic control.

Le Corbusier's original drawings all still survive but need urgent conservation and climatic controlled storage.

ICOMOS considers that there is an urgent need for a Conservation plan to be prepared, as foreseen in the Management Plan. Ongoing conservation work needs to respect ideas of natural light and natural ventilation that were essential parts of Corbusier's designs. Apertures for natural light that are sealed off or ventilating aerators that are sealed shut, may need to be revived in order that the buildings may be seen to work as spaces.

The State Party has confirmed that the process for developing a conservation plan has been initiated. This will include visual and structural surveys, an action plan for restoration and conservation based on the combined findings of the visual and structural surveys and framing of Architectural Regulations to oversee future development and conservation. The plan should be completed by 2020.

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. The exception currently is Chandigarh.

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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.

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### Management

Management structures and processes,  
Including traditional management processes

#### Management of the overall series

For serial nominations within one country, the *Operational Guidelines for the Implementation of the World Heritage Convention*, 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 Standing Conference has been established. The principle was adopted by the seven States Parties and the first meeting of the Conference was scheduled to be held in Paris in the first half of 2015. This meeting would be a continuation of all the meetings held since the third nomination file was launched in 2012 (ten international meetings per year, in addition to the regional or local meetings).

The Standing Conference will coordinate the management of the Property, advise States Parties and implement actions for promotion and enhancement of the Property.

Furthermore, an Association of Le Corbusier sites has been set up to bring together all the local authorities in whose territories sites have been nominated. The first meeting was held in Ronchamp in 2010. Its main objectives are coordination, raising public awareness, sharing conservation experience, overall coordination and management of the series, and implementation of management plans for each of the component sites. The Association has met regularly in each of the towns associated with the application.

The involvement of the expertise of the Le Corbusier Foundation – that has the moral rights over Le Corbusier's oeuvre – is also crucial for appropriate management and conservation of the nominated series, especially in those cases where the properties are in private hands other than the Foundation. The effectiveness of protection is in these cases highly dependent on the willingness of their private owners.

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.

Given the special problems associated with the conservation of 20<sup>th</sup> century architecture, a continuous involvement of (inter)national specialists on the conservation of Modern architectural heritage is also essential. In Switzerland the federal administration can call such specialized experts for advice to support the local conservationists (and has done so already). A similar approach is highly recommended for France, where ten components are located in six different counties (*départements*) and the 'deconcentrated' implementation

of the legislative protection involves many different approaches, and for other countries.

Within both France and Switzerland coordinating committees have been set up to oversee the management of sites in those countries.

What remains unclear is how dialogue is undertaken between countries in relation to sensitive development projects. There is clearly a need for contributing States Parties to have knowledge of, and opportunities to comment on, proposed development in a component site that might compromise the value of the overall series.

Management plans for each site

The development of the third nomination and particularly the creation of the International Association of Le Corbusier sites, has facilitated the development of local management plans for component sites. These have been implemented on a partnership basis between owners and the cultural, heritage and planning departments of the local authorities in whose area they are sited.

Sites in France, Germany, Belgium, Argentina, and Japan all have local Management Plans. The two sites in Switzerland have a local section of a national management plan, while the site in India currently is only guided by the Chandigarh Master Plan although a management plan has been prepared.

The nomination file sets out clearly the management responsibilities for all the component sites. Below are comments on specific aspects of management at various component sites.

France

The current owner of the Manufacture Duval à Saint-Dié is responsible for the management of both the production firm and the premises. He is very devoted to the factory and Le Corbusier's architectural characteristics but it is desirable that brings in advice from the Le Corbusier Foundation and other specialists to draw up and implement a feasible management plan for the maintenance and conservation of the site.

At Ronchamp the management system is not currently effective enough in providing ongoing conservation and maintenance and in ensuring the security of the site. ICOMOS considers that action needs to be undertaken to put in place a specific agreement between the various parties involved to establish and implement a long-term management plan and to address the current weaknesses. This needs to have a clear allocation of funds and clear responsibilities.

Switzerland

The management of the Petite villa au bord du lac Léman is the responsibility of the municipality of Corseaux. ICOMOS recommends that a specific management plan is drafted to set out current responsibilities and systems.

The Cantonal authorities have indicated that there will be more supervision to guide appropriate conservation of the recently restored Immeuble Clarté. There is a need to set out guidelines for the occupants of the apartment as well as the restaurant.

#### Germany

For the single house which is rented out as a home, ICOMOS recommends that specific guidelines for maintenance and use be drawn up for future occupants.

#### Argentina

The Maison du Docteur Curutchet is managed by The Council of Architects of the Province of Buenos Aires. Greater supervision of development in the setting is needed.

#### India

Under the Chandigarh Administration, the Chandigarh Heritage Conservation Committee, or CHCC, is being created, which will have overall supervision of any conservation and maintenance of the Capitol Complex. The States of Punjab and Haryana work together in an interstate committee dedicated to the joint maintenance of the complex, including the removal of additions and insensitive alterations, as well as the restoration of the buildings.

A management plan has been prepared as part of the nomination. This will be implemented by the Chandigarh administration. The Plan calls for a Conservation Plan to be developed.

As there is tension between the Le Corbusier's design for buildings to be cooled by natural ventilation and the demands for air-conditioning, and as air-conditioning units nestled in the brise soleil are visually jarring, there is a need for mechanical engineering expertise to be brought into the management structure.

#### Japan

A revised detailed management plan was created in September 2013. This does not have a concrete actions plan and it would be desirable if specific conservation measures could be identified to address the reconstruction of the interior of the former director's office, a restoration of the forecourt and a restoration of "exhibition rooms with natural lighting" which was an important concept of Le Corbusier's museum designing.

During most of the ICOMOS missions, it was noted that general understanding of the rationale for the series has increased for which the formation of the Association of Le Corbusier sites had had a role.

This was particularly evident in the two 'Citrohan type' houses in Stuttgart where emphasis was laid on the place that they have in both Le Corbusier's development of house types, as well as in the international influence of the Weissenhof-Siedlung in general as part of global spread of the Modern Movement.

Although various websites and leaflets do now refer to the serial nomination, more efforts are desirable to communicate the coherence between the seventeen nominated components of Le Corbusier's oeuvre on each site to the public at large.

As the nomination dossier has set out so clearly the way each item contributes to the whole, an interpretation strategy that allowed each property to explain the Outstanding Universal Value of the whole series and how each component contributes to it, is highly desirable. Perhaps a specific sign could eventually mark each component.

The current staffing levels and levels of expertise and training are high in all sites and mechanisms to allow liaison between sites have been put in place. Nonetheless, there appears to be a need for more capacity building on the processes of impact assessment and a need to formalise and clearly define conservation approaches and procedures across the series.

#### Involvement of the local communities

Almost no involvement of local communities was mentioned in the first two nomination dossiers. Since then there has been more activity in some sites such as the Museum in Tokyo where local communities actively support the inscription and have been involved in some transnational exchanges with the communities in other component parts.

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ICOMOS considers that the management system for the overall serial property is adequate. For individual sites, great progress has been made in putting in place management plans for nearly all components. These need to be strengthened through more specific focus on the attributes of Outstanding Universal Value which have now been clearly defined and the formal use of Heritage Impact Assessments. Clearly defined conservation approaches need to be put in place for the overall series. The Management plan for Chandigarh needs to be submitted together with details of its implementation.

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## 6 Monitoring

Monitoring indicators were provided in the nomination dossier for the series. These are mainly technical indicators related to budgets, tourism, development, and protection measures. What was missing from these indicators were links to the attributes of Outstanding Universal Value. As the attributes of Outstanding Universal Value for the series have now been clearly set out, as well as how each site contributes to these overall attributes, it is these that need to be monitored.

In response to a request from ICOMOS, model attributes were developed for the two properties in Switzerland and a timetable for developing indicators for the rest of the series by the end of 2016.



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ICOMOS considers model indicators are clear and adequate and should be developed for the rest of the series.

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## 7 Conclusions

ICOMOS considers that enormous strides have been taken by the contributing States Parties since 2009. Not only has the nomination dossier been completely re-structured and re-focused, but greatly strengthened management systems have been put in place at both local and international level. During the same time, dialogue between the various States Parties has increased (for a very low base for the first nomination), so that there now appears to be a shared understand of the scope of the nomination and the challenges that have to be addressed. The beginnings of dialogue between local communities involved in individual sites are also emerging.

Most importantly, the nomination now sets out a clear rationale for the series, based on the sites and what they convey in relation to the development of the Modern Movement and to Le Corbusier's contribution to it over half a century, and for the way each of the sites makes specific contributions to the overall series.

There has been much debate within the World Heritage Committee over many years as to how 20<sup>th</sup> century heritage should be inscribed on the World Heritage List in relation to the balance between an architect and his work. The first two nominations submitted for this series were not supported by the World Heritage Committee as they did not clearly differentiate between the importance of Le Corbusier and the importance of the nominated sites, nor did they articulate the way the sites conveyed ideas that could be shared by the whole series, or spell out strongly enough why, for Le Corbusier's work, a global series was justified for the way it relates to the first manifestations of an architect's global reach.

ICOMOS considers that the current nomination does all of these and can be seen as a model as to how a series related to the work of an architect might be structured.

While the new dossier has been compiled, nevertheless there have been increased development pressures on some sites. At two sites, la Chapelle Notre-Dame-du-Haut at Ronchamp and Immeuble locatif à la Porte Molitor, the developments have had a highly damaging impact on their authenticity and integrity and on the ability of the components to convey the ideas for which they have been nominated.

At Ronchamp, the project to develop new monastic buildings and a visitor reception, both designed by Renzo Piano, in spite of opposition by the Le Corbusier Foundation and by ICOMOS in its second evaluation, has resulted in structures being inserted in to the hill that completely overwhelm the remoteness and serenity of

the fragile chapel as a place of pilgrimage, and relationship with its setting as envisaged by Le Corbusier.

At Molitor, a giant stadium has been constructed directly in front of this glass fronted building that fundamentally alters its relationship with the landscape of the Bois du Boulogne that was formerly brought into the apartments through the glass facade.

ICOMOS greatly regrets that these developments have occurred during the evaluation process.

These two developments bring into focus the adequacy of the current protective arrangements. Although the State Party of France has offered details on consultations before these two projects were approved, the precise details as to how the potential negative impacts were assessed remain unclear and do not appear to have adequately considered the potential international value of these sites in relation to the national importance of pilgrimage at Ronchamp and sporting associations at Molitor.

ICOMOS considers that the interventions at these two component sites have impacted to such a degree on their authenticity and integrity and on their ability to convey their contribution to the series, that mitigation measures should be developed, including the possibility of reversing the interventions as soon as possible and within a defined time frame of 20 years.

ICOMOS also considers that all major projects that could impact on the series should be communicated to the World Heritage Centre in line with paragraph 172 of *Operational Guidelines for the Implementation of the World Heritage Convention*. It will be essential in the future for all projects to be evaluated through Heritage Impact Assessments on the contribution of each of the component sites to Outstanding Universal Value. It is for this reasons that clearly defined monitoring indicators relating to the attributes of Outstanding Universal Value are so essential for all component sites.

Furthermore, consideration should also be given to refining the power of the Standing Conference to allow full understanding by all States Parties of major development proposals in all component sites, in relation to their potential impact on the overall series.

A lack of clarity relates to the new Heritage Law being developed in France which, it is anticipated, will be introduced in the second half of 2016. Currently there is no final text available but indications are that the new law will bring significant changes to the way heritage assets are protected and are subject to planning controls. ICOMOS considers that it is of importance that the implications of this new Law are made clear as soon as full details are available in order to understand whether extra protection is needed over and above what the Law can provide.

The nomination makes it clear that the new Standing Conference may recommend extensions to this series. ICOMOS considers that the World Heritage Committee needs to agree the ultimate scope of this series.

## 8 Recommendations

### Recommendations with respect to inscription

ICOMOS recommends that The Architectural Work of Le Corbusier, An Exceptional Contribution to the Modern Movement, France, Argentina, Belgium, Germany, India, Japan, Switzerland, be inscribed on the World Heritage List on the basis of **criteria (ii) and (vi)**.

### Recommended statement of Outstanding Universal Value

#### Brief synthesis

Chosen from the work of architect Le Corbusier that survives in eleven countries on four continents, the sites in seven countries on three continents, implemented over a period of half a century, attest to, for the first time in the history of architecture, the internationalization of architectural practice across the entire planet.

The seventeen sites together represent an outstanding response to some of the fundamental issues of architecture and society in the 20<sup>th</sup> century. All were innovative in the way they reflect new concepts, all had a significant influence over wide geographical areas, and together they disseminated ideas of the Modern Movement throughout the world. Despite its diversity, the Modern Movement was a major and essential socio-cultural and historical entity of the 20<sup>th</sup> century, which has to a large degree remained the basis of the architectural culture of the 21<sup>st</sup> century. From the 1910s to the 1960s, the Modern Movement, in meeting the challenges of contemporary society, aimed to instigate a unique forum of ideas at a world level, invent a new architectural language, modernize architectural techniques and meet the social and human needs of modern man. The series provides an outstanding response to all these challenges.

Some of the component sites immediately assumed an iconic status and had world-wide influence. These include the Villa Savoye, as an icon for the Modern Movement; Unité d'habitation in Marseille as a major prototype of a new housing model; Chapelle Notre-Dame-du-Haut de Ronchamp for its revolutionary approach to religious architecture; the Cabanon de Le Corbusier as an archetypal minimum cell based on ergonomic and functionalist approaches; and the Maisons de la Weissenhof-Siedlung that became known worldwide, as part of the Werkbund exhibition.

Other sites acted as catalysts for spreading ideas around their own regions, such as Maison Guiette, that spurred the development of the Modern Movement in Belgium and the Netherlands; the Maison du Docteur

Curutchet that exerted a fundamental influence in South America; the Musée National des Beaux-Arts de l'Occident as the prototype of the globally transposable Museum of Unlimited Growth which cemented ideas of the Modern Movement in Japan; and the Complexe du Capitole that had a considerable influence across the Indian subcontinent, where it symbolized the Indian's accession to modernity.

Many of the sites reflect new architectural concepts, principles, and technical features. The Petite villa au bord du Léman, is an early expression of minimalist needs as is also crystallized in the Cabanon de Le Corbusier. Le Corbusier's *Five Points of a New Architecture* are transcribed iconically in Villa Savoye. Immeuble Molitor is an example of the application of these points to a residential block, while they were also applied to houses, such as the Cité Frugès, and reinterpreted in the Maison Curutchet, in the Couvent Sainte-Marie-de-la-Tourette and in the Musée National des Beaux-Arts de l'Occident. The glass-walled apartment building had its prototype in the Immeuble Molitor.

A few sites created major trends in the Modern Movement, Purism, Brutalism, and a move towards a sculptural form of architecture. The inaugural use of Purism can be seen in the Maisons La Roche et Jeanneret, Cité Frugès and the Maison Guiette, the Unité d'habitation played a pioneering role in promoting the trend of Brutalism, while La Ronchamp and the Complexe du Capitole promoted sculptural forms.

Innovation and experimentation with materials of architectural components are reflected in the independent structure of concrete beams of the Maisons de la Weissenhof-Siedlung, while pre-stressed reinforced concrete was used in the Couvent de La Tourette. In the Complexe du Capitole, concern for natural air-conditioning and energy saving, led to the use of sunscreens, double-skinned roofs, and reflecting pools for the catchment of rainwater and air cooling.

Standardisation – part of the search for perfection – is seen in the Unité d'habitation de Marseille, a prototype intended for mass production, while the Petite villa au bord du Lac Léman set out the standard for a single span minimal house, and le Cabanon de Le Corbusier a standard, minimum unit for living. The modulator, a harmonic system based on human scale, was used for the exterior spaces of the Complexe du Capitole, which reflect the silhouette of a man with raised arm.

The idea of buildings designed around the new needs of 'modern man in the machine age', is exemplified in the light new workspaces of Manufacture à Saint-Dié, while the avant-guard housing at the Cité Frugès, and the affordable Maisons de la Weissenhof-Siedlung, demonstrate the way new approaches were not intended for a tiny fraction of society but rather for the population as a whole. By contrast the Immeuble Clarté was intended to revolutionise middle class housing. *The*

*Athens Charter*, as revised by Le Corbusier, promoted the concept of balance between the collective and the individual, and had its prototype in the Unité d'habitation, while the Complexe du Capitole, the focal point of the plan for the city of Chandigarh, is seen as the most complete contribution to its principles and to the idea of the Radiant City.

**Criterion (ii):** The Architectural Work of Le Corbusier exhibits an unprecedented interchange of human values, on a worldwide scale over half a century, in relation to the birth and development of the Modern Movement.

The Architectural Work of Le Corbusier revolutionized architecture by demonstrating, in an exceptional and pioneering manner, the invention of a new architectural language that made a break with the past.

The Architectural Work of Le Corbusier marks the birth of three major trends in modern architecture: Purism, Brutalism and sculptural architecture.

The global influence reached by The Architectural Work of Le Corbusier on four continents is a new phenomenon in the history of architecture and demonstrates its unprecedented impact.

**Criterion (vi):** The Architectural Work of Le Corbusier is directly and materially associated with ideas of the Modern Movement, of which the theories and works possessed outstanding universal significance in the twentieth century. The series represents a "New Spirit" that reflects a synthesis of architecture, painting and sculpture.

The Architectural Work of Le Corbusier materializes the ideas of Le Corbusier that were powerfully relayed by the International Congress of Modern Architecture (CIAM) from 1928.

The Architectural Work of Le Corbusier is an outstanding reflection of the solutions that the Modern Movement sought to apply to the major challenges of the 20<sup>th</sup> century to invent a new architectural language; to modernize architectural techniques; and to respond to the social and human needs of modern man.

The contribution made by The Architectural Work of Le Corbusier to these major challenges of the twentieth century is not merely the result of an exemplary achievement at a given moment, but the outstanding sum of built and written proposals steadfastly disseminated worldwide through half a century.

#### Integrity

The integrity of the series as a whole is adequate to demonstrate the way Le Corbusier's buildings reflects not only the development and influence of the Modern Movement but the way they were part of its transmission around the world.

The integrity of most of the component sites is good. At 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. At 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. The setting of this site is fragile. At the Maisons de la Weissenhof-Siedlung, Stuttgart, war-time destruction and post-war reconstruction, has led to the collective integrity of the model settlement being affected by the loss of ten houses out of twenty-one.

There is recent loss of integrity at Ronchamp and La Porte Molitor. At Ronchamp, where Le Corbusier's structure overlaid a centuries-old pilgrimage site, the integrity of the site has been compromised by a new visitor centre and a nunnery near the chapel which cut into the contemplative hillside setting of Le Corbusier's structure and has led to a serious loss of integrity.

At Immeuble locatif à La Porte Molitor, a rugby stadium has been constructed right in front of the glass façade of the apartment block. This enormous structure immediately opposite the site blocks views of the Bois de Boulogne through the innovative glass facades and leads to a serious loss of integrity.

#### Authenticity

The series clearly demonstrates how it adds up to more than the sum of its component parts.

For most of the individual component sites, the authenticity is good in relation to how well the attributes of the site can be said to reflect the overall outstanding universal value of the series. At Cité Frugès, on three plots houses were constructed with traditional houses instead of Corbusian structures, while elsewhere in the urban landscape, there is a partial loss of authenticity through neglect and interior changes. At l'Unité d'habitation, the fire of 2012 destroyed a small part of the building. This has now been totally reconstructed to the original design, but with some reduction in authenticity. The authenticity of the existing Capitol Complex in Chandigarh could be impacted if either or both of the governor's palace or the museum of knowledge were now to be constructed, an eventuality that has apparently been discussed.

At the National Museum of Western Art in Japan (NMWA), the original intention for the forecourt of the Museum appears to be as a wide open space. Forecourt planting in 1999 tends to detract from the presentation of the building, its key views and the setting.

The recent new developments at Ronchamp have a highly negative impact on the authenticity of this chapel. At the entrance, there is now a visual competition between the new constructions and the works of Le Corbusier. These interventions have severely

compromised the authenticity of La Chapelle Notre-Dame-du-Haut at Ronchamp in terms of its ability to convey Le Corbusier's ideas. It is no longer a remote pilgrimage chapel, a serene object in the landscape approached gently on foot. At Molitor an enormous rugby stadium has been constructed in front of the glass façade and has severely compromised the ability of this component site to convey its value.

In terms of materials, some sites have been restored and partly reconstructed in recent years, after neglect or disfigurement. Overall, the modifications can be seen to be reasonable and proportionate. Comparing the sites to other inscribed 20<sup>th</sup> century houses, reveals that these also share similar slightly diminished levels of authenticity.

#### Management and protection requirements

Many of the components received early protection in their respective countries, mostly in the two decades following Le Corbusier's death. Some, like the Maisons de la Weissenhof-Siedlung in Stuttgart and the Unité d'habitation in Marseille, were given protection during Le Corbusier's lifetime. The nomination dossier sets out for each component the relevant forms of legislative protection. All component sites are protected at a national/federal level and their buffer zones are adequately protected by either legislation or planning mechanisms. Given the importance of detail and setting for these 20<sup>th</sup> century buildings, it is crucial that their protection is sufficiently encompassing and sensitive to allow for protection of interiors, exteriors, context and setting.

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. There are conservation issues at the Chapel at Ronchamp. There is now an urgent need to implement the agreed conservation programme. There is also an urgent need for a Conservation plan to be prepared for Chandigarh.

A Standing Conference has been established for the overall series and will coordinate the management of the Property, advise States Parties and implement actions for promotion and enhancement of the Property. An Association of Le Corbusier Sites has been set up to bring together all the local authorities in whose territories sites have been nominated. Its main objectives are coordination, raising public awareness, sharing conservation experience, overall coordination and management of the series, and implementation of management plans for each of the component sites. The involvement of the expertise of the Fondation Le Corbusier – that has the moral rights over Le Corbusier's oeuvre – is crucial for appropriate management and

conservation of the series, especially in those cases where the properties are in private hands other than the Fondation. Within both France and Switzerland coordinating committees have been set up to oversee the management of sites in those countries.

