

ICOMOS

2015

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

ICOMOS Report for the World Heritage Committee
39th ordinary session, Bonn, June - July 2015

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2015

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I Introduction

ICOMOS Analysis of nominations

In 2015, ICOMOS was called on to evaluate 45 nominations.

They consisted of:

- 30 new nominations
- 1 referred back nomination
- 2 deferred nominations
- 2 extensions
- 10 minor modifications/creations of buffer zone

The *geographical spread* is as follows:

Europe and North America

- Total: 19 nominations, 16 countries
- 16 new nominations
- 1 deferred
- 2 extensions
- 10 minor modifications/creations of buffer zone (19 cultural properties)

Latin America and the Caribbean

- Total: 3 nominations, 3 countries
- 2 new nominations
- 1 deferred
- (2 cultural properties, 1 mixed property)

Arab States

- Total: 3 nominations, 3 countries
- 3 new nominations
- (2 cultural properties, 1 mixed property)

Africa

- Total: 2 nominations, 2 countries
- 2 new nominations
- (2 cultural properties)

Asia-Pacific

- Total: 8 nominations, 7 countries
- 7 new nominations
- 1 referred back
- (8 cultural properties)

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 for the Preparation of 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 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 34th 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. 1st February at the latest.

ICOMOS also notes that all modifications to the boundaries of a property and its buffer zone are proposed as "minor" modifications, even when they constitute in fact substantial modifications to the property, or even in some cases an extension of the property. According to the *Operational Guidelines*, proposals for major modifications, whether extensions or reductions, constitute a new nomination (paragraph 165). ICOMOS recommends to the Committee that this provision should be consistently and rigorously applied.

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 17 serial nominations, including 143 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 Tabet¹ review, that the World Heritage Committee give consideration to an extended timeframe for these kinds of nominations.

ICOMOS explicitly informs in its evaluation of the questions it asks in relation to the nature of serial nominations:

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

- e) Is there an overall management framework for all components?

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

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

¹Tabet 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.

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

ICOMOS points out that it has drawn up a document entitled "Guidance on impact assessments for cultural World Heritage sites", which was made available to the World Heritage Committee at its 34th session, and can be consulted on its website. This guidance has been translated into several languages and ICOMOS urges States Parties to make use of it.

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. An International Expert Workshop "Connecting Practice: Defining new methods and strategies to support Nature and Culture through engagement in the World Heritage Convention" has been organized in March 2015, and the outcomes of this project should be presented at the next session of the World Heritage Committee (June 2015).

ICOMOS has moreover launched a pilot project with ICOMOS Norway, IUCN and ICCROM to identify and deepen an understanding of "good practice" approaches based on Rights in the world heritage system.

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 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. 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. Unfortunately, because of a lack of resources, ICOMOS has been unable to review and provide advice concerning certain draft nomination dossiers received by the Centre on 30 September 2014.

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.

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 2012). This document is available on the ICOMOS web site: www.international.icomos.org.

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

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

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

The ICOMOS World Heritage Panel, which brings together some thirty persons, is made up of members of the ICOMOS 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, 20th 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 2013), § 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 39th session, around 130 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*, § 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).

35 experts representing 26 countries took part in field missions as part of the evaluation of the 34 nominated properties, which in turn represented 30 countries.

1 advisory mission was organised in October 2014 at the request of the World Heritage Committee at its 38th session.

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

This year ICOMOS and IUCN took part in a conference call held during the ICOMOS panel meeting, just before the IUCN panel. ICOMOS and IUCN have also exchanged information about draft recommendations concerning mixed property nominations.

ICOMOS received comments from the IUCN concerning three 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 1 to 6 December 2014. 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 2015, in accordance with the normal procedure. All documents received by 28 February 2015 were examined by the second World Heritage Panel at its meeting on 11 and 12 March 2015.

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 39th session in June 2015.

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

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

3. Referred back nominations and requests for minor modifications

On 1st February preceding the World Heritage Committee meeting, ICOMOS also receives supplementary information on nominations referred back during previous sessions of the Committee. As indicated above, ICOMOS does not organise technical evaluation missions for the evaluation of this supplementary information. It was examined by the second World Heritage Panel, which this year met on 11 and 12 March 2015.

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. 10 requests were submitted by the States Parties concerned before 1st February this year. At the request of the World Heritage Centre, all requests have been examined and included in the following document: WHC-15/39.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 sent letters to States Parties throughout the evaluation process on a more systematic basis and on more focused issues. 26 letters have been sent before ICOMOS Panel meeting and 35 letters after the meeting. 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. In addition, to reinforce dialogue with States Parties 11 meetings or skype conferences have been organized from January to end of February 2015.

The replies provided by the States Parties have in most cases provided confirmation or assistance in the adoption of the final recommendations made by ICOMOS. However, time and financial constraints are a problem, and ICOMOS is in favour of fuller discussions about how this dialogue may be improved.

ICOMOS recommendations are made available to the members of the World Heritage Committee six weeks before the beginning of the session. ICOMOS is at the States Parties' disposal for discussions and explanations about its recommendations.

5. Proposals for modifications

Pursuant to the many ongoing efforts to improve the implementation of the World Heritage Convention, ICOMOS has invited members of the World Heritage Committee on a meeting held in January 2015 to discuss the changes undertaken by ICOMOS in order

to improve work as well as to propose mechanisms for an earlier and more cooperative dialogue with the States Parties regarding nominations to the World Heritage List and other issues related to the conservation and management of World Heritage properties. The changes undertaken by ICOMOS may be summarized under the following headings:

- Establishment of a new Secretariat unit to provide assistance to States Parties in all activities that form part of their heritage protection responsibilities, as they relate to both their general heritage protective structure and their World Heritage commitments;
- Full implementation, within the existing financial limitations and the time strictures of the World Heritage calendar, of a new process for evaluating World Heritage nominations in order to engage the nominating States Parties as early as possible in a dialogue that will allow to discuss and jointly solve perceived weaknesses in the nomination dossier.

A meeting organized on 13 March 2016 with the States Parties which have submitted new nominations for 2016 has opened dialogue for next cycle.

6. Conclusion

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

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

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

Paris, April 2015

ICOMOS

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.

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Cultural and Mixed Properties

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Denmark	C 1468	Christiansfeld a Moravian Settlement
Denmark	C 1469	The par force hunting landscape in North Zealand
France	C 1425	The Climats, terroirs of Burgundy
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Germany	C 1470	The Naumburg Cathedral and the landscape of the rivers Saale and Unstrut - territories of power in the High Middle Ages
Iceland/ Denmark/ Germany/ Latvia/ Norway	C 1476	Viking Age Sites in Northern Europe
India	C 1479	Delhi's Imperial Capital Cities
Iran	C 1455	Susa
Iraq	C 1481	The Ahwar of Southern Iraq: refuge of biodiversity and the relict landscape of the Mesopotamian Cities
Israel	C 1471	The Necropolis of Bet She'arim – A Landmark of Jewish Renewal
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Kenya	C 1450	Thimlich Ohinga Cultural Landscape
Mexico	C 1463	Aqueduct of Padre Tembleque, Renaissance Hydraulic Complex in America
Mongolia	C 1440	Great Burkhan Khaldun Mountain and its surrounding sacred landscape
Norway	C 1486	Rjukan – Notodden Industrial Heritage Site
Republic of Korea	C 1477	Baekje Historic Areas
Romania	C 1473	The Monumental Ensemble of Târgu Jiu
Saudi Arabia	C 1472	Rock Art in the Hail Region of Saudi Arabia
Singapore	C 1483	Singapore Botanic Gardens
Spain	C 1482	La Rioja and Rioja Alavesa wine and vineyard cultural landscape
Turkey	C 1488	Diyarbakır Fortress and Hevsel Gardens Cultural Landscape
Uganda	C 1491	Nyero and other hunter-gatherer geometric rock art sites in Eastern Uganda
United Kingdom	C 1485	The Forth Bridge
United States of America	C 1466	San Antonio Missions
Uruguay	C 1464	Fray Bentos Cultural-Industrial Landscape
Extensions (2)		
Georgia	C 710bis	Gelati Monastery [extension of "Bagrati Cathedral and Gelati Monastery"]
Spain	C 669bis	Routes of Santiago in Northern Spain [extension of "Routes of Santiago de Compostela"]
Referred back nominations (1)		
Iran	C 1423rev	The Cultural Landscape of Maymand

Deferred nominations (2)