What remains unclear is how dialogue is undertaken between countries in relation to sensitive development projects. There would be a need for contributing States Parties to have knowledge of, and opportunities to comment on, proposed development in a component site that might compromise the value of the overall series.

Local management plans have been drawn up for each component site. These have been implemented on a partnership basis between owners and the cultural, heritage and planning departments of the local authorities in whose area they are sited. At Ronchamp the management system needs strengthening to ensure the security of the site. At Doctor Curutchet's house, greater supervision of development in the setting is needed.

Given the special problems associated with the conservation of 20<sup>th</sup> century architecture, a continuous involvement of (inter)national specialists on the conservation of Modern architectural heritage is also essential. In Switzerland the federal administration can call such specialized experts for advice to support the local conservationists (and has done so already). A similar approach is highly recommended for other countries.

The current staffing levels and levels of expertise and training are high in all sites and mechanisms to allow liaison between sites have been put in place. Nonetheless, there appears to be a need for more capacity building on the processes of impact assessment and a need to formalise and clearly define conservation approaches and procedures across the series.

Model monitoring indicators developed for two properties in Switzerland will be developed for the rest of the series by the end of 2016.

#### Additional Recommendations

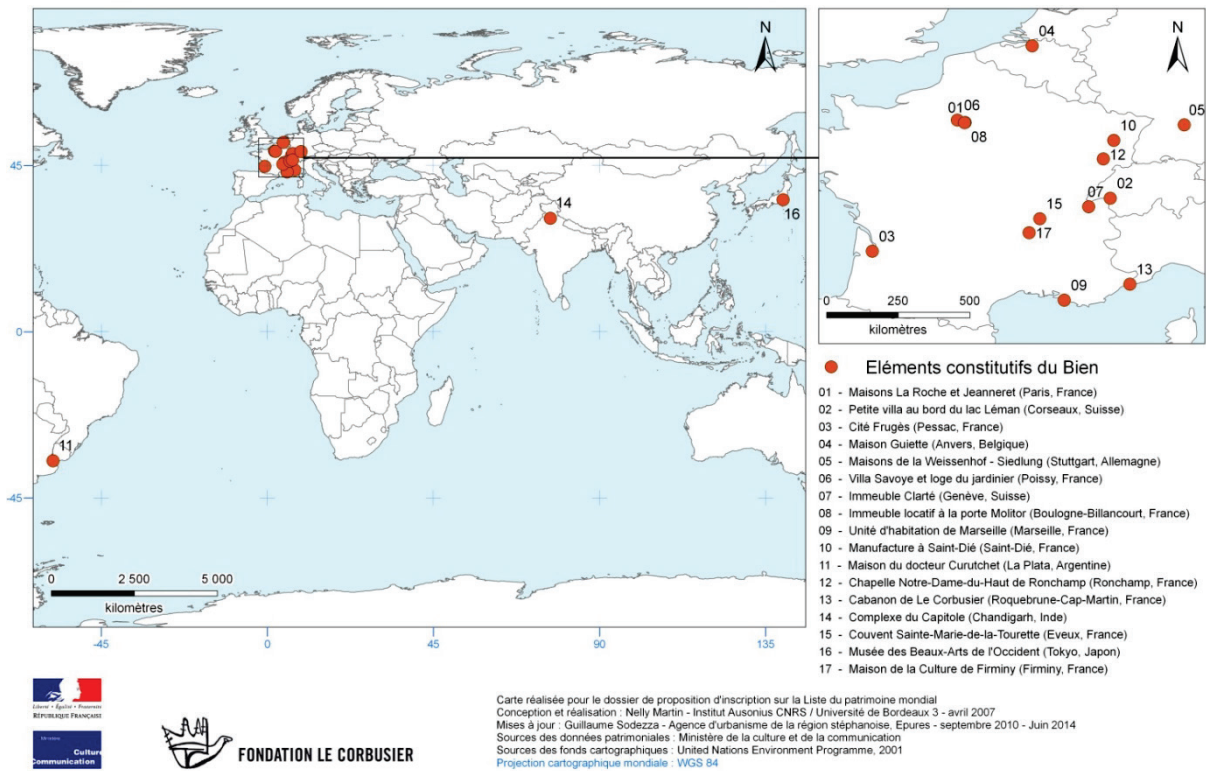
ICOMOS further recommends that the States Parties give consideration to the following:

- Developing short and longer term mitigation measures to address the adverse impacts of recent development at Ronchamp and Molitor, including consideration of removal of the new constructions within a defined timeframe;
- Introducing the Heritage Impact Assessment procedures for proposed development at all component sites;
- Developing monitoring indicators for all component sites;

- Developing agreed overall conservation approaches and procedures for the series;
- Considering how the power of the Standing Conference might be refined to allow full understanding by all States Parties of major development proposals in all component sites, in relation to their potential impact on the overall series;
- Submitting the Management plan for Chandigarh;
- Progressing with the Conservation Plan for Chandigarh;
- Clarifying the protection of the buffer zone for Maison Guiette;
- Clarifying the implications of the new Heritage Law in France;
- Submitting proposals from the Standing Conference on the approach to any further extensions to the series and on its ultimate scope.
- Submitting a State of Conservation report by 1<sup>st</sup> December 2018 in order to provide progress and/or clarification on the above mentioned recommendations for examination by the World Heritage Committee at its 42 session.

ICOMOS would be ready and willing to discuss these recommendations with the States Parties, if requested.





Map showing the location of the nominated properties within seven States Parties





Element 1: Maisons La Roche et Jeanneret – Paris, France



Element 2 : Petite villa au bord du lac Léman – Corseaux, Switzerland



Element 4: Maison Guiette – Antwerp, Belgium



Element 5: Maisons de la Weissenhof-Siedlung– Stuttgart, Germany





Element 6: Villa Savoye - Poissy, France



Element 8: Immeuble Molitor - Paris, France



Element 11: Maison du Docteur Curutchet – La Plata, Argentina



Element 12: Chapelle Notre-Dame-du-Haut – Ronchamp, France



Element 14: Capitol Complex – Chandigarh, India



Element 16: National Museum of Western Art – Tokyo, Japan

## **IV Cultural properties**

### **A Asia – Pacific**

New nominations

### **B Europe – North America**

New nominations

Nomination deferred by previous sessions of the World Heritage Committee

### **C Latin America - Caribbean**

New nominations

Extension





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## The Antigua Naval Dockyard (Antigua and Barbuda) No 1499

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### Official name as proposed by the State Party

The Antigua Naval Dockyard and Related Archaeological Sites

### Location

Eastern Caribbean, West Indies

### Brief description

The Antigua Naval Dockyard and related archaeological sites consist of a group of Georgian naval structures, set within a walled enclosure, on a naturally-occurring series of deep narrow bays surrounded by highlands, on which defensive fortifications were constructed. The Dockyard and its related facilities were built at a time when European nations were battling for supremacy of the seas to obtain control over the lucrative sugar producing islands of the Eastern Caribbean. Antigua's location as a front-line naval dockyard facility gave the British navy a strategic advantage over its rivals at a crucial point in history.

### 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* incorporating a *group of buildings*.

## 1 Basic data

### Included in the Tentative List

12 February 2012

### International Assistance from the World Heritage Fund for preparing the Nomination

None

### Date received by the World Heritage Centre

27 January 2015

### Background

This is a new nomination.

### Consultations

ICOMOS has consulted its International Scientific Committee on Fortifications and Military Heritage and other independent experts.

### Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the property from 31 August to 5 September 2015.

### Additional information received by ICOMOS

On 15 December 2015, ICOMOS sent a letter to the State Party requesting additional information on the justification of criterion (ii); the approval of the Environment Management Bill and the new Heritage Act; the plans for hotel and tourism facilities' expansion at Galleon Beach and Freeman's Bay; clarifications regarding the land-use maps presented in the management plan; and drafting of an implementation calendar for revising management instruments.

The response and additional information provided have been incorporated into the relevant sections of the present report.

### Date of ICOMOS approval of this report

11 March 2016

## 2 The property

### Description

The central part of the southern coast of the Island of Antigua forms a series of close bays accessible only through a narrow channel with deep waters: these bays are known collectively as English Harbour. Out of four bays forming the Harbour, only Freeman's Bay is open and visible from outside; the other three inlets – Tank Bay, Ordnance Bay and Commissioner's Bay – are all well protected and hidden from view. A system of hills protects the harbour on the landward side.

The natural setting of this side of the island offered ideal conditions as a hurricane shelter and as a place for repairing ships and vessels. The strategic value of the Harbour was exploited by the British navy between the late 17<sup>th</sup> and the first half of the 19<sup>th</sup> century. Most of the naval facilities and defensive structures, however, were erected in a short period of time between the late 18<sup>th</sup> and the early 19<sup>th</sup> century.

The Naval Dockyard encompasses an ensemble of buildings, facilities and structures with different uses that altogether made the functioning of the compound possible. Almost all the building materials, except for mortar and stone, were brought from England and other colonies.

The description of the main elements of the nominated property is carried out according to their distribution in the various areas of the compound.

### The Dockyard Naval Facility and structures

At English Harbour, the first dockyard was built at St. Helena: only a few of the original structures built in 1725 survive to this day and are still in use. The yard was subsequently enlarged and surrounded by a high brick wall which encompasses a variety of facilities.

The Engineers House (1785) was used as an office and residence for the engineers; built in brick, it exhibits Georgian architectural features. The supporting structures

of ceilings and roofs are based on the post-and-beam type system. Today it houses the Admiral's Inn hotel.

The Guard Station (1778) and the Storage Workshop (1776) form a long one-storey brick edifice built in two phases, with a steep pitched hipped roof covered with shingles. It is currently used for storage by the Dockyard maintenance department.

The Clerk's or Senior Officer's House (1855), a wooden building, is the most recent in the dockyard complex. It exhibits a Georgian Vernacular aspect and large two-storey verandas on three sides. Today it houses the Museum dedicated to Admiral Horatio Nelson and other officers and men who lived and died in the Dockyard.

The Bakery (1772) is a small stone construction built onto the perimeter wall of the yard. It still contains three ovens that supplied bread and meals; today it continues to operate as a bakery.

The Porter's Lodge, Sick House and Condemned Article Store (1778) all exhibit a similar form as the Engineer's building and were used for different functions in the operational era of the Dockyard. Today they are part of the Admiral's Inn.

The Copper and Lumber Store Building (1789) is architecturally the most significant building within the historical complex. It is a two-storey building with an inner courtyard and arched openings that allowed ventilation of the stored lumber. The external walls were built in yellow bricks with a white limestone string-course. The supporting structure of ceilings and roof is of the post-and-beam type. Today it is used as an hotel.

The Officers Quarters (1821) was built in a slightly later phase to provide accommodation for officers whose ships were being careened. It is a two-storey building built of stone, brick and wood. The ground floor contains a series of 12 cisterns where rainwater could be collected from the roof. The supporting structure of the first floor is of the wooden post-and-beam type.

The Pay Office (ca. 1807) was a simple wooden cabin built in stone and wood, with hurricane-resistant design features, such as heavy shutters, found in all the buildings, and no overhanging eaves. Today the building serves as the office of the Antigua and Barbuda UNESCO National Commission.

The Canvas and Cordage Building (1792) was a two-storey building; the largest construction in the compound, it was badly damaged during a hurricane in 1950 and only received basic repair works but was never restored.

The Seamen's Galley (1778) is a single-storey stone building for seamen and workers to prepare their meals. It was a popular social place; today it houses a restaurant.

The Mast Shed (ca. 1789) is an open and covered space for work on masts and spars. In the vicinity is located the

Saw Pit Shed (1769), which is the oldest standing structure in the Dockyard. It was built with a pit below to allow the cutting of large pieces of timber. An inclined ramp in front of the building allowed the rolling in and out of logs and timber pieces.

The Master Shipwright's Cabin (1769) is a two-storey brick edifice; it holds particular intangible value as the master shipwright and Methodist preacher John Baxter lived there. Today, the building serves as a gift shop, office and security centre.

Other significant structures are the sun dial, the brick and stone wall compound, the Sail Loft columns, the stone wharf and heave-down blocks, and the Capstan House.

#### The Archaeology and Features of English Harbour

Further relevant structures of the arsenal compound are the Ordnance Powder Magazines and the Army Ordnance complex, at Ordnance Bay, built in the early 19<sup>th</sup> century to replace wooden structures. Powder from ships being careened was stored there. Both buildings are today in residential use.

Fort Berkeley was built on the western side of the harbour entrance, on a long and thin rocky spur projecting into the sea and protecting the inner bays. Its construction began in 1704 and continued in the following decades. Its remains include the defensive walls, the powder magazine and the guard house.

Fort Charlotte was built on the opposite side of the entrance in 1745, but today little remains of this structure. An iron chain was hoisted across the bay between the two forts and raised to close the channel.

Additional significant natural features of English Harbour are the Pillars of Hercules, at the entrance of the bay, and Freeman's Bay. This latter served as a mooring station for vessels ready for service and those awaiting repair. The beach was used as a cemetery for sailors who died when ships were at anchor and it is now an archaeological site. The whole harbour preserves important underwater archaeological heritage which has only been explored to a limited extent and awaits further research.

#### The Fortifications surrounding the Dockyard

Several fortifications and defensive structures were built to protect the Dockyard during the second half of the 18<sup>th</sup> century. Beyond Forts Berkeley and Charlotte, these include Dow's Hill Fort, the Block House Complex, the Lookout Fort, the Artillery Complex, the Hospital, the Officers Quarters, and several other structures, most of which are in ruins.

#### Clarence (The Commissioner's) House

The building was erected by the British navy in 1804-1806 as the Commissioner's residence and served this purpose until 1815. It is a two-storey building, where the ground floor acts as a high basement for the main floor. This is

surrounded on all four sides by a veranda supported by wooden columns. The building suffered repeated substantial hurricane damage in 1871 and 1950, after which it was subsequently repaired, and lastly, in the 1990s; it is again under major restoration work that the dossier indicated would be completed by the end of 2015.

The complete list of the relevant buildings and structures in this area can be found on pages 35, 47, 51 and 62 of the Nomination Dossier.

### **History and development**

Archaeological research in the area has yielded scattered findings, proving that Antigua was settled as early as the Archaic Age (3200 BCE – 250 BCE) and then replaced by Ceramic Age Arawak (500 BCE – 1493 CE) people who migrated from South America and remained on the island until European settlers arrived.

English colonists first settled on Antigua in 1632. Sugar cane cultivation was introduced in the Caribbean islands around the mid 17<sup>th</sup> century and spread rapidly, granting planters and merchants enormous profits that needed to be secured. The advantages of the natural setting of English Harbour and its situation, close to the routes from and towards France, were soon to be exploited, initially by merchants based in Antigua, and then by the British navy.

The first structures to be built were Forts Berkeley and Charlotte, at the mouth of the harbour. However, it was only in 1725 that the British authorities seriously considered the potential of English Harbour, when works began at St. Helena to build a dockyard and related service structures.

In 1743 the British navy began to build a major dockyard facility: a wide range of buildings, structures and facilities, including water tanks and catchments, were erected over a period of some 40 years in the Dockyard area to service a permanent military force. This was to protect, from external and internal threats, planters' interests and to carry out raids against the competing European powers based in nearby islands. Following this period of extensive works, the harbour became the acknowledged port for vessels during the hurricane season.

A second phase of construction and expansion began in 1781 and continued for the following decades at English Harbour and on the surrounding hills, from the Blockhouse to the Lookout Point, for defensive purposes.

With British hegemony attained in 1814 and the loss of economic centrality of the Leeward Caribbean, the naval compound lost its strategic importance and its fortifications fell into progressive disuse and became obsolete. The Dockyard continued to be used until 1889 when it was decommissioned, due to the impossibility of its adaptation for larger steam vessels, which replaced sailing ships.

In the 19<sup>th</sup> century the complex suffered substantial damage on two occasions: in 1815 some buildings burnt down due to a lightning strike and in 1843 the great 19<sup>th</sup> century earthquake hit the island, destroying and damaging many structures within the compound. It was definitively abandoned in 1895 and in 1906 the Arsenal was handed over to the Antiguan Government. The compound continued to be used during the two World Wars as a military training facility and subsequently as a careening and repair complex for smaller vessels for inter-island transportation. It was only in the 1950s that the potential of the Dockyard to be converted into a heritage tourism site and yachting destination, was recognised.

In 1951, the Society of the Friends of English Harbour, inspired by the many Societies of Friends that were assisting the preservation of ancient buildings in Great Britain, was born, with the aim of preserving and conserving the Dockyard. An intense campaign of fund raising was initiated and, with the backing of members of the British Royal Family and other prominent personalities, the Society was able to raise the needed funds to restore the Dockyard structures within a period of five years. In 1961 the completion of the restoration works were celebrated and the historic compound of the Dockyard was reopened; most of the buildings and facilities have since been used for tourism or yachting, thanks also to the policy established by the Friends of English Harbour.

The construction of the Dockyard and its facilities could not have been possible without the work of generations of enslaved Africans, on whose labour the British Empire was heavily dependent. Records exist of enslaved Africans being sent by planters to contribute to the construction and operation of the naval facility, as well as of their main occupations at the Dockyard, which also included serving as soldiers in the Army, in the specially-created West India Regiments. Surprisingly, documentary and archaeological research attests that the Dockyard cemetery was not segregated and that the hospital treated all personnel affiliated with the Dockyard.

## **3 Justification for inscription, integrity and authenticity**

### **Comparative analysis**

The State Party carried out the comparative analysis looking at Naval Dockyards built in Great Britain since the 16<sup>th</sup> century and then expanding the comparison to other similar compounds in the same geo-cultural region as that of the nominated property. The comparison has been limited to the naval facilities built by the British. The selected examples have been compared with the nominated property with regard to their location, type and number of facilities and services offered, and their period of operation.

The analysis concludes that the Antigua Naval Dockyard and related archaeological sites stands out in respect to other surviving similar compounds due to its strategic location in a well-protected bay, its articulation and multiple functions, and its continuity of use for the purpose for which it was built until the present day.

ICOMOS notes that no similar complexes erected in the region and worldwide by other European powers have been examined by the comparative analysis, including properties already inscribed on the World Heritage List, e.g. Port, Fortresses and Group of Monuments, Cartagena (Colombia, 1984, (iv) and (vi)), Old Havana and its Fortification System (Cuba, 1982, (iv) and (v)) or the historic harbour of Port Louis in Mauritius, which includes the Aapravasi Ghat World Heritage property (Mauritius, 2006, (vi)), which would have been appropriate comparators, as they hold historical and strategic similarities with the nominated property.

However, ICOMOS also notes that the rarity of the surviving buildings compared to other naval dockyards has not been fully highlighted in the comparative analysis and considers that its enlargement would only strengthen the Antiguan case.

ICOMOS believes that the 18<sup>th</sup> and early 19<sup>th</sup> century buildings at English Harbour are amongst the oldest surviving examples of naval facilities remaining in the British colonies worldwide. The network of naval bases was designed to protect Britain's important colonial supply network, which provided goods that England used in large quantities but could not produce, in particular sugar and timber. These outposts did not exceed the main English naval bases in size; rather, the scale and character of the individual buildings was similar due to the similar range of building materials and building technologies used.

The Antigua Naval Dockyard is among the few dockyards throughout the world that clearly demonstrates the transition from using British prototypes to developing colonial building morphologies.

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 unique geo-morphological attributes of a jagged bay with deep waters, surrounded by protective hills and a narrow access, were ideal for repairing and careening vessels and for providing a safe shelter, and this favoured the construction of the naval compound;
- the dockyard and its facilities and fortifications were of major strategic importance for securing British

interests in the region as they allowed the mobilisation and movement of military forces, and the repair of ships;

- the structures and facilities within the walled compound were all built in a short period of time at the end of the 18<sup>th</sup> century and today they form a unique collection of Georgian period structures in the Eastern Caribbean context;
- the construction of many facilities and the repair works at the dockyards were carried out by enslaved Africans, who were also employed as sailors and for other tasks on ships;
- many of the facilities within the nominated property are still used to repair and to construct vessels for inter-island sailing.

ICOMOS considers that this justification is appropriate: the Antigua Naval Dockyard is significant at the global level, as it contains early surviving examples of standard military buildings such as powder magazines, storehouses and barracks, erected throughout the British colonies. From the records held at the National Archives at Kew in London, one of the most substantial dockyards outside of England in the eighteenth century was located at Antigua. Few other dockyards were built outside of Great Britain, apart from Gibraltar (naval) and Bombay (merchant); all the other dockyards were on home soil. The nominated property represents a major shift in focus between protecting England and the projection of imperial power in the protection of her colonies, the purpose for which this dockyard and the subsequent facilities in Canada, Australia, Hong Kong etc. were established.

The architectural design and features of the buildings of the nominated property exhibit clearly the adaptation of British prototypes to a different climatic context and different building materials.

Finally, the contribution in labour and skills of enslaved African workers has proved to be substantial in the construction and operation of the Dockyard. The British Empire and other European powers were heavily dependent upon enslaved labour in their colonies; however, the Antiguan Naval Dockyard and its archaeological remains witness the relaxation of segregation rules in this compound, which were strictly applied elsewhere (e.g. burial sites were mixed and the same goes for hospitals).

#### **Integrity and authenticity**

##### **Integrity**

The nominated area (255ha) coincides with the former Naval Dockyard installations and its related former supporting/defensive compounds, which have been in continuous use since 1725. The partially-walled Dockyard includes an important number of historical buildings, whereas the related former supporting/defensive compounds comprise several structures currently reduced to archaeological vestiges.

Therefore, ICOMOS considers that the nominated property is of adequate size to ensure the complete representation of the features and processes which convey the significance of the nominated property and it includes all the elements necessary to understand its proposed Outstanding Universal Value.

The nominated property still retains its visual integrity, as the visual relationships and dynamics between the Dockyard complex (down at sea level) and the former military structures (on the surrounding hills) are still recognizable.

ICOMOS considers that the physical fabric of the buildings at the Dockyard and their significant features are in good condition, showing almost no signs of neglect. They retain all the elements necessary to express the features and processes which convey their significance. Most of the buildings at the Dockyard have either been restored/repared (fairly recently) or are scheduled to undergo restoration in the near future.

In this regard, ICOMOS recalls paragraph 172 of the *Operational Guidelines*, as well as the principles of the Venice Charter, and suggests the adoption of a minimal intervention approach.

On the other hand, the archaeological sites and vestiges of the military complexes that surround the Dockyard exhibit an uneven state of conservation and many of them show significant levels of decay and deterioration. Due to the high number and spatial distribution of these former military ensembles and the amount of economic resources needed for their proper conservation, the current impact of their deterioration processes is not appropriately controlled.

However, they still retain their essential relationships and visual dynamics in relation to the Dockyard. Therefore, ICOMOS considers that, if assisted by interpretation activities, they can still express the fact that they played a significant role in terms of watching over and safeguarding the Dockyard.

The buffer zone (3,873ha) follows the perimeter of the 'Nelson's Dockyard National Park' thus including an important and vast landscape which comprises scattered and less important archaeological remains, e.g. the former sugar cane windmills and a few former British secondary military structures, as well as the outer set of bigger hills ("outer ring") for defensive purposes. Therefore, ICOMOS considers that the buffer zone is of adequate size to provide the nominated property with an additional layer of protection, encompassing its immediate setting, important views, and other areas or attributes that are functionally important as a support to the property and its protection.

## Authenticity

The Dockyard is located in its original location and continues to be embedded in the same original setting. The buildings within were all originally built between the 18<sup>th</sup> and 19<sup>th</sup> centuries and retain their original form and design. Most of them even retain their original use and function, and those which do not are used for similar and/or compatible functions. Traditionally-based conservation works have used stone from the original quarries that continues to be cut and shaped by hand. Bricks and stones are recycled as often as possible. So, traditional building techniques continue to be practiced.

ICOMOS, however, considers that it would be appropriate to ensure that those parts that have been substantially restored or replaced be made distinguishable, at least in the interpretation programmes, so as not to create confusion about the historic substance of the property elements and structures in respect to restored or replaced parts. Continuous cooperation amongst conservation architects, architectural historians and archaeologists in the conception of conservation programmes, projects and works would be highly beneficial, to ensure the retention of the authenticity of materials, craftsmanship and design.

ICOMOS notes that archaeological remains are still embedded in a setting which is comparable to the original one; abandonment and neglect have caused decay but not substantial modification, so many of the fortifications and supporting facilities retain their original materials and their visual interrelationships. Their form and design have not been altered and can be appreciated through archaeology, historical research, consolidation, stabilization and interpretation. The informative potential of archaeological remains is overall retained; however, protection and maintenance strategies should be set up in order to avoid further loss of historic material.

Some structures have been built with materials that are not in accordance with the historic character of the nominated property and its elements. Although they do not undermine the overall authenticity and integrity of the nominated property, ICOMOS deems it necessary to set up a programme and guidance for the improvement of the design and quality of building materials to be used within the nominated property and the buffer zone.

In terms of functions, spirit and feeling, as well as living traditions, a number of buildings are still used for their original functions or, if not, house uses that are compatible with their character; traditional craftsmanship is still practiced by local craftsmen to repair boats and vessels.

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In conclusion, ICOMOS considers that the conditions of integrity and authenticity have been met. However, an overall conservation and maintenance programme covering all built structures and their setting is crucial and urgent to ensure that integrity and authenticity is retained and, where necessary, enhanced.

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### Criteria under which inscription is proposed

The property is nominated on the basis of cultural criteria (iv).

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 ensemble of the Georgian period naval facilities and the associated military structures were laid down and built, exploiting the natural attributes of the area (the deep waters of English Harbour, the series of hills protecting the bay, the jagged contour of the coastline and the narrow entrance), in a period when European powers were at war to expand their spheres of influence in the Caribbean. Altogether, the nominated property represents an outstanding example of a Georgian naval facility in the Caribbean context.

ICOMOS considers that the Antigua Naval Dockyard and the related archaeological sites demonstrate the process of colonisation and the global spreading of ideas, building forms and technologies by a leading naval power in the 18<sup>th</sup> century. Few other sites demonstrate this transition from British prototypes to the use of creolized colonial building forms as clearly as the Antigua Naval Dockyard and the exploitation of favourable geo-morphological features for the construction and defence of a strategic compound.

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ICOMOS considers that this criterion has been justified.

Criteria not proposed by the State Party.

Although not originally proposed by the State Party, ICOMOS found that the property had the potential to also meet criterion (ii), on the grounds of the information provided in the nomination dossier but not explicitly incorporated into the justification for the criterion.

In ICOMOS's interim report dated 15 December 2015, following dialogue with the State Party's delegation, it was requested to provide a justification also for criterion (ii).

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;*

In the additional information provided by the State Party on 20 February 2016, the State Party holds that the enslaved Africans serving the British navy and army built and worked in the Dockyard facilities in Antigua and in other colonies in several capacities and were crucial for the development of the British Empire's economy, trade and industrialisation. The buildings, facilities and archaeological remains at English Harbour bear witness to their efforts and continue to inspire their descendants.

ICOMOS concurs with the justification proposed for this criterion by the State Party and on the crucial role played by enslaved African workers in the construction, maintenance and operation of the Antigua Naval Dockyard and of many other similar compounds in the Caribbean and throughout the world, and, in general, in the colonial system and the wealth generated by the colonies.

ICOMOS, however, also found that the Antigua Naval Dockyard shows how British Admiralty building prototypes were adapted to cope with extreme climates, and the lessons learnt in the Caribbean in constructing buildings were then successfully applied in other colonies.

Clarence House, with its rooms raised for accommodation off the ground, exhibits a morphology that was adopted in a number of other British military and penal settlements until at least the 1840s. It demonstrates how English Georgian architecture was modified to suit the hot tropical climate and to counter the threat of disease, and the emergence of a distinctly colonial architecture. The Officer's Quarters and the Senior Officer's House demonstrate how building forms were adapted, by the addition of features such as storm shutters and verandas to suit the climate of the Caribbean. Few other sites demonstrate this transition from British prototypes to the use of colonial building forms as clearly as the Antigua Naval Dockyard.

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ICOMOS considers that this criterion has been justified.

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ICOMOS considers that the nominated property meets criteria (ii) and (iv) and conditions of authenticity and integrity. However, a comprehensive conservation and interpretation programme for the overall property, developed in continuous dialogue among conservation architects, architectural historians and archaeologists, defining the most appropriate levels of intervention, compatible uses for each structure, and priorities, would assist greatly in preserving the integrity and authenticity of the tangible aspects of the property. Guidance for compatible new design would be equally important.

### Description of the attributes

The natural setting of the property, including its geomorphological features, promontories, valleys, the system of the bays, the harbour, the deep waters, the series of surrounding hills, altogether make clear the strategic relevance of the property for the British to achieve supremacy in the region.

The views and visual inter-linkages among the different natural points, the defensive structures and the port facilities, contribute to demonstrating how the geomorphological features were used to maximise the advantages of the natural environment.

The semi-walled naval dockyard complex and the buildings therein, the archaeological sites and the underwater heritage, convey the sense of a secluded

military area for highly specialised activities in which the main focus and mission were the care, maintenance, security and protection of ships and vessels and of their cargoes.

#### **4 Factors affecting the property**

The major factors affecting the property are of man-made origin; these include development pressure, with proposals for major hotel complex expansions (e.g. the Galleon Beach and Freeman's Bay Hotels), real estate speculation and tourism pressures.

ICOMOS requested additional information on the possible expansion of the hotel compounds.

The State Party in February 2016 responded that the Galleon Beach Hotel needs to be extensively renovated. However no plans for its renovation or expansion exist at this time. Archaeological research has been carried out in the area, in 2009 and 2013, as a preventive measure.

The other expansion area concerns the Admiral's Inn Hotel, for which six additional units in cottage style have been permitted. The State Party reports that the addition ties in with the historic and natural environment of the area and that it will be completed during 2017.

ICOMOS considers that further information on this project, that appears to have already been approved, is necessary, along with an Heritage Impact Assessment of its possible impact on the nominated property.

The nominated property and its buffer zone are under the National Park Authority's responsibility and any development proposal should comply with current building regulations/ordinances. However, considering the high development pressure, constant vigilance is crucial and corrective measures may be necessary to readdress proposals that can impact the nominated property. In particular, the projects for the expansion of the above-mentioned hotels could negatively affect the attributes of the nominated property at different levels.

In this regard, ICOMOS recalls paragraph 172 of the *Operational Guidelines* and considers that carrying out Heritage Impact Assessments for both projects as soon as possible would greatly assist the managers of the Dockyard compound in providing clear guidance to the developers and to avoid negative impacts on the property and its proposed Outstanding Universal Value.

Natural affecting factors include hurricanes, weathering, vegetal and insect infestations, fires and earthquakes. The National Parks Authority (NPA) has elaborated a Risk Preparedness and Response Manual specific to the Naval Dockyard. This is being implemented and assists the Park staff to face the natural threats. An additional natural/man-made negative factor is represented by free-grazing goat herds, which have grown in numbers and have been contributing to desertification and soil erosion. Dialogue

and consultations with the herds' owners have been initiated in order to sensitize them towards this problem, but this needs to be continued and reinforced.

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ICOMOS considers that the main threats to the property are hurricanes, vegetal and insect infestations, development pressure, real estate speculation and tourism pressures.

With regard to the above-mentioned expansion projects of the hotels at Galleon Beach and Freeman's Bay, ICOMOS recommends that specific Heritage Impact Assessments should be carried out for both projects as soon as possible and submitted to the World Heritage Committee before any final decision is taken.

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#### **5 Protection, conservation and management**

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

The boundaries of the nominated property appear justified on the grounds of a historical rationale, for they coincide with the former Naval Dockyard installations and its related former supporting/defensive compounds. The rest of the boundary follows the coastline, diverging slightly to include historic structures, thus encapsulating all relevant areas and tangible elements necessary to express its OUV. It does not appear to exclude other areas that, in the light of future research, could potentially contribute to the understanding of the property.

The buffer zone corresponds to the Nelson Dockyard National Park, which is a much larger area, comprising the outer set of larger hills which had communication points in order to pass signals from one end of the island to the other. Therefore, the visual relationship of the buffer zone with the nominated property had a central and functional role in the defence of the dockyard, and fully justifies the size and contour of the buffer zone.

However, since the boundaries of both the nominated property and its buffer zone are formed by segments of a polygon and not by natural or man-made elements materialised on the ground, their vertices are not sufficiently and clearly demarcated. This point needs to be addressed both on land and in the sea.

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In conclusion, ICOMOS considers that the boundaries of the nominated property and of its buffer zone are adequate; however, their clearer demarcation on the ground would be necessary.

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##### **Ownership**

The Antigua Naval Dockyard and most of the land within the boundaries are owned by the Government of Antigua. However, within the nominated property some privately-owned houses exist, as well as two hotels and land. In the buffer zone, the land is mostly privately owned.



## Protection

At the national level, both the property and the buffer zone are protected by the 1984 National Parks Act which has been satisfactorily protecting the entire Park ever since, through the implementation of all the legal protection measures by its management body, the National Parks Authority (NPA).

Further means of legal protection are obtained by the 'Physical Planning Act of 2003', under which the Chief Town and Country Planner of the Development Control Authority (DCA) has the legal power to declare additional sites and structures as protected areas. In addition, another level of protection is the 'Land Use or Physical Development Plan for Antigua and Barbuda', which defines and establishes zones for appropriate land use, and identifies and strengthens the boundaries of the Nelson's Dockyard National Park as a protected area.

The above legislation collectively supports the National Parks Act, but none of it has the authority to overrule the decisions of the NPA. Building Guidelines have been designed to guide conservation interventions on historical buildings and archaeological remains, and to set standards for new architecture.

A new "Environmental Management Bill" aiming to reinforce existing environmental legislation and site management was under discussion when the dossier was submitted.

The State Party informed that the Environmental Bill was approved in September 2015. .

Finally, a new 'Heritage Act' for compliance with the '2001 Underwater Cultural Heritage Convention', was under modification to include all heritage sites and objects. Likewise, the NPA plans to implement the proposed Act's measures and standards, by establishing guidelines and high standards regarding the Dockyard's potential Underwater Cultural Heritage survey, research, identification, conservation and management.

ICOMOS considers that the legal protection will be fully adequate when the 'Environmental Management Bill' is approved and in effect. Likewise, the effective protection of the cultural attributes of the site (including terrestrial and underwater heritage), needs the above-mentioned 'Heritage Act', to be approved and in effect.

In its December 2015 interim report, ICOMOS requested updated additional information on the approval process of the two new Bills.

The State Party responded that the Environment Bill was approved in September 2015, whilst the draft of the new Cultural Heritage Act was being finalised and its approval by the Parliament was expected by March 2016.

ICOMOS considers that the approval of the new 'Environmental Management Bill' represents an important step forward for the protection of the nominated property.

Likewise, the effective protection of the cultural attributes of the site (including terrestrial and underwater heritage), needs for the above-mentioned 'Heritage Act' to be approved and in effect.

As for the protective measures, in ICOMOS's view, the existing Building Guidelines need to be expanded, strengthened and made widely known to professionals and to the public.

ICOMOS also requested the State Party to submit an implementation calendar for the revision of the above-mentioned Guidelines.

The State Party responded that the Building Guidelines were being updated and their finalisation expected by the end of February 2016.

ICOMOS welcomes this information and would be grateful to receive a copy of the revised Building Guidelines.

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In conclusion, ICOMOS considers that the legal protection in place will be fully adequate when the revised Heritage Act is approved and implemented. The protective measures will be adequate when the current Building Guidelines are revised and their standards strengthened.

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## Conservation

The NPA Heritage Department is responsible for monitoring, documentation and research of the property. It collects and stores information, drawings, photographs and records of activities, work, use and repairs/restoration of all buildings in the site (including the Dockyard and related archaeological sites), as well as those in the buffer zone.

However, architectural survey updates of historic buildings or archaeological sites are only done according to need and/or if they are programmed for conservation/restoration works. This means that much of the cultural heritage (especially the archaeological sites) does not necessarily possess updated surveys. This represents a considerable gap in terms of baseline information, for Antigua is a hurricane-prone island and a number of storms have already caused great damage to the historic structures of the property in the past.

The overall state of conservation of the nominated property is uneven. The historical buildings within the Dockyard are in a very good state of conservation. Since the Dockyard is the living heart of the Park, its buildings and historical structures have been either restored or partially reconstructed to their original states so as to have all the Dockyard facilities in the best state possible.

On the other hand, there are only a few examples of archaeological ensembles in a fairly good state of conservation, and the rest of the many other archaeological ensembles show significant levels of decay.

As far the buildings at the Dockyard are concerned (including "The Clarence House"), the conservation measures appear overall to be fairly appropriate to preserve the authenticity and integrity of the nominated property. The NPA still uses traditional building methods for repair, maintenance and restoration. However, there is a tendency to remake/reconstruct a little bit more than is necessary, in every conservation intervention. Clarence House is undergoing a comprehensive conservation programme, the completion of which is expected by the end of 2015.

With regard to the archaeological sites and remains, ICOMOS notes that most of the archaeological ensembles show a lack of implementation of any kind of conservation measures, but for a number of them there are ideas and hopes for restoration and reconstruction (partially or even completely), on the basis of the original historical British plans.

ICOMOS considers that a commendable effort has been, and is being made to ensure the conservation of the buildings within the naval compound. However, ICOMOS notes that the archaeological sites and structures have not been the object of the same care as the buildings and lack proper stabilization and maintenance. Additionally, there is a tendency to over-restore and to reconstruct extensive parts of the buildings.

ICOMOS considers that reconstruction should not be the main goal of conservation or the prevalent practice, even if based on reliable historical documentation, considering that today there are many alternative means of making understandable past times and life. This holds particularly true for archaeological remains, for which stabilization, protection and preventive maintenance should be the preferred options.

In order to ensure an adequate level of attention to all attributes of the property, ICOMOS considers that a comprehensive conservation and maintenance plan, with priorities, timetables and funding requirements to take proper control over the ongoing deterioration processes, should be elaborated. This should include guidance on the most appropriate level of intervention in relation to the specific contribution of each structure in illustrating the Outstanding Universal Value of the nominated property and of its authenticity.

In its interim report, ICOMOS requested the State Party to provide an implementation calendar for the elaboration of a conservation and maintenance plan.

The State Party responded on 20 February and transmitted a first outline of the conservation plan under elaboration with the assistance of an international conservation expert. The expert has already developed an initial draft for the conservation plan and, according to the time-frame submitted by the State Party, it will be completed by mid-March 2016.

ICOMOS considers that the outline of the conservation plan submitted in February represents a valid point of departure for its further development into a full conservation plan, which needs to be complemented by an inventory of the structures comprised within the nominated property and by the documentation of their physical condition and state of conservation, as a basis for programming and budgeting. In this regard ICOMOS considers that some more time than that allocated by the State Party may be needed to elaborate a full conservation and maintenance plan.

In conclusion, ICOMOS notes that great efforts have been made for the conservation of the structures of the nominated property. However, ICOMOS also considers that reconstruction should not be the main goal of conservation or the prevalent practice, even if based on reliable historical documentation, particularly in the case of archaeological remains. ICOMOS considers that the initiated conservation and maintenance plan should be fully developed, accompanied by an inventory, priorities, timetables and funding requirements. Forms of interpretation and presentation of conservation works should also be envisaged to avoid confusion over the authenticity and integrity of the restored historic structures.

## **Management**

Management structures and processes, including traditional management processes

The NPA is, by law (since 1984), the sole body responsible for the park's management. The structure of the NPA's Board comprises a Chairman, the Chief Town and Country Planner, the Permanent Secretary for the Ministry responsible, and five directors. The Minister responsible, in consultation with Cabinet, chooses the appointed directors. They are usually selected according to their skills and professions.

The Board then hires a Commissioner who in turn (and in consultation with the Board) employs a complete management staff to carry out the workings and management of the site. In addition, the NPA currently employs some 80 persons directly, and several thousand persons indirectly, within the businesses/industries created by the Park. These staff include qualified personnel in the areas of the yachting sector, hotels, restaurants, taxi and transportation services, retail and professional services, and many others.

The management structure includes 8 departments. These are: Heritage, Yachting Services (which manages the marina and also assists with restoration efforts), Financial control, Security, Interpretation Centre, Visitor Services, Marketing and Hotel management, Human resources, Maintenance and grounds management. The above-mentioned managers submit quarterly reports and annual budget estimates. Management meetings are routinely held quarterly, and prior to, and after, every major event.

The current management system has been in place for over 30 years and, in general terms, has proven fairly effective and comprehensive. However, as much as the NPA is making a great management effort, ICOMOS found that certain aspects of management require attention and strengthening.

In particular, in ICOMOS's view, one specialist in architectural conservation and one historian of architecture should be consulted as soon as possible with a view to integrating these professionals into the management staff in the medium- to long-term, so as to ensure that conservation works are carried out according to internationally-accepted principles and practices.

In the additional information submitted in February 2016 the State Party explains that in Antigua no conservation architect is available, therefore the State Party has recruited one from abroad.

ICOMOS acknowledges the promptness of the State Party's response to this issue. Nevertheless, ICOMOS suggests that it would be strategically wise if the State Party, possibly in cooperation with other small island State Parties in the Caribbean, were to undertake steps to ensure that in the medium- to long- term, conservation professionals are available from within the Island.

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

The system relies on the National Parks Development and Management Plan, which is specifically prepared under the provisions of sub-section 10 (2) of the Antigua and Barbuda National Parks Act (1984). In general terms, the management plan has proven fairly effective and comprehensive. In addition, the NPA has a strong annual 'Marketing Plan', containing marketing and promotional ideas, plans and sub-plans, for increasing its income each year.

ICOMOS, however, notes that both the Plan and the management have an excessive focus on aspects such as finances, the marina, hotels, visitors, tourism, and marketing, but have not given as much attention to the importance of properly managing and preserving and enhancing the physical attributes that make explicit the Outstanding Universal Value of the nominated property.

In its interim report, ICOMOS has asked the State Party to revise the Management Plan so as to centre its objectives and strategies on the proposed Outstanding Universal Value.

The State Party responded that the Management Plan was under revision to make it consistent with the requirements for World Heritage status and its approval was expected by April 2016. A carrying capacity study was initiated and this is planned to be completed in August 2016.

ICOMOS considers that, with the completion of the conservation and maintenance plan, this is an important step to ensure the perpetuation of the values of the nominated property, ICOMOS observes that the revision of the Management Plan according to the requirements for a World Heritage property may need some more time than that allocated by the State Party. ICOMOS would be equally grateful that the State Party submits the revised Management Plan for review.

ICOMOS further notes that there are discrepancies between the land-use map named "Nelson's Dockyard National Park current land use plan" presented on p. 17 of the document *Annex 12 – current management plan* and the map presented on p. 18 named "Nelson Dockyard National Park land use plan". The former shows an expansion of the zone for tourism and residency at the expense of the conservation area. This appears particularly concerning as the areas for which land-use change is envisaged are particularly sensitive due to their vicinity to the very heart of the historic dockyard and their visual connections between the Lookout Point and Fort Charlotte.

ICOMOS considers that a revision of the Management Plan and related instruments, particularly of the land-use zone plan (p.17 of the Management Plan), is crucial. The land uses should be based on the Outstanding Universal Value of the nominated property and on the preservation and enhancement of its attributes, both cultural and natural, and their visual interrelations, so as to ensure that the nominated property conveys effectively its significance, and its integrity is not undermined.

In this regard, ICOMOS asked in its interim report that the State Party revises the perimeter of the zoning of the land-use plan in order to be in line with the Outstanding Universal Value.

The State Party submitted a revised map in which the zone comprised between the promontory enclosing Freeman Bay and the Tourism Zone of Galleon Beach has now been assigned conservation land-use status, while in one of the maps previously submitted in the nomination dossier it was indicated as a tourism/residential zone. This revision of the land-use has not been ratified yet.

ICOMOS considers that the modification of the land-use designation as a conservation one for this area is particularly important for the preservation of the values of the nominated property and it would be grateful to receive information on the time-scale for the ratification of this land-use designation.

The catalogue of heritage resources indicated at paragraph 4.4.2 of the current Management Plan should be promptly elaborated; assessment of the relevance and contribution of each heritage resource should be made with reference to the proposed Outstanding Universal Value of the nominated property.

The State Party informed that a Conservation Strategy and Policy Document is under preparation as an expansion of the Conservation Plan and its completion is expected by June 2017.

ICOMOS considers that the Conservation Plan, the Conservation Strategy and Policy Document, and the Management Plan are mutually interrelated; the Management Plan needs to allocate adequate resources for the above documents to be implemented.

Identification of views and visual inter-linkages important in explaining the defensive functions of the natural setting, with its series of hills and of the fortifications built there, is crucial to ensure that development pressures do not interrupt these connections. In this regard, ICOMOS believes that a landscape approach would provide great benefit to the management plan, its land-use zoning, and building guidelines.

Development needs should preferably be satisfied in appropriate areas of the buffer zone instead of within the nominated property, which seems already rather densely utilized for tourism purposes.

In this regard, ICOMOS suggests that reference to the Resource Manual "Managing Cultural World Heritage" and systematic use of the Heritage Impact Assessment process for development projects, would greatly assist the State Party and the NPA in developing the appropriate management instruments and guidance for the nominated property and its buffer zone.

The nominated property has low and high tourist seasons, due to its hurricane-prone climate. The peak season covers about 4 months (November – March), during which English Harbour may reach 15,000 visitors per month and up to 100-120 boats docked at any one time. Additional pressure comes from great numbers of cruisers which can arrive at the Dockyard historic area at the same time, creating sudden intense traffic flows.

Data on visitors are collected from various sources and are used to produce statistics, but only for financial and budgeting purposes. ICOMOS considers that there is an urgent need to develop a scientific study on the carrying capacity of the Dockyard and related archaeological sites, so as to build a sound and heritage-sensitive visitor and tourism strategy that is sustainable and does not damage the nominated property and its immediate setting.

The NPA has initiated different forms of communication and interpretation for the property; these include an interpretation centre, signage and information panels at the Dockyard. Media coverage includes books, periodicals, lectures, documentaries on the history, and also on the annual archaeological programme.

ICOMOS further considers that there is a need to set up signage and interpretation instruments for other buildings and archaeological sites within the property, to help visitors understand and appreciate its heritage values.

#### Involvement of the local communities

The UNESCO National Commission, in partnership with the NPA, began a public awareness campaign and education programme to inform citizens about the nominated property. However, local communities do not appear to have really been involved in preparing the nomination, nor in the protection, conservation or management of the site. However, in spite of that, the overall impression is that they are fully aware of the site management and its current World Heritage nomination and thus fully support the current NPA plans, programs and administration. Furthermore, there seems to be a good relationship between the NPA and the local communities, from which the NPA outsources specific professional services. So, the locals benefit directly or indirectly from all the visitors and tourism activities that take place.

ICOMOS considers that the close and solid cooperation between the management staff, a conservation architect and an historian of architecture now being established should be continued, with a view to integrating these professional positions into the NPA staff in the medium- to long-term. The revision of the Management Plan according to World Heritage requirements, focussing on the Outstanding Universal Value and its related attributes, needs to be completed. The land-use zoning map as amended and submitted in February 2016 needs to be ratified. ICOMOS recommends that a systematic application, for all development projects at their early stages, of Heritage Impact Assessments, following ICOMOS's Guidance, is needed to assist decision-making. The existing Building Guidelines should be revised and expanded to set up orientation for compatible new design and to reinforce guidance for conservation works. ICOMOS considers that the management system for the property should be extended to include a heritage-sensitive visitor and tourism strategy, based on the results of a scientific study on the carrying capacity of the nominated property, with regard to visitors and related development pressures.

## 6 Monitoring

The rationale for the monitoring presented in the nomination dossier appears reasonable and the listed monitoring activities appear justified to measure the state of conservation of the property and its attributes. However, in ICOMOS's view, these monitoring activities should also address management effectiveness, through appropriate indicators. Finally, ICOMOS notes that in the table presented on p. 158 -159 of the nomination dossier there is some confusion between indicators and objectives of the monitoring.

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In conclusion, ICOMOS considers that the monitoring strategy should be extended to assess also management effectiveness and indicators revised accordingly.

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## 7 Conclusions

The Antigua Naval Dockyard and related archaeological sites is comprised of an ensemble of 18<sup>th</sup> - 19<sup>th</sup> century port service facilities and buildings, laid down on the two promontories that shape the narrow bays of English Harbour, as well as the natural setting of the harbour and the surrounding hills and the defensive structures built atop them.

The nominated property includes one of the largest surviving ranges of dockyard buildings dating from the late 18<sup>th</sup> century erected in the colonies, and which have vanished from other contemporary dockyards worldwide.

The buildings erected within also demonstrate how building forms were adapted to suit the climate of the Caribbean and the emergence of a distinctly colonial architecture. The design of the buildings demonstrates the progressive adaptation of construction techniques typical of the British navy to different geographical contexts.

ICOMOS considers that the nominated property is an outstanding example of an impressive British naval, military and defensive compound from the Georgian period. It exhibits technological qualities that also contributed to its preservation as well as an exceptional landscape character. This Arsenal gave the British navy a strategic advantage in maintaining control over the Caribbean and the lucrative sugar cane production. Enslaved African workers were crucial in the construction and operation of this Arsenal, as in many others, and thereby contributed to the building of colonial fortunes.

ICOMOS notes that major efforts have been made by the State Party to ensure the protection and the conservation of the nominated property since the 1950s and then from 1984, with the institution of the National Park. The protection of the nominated property is based on an array of legal and planning instruments and this has proven to be fairly effective; however, recent affecting factors need to be addressed through new legal tools which currently await approval.

However, ICOMOS also notes that the nominated property is under considerable development and tourism pressure and the current management plan is not entirely satisfactory as it has a strong focus on development and pays less attention to the much-needed conservation and maintenance of all structures that contribute to making comprehensible the significance of the nominated property.

Currently, two projects for the expansion of two major hotels within the nominated property are under NPA evaluation, but additional ones may emerge in the future.

Gaining control over the ongoing deterioration caused by weathering, infestation, lack of maintenance and stabilisation of a number of large archaeological structures and buildings, currently not dealt with, is a major undertaking that requires clear objectives, as well as human, financial and technical resources.

Even more efforts are needed to address development and tourism pressures, as this requires the involvement of a number of stakeholders that may hold conflicting views, and the ability to forecast future trends vis-à-vis the carrying capacity of the nominated property.

ICOMOS considers that the 30 years of effective protection and management of the Antigua Dockyard National Park represents a guarantee for the future management of the property; however, establishing an agreed implementation calendar for the strengthening of the management and the conservation of the property would be beneficial for the effective safeguarding of the property's Outstanding Universal Value and its attributes.

The additional information provided by the State Party in February 2016 demonstrates its full engagement for the protection and management of property in full respect of its Outstanding Universal Value; however, many of the measures that have been undertaken by the State Party are in their early stages and require continued efforts to achieve completion.

## 8 Recommendations

### Recommendations with respect to inscription

ICOMOS recommends that Antigua Naval Dockyard and Related Archaeological Sites, Antigua and Barbuda, be inscribed on the World Heritage List on the basis of **criteria (ii) and (iv)**.

### Recommended Statement of Outstanding Universal Value

#### Brief synthesis

The Antigua Naval Dockyard and its Related Archaeological Sites consists of a group of Georgian Naval structures, set within a walled enclosure, on a naturally-occurring series of deep narrow bays surrounded by highlands on which defensive fortifications were constructed. The Dockyard and its related facilities were built at a time when European nations were battling for supremacy of the seas to obtain control over the lucrative sugar-producing islands of the Eastern Caribbean. Antigua's location as a front-line naval dockyard facility gave the British navy a strategic advantage over its rivals at a crucial point in history.

The construction and operation of the Antigua Naval Dockyard were made possible through the labour and skills of enslaved Africans, whose contribution was crucial for the establishment of the facility and, more widely, for the development of the British Empire, trade and industrialisation.

**Criterion (ii):** The Antigua Naval Dockyard and its Related Archaeological Sites exhibit an important exchange of human values over a span of time within the Caribbean and between this region and the rest of the Commonwealth, on developments in architecture, technology and exploitation of natural topographical features for strategic military purposes. The enslaved Africans toiling in the service of the British navy and army built and worked the facilities that were critical to the development of the British Empire, trade and industrialisation. The Georgian Period buildings and the archaeological structures and remains stand as testimony to their efforts and continue to influence the architectural, social and economic development of their descendants.

The Antigua Naval Dockyard exceptionally shows how British Admiralty building prototypes were adapted to cope with extremes of climate, and the lessons learnt in the Caribbean in erecting such buildings were subsequently successfully applied in other colonies. Among the most prominent witnesses of this interchange, Clarence House demonstrates how English Georgian architecture was modified to suit the hot tropical climate and to counter the threat of disease, and the emergence of a distinctly colonial Caribbean Georgian architecture; and the Officers Quarters and the Senior Officer's House demonstrate how building forms were adapted, by the addition of features such as storm shutters and verandas, to suit the climate of the Caribbean. Few other sites demonstrate this transition from British prototypes to the use of colonial building forms as clearly as the Antigua Naval Dockyard.

**Criterion (iv):** The ensemble of the Antigua Naval Dockyard and its Related Archaeological Sites were laid down and built exploiting the natural attributes of the area (the deep waters of English Harbour, the series of hills protecting the bay, the jagged contours of the coastline, and the narrow entrance) in a period when European powers were at war to expand their spheres of influence in the Caribbean. Altogether, the property represents an outstanding example of a Georgian naval facility in the Caribbean context.

The Antigua Naval Dockyard and its Related Archaeological Sites demonstrate the process of colonisation and the global spread of ideas, building forms and technologies by a leading naval power in the 18<sup>th</sup> century. Few other sites demonstrate this transition from British prototypes to the use of colonial building forms as clearly as the Antigua Naval Dockyard and the exploitation of favourable geo-morphological features for the construction and defence of a strategic compound.

## Integrity

The nominated area (255ha) coincides with the former Naval Dockyard installations and its related former supporting/defensive compounds, which have been in continuous use since 1725. The partially-walled Dockyard includes an important number of historical buildings, whereas the related former supporting/defensive compounds comprise several structures nowadays reduced to archaeological remains. The property still retains its visual integrity and the visual relationships and dynamics between the Dockyard complex (down at sea level) and the former military structures (in the surrounding hills) are still recognizable. Most of the buildings at the Dockyard have either been restored/repared (fairly recently) or are scheduled to undergo restoration in the near future. On the other hand, archaeological structures outside the Dockyard exhibit an uneven state of conservation that will benefit from a comprehensive conservation strategy based on the adoption of a minimal intervention approach.

## Authenticity

The Dockyard is located on its original site and continues to be embedded in the same original setting. The buildings within were all originally built between the 18<sup>th</sup> and 19<sup>th</sup> centuries and retain their original form and design. Most of them even retain their use and function, and those which do not are used for similar and/or compatible functions. The authenticity of the property in terms of materials, craftsmanship and design will benefit from a continuous cooperation amongst conservation architects, architectural historians and archaeologists in the conception of conservation programmes, projects and works. Archaeological remains are still embedded in a setting which is comparable to the original one; many of the fortifications and supporting facilities retain their original materials and their visual interrelations. Their form and design have not been altered and can be appreciated through archaeology, historical research, consolidation, stabilization and interpretation. The informative potential of archaeological vestiges is overall retained; however, protection and maintenance strategies should be set up in order to avoid further loss of historic substance.

## Protection and Management requirements

The Antigua Naval Dockyard and Related Archaeological Sites have been protected as a National Park since 1984 under the National Parks Act and managed by the National Parks Authority (NPA). Further means of legal protection are obtained by the recently approved new 'Environmental Management Bill' (2015) the forthcoming new 'Heritage Act', the 'Physical Planning Act' (2003), and the 'Land Use or Physical Development Plan for Antigua and Barbuda', which defines and establishes zones for appropriate land use. Building Guidelines have been designed to orient conservation interventions of historical buildings and archaeological remains and to set standards for new architecture and new guidelines; high standards

regarding the Dockyard's potential Underwater Cultural Heritage are also needed.

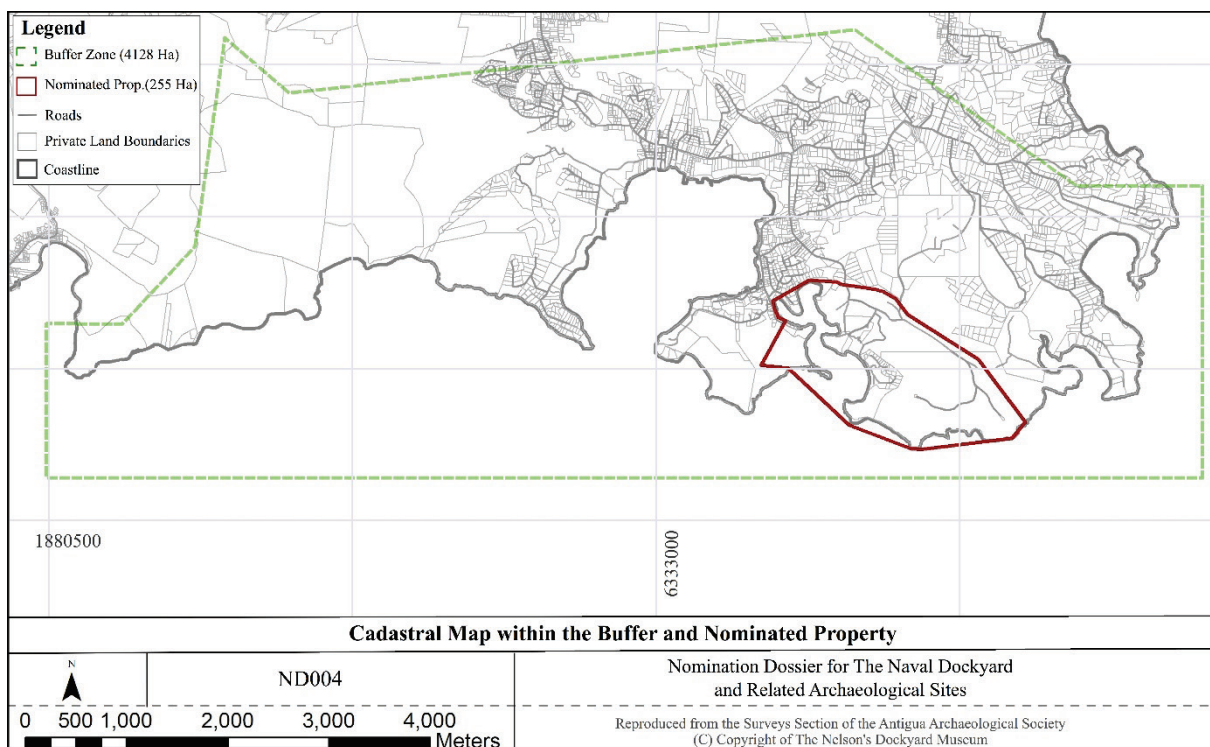
The system relies on the National Parks Development and Management Plan, which is specifically prepared under the provisions of sub-section 10 (2) of the Antigua and Barbuda National Parks Act (1984). The Management Plan, with its objectives and its operational instruments (land use zoning plan, action plan, conservation plan, marketing plan, guidelines, etc.) forms an integrated management framework that needs to focus on the Outstanding Universal Value of the Antigua Naval Dockyard and Related Archaeological Sites so as to ensure its effective management as a World Heritage property.

#### **Additional recommendations**

ICOMOS further recommends that the State Party gives consideration to the following:

- Approving the revision of the land-use zone plan as illustrated in the map submitted in the additional information provided in February 2016 so that it is aligned with the main aim of safeguarding the Outstanding Universal Value of the property and the attributes supporting it;
  - Completing the revision of the Management Plan so as to focus it on the sustenance of the Outstanding Universal Value of the property and to ensure that it is complemented by:
    - revised building guidelines for the conservation of the built and archaeological structures and compatible new design would assist in managing effectively the property and its values;
    - a Heritage Impact Assessment approach for all development projects concerning the property and its buffer zone;
    - a scientific study to assess the carrying capacity of the property for tourism and related pressures and a tourism and visitor strategy;
    - an interpretation programme for the restored structures with improved signage;
    - an improved monitoring system with appropriate indicators.
  - Approving and putting into effect the new Heritage Act as soon as possible;
  - Completing the comprehensive conservation and maintenance programme for the structures and archaeological remains, taking into account the specific contribution of each of the heritage resources in conveying the property's Outstanding Universal Value and complementing it with graphic technical documentation of the historic/archaeological structures within the property, as baseline information;
- Submitting a comprehensive and updated report on the implementation of the above recommendations by 1 December 2016 and 1 December 2017 for review by the World Heritage Centre and ICOMOS.





Map showing the boundaries of the nominated property



English Harbour – General view



Aerial view of Blockhouse complex with Cistern, Gun Platforms and Powder Magazine





Fort Berkeley



Guard Station





Artillery building



Clarence House south view

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# Pampulha Modern Ensemble (Federal Republic of Brazil) No 1493

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## Official name as proposed by the State Party

Pampulha Modern Ensemble

## Location

Minas Gerais  
Brazil

## Brief description

Designed in 1940 around an artificial lake, the Pampulha ensemble was a centre for leisure and culture within a garden city neighbourhood of Belo Horizonte, the new capital of Minas Gerais State.

Within landscaped grounds, and linked by a boardwalk around the edge of the lake, the Casino (now the Pampulha art museum), the Ballroom (now the Center of Reference in Urbanism, Architecture and Design), the Golf Yacht Club (present Yacht Tennis Club), and the São Francisco De Assis Church, were all designed by architect Oscar Niemeyer, working in collaboration with engineer Joaquim Cardozo, and artists including Cândido Portinari creating bold forms that exploited the plastic potential of concrete, and integrated the plastic arts.

Landscape designer Roberto Burle Marx, created a circuit of walkable spaces reflecting a dialogue with nature that emphasised these buildings as special pictures in a designed landscapes around the edge of the lake.

The ensemble is seen to reflect the way principles of modern architecture and landscape design were freed from rigid constructivism and adapted organically to reflect the Brazilian climate and natural surroundings. The landscape fused the new fluid architectural language with its landscape context. The complex came to be seen as a symbol for Brazilian identity.

## 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* (July 2015) paragraph 47, it is also a *cultural landscape*.

## 1 Basic data

### Included in the Tentative List

06 September 1996

## International Assistance from the World Heritage Fund for preparing the Nomination

None

## Date received by the World Heritage Centre

13 January 2015

## Background

This is new nomination.

## Consultations

ICOMOS consulted its International Scientific Committee on 20<sup>th</sup> Century Heritage and several independent experts.

## Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the property from 27 September to 2 October 2015.

## Additional information received by ICOMOS

A letter was sent by ICOMOS to the State Party on 23 September 2015 to request clarification and additional information on maps, management of the lake, historical development of the property, restoration of buildings and landscape and the airport. The State Party replied on 29 October 2015 to all these points.

On 15 December 2015 a further letter was sent to the State Party as an interim report from ICOMOS. The State Party replied on 24 February 2016, and submitted a slightly revised nomination dossier as well as further details on protection, restoration, conservation, management and an Intervention Plan.

These further details are reflected in this report.

## Date of ICOMOS approval of this report

11 March 2016

## 2 The property

### Description

NOTE: *The English translation of the nomination dossier from the original Portuguese is not easy to read and did not make the task of understanding the scope and value of the nominated property an easy one.*

The Pampulha Modern Ensemble was the centre of visionary urban design for part of a 'Garden City' promoted by a city administration who were responding to emerging international ideas.

The Ensemble lies within the city of Belo Horizonte, which was planned as a new capital of Minas Gerais State in the 1890s, to replace the mining city of Ouro Preto. The new city was built on several hills, surrounded by mountains.

The Pampulha Ensemble was planned as the harmonious centrepiece of a new neighbourhood in

1940. A large, sinuous man-made lake formed the natural focus around which art, culture and sport were to flourish in four main buildings on or near the edge of the water. The Casino, a powerful attraction in many cities at this time, provided fun, the Ballroom was the place for social interaction, the Yacht and golf club offered sport, especially on the lake, while the Church symbolised the strong religious nature of society. A boardwalk around the edge of the lake linked the buildings.

Beyond these nodal buildings and a peripheral avenue, the new neighbourhood was formally laid out with wide boulevards and low-rise residential neighbourhoods – some used as country houses, all interspersed by abundant vegetation.

The four buildings were designed by architect Oscar Niemeyer as an ensemble with interlinked views of each other and of the surrounding wooded mountain landscape. Engineer Joaquim Cardozo translated Niemeyer's sketches into reality. On and in the buildings, murals and tiles of Cândido Portinari and other artists were designed in harmony with the architectural forms. Each building was set in densely planted landscape gardens designed by Roberto Burle Marx, within which tiled walkways provided a connection with Brazilian civic tradition.

Although each of the four building offers a slightly different architectural solution to the challenge of adapting the prevailing formal 'Modernist' vocabulary to the climate and environment of the new city, overall what emerged was a fluid and plastic architecture that embraced views and allowed buildings to add to the 'picturesque' qualities of the lake and mountain landscape.

The four individual buildings are nominated together with most, but not all, of the lake and its surrounding boardwalk, together with the green area beyond between the designed ensemble and the city.

The original scheme envisaged further buildings being added such as an hotel that was not constructed. It also encompassed the whole lake, including Love Island, not included in the nominated area.

The nominated buildings are considered in turn:

#### *The Casino 1940*

The Casino, the first building to be designed and constructed, was the focus of the ensemble. It sits on highest peninsula around the lake, and was the main social centre at the time.

Of the four buildings, it is the one that most closely follows Corbusian principles with its free-standing structures reflected in modulated facades providing views of the lake. Circular and rectangular spaces, richly finished with marble and ceramic tiles, are linked by ramps and elliptical corridors to create a 'promenade' building, a form reinforced by the promenades in the landscaped gardens designed by Burle Marx that culminate in the detached

porte-cochere that shelters a bronze sculpture by Zamoyiski.

The Casino has seen at least three processes of restoration in the last 15 years, in which problems from water penetration have been addressed. In 1997 the gardens were restored, to reflect Burle Marx's concepts. They were further restorations in 2013.

The Casino is now used as the Pampulha Art Museum.

#### *The Ballroom*

The more modest Ballroom sits on a small island close to the shore to which it is linked by a bridge. Its flat roofed, circular form is approached by a curved, covered walkway through the surrounding mostly paved minimalist garden.

The Ball Room has been twice restored in the last twenty years. A new ceiling was inserted in 2003 to make the room more usable and this was approved by Niemeyer. A new entrance that was also inserted is less satisfactory and the original should be recreated. A project to achieve this has been agreed. (See Intervention Plan below.)

The Ball Room is now used as the Centre of Reference in Urbanism, Architecture and Design.

The original Burle Marx plans for the gardens are missing. In 2002, the gardens were restored on the basis of surviving images and interpretations of Burle Marx's concepts by Ricardo Samuel de Lana. A further restoration was undertaken in 2007.

#### *The Yacht golf club*

Designed on pilotis, its two storey rectangular form, with a gently sloping 'butterfly' roof oversailing a veranda, suggests a boat moored on the water's edge. The butterfly roof design was subsequently used in the Juscelino Kubitschek house in the buffer zone and then widely copied by other architects.

The golf course part of this club never materialised and its sole function was to provide access to water sports on the lake and facilities for tennis.

The Yacht Club is the only building that has not been restored. Internal partitions have been added and there has been loss of some features such as blue and white decorative tiles, marble cladding, *brise-soleil*, *Jatobá* ceramic tablets, parquet flooring and metal window frames.

In addition extensions, including a water tower, have modified its original relationship with the landscape, and fences have modified the relationship between the building and the street.

Nothing remains of the Yacht Club's original Burle Marx's landscape scheme, although the plans survive. The gardens were simple and mostly linear in form with shrubs to provide privacy for the tennis players.

There is a commitment to restore the building, remove the additional structures and restore the Burle Marx landscape. This work will include reconstruction of acoustic shell and access stairs, recovery and restoration of marble and tile finishes, and reinstatement of a mural by Burle Marx and a tempera panel by Cândido Portinari. (see Intervention Plan below.)

#### *São Francisco De Assis Church*

Sitting on a peninsula in part of the large gardens designed by Burle Marx, the church is constructed of five adjoining ellipsoid concrete shell structures of different heights. Although concrete shells had been used previously for industrial buildings, their use here marked the first occasion for a religious structure.

The largest shell faces the lake where a slender free standing 'tower' in the shape of an inverted pyramid is linked to the church by the flat roof of the porch. Part of the outer surface of the shell is decorated with tiles by Paulo Werneck, while blue and white murals by Cândido Portinari cover the facades of the lower shells facing the street.

The unusual and innovative design of the church generated much misunderstanding that caused the postponement of its consecration by the Catholic Church – and consequently its opening to the public – until 1959.

São Francisco de Assis Church underwent an extensive restoration in 2005, although some problems associated with water penetration have still to be overcome.

The extensive gardens designed by Burle Marx were in two parts: mainly low rose beds near the building and beyond the Avenue an arboretum and shrubbery, connected by elaborate paving. The rose planting around the building has been restored. The arboretum and shrubbery, now known as Dino Barbieri Square, were abandoned after the dam broke (see History) and the space given to a restaurant (much disliked by Niemeyer). The main restaurant was demolished in the 1990s but a small circular building retained. There is currently a proposal by the Municipality to keep the building and turn it into a Tourism Information Centre. At the time of the nomination was submitted, the gardens were being re-organised with extensive hard landscaping that did not reflect Burle Marx's original design nor was sympathetic to it. In response to ICOMOS's concerns, there is now agreement to prepare a detailed rehabilitation project for Dino Barbieri Square and implement it by 2018. This will involve demolishing the existing building and preparing a design that 'contemplates Burle Marx's style, readjusting it to the current reality' (see Intervention Plan below).

#### *Dalva Simão (formerly Santa Rosa) square*

This small square between the Ballroom and the Yacht Club was originally designed by Burle Marx in 1943. It was only completed in 1973 to a revised design by Marx that made full use of its rocks and the potential for desert plants in its arid environment.

#### *The lake*

The undulating outline of the lake was part of the original design to allow the reservoir to fit into its landscape; the water providing a 'mirror' for the urban ensemble. The eastern part of the lake is included in the boundary.

Around the edge of the lake, five hundred seedlings of royal palms (*Roystonea oleracea*), were planted by Burle Marx and these today are now fully mature. In between the palms, are several landing stages (*embarcaderos*) originally used by boats crossing the lake, and belvederes, one designed by Niemeyer, in the form of a simple, rectilinear shelter.

#### *Other parts of the ensemble not within the nominated area*

Some parts of the original planned ensemble are not included in the nominated area. These are in the Western end of the lake.

Two 'arms' of the lake became silted up and one was turned into an ecological park. The second arm is now about to be re-designed to re-claim some of the lake water and create a new park, but not incorporating the original designs by Burle Marx for Parque Vereda that were never executed.

Love Island, a small island inaccessible except by boat, was originally planted with exotic species to designs by Burle Marx. It is now a nature reserve. The possibility of recovering Burle Marx's designs is being considered as part of an overall tourism plan for Pampulha.

#### *Buffer Zone*

The buffer zone includes the remainder of the lake and an area encircling it to reflect the landscape setting of the urban ensemble.

Within the surrounding residential neighbourhood, in which wealthy families were encouraged to build country houses, are a few that were designed by Niemeyer such as the Alberto Dalva Simão house and the house of Juscelino Kubitschek built in 1942 for the Mayor who promoted the whole urban scheme. This latter house was recently restored together with its Burle Marx gardens, and opened as a Museum in 2013.

#### **History and development**

The construction of a new capital for the Minas Gerais State, the birthplace of libertarian movements against colonial rule, was approved in 1891 and inaugurated in 1897. Planned to accommodate between 200 and 300 thousand people, it was laid out in a grid pattern with added diagonal streets. Beyond this formal core, suburban areas were also planned with less regular structures and wider avenues.

The rapid growth of the city during the next few decades, culminating in an explosion of population in the 1920s, prompted by the rapid industrialisation of the area, overwhelmed the original planning processes for the suburbs.



In response, between 1938 and 1940 a new Urban Plan was developed, which addressed the need to lay down parameters to define the character of new city districts through the identification of planning zones. It was within the framework of this new Plan, that the Pampulha area was developed.

To north of the city the Pampulha Reservoir had been constructed between 1936 and 1938 to provide water for the wider area. It was tripled in size between 1940 and 1942. This major addition to the landscape was seen as the opportunity to plan a new zone that 'beautified' the lake and its surrounding area and promoted its development as a satellite city for leisure and tourism. The mayor, Juscelino Kubitschek de Oliveira, appointed in 1940, wanted to promote ideas of modernity and it was him who discovered and invited the young architect Oscar Niemeyer to design the new neighbourhood.

As well as being a centre for culture and leisure, the idea was to attract the wealthy classes through encouraging them to build country houses. The residential areas were to have wide streets, low density housing and spacious garden plots – all the characteristics of a 'Garden City'. Transport links were improved through new roads and the construction of Pampulha airport.

The main focus for the new zone was an ensemble of individual buildings related to leisure, sport and culture strategically placed around the lake. The Casino, Yacht and Golf Club, Ballroom and Church were constructed near the water within an encircling avenue, beyond which were the low rise detached houses. A boardwalk provided pedestrian links but there were also jetties for boats that crossed the lake. The setting for the ensemble that was built extended beyond what has now been nominated to include the western end of the lake.

For various reasons, the overall scheme was never completed. The Golf course was not developed and today the space is occupied by Belo Horizonte Zoo. The ensemble was also intended to have a hotel on a lake promontory and a restaurant on Love Island but neither of these were built.

And what was built has been modified by social as well as environmental changes. The Casino only functioned for a few years before a ban on public gambling came into force in 1946. In 1954 the lake dam ruptured and caused some flooding as well as changes to the edge of the lake. The idea of attracting wealthy individuals to own country houses in Pampulha also never really caught on. It became apparent that a high value residential area did not sit well alongside a popular leisure resort. Its leisure attractions have been supplemented over the years with a new large football stadium constructed in 1965 and a further multi-sports stadium in 1980. While these have strengthened the leisure facilities, they have added negatively to the original visual concept.

Pampulha is now described as a leisure area 'increasingly suitable for lower strata'. This shift has in turn presented problems with finding owners for the expansive suburban houses that were built for wealthy families.

From the 1960s, enormous pressure began to be put on the reservoir as a result of continuing industrial and urban development, particularly to the north of Minas Gerais. The water courses that feed the reservoir became polluted by sewage and silt.

By the 1990s the problems had escalated to such an extent that local resident began to demand comprehensive solutions. In the past twenty years, work has starting to clean up the lake, and in parallel, conservation work of the buildings has been undertaken.

### **3 Justification for inscription, integrity and authenticity**

#### **Comparative analysis**

The comparative analysis presented in the nomination dossier offers comparisons of both the whole ensemble and of its individual elements, and also considers comparisons with other groups of buildings arising from government initiatives. It first considers comparisons with inscribed properties and then others.

The comparisons with individual elements are not particularly relevant as it is suggested that there are some similarities between the Pampulha ensemble and Parc Güell by of Antoni Gaudí (Spain, Works of Antoni Gaudí, 1984, 2005, criteria (i), (ii) and (iv)), with the Museum of Modern Art (MAM) in Rio de Janeiro, designed by Affonso Eduardo Reidy and inaugurated 25 years later, and with the Sydney Opera House (Australia, 2007, criterion (i)), by Jørn Utzon constructed between 1958 and 1973, as both overlook water.

The various government commissioned buildings that are explored also do not contribute to an understanding of the singularities of the Ensemble in terms of the value that is suggested for it.

ICOMOS considers that it is the ensemble that should be the main focus of the comparisons in relation to the way it has been justified for inscription: that is an ensemble that manifest new approaches to the way modern architectural precepts were modified to create buildings that fused with their designed environment, reflected local cultural traditions, and integrated other arts. It is this combination of the asset and its proposed value that should be the starting point for be comparisons, in order to demonstrate that there are no other sites with a similar combination on the World Heritage List, or others that might come forward.

Thus the Ensemble should be compared with other buildings and ensembles in other parts of the world where modern architectural ideas were tempered by

climatic and cultural traditions in a way that resulted in a new architectural language emerging, as well as within Latin America to ensure it is the best exemplar in its home region.

It would have been relevant to understand how modern movement ideas were fused with local traditions in India and Japan, for instance, or in the African sub-continent, and whether there were or were not similar outcomes in terms of new architectural languages emerging that were related to national or regional identities. These comparators have not been considered.

Within Latin America, the comparators are more meaningful in terms of understanding what other developments were emerging in parallel and the impacts they had. The text makes a strong case for considering Pampulha, “In conjunction with the building of MESP (Ministry of Education and Public Health), in Rio de Janeiro, and with the University Cities of UNAM (Universidad Nacional Autónoma de México) in Mexico City [inscribed in 2007 on the World Heritage List, criteria (i), (ii) and (iv)] and University City of UCV (Universidad Central de Venezuela), in Caracas [inscribed on the World Heritage List in 2000, criteria (i) and (iv)], Pampulha represents one of the best examples of the work of the so-called “Vanguards of State” noted in Latin America in the mid-twentieth century”.

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

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#### **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.

Developed by the public sector in 1940, as an ensemble of buildings around an artificial urban lake for leisure and culture, at the centre of a new “garden city”, the Pampulha Modern Ensemble, designed by architect Oscar Niemeyer, engineer Joaquim Cardozo, landscape architect Roberto Burle Marx and artists including Cândido Portinari, has:

- Joined various forms of artistic expressions into an integrated whole, with technology and the specific language of each discipline (architecture, landscaping, painting, sculpture, ceramics) relating to each other and to the expressiveness of the whole;
- Represents a *new synthesis* in the Americas of architectural ideas and forms that had evolved in the first decades of the 20<sup>th</sup> century, which can be seen as an important chapter in the world history of modern architecture;
- Symbolizes the merging of universal trends with local traditions and values which, in turn, influenced and changed the course of worldwide trends;

- Through the strength of the Ensemble provided by the shapes of their buildings and the relationship established between them and with the landscape, a new architectural language was inaugurated based on formal freedom, collage of references from multiple sources, use of local nature and values, in addition to the reaction against a strict functionalism. Thus, it expresses a *pioneer contextual approach* within the modern architecture scope, in contrast to the indifference to the surrounding context that was often featured.

ICOMOS considers that this justification is broadly appropriate in the way the ensemble developed a new architectural language based on modern precepts but tempered to provide a more contextual approach that proved highly influential in responding to emerging national identities.

The new architectural vocabulary allowed buildings to respond to and complement their landscape setting and fuse together architecture, the plastic arts and design. The buildings were designed in such a way that there was a dialogue between the structures and their surroundings with strong functional and visual links between the components. They also reflect a dynamic collaboration between various innovative artists in their respective fields of activity.

For this reason, ICOMOS considers that it is essential that what is nominated reflects vividly the way the four main buildings in their landscape were designed as a single entity and one unified concept, and demonstrates a synthesis of architecture, plastic arts, landscape design and the ‘natural’ setting both as a whole ensemble, and through the way each of the individual structures can be seen as specific exemplars of the new multifaceted style.

ICOMOS considers that currently the clarity of this new architectural vocabulary is not sufficiently in evidence throughout the whole property. There is a need to restore some of the components, both built structures and designed landscapes, and to reinstate the clear ‘mirror’ of the lake at the centre of the composition. During the course of the evaluation process, a clear commitment has been made by the State Party to undertake this work supported by the Federal, State and Municipal governments.

#### **Integrity and authenticity**

##### **Integrity**

In terms of the way the nominated ensemble reflects the original design of the cultural centre around the new lake, the four main buildings and most of their surrounding landscapes are included within the boundaries. Currently, though some of the individual attributes are compromised and this impacts adversely on their integrity.

The Yacht Club is compromised by internal alterations, and recent additions, and by the lack of its Burle Marx designed landscape, part of the over-arching idea of fusing buildings with their surroundings.

The commitment by the State Party to carry out the necessary restoration work means, when it has been completed the Yacht Club building, will once more express its original architectural and decorative designs and be reunited with its designed landscape area.

Similarly the church should be reunited with the overall extent of its designed landscape. Currently only part of the Burle Marx landscape around the church has been restored. For this building there is a commitment for the remaining part of the landscape in Dino Barbieri Square to be re-configured to respect Burle Marx's original designs.

In terms of the overall design concept for the ensemble, which gives it a coherence, it is impossible in visual terms to separate the green areas on both sides of the encircling road from the ensemble. The 10 meter green area on the far side of the road and the first row of houses beyond are part of the coherence of the ensemble and need to be managed as such to sustain the integrity of the whole.

Pollution of the lake also remains an issue, in relation to the idea of a beautiful landscape and one that provides leisure activities especially related to the water. The commitment of the State Party to address this issue is essential in order that the lake can be reinstated as the element that binds the buildings and designed landscapes together.

Once the various restoration, reinstatement and conservation projects have been completed, the issues relating to the integrity of the individual elements should have been addressed.

In terms of visual coherence, the presence of two gigantic sport facilities very close to the area impact on views of the Church from the lake. Their impact needs to be minimized through remedial work in the landscape.

#### Authenticity

If the fusion of architecture with other arts is to be fully understood, there is a need for the restoration of the Burle Marx landscapes which are a crucial aspect of the ensemble. In only two of the components (Casino and Ballroom) have the gardens been completely researched and restored. For the other two components, part of the Church garden has been restored but not the arboretum to the rear of the Church in Dino Barbieri square, and no work has yet been done on the Yacht Club landscaping (although documentation survives).

There is a degree of weakness in the authenticity of the overall ensemble in terms of the extent to which evidence of these landscape schemes can be

appreciated. The idea of placing buildings in an overall landscape with those parts nearest the buildings being carefully designed is no longer evident around the Yacht Club or in the square behind the Church. There is now a commitment to address these issues and undertake necessary work on the gardens.

In terms of buildings, the authenticity of the Yacht Club has been weakened by the heavy modification to the design, particularly by additional buildings which need to be removed, by inserted internal partitions and by the removal of some of its decorative elements. And the authenticity of the Ballroom has been impacted upon by the new entrance, which needs to be removed and the original one recreated.

The State Party has now given commitments to undertake necessary restoration and reinstatement project to reverse these changes and this should strengthen the authenticity of the components.

A proposed new building (for which no details have so far been provided and whose status is unclear) could impact adversely on the authenticity of the Casino and more details need to be provided.

The low-rise, low density housing in the surrounding 'Garden city' areas are vulnerable to changing uses and development, such as the large hotel near the Yacht Club, and these could impact adversely on the immediate landscape setting of the property.

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ICOMOS considers that the conditions of integrity and authenticity have not been fully met, but that there is a commitment to address the necessary work that will strengthen authenticity to an acceptable level.

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#### 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;*

This criterion is justified by the State Party on the grounds that the Pampulha Modern Ensemble, as a new architectural synthesis, is a seminal reference point for world architecture and the architectural and cultural history of humanity.

The Ensemble fuses various forms of artistic expression (sculpture, painting, landscaping and architecture), to make a coherent and harmonious whole. It had a strong influence on the development of Brasilia, the Chapel of Ronchamp and the Opera House in Sydney.

ICOMOS considers that the idea of the ensemble being a "referential moment in the history of mankind" is not substantiated and is anyway more relevant for criterion (iv), whereas its influence is more appropriate for criterion (ii).

In order to demonstrate this criterion, ICOMOS considers that the justification needs to focus on how the collective geniuses of Niemeyer, Burle Marx and Cândido Portinari delivered a landscape ensemble that as a whole was outstanding and can still be considered outstanding in its present form as a masterpiece of human creative genius as an example of extraordinary genius.

ICOMOS considers that the original four buildings in their wider landscape have the capacity to demonstrate this criterion as an exceptional creation once all the key elements of this overall creation have been reinstated and /or restored, for which work there is now a commitment.

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ICOMOS considers that this criterion can be 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 Pampulha Modern Ensemble was linked to reciprocal influences between European and North America and the Latin American periphery and particularly a poetic reaction to the perceived austerity of modern European architecture.

Pampulha is important for the dynamic interchange between arts and architecture, for the way its fluid forms expressed the landscape, and for the way the new architecture asserted new national identities in recent independent Latin American countries.

Particularly through its free geometric forms, Pampulha had a lasting influence on the work of other architects such as Le Corbusier and those working in later decades, and overall exerted an architectural and cultural influence in many parts of the world.

ICOMOS considers that this justification is in principle appropriate as Pampulha inaugurated a new direction in establishing a synthesis between local regional practices and universal trends. It also made Brazilian modern architecture known in the world, through for instance the exhibition 'Brazil Builds. Architecture new and old (1652-1942)', held at the Museum of Modern Art in New York, in 1943 which consolidated Oscar Niemeyer as the exponent of this new modern path to follow.

However, it cannot support the idea that the curved forms used in the Ensemble were an innovative Brazilian idea as these had been used earlier for instance by Mies van der Rohe in the 1920s. Nor does it consider that the Ensemble had a worldwide influence. Certainly what was created became well-known but it can be seen to have had a mostly regional influence. ICOMOS also considers that the influence is not only emanated from the

architecture but rather from the close links between architecture, landscape design and the plastic arts.

Thus, in order for this criterion to be justified, there is a need to ensure that the ensemble fully reflect the fusion of arts and architecture and the interrelationship between buildings and landscape that underpins its influence. There is now a commitment to undertake this necessary reinstatement/restoration work.

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ICOMOS considers that this criterion can be 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;*

The criterion is justified by the State Party on the grounds that the significant stage in human history relates to the economic crises of 1929 and the way the masses demanded greater inclusion in nation building. These circumstances enabled the Pampulha Modern Ensemble to propose a change in the direction of Modern architecture and landscaping, so that the State could deliver creative and cultural autonomy.

Pampulha, as a homogenous ensemble, is seen to express innovative architectural form, technological innovations, innovative landscaping and the acknowledgment of the value of public space and the natural landscape.

Also mentioned are its links to innovations such as the curve and the idea of 'freeform'.

ICOMOS considers that this criterion could be justified but for the way the Pampulha ensemble and its innovative architectural and landscape concepts reflects a particular stage in architectural history, which in turn reflects wider socio-economic changes in society, particularly in South America.

The text on the influence of the curve (which has been commented upon above) is not relevant to this criterion, nor is the idea of 'freeform', which anyway is somewhat unclear.

If the ensemble is to carry this strong message, and be seen as an exemplary historic urban landscape ensemble, further work is needed on restoring gardens and squares and the water of the lake, as is detailed elsewhere, and for which a commitment has been made.

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ICOMOS considers that this criterion can be justified.

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ICOMOS consider that the criteria and the conditions of authenticity and integrity can be met.

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#### 4 Factors affecting the property

All the component sites except the Yacht club are in public ownership and are not subject currently to direct development pressures. In the case of the Yacht Club, decision-making depends on the members of the club. There are plans to reverse the interventions that have affected the authenticity of the component site.

Development in the buffer zone is a different issue as here there has been some development such as the hotel next to the Yacht Club, which because of its scale destroys the relationship between the Yacht Club and the urban residential areas, and further development is apparently planned near the Casino. Current zoning regulations in the buffer zone allow densification in some areas and large scale community facilities would be allowed in other areas just beyond it in the wider setting.

Zoning regulations alone will not be sufficient to control inappropriate development.

The data in the dossier from the 2010 Census shows that the neighbourhoods surrounding the Pampulha Lagoon have decreased in population over the past twenty years with many houses left unoccupied. This factor combined with Changes in use from single-family residential and non-residential uses related to recreation and leisure activities to multifamily residential use, trade activities and other services of metropolitan coverage, can put pressure on the landscape and the overall rationale and atmosphere of the property at the centre of a 'garden' residential area.

Some of the houses immediately adjacent to the property are now for rent or sale, while some other large single-family houses, are abandoned, a cause for concern considering the feasibility of their conservation. This will need to be addressed as part of the management and conservation plans.

The zone of interaction between the designed buildings and landscape at the edge of the lake and the residential neighbourhoods is of crucial importance and vulnerable to incremental changes. In some places, changes that have already happened and these need reversing such as those places where the grass areas either side of the Avenue and adjoining the boardwalk on the lake side, have been changed to hard surfaces and need restoring to grass, and where the first row of houses have been modified in various ways.

The city of Belo Horizonte has dense traffic along its main road and Pampulha also suffers from an increase of cargo and private vehicular traffic, which affect the road surrounding the lake, adding stress on the visitors crossing to the nominated area. Another factor that deserves further study and further control is the parking facilities for single vehicles and tourism buses along the main road and near the nominated buildings.

One of the biggest problems is the pollution of the Lake brought about by industrial and other development and the lack of adequate sewage schemes. This can at time be so bad that the water gets covered by green algae, no water sports can be contemplated, and residents complain of strong nauseating smells that keep them indoors.

This is a problem that dates back many decades. Although there are many institutions and plans dealing with the eutrophication of the lake, these appear not to have been effective so far. A sewage system collects water before it reaches the lake and directs it to a treatment plant, but there are still some areas with septic tanks percolating into the lake as not all the urban areas within the watershed are connected to the sewage system. Another issue is rainwater, which brings sediment and garbage to the lake in the West. An action plan has been drawn up and its implementation is due to start in 2016. (see details below)

Although tourism is not yet a large negative factor, largely because of lake pollution, there are some concerns about the degree to which it will be encouraged. The tourism plan defines the Pampulha area as one of the main attractions of the city of Belo Horizonte. There is a need for more assessment of the overall development, tourism and leisure plans, as there are some suggested uses that do not appear to be compatible with the value of the property and its buffer zone as an historic, designed urban landscape.

For instance, the suggested sports use could push the nominated area beyond its carrying capacity and be used to justify constructions which could impact adversely on the open landscape around the ensemble.

There is a need to calculate the fluctuating population resulting from proposed sports activities, especially at the Football and Mineirão Stadium. These have different motivations and in some cases could conflict with appropriate uses of the ensemble and its setting.

The use of the lake for nautical sports is a medium-term action, waiting for the environmental issues in the lake to be addressed.

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ICOMOS considers that the main threats to the property are over ambitious tourism development, pollution of the lake, a declining residential population and incremental changes to the key attributes of the property and its setting.

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#### 5 Protection, conservation and management

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

The Lake is one indivisible element. The western end should be included within the boundary together with Love Island, one of the original components of the

designed ensemble. ICOMOS understands why at this time the west end of the lake has been excluded from the boundaries, but considers that it should be a long term aim to extend the boundaries to include the whole of the water body and its immediate periphery.

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ICOMOS considers that the boundaries of the nominated property and of its buffer zone are adequate but there should be a long term aim to extend the boundary to include the west end of the lake.

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### **Ownership**

The Casino (Pampulha Art Museum), and the Ball Room (Centre of Reference in Urbanism, Architecture and Design), are owned by the Municipality of Belo Horizonte. The San Francisco Church belongs to the Catholic Church of Brazil, while the Yacht Tennis Club is in private ownership.

### **Protection**

The nominated property is protected at national, state and local level.

At the National level, the ensemble of buildings and landscape (which includes parts of the buffer zone) were protected in 1997 by IPHAN (National Historical and Artistic Heritage Institute).

At the Regional level, the ensemble also, since 1984, has had State level protection under the IEPHA-MG (State Institute of Historical and Artistic Heritage of Minas Gerais). In 2003 protection was also given to the surrounding perimeter which covers most of the buffer zone, but excludes some portions to the East and southwest.

At the Local level, the individual buildings have local protection.

The Master Plan of Belo Horizonte, 2010, defines the planning zones for the city. The buffer zone and the wider setting beyond it are in various restrictive zones. However some of these are protected for environmental reasons, such as those encompassing the parks, the part of the lake in the buffer zone, and the areas around the stadia are delineated as 'large equipment' zones.

Also of concern is the delineation of three areas, one adjoining the shore immediately opposite the Yacht Tennis Club, and to the west of the Casino, a second at the north east edge of the lake (just outside the buffer zone), and a third at the edge of the western end of the lake as 'favourable densification' zones, while an area adjoining the lake at its southernmost tip (outside the buffer zone), as well as one at the north-east of the lake (also just outside the buffer zone) are zoned for 'large scale community facilities'.

In order to protect the context for the designed ensemble as the core of a garden city neighbourhood, strengthened protection and specific restrictions need to be put in place for the buffer zone that reflect its cultural

value as an essential context for the designed ensemble. The current zoning regulations on their own are not adequate tools.

Also the first block of houses beyond the Avenue and facing the lake needs to be protected for its contribution to the visual setting of the Ensemble and its overall rationale.

A further planning restriction is provided by the Special Planning Guidelines' Area (ADE). This relates to interventions within the zones outlined above. There are two ADEs in the buffer zone: for Pampulha Basin regulated in 2005, and for Pampulha, initially regulated in 1996 but amended in 2005. This latter amendment introduces the possibility of non-residential uses, linked to leisure tourism and culture, being allowed on the 'boardwalk and arterial paths', and a maximum height of 9 metres is mentioned.

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ICOMOS considers that the legal protection in place for the property is adequate but for the buffer one, the protective zoning needs strengthening in some places.

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### **Conservation**

In response to concerns of ICOMOS in relation to some aspects of the conservation of the built fabric and the deigned landscape, the State Party has produced an Intervention Plan that sets out how these issues will be addressed, a timescale for the necessary work, and a signed commitment from all the relevant organisations.

The Casino, Ballroom, and the Church have all been restored over recent years and are in a good state of conservation. The exception is the Yacht Club where no restoration has so far been carried out. Work is needed not only on the main fabric, and on removing inserted internal partitions, and reinstating now missing elements of the original design, but also to claim its surroundings from additional buildings. There is a commitment to carry out this work and to provide the necessary resources.

Internally, the restoration of its plan and restoring the fabric could be resolved with relative ease. Restoring missing details and finishes will be more challenging. A detailed project plan has been proposed as part of the Intervention Plan. Work started on developing this project on 1<sup>st</sup> March 2016. This will include demolition of additional buildings, restoring decorative wall coatings and marble flooring, reconstruction of an acoustic shell, reconstruction of party room access with mirror green tiles, re-instating Burle Marx's *O Esporte* mural and a tempura panel by Cândido Portinari, and the restoration of the old night club and its furniture. The project is due to take 18 months.

Although the Ballroom has been restored, the original entrance has been changed. ICOMOS considered that the original should be replaced. This work is also part of the Intervention Plan. This work will take 6 months and is planned for 2017.

Gardens adjoining two of the buildings (Casino, Ballroom) have been restored and part of the Church Garden. Those around the Yacht Club need restoring to bring back the original designs of Burle Marx, once additional buildings have been demolished. This work is proposed as part of the Intervention Plan.

The intervention plan also includes proposal to re-design Dino Barbieri Square behind the church to make it more sympathetic to Burle Marx's original designs. This will involve demolishing the circular building.

The conservation of the lake is unsatisfactory and this is acknowledged. The poor water quality kills fish and prevents any recreational use. Although large amounts of silt were removed from the lake in 2014, as part of a major Pampulha Viva project, this has not provided a long term solution. This matter is also addressed in the Intervention Plan which sets out projects to address the two key aspects: build-up of sediment and water quality. The sediment will be addressed by an initial four year maintenance programme, while water quality will be tackled by a combination of bioremediation and phosphorous collection technologies which aim to bring the water purification up to level 3 in ten months and maintain it initially for 12 months. For both projects, \$27.5 million will be invested. The projects are due to start in spring 2016. In parallel with these projects, the State Sanitation Company (COPAS) will be working to deliver 95% sewer connection by December 2016.

Documentation related to the already completed restoration projects is kept in IPHAN-MG, IEPHA-MG and the Heritage office at the Municipality. IPHAN-MG has documentation on interventions in Pampulha Modern Ensemble since 1944. All restoration projects need to be approved by the three levels of government and the proposed Pampulha Modern Ensemble Management Committee has among its functions the coordination of the documentation related to restoration projects of the buildings and gardens in the nominated area.

In the case of the past landscape restoration projects, the information seems not to be as well organized. There appears to be a need for further work in order to ensure an adequate record of interventions and baseline data for the future.

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ICOMOS considers that conservation of two of the three buildings is adequate, while the Yacht Club needs major restoration; conservation of the designed landscapes is adequate for the Casino and the Ballroom but not satisfactory for the Yacht Club and the Dino Barbieri Square to the south of the church; conservation of the lake is also currently not satisfactory. ICOMOS notes that all these issues are to be addressed by the Intervention Plan.

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## Management

Management structures and processes,  
Including traditional management processes

In order to bring together the main stakeholders of the property and its buffer, the government has created a Committee in which all three levels of government participate. It has the mandate to set the guidelines for the execution of the Management Plan and to promote the execution of actions by the different levels of government and municipal authorities with jurisdiction over the ensemble. It was created August 2015 and had its first meeting September 2015. It has 26 active members and 26 substitute members.

Within the Municipality, there is a management group that deals with day-to-day management. This presumably brings together those responsible for the buildings and those with responsibilities for the boardwalk and lake – currently within different departments. An office for this group is planned in one of the buildings at the property. Siting some key parts of the management within the property is of the utmost importance.

The one aspect that does not appear to be covered by the present structures is a link to neighboring municipal authorities. Only 45% of the Pampulha Basin is within Belo Horizonte Municipality, while the remainder is within the Contagem Municipality. Although the Contagem Municipality participates in the Recuperation of the Pampulha Basin programme, which deals with environmental issues, it is essential that their participation also extends to cultural aspects as well. Representatives of the Contagem authority need to be part of the management Committee and actively linked to the management Group.

All proposed alterations to listed buildings in the Pampulha Lake have to go to IPHAN-MG for a Technical Approval based on the Guidelines of the Belo Horizonte Master Plan.

There are four architects and a supervisor dedicated to processing the projects and permissions in the Pampulha area and they will be part of a Technical sub-committee.

The Heritage office of the Belo Horizonte Municipality also houses 30 professionals, half of whom are architects. The office offers to design projects free of cost for owners not able to afford to pay fees - a good initiative implemented in the Pampulha area as part of management strategies.

For individual buildings, apart from the Yacht Club all have good staffing levels: the Ball Room has twenty-two employees, seven for maintenance, six for security, and the rest for managerial tasks. The Church has four employees and extra for events.



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

A Management plan was submitted with the Nomination dossier; this was compiled by a consultant. The Plan sets out a management chart and a matrix of responsibilities. It includes a list of work already undertaken to promote the idea of World Heritage and sensitize local citizens and also work to be undertaken in the future such as the development of a Communication Plan.

The Plan falls far short of being a satisfactory document that could provide the framework for future actions. It does not set out in detail what is to be managed in relation to the proposed Outstanding Universal Value and there is little analysis of the issues that might face the property in terms of sustaining the attributes of Outstanding Universal Value, or how they might be addressed in a proactive way.

Given the complexity of the property in terms of the way buildings relate to each other in visual terms and to the wider landscape of lake, urban area and mountains beyond, there is a clear need for a more effective Management Plan that acknowledges the tensions that prevail, especially in relation to tourism development, densification of urban areas. This needs to set out strategic guidelines that can over-arch management and decision making as formal commitments to progress in key areas. Such a document could provide a clear enough understanding of the challenges of protecting not just the key buildings in the landscape setting but also the essential characteristics of the traditional neighbourhoods that complement the ensemble and together form a complex historic urban landscape.

Involvement of the local communities

Local communities today are seen to widely recognise the uniqueness, strengths and exceptionalities of the vision and design of the ensemble and its setting.

During the mission there was an extended meeting with representatives of the local community and residents of the area who support the bid as a way of bringing the Pampulha Lake back to its original idea as a low-density recreational residential area. So far, however, there is no active involvement of these groups in the management.

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ICOMOS considers that the management structure appears adequate, if extended to include representatives of Contagem Municipality; it is as yet untested; the Management Plan needs re-drafting to adopt an historic urban landscape approach and to embrace specific aspects such as tourism and sustaining traditional neighbourhoods. Local communities need to be actively involved in management.

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## 6 Monitoring

The monitoring indicators that have been provided are rather basic, somewhat reactive and unrelated to the attributes of Outstanding Universal Value. They include, for instance measuring the number of fines for planning irregularities.

These indicators would not help measure how far management is successful in sustaining the complex historic urban landscape in a proactive way. As part of the re-writing of the Management plan, a new more targeted set of indicators needs to be developed, based on the defined attributes of Outstanding Universal Value.

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ICOMOS considers that the current indicators and not adequate and need to be re-formulated as part of the re-writing of the Management Plan.

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## 7 Conclusions

The Pampulha Modern Ensemble is put forward as an exceptional group of buildings within a designed landscape, conceived as a whole and built within in a short space of a few years in the early 1940s. Its creation resulted from the merging of the creative talents of Oscar Niemeyer, Burle Marx and a range of artists such as Cândido Portinari. Together they fused architecture, landscape design and the arts into a single whole.

The four buildings in their landscape were designed as a single entity – one unified concept. If the organic forms of the buildings are to fully reflect their interaction with the natural surroundings in a visually exciting and harmonious way, and for the ensemble as a whole to reflect the synthesis of the four elements: architecture, plastic arts, landscape design and 'natural' setting, then it is essential that their original design concepts are visible and readily understood.

Currently three of Niemeyer's buildings have been restored but the fourth, the Yacht Club, has been compromised by alterations and none of its artistic decoration is evident. The Burle Marx gardens around the Yacht club have disappeared and his plans for Dino Barbieri Square behind the church are also not extant. And the lake no longer provides clear mirror for the buildings.

If the ensemble is to be valued as an example of extraordinary creative genius, as well as for the way it has influenced architectural development elsewhere and can be seen as an important stage in architectural history, then these missing parts need restoring.

Fortunately the required plans survive and key decorative panels by Burle Marx and Cândido Portinari can be reinstated. During the evaluation process, and as a result of dialogue with ICOMOS, the State Party was able to get the necessary agreement from Federal, State

and Municipal governments to undertake the work and to find the necessary resources. A signed commitment has been provided that this work will be arrived out to an agreed timescale.

Given the care with which the restoration work has been carried out on the three buildings and designed landscapes, ICOMOS considers that the integrity and authenticity of the ensemble can improved to a satisfactory level by this work.

As the designed ensemble has always been part of the overall designed urban area, if this landscape setting is to be maintained, then more attention needs to be given to the current protective management around the edge of the lake, where in some places densification and development have been allowed, and to sustaining the character of the green sward and adjoining block of houses beyond the encircling Avenue.

Although the management structure is adequate, the management plan needs to be augmented to encompass the complex challenges that face the detailed management of the context for the ensemble.

Finally ICOMOS would like to comment on the clarity of the nomination dossier – or rather the lack of clarity. The translation of the text from Portuguese to English has left much to be desired. Currently the information within the text can only be understood with some difficulty. As the nomination dossier is the reference point for this property once it is inscribed and the archived record of what has been nominated, ICOMOS would like to suggest that the State Party consider contributing an improved translation.

## 8 Recommendations

### Recommendations with respect to inscription

ICOMOS recommends that the Pampulha Modern Ensemble, Brazil, be inscribed as a cultural landscape on the World Heritage List on the basis of **criteria (i), (ii) and (iv)**.

#### Brief synthesis

Designed in 1940 around an artificial lake, the Pampulha ensemble, of four buildings set within landscaped grounds, was a centre for leisure and culture in the 'garden city' neighbourhood of Belo Horizonte, built as the new capital of Minas Gerais State.

The Casino, Ballroom, Golf Yacht Club and São Francisco De Assis Church, were designed by architect Oscar Niemeyer who, working in collaboration with engineer Joaquim Cardozo, and artists including Cândido Portinari, created bold forms that exploited the plastic potential of concrete, and integrated the plastic arts such as ceramics and sculpture. Landscape designer Roberto Burle Marx, reinforced the links between the buildings and their natural landscapes

through designed gardens and a circuit of walkable spaces to reflect a dialogue with nature that emphasized the buildings as special pictures mirrored in the lake.

The Ensemble reflects the way principles of modern architecture that had evolved in the first decades of the 20<sup>th</sup> century were freed from rigid constructivism and adapted organically to reflect local traditions, the Brazilian climate and natural surroundings. Through a dynamic collaboration between various innovative artists in their respective fields of activity, the Ensemble pioneered a contextual approach in which a new fluid modern architectural language was fused with the plastic arts and design, and responded to its landscape context.

This new synthesis that evolved at Pampulha made Brazilian modern architecture widely known through for instance the exhibition 'Brazil Builds. Architecture new and old (1652-1942)', held at the Museum of Modern Art in New York, in 1943. The new architectural language proved highly influential in responding to emerging national identities in South America.

The Casino is now the Pampulha art museum, the Ballroom is the Center of Reference in Urbanism, Architecture and Design, the Golf Yacht Club is the Yacht Tennis Club, and the São Francisco De Assis Church remains in use as a church. Beyond the four buildings and their linking board walk, the original concept of the garden city neighbourhood still persists in the encircling Avenue with its green grass edges and beyond in the low rise detached houses in spacious gardens which collectively provide an overall rationale and context for the four buildings.

**Criterion (i):** Niemeyer, Burle Marx and Cândido Portinari collectively delivered a landscape ensemble that as a whole is an outstanding for the way it manifests a new fluid modern architectural language fused with the plastic arts and design, and one that interacts with its landscape context.

**Criterion (ii):** The Pampulha Modern Ensemble was linked to reciprocal influences between European and North America and the Latin American periphery and particularly to a poetic reaction to the perceived austerity of modern European architecture.

In establishing a synthesis between local regional practices and universal trends, as well as fostering dynamic links between architecture, landscape design and the plastic arts, Pampulha inaugurated a new direction in modern architecture which subsequently was used to assert new national identities in recently independent Latin American countries.

**Criterion (iv):** The Pampulha ensemble and its innovative architectural and landscape concepts reflects a particular stage in architectural history in South America, which in turn reflects wider socio-economic changes in society beyond the region. The economic crises of 1929 prompted demands for people to have

greater inclusion in nation building. These circumstances influenced the design of the new garden city neighbourhood of Belo Horizonte as a place that could reflect creative and cultural 'autonomy' through innovative architectural buildings designed for public use, set in a designed 'natural' landscape, well endowed with public spaces for leisure *and exercise*.

#### Integrity

The boundaries of the Ensemble reflects the original design of the cultural centre around the new lake and include the four main buildings and most of their surrounding landscapes, both designed and natural. Only the west part of the lake is excluded from the boundaries. The ensemble as a whole can be seen as sufficiently intact. The four buildings still maintain a good relationship with each other, with the lake which they face, and with the garden city neighbourhood to their rear.

In terms of the overall design concept for the ensemble, which gives it a coherence, it is impossible in visual terms to separate the green areas on both sides of the encircling road from the ensemble. The 10 metre green area on the far side of the road and the first row of houses beyond are part of the coherence of the ensemble and need to be managed as such to sustain the integrity of the whole.

Three of the individual components, the Casino, the Ballroom and the Church are individually intact in terms of the way they reflect all their original architectural features, while two of them, the Casino and the Ballroom are also set in designed landscape gardens that reflect their original designs. For the Church, currently only part of its Burle Marx landscape has been restored, but there is a commitment for the remaining part of the landscape in Dino Barbieri Square to be re-configured to respect Burle Marx's original designs.

The fourth component, the Yacht Club, is currently compromised by internal alterations, and recent additions, and by the lack of its Burle Marx designed landscape. There is a commitment to carry out the necessary restoration work to allow the Club building to once more express its original architectural and decorative designs and for it to be reunited with its designed landscape and lake frontage.

Pollution of the lake remains an issue, in relation to the idea of a beautiful landscape that provides leisure activities especially related to the water. This issue should be addressed in order that the lake can be reinstated as the element that binds together the buildings and designed landscapes and provides recreation.

In terms of visual integrity, the presence of two gigantic sport facilities very close to the property impact on views of the Church from the lake. Their impact needs to be mitigated through remedial work in the landscape.

#### Authenticity

If the fusion of architecture with other arts is to be fully understood, there is a need for the restoration of the Burle Marx landscapes which are a crucial aspect of the ensemble. In only two of the components (Casino and Ballroom) have the gardens been completely researched and restored. For the other two components, part of the Church garden has been restored but not the arboretum to the rear of the Church in Dino Barbieri Square, and no work has yet been done on the Yacht Club landscaping (although documentation survives). There is a commitment to address these issues and undertake necessary restoration work on the gardens.

In terms of buildings, the authenticity of the Yacht Club has been weakened by the heavy modification to the design, particularly by additional buildings which need to be removed, by inserted internal partitions and by the removal of some of its decorative elements. And the authenticity of the Ballroom has been impacted upon by the new entrance, which needs to be removed and the original one recreated. There are now commitments to undertake necessary restoration and reinstatement projects to reverse these changes and strengthen the authenticity of both these components.

The low-rise, low density housing in the surrounding 'Garden city' neighbourhood is vulnerable to changing uses and development, such as the large hotel near the Yacht Club, and these could impact adversely on the immediate landscape setting of the property.

#### Management and protection requirements

The nominated property is protected at national, state and local level. At the National level, the ensemble of buildings and landscape (which includes parts of the buffer zone) were protected in 1997 by IPHAN (National Historical and Artistic Heritage Institute). At the Regional level, the ensemble also, since 1984, has had State level protection under the IEPHA-MG (State Institute of Historical and Artistic Heritage of Minas Gerais). In 2003 protection was also given to the surrounding perimeter which covers most of the buffer zone, but excludes some portions to the east and southwest. At the Local level, the individual buildings have local protection.

The Master Plan of Belo Horizonte, 2010, defines the planning zones for the city. The buffer zone and the wider setting beyond it are in various restrictive zones. However some of these are protected for environmental reasons, such as those encompassing the parks and the part of the lake in the buffer zone, while areas around the stadia are delineated as 'large equipment' zones and further areas are designated as 'favourable densification' zones or for 'large scale community facilities'. A further planning restriction is provided by the Special Planning Guidelines' Area (ADE).

In order to protect the context for the designed ensemble as the core of a garden city neighbourhood, strengthened protection and specific restrictions need to

be put in place for the buffer zone that reflect its cultural value as an essential context for the designed ensemble.

A Management plan sets out a matrix of responsibilities. This plan needs to be augmented to provide strategic guidelines that can over-arch management and decision making as formal commitments to progress in key areas, and to provide a clear enough understanding of the challenges of protecting not just the key buildings in their landscape setting but also the essential characteristics of the traditional neighbourhoods that complement the ensemble and together form a complex historic urban landscape. The Plan also needs to provide a more targeted set of monitoring indicators that relate to the defined attributes of Outstanding Universal Value.

In order to bring together the main stakeholders of the property and its buffer, the government has created a Committee in which all three levels of government participate. It has the mandate to set the guidelines for the execution of the Management Plan and to promote the execution of actions by the different levels of government and municipal authorities with jurisdiction over the ensemble. Within the Municipality, there is a management group that deals with day-to-day management. This brings together those responsible for the buildings and those with responsibilities for the boardwalk and lake – currently within different departments.

Only 45% of the Pampulha Basin is within Belo Horizonte Municipality, while the remainder is within the Contagem Municipality. Although the Contagem Municipality participates in the Recuperation of the Pampulha Basin programme, which deals with environmental issues, its participation needs to be extended to cultural aspects as well.

#### **Additional recommendations**

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

- Implementing the work set out in the Intervention Plan to:
  - Restore the Yacht Club building and its designed landscape;
  - Draw up a new design for Dino Barbieri Square to reflect Burle Marx's designs and submit it to the World Heritage Centre for review by the Advisory Bodies;
  - Once approved, implemented the design for Dino Barbieri Square;
  - Restore the original entrance to the Ballroom;
  - Improve the water quality of the Lake to recreational standards, all within the timescale as set out.
  
- Augmenting the Management Plan to:

- Include strategic guidelines that can over-arch management and decision making as formal commitments to progress in key areas;
- Encompass more clearly the challenges of protecting not just the key buildings in their landscape setting but also the essential characteristics of the traditional neighbourhoods that complement the ensemble;
- Adopt an Historic Urban Landscape approach to sustaining traditional neighborhoods;
- Include a tourism strategy;
- Include detailed monitoring indicators that relate to the attributes of Outstanding Universal Value;
- Strengthen the involvement of local communities in the management processes.

- Strengthening:

- Protection and planning controls on the first block of houses beyond the Avenue and facing the Lake in order that they provide an appropriate context for the Ensemble;
  - Protection in the buffer zone so that land facing and adjoining the lake provides a green backdrop to the water.
- Submitting a report on the implementation of the above mentioned recommendations to the World Heritage Committee by 1<sup>st</sup> December 2018 for examination at its 42<sup>nd</sup> session;
  
  - Considering providing an improved translation of the nomination dossier.

ICOMOS is ready and willing to offer advice to the State Party on the above conservation and management processes.







Aerial view of the Ensemble



The Yacht Club



The Casino



The Ball Room





## **IV Cultural properties**

### **A Asia – Pacific**

New nominations

### **B Europe – North America**

New nominations

Nomination deferred by previous sessions of the World Heritage Committee

### **C Latin America - Caribbean**

New nominations

Extension



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## **Panamá City (Republic of Panama) No 790ter**

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### **Official name as proposed by the State Party**

Archaeological Site and Historic Centre of Panamá City

### **Location**

City of Panamá, Province of Panamá  
Republic of Panama

### **Brief description**

The property, for which this significant boundary modification was submitted, comprises two components, the Archaeological Site of Panamá Viejo which illustrates the first location of Panamá City destroyed during a pirate attack in 1671 and the Historic Centre of Panamá City, the urban site at which Panamá was rebuilt starting from 1673. While the first remains today as an uninhabited archaeological site, the latter, located 8 kilometres south-west at the foot of Ancon Hill, is an inhabited city centre of dense urban fabric with market streets and residential neighbourhoods.

### **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 2 sites.

## **1 Basic data**

### **Included in the Tentative List**

19 January 2015

### **International Assistance from the World Heritage Fund for preparing the Significant Boundary Modification**

None

### **Date received by the World Heritage Centre**

26 January 2015

### **Background**

This significant boundary modification has been submitted along with a name change of the previously inscribed Archaeological Site of Panamá Viejo and Historic District of Panamá. This World Heritage property was initially inscribed in 1997 under criteria (ii), (iv) and (vi) and extended in 2003.

The current significant boundary modification was submitted in response to the World Heritage Committee's decision at its 37<sup>th</sup> Session in Phnom Penh in 2013, which stated as follows:

*The World Heritage Committee,*

- 1. Having examined Document WHC-13/37.COM/7B.Add,*
- 2. Recalling Decisions 33 COM 7B.141, 34 COM 7B.113, 35 COM 7B.130, 36 COM 7B.103, adopted at its 33rd (Seville, 2009), 34th (Brasilia, 2010), 35th (UNESCO, 2011) and 36th (Saint Petersburg, 2012) sessions respectively, and its concern that the construction of the Cinta Costera Phase III (Maritime Viaduct) would irreversibly impact on the property,*
- 3. Also recalling the state of conservation reports and reactive monitoring mission reports of March 2009, March 2010 and October 2010 that underscored the impacts of the Cinta Costera project, in particular the Maritime Viaduct, and the poor state of conservation of the property;*
- 4. Notes the progress with developing a Management Plan, with quantifying the number of buildings at risk and with work on the streetscapes, and undergrounding networks, and reiterates its deep concern about the overall state of conservation of the property and regrets that no sufficient progress has been made in comprehensively and sustainably addressing issues, or in implementing the emergency Action Plan agreed in 2009;*
- 5. Also regrets that the State Party decided to launch the construction of the Cinta Costera Phase III (Maritime Viaduct) that modifies in an irreversible manner the relation of the historic centre with its wider setting;*
- 6. Requests the State Party to submit by 1 February 2015 a significant modification to the boundaries to allow it to justify a revision of the Outstanding Universal Value of the property;*
- 7. Also requests the State Party to invite as soon as possible a high-level World Heritage Centre/ICOMOS Reactive Monitoring Mission, guided by the World Heritage Centre, to discuss the different possibilities of this modification;*
- 8. Considers that in the absence of the implementation of the request made in this decision, the property would be deleted from the World Heritage List at its 39th session in 2015, in conformity with Chapter IV.C of the Operational Guidelines.*

Following the decision of the World Heritage Committee, the joint high level reactive monitoring mission referred to in paragraph 7 was undertaken and visited the property between 25 and 28 November 2013. The mission developed recommendations for three approaches that could be taken towards the significant boundary modification and expressed a preference for the third option:

*The mission recommends that the authorities carefully consider the following options:*

- I. Submission of a significant boundary change to focus the site only on Panamá Viejo based on the original extension dossier of 2002, to also include the new buffer zone by law 91/2007 and review the statement of Outstanding Universal Value.*
- II. Submission of option I with an addition of a reduced area in the Historic District where the attributes that convey the contribution of this component to the Outstanding Universal Value of the serial property are present.*
- III. Submission of a (phased) approach by 1 February 2015 in which an overall new vision is included regarding components of the property as parts of a broader territorial*

*system related to interoceanic and intercontinental commerce over five centuries. Further information on this option is included in the relevant sections of this report. The mission notes that this option would require a re-nomination for different values and a revised Statement of Outstanding Universal Value; it is further noted that the time-lines for submission are the same as for a major boundary modification as indicated in the Operational Guidelines.*

The significant boundary modification now submitted follows the approach suggested in the second recommendation and retains a slightly reduced area of the historic centre in which the attributes of Outstanding Universal Value are said to remain present. ICOMOS notes that the significant boundary modification submitted is not very significant in terms of the boundary changes; the component of Panamá City has been reduced from 29.4 to 22.0 hectares, while the boundaries of the component Archaeological Site of Panamá Viejo remain identical. However, buffer zones are added to both components and the name of the property and of one component was slightly modified.

#### **Consultations**

ICOMOS consulted its International Scientific Committee on Historic Towns and Villages, on Archaeological Heritage Management and several independent experts.

#### **Technical Evaluation Mission**

An ICOMOS technical evaluation mission visited the property from 28 September to 2 October 2015.

#### **Additional information received by ICOMOS**

No additional information has been requested at this stage.

#### **Date of ICOMOS approval of this report**

11 March 2016

## **2 The property**

### **Description**

The inscribed World Heritage Property of the Archaeological Site of Panamá Viejo and Historic District of Panamá as well as the renamed property of the present significant boundary modification comprise two serial site components, the Archaeological Site of Panamá Viejo and Historic District of Panamá, now referred to as the Historic Centre of Panamá City. These two components shall be described separately below.

#### **Archaeological Site of Panamá Viejo**

The archaeological remains of the original settlement are located 8 kilometres north-east of the later built historic centre and encompass an area of 28.7 hectares. The archaeological site includes the remains of the earlier Spanish settlement as well as the Pre-Columbian vestiges of the Cuevan aboriginal occupation of the same name. The physical archaeological evidence of the first city

includes its original street pattern, a slightly irregular grid with blocks of various sizes, and the location of domestic, religious and civic structures. The ruins of the cathedral and public buildings illustrate the architectural stylistics of the city before 1671.

#### **Historic Centre of Panamá City**

The second serial component is suggested to be renamed and was previously referred to as the Historic District of Panamá. It encompasses the originally walled quarter covering an area of 22 hectares. The walls survive in most of the seaward locations and remain recognizable until today. The walled city has an orthogonal layout while the historic areas outside the wall were built irregular.

Many individual buildings inside this serial component are listed for their architectural value as churches, public buildings and examples of residential architecture of the colonial era. These include both upper class stone houses as well as modest wooden structures. A former Franciscan convent, now used as a school and the Ministry of Foreign Affairs, covers an entire city block attached to the city wall. It was the location of the Amphycion Congress in 1826.

#### **Modification proposed**

The boundary modification proposal excludes seven plots in the Historic Centre of Panamá City component, as well as structures which are located beyond the historic city wall and were oriented in location and function towards the sea. This reduction was defined by the State Party as reducing the components to its attributes within the outer wall, respectively ditch on the landward side, to exclude the marine context, which had been irreversibly affected by the construction of the Cinta Costera III aqueduct bridge around the historic centre. However, the western neighbourhoods between Calle Este and Calle Oeste, which have been excluded, show no immediate relation to the Cinta Costera III expressway as they are by no means seafront locations. These exclusions seem rather motivated by challenges in the present state of conservation of the urban fabric. The excluded plots at the seafront are more relevant in terms of the impacts on integrity. However, only one of these is being used in its original function as warehouse, the others are locations of a parking lot, a soccer ground, a public park, a walled garden and a wing of the Ministry of Foreign Affairs, which did not contribute strongly towards the attributes of Outstanding Universal Value.

#### **History and development**

Panamá City was founded in 1519, following the discovery by the Spanish of the South Sea, later called Pacific Ocean, in 1513. The trans-isthmian route has not only characterized Panamá as a nation but also determined the location of the first city Panamá. The settlement was a prominent colonial outpost and hosted a Royal Court of Justice in the 16<sup>th</sup> and 17<sup>th</sup> centuries, when Panama consolidated its position as an intercontinental trade hub. Panamá City reached its zenith during the second third of

the 17<sup>th</sup> century when the bullion trade and the Portobelo fairs were at their peaks. The population of that time is estimated to have reached 8000 inhabitants. However, during its initial 152 years of existence, the town was also affected by several political events and natural disasters including a slave rebellion, fires and an earthquake, and was finally almost completely destroyed in the devastating pirate attack in 1671.

In 1673 the foundation for the new city was laid and the ruins of Panamá Viejo were a convenient source of building materials for many decades. The new city was characterized by strong social and economic differences between the wealthier inhabitants inside the city walls and the less fortunate outside. The 18<sup>th</sup> century brought difficult times, the key trade fairs were discontinued and the Cape Horn route was opened offering an alternative to the trans-isthmian passage. With the economic recession the city stagnated. Destructive fires occurred within the walls at least three times so that towards the end of the century a good part of the city lay in ruins and the population was significantly reduced.

Independence from Spain in 1821 brought several changes and Panamá became part of Gran Colombia. Despite civil wars in the 19<sup>th</sup> century, the city took benefit from the construction of the Panamá railway and the Canal Project (1880-1889). With the financial collapse of the canal company and another devastating fire another recession began shortly before the turn of the 20<sup>th</sup> century, which commenced with the Thousand Days War (1899-1902), the worst conflict Panama ever experienced. In 1903, Panamá became an independent republic with Panamá City as its capital. The early 20<sup>th</sup> century boosted building activity and infrastructural innovation. During this time the final configuration of the urban plan was reached, with the extensions of Avenue A and Avenue B.

With adjacent landfills and new expansions of the city beyond the city walls by the middle of the 20<sup>th</sup> century a social segregation process had commenced with most of the elites moving out into modernized neighbourhoods. Following this and further fires, a significant amount of historic fabric was destroyed with entire areas left vacant and re-used as parking lots. Likewise most governmental buildings moved into the new areas outside the walled city. In the early 1970s the heritage value of the historic centre was recognized and an initial conservation and management plan drawn up. Revitalization projects led to a real estate boom in the 1990s, also likely influenced through the recognition as a UNESCO World Heritage Site. Between 2012 and 2014, the third phase of the Cinta Costera expressway was constructed, a highway bridge structure which surrounds the entire historic peninsula and cuts off its relationship to the open sea. In view of this project, the World Heritage Committee threatened in 2013 to delete the property from the World Heritage List.

### 3 Justification for inscription, integrity and authenticity

#### Comparative analysis

The comparative analysis highlights the uniqueness of Panamá Viejo as a site which preserved both the original city destroyed by pirate attacks as an archaeological site and the rebuilt city of the same name at another location. The brief comparative analysis continues to compare the two serial components separately, the Archaeological Site of Panamá Viejo with other archaeological sites in the region and the Historic Centre of Panamá City with other urban trade hubs.

ICOMOS considers that the comparative analysis highlights the elements of uniqueness for which the property was inscribed in 1997 and extended in 2003. The reduction of 7 plots and seaside structures of one site component, equalling to an area reduction of 7.4 hectares has not reduced the legibility of remaining attributes of the Historic Centre of Panamá City. However, attributes of its role as a coastal departure point for the Spanish conquest and trade hub of the inter-oceanic and intercontinental commerce through the Panama isthmus have been previously affected by urban and infrastructure developments.

The aspects least affected by the reduction of the property as well as the impacts on integrity caused by urban and infrastructure developments on land and in the sea relate to the significance captured under criterion (iv) and Panamá City's qualities in terms of its house and church typologies from the 16<sup>th</sup> to the 18<sup>th</sup> centuries, which were recognized to represent a significant stage in the development of Spanish colonial society as a whole. Exceptional architectural types were also recognized for multiple-family houses from the 19<sup>th</sup> and early 20<sup>th</sup> centuries as original examples of how society reacted to new requirements, technological developments and influences brought about by post-colonial society and the building of the Panama Canal. However, in ICOMOS' view, these aspects have not been covered in the comparative analysis and it is not fully demonstrated how in terms of architectural typology the property differs from other historic centres in the Central American region.

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ICOMOS considers that the comparative analysis does not justify consideration of the proposed changes for approval.

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#### Justification of Outstanding Universal Value

The property as defined by the proposed boundary changes is considered by the State Party to be of Outstanding Universal Value as a cultural property for the following reasons:

- Panamá City was founded as a connection and departure point of the Spanish expansion by means of land and maritime routes and had important roles in the American conquests, the African diaspora and

served as a logistic and transport nod on the Pacific side of the isthmus;

- Because of its fame and economic wealth, Panamá City was attacked and destroyed by pirates in 1671 and rebuilt at a location 8 km south-west from 1673 onwards. As result it presents the exceptional situation of a city preserved in two versions, as an archaeological site and its later reconstruction as a continuing, inhabited city;
- The property is tangibly associated with the Amphyctionic Congress in 1826, which established a unified league of nations called Gran Colombia; thus Panamá City becoming indivisible from the rise and fall of the Bolivarian dream.

ICOMOS considers that the justification reiterates the reasons for which the property was initially inscribed in 1997 and extended in 2003. It adds however a little more detail in relation to its strategic position as a trade hub, its role for the African Diaspora as well as its importance in relation to historic political events in the early 19<sup>th</sup> century.

ICOMOS considers that the ability of Panamá City to communicate its significance as a strategic access to land and maritime trade routes and the origin of Spanish expansion along the Pacific Coast has been undermined by urban and infrastructural development projects, which had considerable negative impacts on the land and sea setting of the historic centre. These developments hinder the perception of relations with the surrounding geographic terrain, which was so essential for the trade and defence relations of the city.

ICOMOS considers that likewise the exceptional history of destruction by pirate attacks and rebuilding on a new strategic defence location on a peninsula is not easily communicated for two serial components both separated from their wider seascape by expressways running in front of the shore. ICOMOS concludes that while several aspects described in the proposed Statement for Outstanding Universal Value, including the unique existence of two consecutive cities or the importance of architectural typologies of Colonial architecture in both cities can still be considered relevant, a number of important attributes required to express Outstanding Universal Value for all the aspects proposed have been damaged by urban and infrastructure developments.

### **Integrity and authenticity**

#### **Integrity**

The approach towards a serial nomination of two properties as was taken since the property's extension in 2003 remains relevant and was one of the three options suggested by the joint World Heritage Centre/ICOMOS Advisory Mission in 2013. The selection of the serial site components is hence appropriate.

In the Archaeological Site Panamá Viejo no particular threat to the historic substance has been identified.

However, ICOMOS notes development projects on and in the vicinity of the sites affected the visual integrity of the serial component. On site visitor installations, such as the visitor centre, museum, laboratories and offices are located in structures added in 2002-2003, which are not very suited and should have been designed more harmonious with their setting. In terms of the setting, in which several high-rise developments already occurred, ICOMOS recommends that measures be adopted to prevent visual impacts of new developments in the neighbouring areas and to protect important views. Like the Historic Centre, the Archaeological Site of Panamá Viejo is separated from its sea setting by a highway viaduct. However, this situation was considered of negative impact but accepted during the extension in 2003 because is not very noticeable due to dense mangroves which obstruct views to the seashore and protect the archaeological site as a natural barrier.

The Historic Centre of Panamá City has suffered more severe impacts on its integrity to the extent that many attributes of Outstanding Universal Value are no longer able to convey the significance of the site. The urban layout of the city still retains its colonial patterns and the city wall remains legible in almost all areas. However, beyond this, the relations between the serial component and its surrounding land and seascape have been severely affected by urban and infrastructural developments, including the Cinta Costera III expressway viaduct. It is no longer possible to see the open Pacific Ocean from the either the shore or the walls.

Several infelicitous additions of 20<sup>th</sup> century architecture affect the internal harmony of the historic centre. These include the modern structure into which the historic room of the Amphyctionic Congress in 1826 has been integrated. Night lighting on Cinta Costera III constitutes another aggression to the former visual integrity of the Historic Centre. Following pop aesthetics, the lighting features different colours, neon lights and movement which have a severe impact on the atmosphere of the historic centre. Several high-rise and other developments on the land side, some beyond the buffer zone, contribute to the loss of visual integrity and likewise provide coloured roofs or light-plays at night, including the very recent Biomuseo of Frank Gehry.

#### **Authenticity**

Since the property's inscription in 1997 and its extension in 2003, the condition of authenticity has been reduced in a number of aspects. At the Archaeological Site of Panamá Viejo recently built visitor services, including the museum, affect the atmosphere of the archaeological site and the perception of its special patterns. A new two-storeys structure currently under construction is claimed needed to close a space of the main plaza. ICOMOS considers it appears massive in proportion of the surrounding ruins and will affect authenticity of design and spatial perception. Apart from these later additions, the authenticity of the ruins and archaeological remains is acceptable in terms of material, workmanship and



location. Authenticity of the setting has been impaired by a number of high-rise constructions which are visible towards the land-side of this serial component.

The authenticity of the Historic Centre of Panamá City has since its inscription in 1997 been affected by socio-economic and political changes. However, several 20<sup>th</sup> century structures which were added in the Historic District, such as the Hotel Central, had already reduced authenticity before the inscription of the property. ICOMOS notes that much effort has been undertaken to restore dilapidated and at times ruinous buildings, at times at expense of the authenticity of the historic structures. Following the restorations several architectural structures changed functions towards touristic infrastructure so that former residential complexes became small hotels or restaurants, affecting authenticity in use and function. ICOMOS also notes that street surfaces and furniture have been replaced, especially around the central plaza.

The key impact on the authenticity of the Historic Centre of Panamá City is the impact on its setting for which authenticity has been reduced by the Cinta Costera III expressway viaduct as well as the high-rise developments in Panamá City downtown and Punta Paitilla. The Cinta Costera III viaduct does not only affect the setting but also the urban features of the walled city as it separates the city from the sea, which has impacts on the credible communication of its historic strategic location, which facilitates trade, defence and governance in an exceptional way.

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In conclusion, ICOMOS considers that the condition of integrity has been compromised. ICOMOS further considers that the condition of authenticity has been reduced since the property's inscription in 1997 and extension in 2003.

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#### **Criteria under which the significant boundary modification is proposed**

The property as defined by the proposed boundary changes 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, town-planning or landscape design;*

This criterion is justified by the State Party on the grounds that Panamá Viejo exhibits an important interchange of human values as it had immense influence as a prototype on subsequent developments in colonial Spanish town planning. Its layout and urban pattern reflects the persistence and interchange of human values in adaptation to the evolving socio-economic conditions at the Central American Isthmus.

ICOMOS considers that the justification provided is identical to the justification of this criterion, adopted by

the World Heritage Committee in decision 37 COM 8E, Adoption of retrospective Statement of Outstanding Universal Value at its 37<sup>th</sup> Session in 2013. ICOMOS considers the exclusion of 7 plots and seaside structures in one of the property component minor and without effect on the justification of this criterion. However, ICOMOS considers that the construction of the Cinta Costera III expressway and the ensuing limited ability to perceive the city in its strategic seaside location has reduced the legibility of its prototype character as a centre of trade and governance between the Pacific Ocean and the Caribbean Sea.

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ICOMOS considers that this criterion has been justified and acknowledged by the World Heritage Committee.

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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 both serial components contain house and church types which represent a significant stage in the development of Spanish colonial society as a whole as well as an exceptional example of the period's building technology and architecture.

ICOMOS considers that the justification provided is identical to the justification of this criterion, adopted by the World Heritage Committee in decision 37 COM 8E, Adoption of retrospective Statement of Outstanding Universal Value at its 37<sup>th</sup> Session in 2013. ICOMOS considers the exclusion of 7 plots and seaside structures in one of the property component minor and without effect on the justification of this criterion.

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ICOMOS considers that this criterion has been justified and acknowledged by the World Heritage Committee.

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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 property is closely linked to the European discovery of the Pacific Ocean, the history of Spanish expansion in the Isthmus of Central America and in Andean South America, the African Diaspora, the history of piracy and proxy war, the bullion lifeline to Europe, the spread of European culture in the region and the commerce network between the Americas and Europe.

ICOMOS considers that the justification provided is identical to the justification of this criterion, adopted by the World Heritage Committee in decision 37 COM 8E, Adoption of retrospective Statement of Outstanding Universal Value at its 37<sup>th</sup> Session in 2013. ICOMOS considers the exclusion of 7 building plots and seawards oriented structures in one of the property components

does not affect the justification provided. However, ICOMOS considers that attributes required for this justification have been negatively affected by urban and infrastructure developments, which reduces their capacity to reflect some associations to the commerce network between the Americas and Europe.

ICOMOS further considers that the construction of the Cinta Costera III expressway and the ensuing limited ability to perceive the city in its strategic seaside location has reduced the legibility of its association to the discovery of the Pacific Ocean and its strategic location in the Central American Isthmus. Likewise the exposure of the city to piracy and proxy war and its essential network function in sea trade is less evident in light of the expressway barrier towards the sea.

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ICOMOS considers that this justification for criterion (vi) has been previously acknowledged by the World Heritage Committee. However, ICOMOS considers that the urban and infrastructure developments have reduced the capacity of the attributes to reflect this criterion.

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In conclusion, ICOMOS considers that criteria (ii), (iv) and (vi) have been previously acknowledged by the World Heritage Committee. However, the urban and infrastructure developments have reduced the capacity of some attributes to reflect criterion (vi).

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#### **4 Factors affecting the property**

The key pressure to both serial components, the Archaeological Site of Panamá Viejo and the Historic Centre of Panamá City is urban and infrastructural development. This pressure has been clearly acknowledged in the Management Plan of 2013, yet the heritage authorities seem to have little capacity to influence or stop development projects which create negative visual impacts on the property.

The State Party further acknowledges that the reliance on tourism in the historic centre causes pressures on the historic fabric. These are related to development pressures in terms of real estate development initiatives but also the conversion of houses towards visitors services, first and foremost restaurants, cafés and hotels. Tourism activities have displaced other traditional economic activities, reducing employment options for the local population. In addition, the increasing conversion of shops towards tourism products and merchandise reduces the access to items of daily need for the local population.

Gentrification is the medium-term result of this process, which can already be well observed in a replacement of the former population by visitor infrastructure. The property values have risen considerably over the past two decades which makes sale to tourism investors ever more lucrative. ICOMOS is concerned that this progressing gentrification process will completely change the

atmosphere of the historic centre from a lively inhabited town to an open-air museum. ICOMOS further observes that the local communities living in or in the vicinity of the site components do not share in revenues of this tourism industry.

At present, the Panamá Bay suffers obvious waterfront environmental decay as result of pollutants discharged from the Metropolitan Area into the sea. This challenge is currently being responded to by the Panamá Bay sanitation project, which is said near to completion. The historic centre has not been affected by many natural catastrophes in the past. Nevertheless, the management authorities have established an evacuation plan in 2013, which will be applied in case of flood, tsunami or other severe natural catastrophes.

The Historic Centre of Panamá City is economically dependent on tourism revenues which are said to finance its revitalization. It hence seeks to attract large numbers of visitors. At the same time, the site management authority has noted increasing visitor numbers as a risk, in particular the excess of tourism related services offered on ground floors of the buildings, the lack of appropriate spaces for arrival and departure, including bus and car parking facilities, and the replacement of essential non-tourism related businesses.

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ICOMOS considers that the main threats to the property are urban and infrastructure development as well as gentrification of the Historic Centre of Panamá City.

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#### **5 Protection, conservation and management**

##### **Modification of the boundaries of the nominated property and buffer zones**

The property is composed of two serial components, the Archaeological Site of Panamá Viejo and the Historic Centre of Panamá city. The boundaries of the Archaeological Site of Panamá Viejo remain unchanged and cover an area of 28.7 hectares. A buffer zone of 619.9 hectares is proposed to be added to the site component. 66.6 hectares of this buffer zone are located on land, the remaining 553.7 hectares are maritime buffer zone, reaching 2 km beyond the *Corredor Sur* highway which separates the archaeological site from the open sea.

ICOMOS considers that the maritime component of the buffer zone is ample and makes a significant contribution to the seaward protection of the site, if its regulations are fully implemented. ICOMOS further considers that the landward component is not large enough to protect the archaeological site from further visual intrusion by high-rise developments. ICOMOS accordingly recommends to either significantly enlarge the buffer zone or to conduct a three-dimensional view-shed and view corridor analysis to identify specific sensitive areas.

The boundaries of the Historic Centre of Panamá City are proposed to be reduced by 7.4 hectares from previously 29.4 to now 22 hectares through the exclusion of 7 plots and seaside structures located outside the city wall. These 7 plots are landward residential areas beyond the defensive ditch, while the coastal exclusions contain merely 2 architectural structures and comprise a parking lot, a soccer ground, two public parks, a private walled garden, a wing of the 20<sup>th</sup> century structure of the Ministry of Foreign Affairs and a warehouse.

ICOMOS considers that the boundary modification does not exclude significant attributes of Outstanding Universal Value. However, ICOMOS considers that the rationale of these exclusions is not clear, since the argument that these exclusions alleviate the losses of attributes and integrity by the Cinta Costera III expressway viaduct cannot be accepted. ICOMOS considers that the reduction of 7 specific plots and selected seafront location does not change the overall relationship between the historic walled centre and its natural setting. The modification proposed does hence not sufficiently respond to the request of the World Heritage Committee to submit a “*significant modification to the boundaries to allow it to justify a revision of the Outstanding Universal Value of the property*”.

A buffer zone is proposed to be added to the Historic Centre component with an overall area of 190.1 hectares. 29.04 hectares, which correspond to the remaining designated site of the historic city are proposed as the landward buffer zone and 164.5 hectares as the seaward buffer zone reaching beyond the Cinta Costera III viaduct highway. ICOMOS considers that while the seawards buffer zone seems adequate, the land component is far too small to effectively protect the site from negative visual impacts of urban development. Like for the other serial component above, ICOMOS recommends to either significantly enlarge the buffer zone landwards or to undertake a three-dimensional view-shed analysis to identify specific sensitive areas, which require development restrictions.

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In conclusion, ICOMOS considers that the boundary changes of the property and of its buffer zone are not yet adequate at this stage.

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#### **Ownership**

The proposed significant boundary modification does not change the ownership situation of the property. The National Institute of Culture owns the Archaeological Site of Panamá Viejo, while the Historic Centre of Panamá City is of mixed public-private ownership.

#### **Protection**

The legal protection of the property remains unaffected by the request for significant boundary modification. Two buffer zones are formally added, which existed in national legislation but were not formally acknowledged in the World Heritage context. The property, including both serial components, was declared a *Conjuntos Monumentales Históricos*, historic urban ensemble, in 1976 according to

Law 91 of 22 December 1976. This law prohibits explicitly any activity that may damage the conservation of the property. Construction permits given by the Municipality of Panamá require a favourable approval of the Panamá Tourism Institute and the National Advisory Council on Historic Monuments.

The proposed buffer zone for the Archaeological Site of Panamá Viejo was legally established by Law 16 of 2007, which strictly regulates the growth of its urban neighbourhoods. The second proposed buffer zone for the historic district or Historic Centre of Panamá City was established in its landward component by Decree Law 9 of 1997 and extended towards the sea by Executive Decree 51 of 2004. The size of this buffer zone was increased by executive decree in 2014 to extend 2.5 kilometre seawards in all directions.

ICOMOS considers that the fact that the protective legislation for the property and buffer zone was already in place at the time that the construction of the Cinta Costera III expressway was approved without appropriate consideration of the heritage impact of the project only proves that the legal protection is not effective and cannot withstand potential future conflicts with urban or infrastructural developments. ICOMOS hence concludes that while legal protection formally exists, de facto protection has proven to be ineffective for both the property and its proposed buffer zone.

In this respect, ICOMOS recommends incorporating a Heritage Impact Assessment approach into the management system, so as to ensure that any programme, project or legislation regarding the property be assessed in terms of its consequences on the Outstanding Universal Value and its supporting attributes.

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In conclusion, ICOMOS considers that while legal protection is in place, protective measures for the property are inadequate and recommends incorporating a Heritage Impact Assessment approach into the management system of the property

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#### **Conservation**

The general state of conservation of the Archaeological Site of Panamá Viejo is good. Urgent consolidation works were carried out in 2013 and continuous monitoring aims at identifying any further needs for conservation before decay or dilapidation occurs. The recent relocation of Via del Cincuentenario eliminated the constant and heavy traffic that affected historic structures through vibration.

The State Party undertook detailed researches and surveys on the State of Conservation of the Historic Centre of Panamá City and continues these to measure the progress of the rehabilitations works. According to the data as of March 2014, 65 percent of the architectural structures were in good or fair condition or under restoration at the time of data collection. The condition of approximately 16 percent remained poor while another 12 percent were in ruins. ICOMOS is particularly concerned about the structures in ruins as their future is

often unclear and unauthentic reconstructions – as have occurred in some places – need to be avoided. ICOMOS considers that comprehensive Heritage Impact Assessments are necessary before any rebuilding or new construction plans are approved for ruined or empty plots.

ICOMOS acknowledges that the general state of conservation of the Historic Centre has improved over the past years while there are remaining challenges to be addressed. ICOMOS notes that several site infrastructure components, including electricity, pavements, sewage, water supply and garbage system, have recently been repaired or improved. The conservation works conducted on the historic structures is very often aimed at adaptive reuse of the buildings and hence quite extensive, at times with changes to inner floor plans and spatial divisions. ICOMOS considers that continued use of the historic structures is important but that conservation measures should be based on the minimum necessary modification and introduction of new materials that is required for use.

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In conclusion, ICOMOS considers that the state of conservation of the Archaeological Site of Panamá Viejo is adequate and that continuous progress is being made for the Historic Centre of Panamá City.

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## **Management**

Management structures and processes, including traditional management processes

The overarching management structure is defined through the responsibility of the same institution to steer management processes, the National Institute of Cultural Heritage (INAC). The team at INAC is composed of archaeologists, conservation and heritage management professionals, who are well qualified to address the management questions at hand. Difficulties in management arise from the question, whether cultural heritage concerns are given priority in a broader national decision-making agenda driven by desire for tourism industry revenues and continued urban and infrastructure development.

For the Archaeological Site of Panamá Viejo, INAC cooperates with a public-private foundation, the Patronato de Panamá Viejo, which supports management initiatives and fundraising. With assistance of the foundation, fundraising proved to be effective, which is essential as the funds allocated by the National Government for the implementation of necessary management and conservation works is inadequate at present. ICOMOS accordingly recommends ensuring a long-term adequate financial situation including through provision of additional public resources.

The management system in the Historic Centre of Panamá City is challenged by two aspects, constant negotiations with developers and investors, which require, within the legal framework that exists, agreement on appropriate scales of rehabilitation and introduction of new uses and services. The second aspect lies in occasional

degradations by members of the local community towards the heritage sites. Community initiatives at different social and economic levels had long battled against the governmental decision to construct the Cinta Costera III viaduct expressway. The final loss of these initiatives has created frustrations which continue to be unleashed in expressions of heritage vandalism.

Risk preparedness has been addressed by means of an evacuation plan for the historic centre, which can be applied in case of floods, tsunamis, earthquakes and other natural disasters. ICOMOS considers that the risk of fire was dominant during historic periods and requires to be addressed also in contemporary management approaches. ICOMOS accordingly recommends that a fire prevention and response plan is being established with the local fire brigades.

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

The management plan for the property was adopted on 12 September 2013 and is currently in its implementation phase. It seems to adequately address the key challenges of both serial components and has led to several improvements of the sites condition and management coordination procedures.

The management plan envisages the development of an interpretation and presentation system for the Archaeological Site of Panamá Viejo. It shall be based on multiple elements, including the museum, signposts, guides, books, leaflets, commemorative minting, and workshops for children and students. Some of these elements have already started to be implemented. The Historic Centre of Panamá City is not yet fully equipped with interpretation and presentation facilities; however historic plaques and panels dating to the early 20<sup>th</sup> century offer the most relevant information in historic flair.

ICOMOS considers that the adoption of the management plan was an important step which has already led to improvements in the condition of both serial components. ICOMOS recommends developing an interpretation and presentation system for the Historic Centre of Panamá City, to allow for full communication of the attributes of Outstanding Universal Value.

Involvement of the local communities

The management plan has been developed in a participatory format and included representatives of the local communities. However, ICOMOS notes that the local community representatives, including religious and educational organizations, inhabitants of the historic centre and San Felipe neighbourhood as well as entrepreneurs, share a mutual concern regarding the frustration which arose with the unsuccessful battle against the Cinta Costera III highway project. The negative outcome following much engagement and struggle led to both, subtle forms of heritage aggression

and resignation as well as unwillingness to participate in processes of community participation and involvement.

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In conclusion, ICOMOS considers that the adoption of the management plan is an important step in the improvement of the condition and management of the property. However, ICOMOS considers that long-term management effectiveness will depend on whether cultural heritage concerns are given priority in a broader national decision-making agenda.

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## 6 Monitoring

The State Party has set up a monitoring system which systematically surveys the state of conservation of both serial components. The system is used at present to identify new conservation and development challenges but also for progress monitoring of the rehabilitation and restoration measures. In addition to the state of conservation, monitoring indicators have been created in a number of thematic areas, including public facilities, risk prevention and climate change, civic participation and consensus-building, tourism and economic activities, improvement of existing databases and cultural promotion.

ICOMOS considers that the indicators provided are appropriate; however the periodicity of data collection – such as five year intervals for the consideration of public spaces – appears too infrequent. ICOMOS further recommends to document in more detail how the different indicators are to be evaluated to ensure continuity of assessment over longer intervals of time.

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In conclusion, ICOMOS considers that the monitoring indicators are appropriate but that their frequency and methodology of application should be reviewed and further detailed.

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## 7 Conclusions

The significant boundary modification submitted for the Archaeological Site and Historic Centre of Panamá City proposes a reduction of 7 plots and selected seaside structures of the Historic Centre of Panamá City component, which cover a size of 7.4 hectares, reducing the serial component from 29.7 to 22 hectares. In addition, buffer zones, both on land and in the sea, have been added to both serial components. The significant boundary modification also entails a name change for the property but remains based on the same set and justification of criteria and the existing Statement of Outstanding Universal Value for which a few aspects were further detailed through redrafting specific passages.

ICOMOS considers that despite use of the mechanism for significant boundary modifications by the State Party, the boundary change proposed is minor and does not affect the attributes of Outstanding Universal Value. ICOMOS

considers that the rationale for the exclusion of the seven plots does not become clear. ICOMOS further considers that the justification, the reduction of outer wall structures would compensate for the loss of integrity caused by the Cinta Costera III expressway viaduct, cannot be accepted.

ICOMOS considers that a number of attributes of Outstanding Universal Value which were retained in the proposed Statement of Outstanding Universal Value have been affected by urban and infrastructure developments in the vicinity of the Historic Centre of Panamá City, including but not exclusively by the Cinta Costera III expressway. These attributes relate to significance aspects that require the legibility of the strategic geographic location of the peninsula in relation to both land and sea, which has been obscured by the urban and infrastructure developments. Such attributes however are required to credibly and completely communicate themes like the role of Panamá as a strategic hub of the Pacific and trans-isthmian trade, its defence function, its role for the African Diaspora and its character as a prototype coastal settlement of the Spanish colonial expansion.

ICOMOS acknowledges that the state of conservation of the property has improved over the past years but that both components remain challenged by urban and infrastructure developments. Although legal protection exists, this legal protection existed for the past decade and did not prevent major developments as well as demolitions hence its effectiveness in implementation has to be questioned. The same applies to the legal protection provided for the buffer zones which was already in place before the construction of the Cinta Costera III expressway viaduct and had no effectiveness in preventing it.

The now formally proposed buffer zones are adequate with regard to their sea components but should be enlarged on the land-side to protect important view relations and vistas. In this context measures may be necessary to mitigate visual impacts which have already occurred, either through reduction of the impacts, such as the coloured flashy lighting of the Cinta Costera III at night or through screening, such as vegetation screening to reduce the impact of high-rise developments on the archaeological site component.

ICOMOS considers that the adoption of the management plan in 2013 was an important step forward towards improving the condition and management system of the property. ICOMOS further observes much progress in rehabilitation and restoration of historic structures. However, ICOMOS considers that the long-term effectiveness of the management system and plan will depend on whether cultural heritage concerns are given priority in a broader national decision-making agenda.

## 8 Recommendations

### **Recommendations with respect to the request for significant boundary modification**

ICOMOS recommends that the significant boundary modification of Archaeological Site and Historic Centre of Panamá City, Republic of Panama, should **not be approved**.

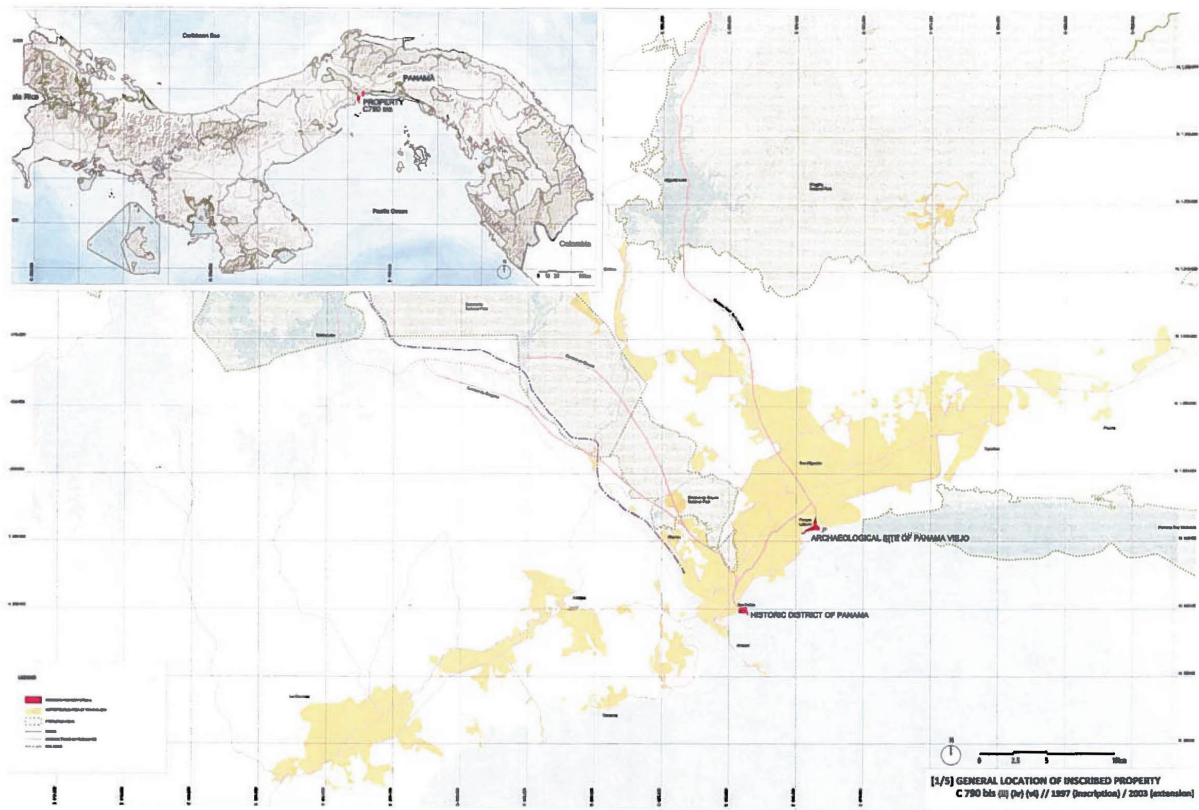
ICOMOS further recommends the State Party to revise the proposed submission as a significant boundary modification as requested by the World Heritage Committee based on a substantial revision of the Outstanding Universal Value of the property, and in this context, to reconsider all three options outlined by the 2013 joint World Heritage Centre/ICOMOS mission.

In the context of Upstream processes, ICOMOS is willing to assist the State Party, if it is deemed useful, with a view to build a robust case.

### **Additional recommendations**

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

- Incorporating a Heritage Impact Assessment approach into the management system, so as to ensure that any programme, project or legislation regarding the property be assessed in terms of its consequences on the Outstanding Universal Value and its supporting attributes;
- Conducting the above mentioned three-dimensional view-shed and view corridor analysis to identify specific sensitive areas, which will be protected in addition to the existing buffer zones;
- Reducing or mitigating the visual impact of existing developments through reduction of the impact source or screening measures;
- Ensuring the long-term adequate financial sustainability of conservation and management efforts through adequate governmental funding.



Map showing the location of the properties





Aerial view of the archaeological site of Panamá Viejo and its surrounding



Aerial view of the Cathedral of Panamá Viejo



Aerial view of the Historic Centre showing the orthogonal street layout



View of Independence Plaza and the Cathedral, from the Southeast