Turkey	C 1018rev	Ephesus
Jamaica	N/C 1356rev	Blue and John Crow Mountains

Cultural and Mixed Properties

Geographical spread of nominations

Africa		2 States Parties, 2 nominations
Kenya	C 1450	Thimlich Ohinga Cultural Landscape
Uganda	C 1491	Nyero and other hunter-gatherer geometric rock art sites in Eastern Uganda
Arab States		2 States Parties, 2 nominations
Iraq	C 1481	The Ahwar of Southern Iraq: refuge of biodiversity and the relict landscape of the Mesopotamian Cities
Jordan	C 1446	Baptism Site "Bethany Beyond the Jordan" (Al-Maghtas)
Saudi Arabia	C 1472	Rock Art in the Hail Region of Saudi Arabia
Asia – Pacific		7 States Parties, 8 nominations
China	C 1474	Tusi Sites
India	C 1479	Delhi's Imperial Capital Cities
Iran	C 1423rev	The Cultural Landscape of Maymand
Iran	C 1455	Susa
Japan	C 1484	Sites of Japan's Meiji Industrial Revolution: Kyushu-Yamaguchi and Related Areas
Mongolia	C 1440	Great Burkhan Khaldun Mountain and its surrounding sacred landscape
Republic of Korea	C 1477	Baekje Historic Areas
Singapore	C 1483	Singapore Botanic Gardens
Europe – North America		16 States Parties, 19 nominations
Austria	C 1489	Hall in Tirol – The Mint
Denmark	C 1468	Christiansfeld a Moravian Settlement
Denmark	C 1469	The par force hunting landscape in North Zealand
France	C 1425	The Climats, terroirs of Burgundy
France	C 1465	Champagne Hillsides, Houses and Cellars
Georgia	C 710bis	Gelati Monastery [extension of "Bagrati Cathedral and Gelati Monastery"]
Germany	C 1467	Speicherstadt and Kontorhaus District with Chilehaus
Germany	C 1470	The Naumburg Cathedral and the landscape of the rivers Saale and Unstrut - territories of power in the High Middle Ages
Iceland / Denmark / Germany / Latvia / Norway	C 1476	Viking Age Sites in Northern Europe
Israel	C 1471	The Necropolis of Bet She'arim – A Landmark of Jewish Renewal
Italy	C 1487	Arab-Norman Palermo and the Cathedral Churches of Cefalù and Monreale
Norway	C 1486	Rjukan – Notodden Industrial Heritage Site
Romania	C 1473	The Monumental Ensemble of Târgu Jiu

Spain	C 669bis	Routes of Santiago in Northern Spain [extension of “Routes of Santiago de Compostela”]
Spain	C 1482	La Rioja and Rioja Alavesa wine and vineyard cultural landscape
Turkey	C 1018rev	Ephesus
Turkey	C 1488	Diyarbakır Fortress and Hevsel Gardens Cultural Landscape
United-Kingdom	C 1485	The Forth Bridge
United States of America	C 1466	San Antonio Missions
Latin America and the Caribbean		3 States Parties, 3 nominations
Jamaica	N/C 1356rev	Blue and John Crow Mountains
Mexico	C 1463	Aqueduct of Padre Tembleque, Renaissance Hydraulic Complex in America
Uruguay	C 1464	Fray Bentos Cultural-Industrial Landscape

Cultural and Mixed Properties
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C 1018rev	Turkey	Ephesus	320
N/C 1356rev	Jamaica	Blue and John Crow Mountains	21
C 1423rev	Iran	The Cultural Landscape of Maymand	Add
C 1425	France	The Climats, terroirs of Burgundy	161
C 1440	Mongolia	Great Burkhan Khaldun Mountain and its surrounding sacred landscape	104
C 1446	Jordan	Baptism Site “Bethany Beyond the Jordan” (Al-Maghtas)	49
C 1450	Kenya	Thimlich Ohinga Cultural Landscape	34
C 1455	Iran	Susa	75
C 1463	Mexico	Aqueduct of Padre Tembleque, Renaissance Hydraulic Complex in America	330
C 1464	Uruguay	Fray Bentos Cultural-Industrial Landscape	341
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C 1472	Saudi Arabia	Rock Art in the Hail Region of Saudi Arabia	57
C 1473	Romania	The Monumental Ensemble of Târgu Jiu	254
C 1474	China	Tusi Sites	65
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C 1477	Republic of Korea	Baekje Historic Areas	113
C 1482	Spain	La Rioja and Rioja Alavesa wine and vineyard cultural landscape	261
C 1483	Singapore	Singapore Botanic Gardens	122
C 1484	Japan	Sites of Japan’s Meiji Industrial Revolution: Kyushu-Yamaguchi and Related Areas	88
C 1485	United-Kingdom	The Forth Bridge	283
C 1486	Norway	Rjukan – Notodden Industrial Heritage Site	245
C 1487	Italy	Arab-Norman Palermo and the Cathedral Churches of Cefalù and Monreale	235
C 1488	Turkey	Diyarbakır Fortress and Hevsel Gardens Cultural Landscape	273
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Cultural and mixed properties
Technical evaluation mission experts

State Party	ID number	Name of the property	Field mission	Date
New nominations				
Austria	C 1489	Hall in Tirol – The Mint	Nikos Belavilas (Greece)	Sept. 2014
China	C 1474	Tusi sites	Tara Sharma (India)	Sept. 2014
Denmark	C 1468	Christiansfeld a Moravian Settlement	Pål Anders Stensson (Sweden)	Sept. 2014
Denmark	C 1469	The par force hunting landscape in North Zealand	David Jacques (UK)	Sept. 2014
France	C 1425	The Climats, terroirs of Burgundy	Mauro Agnoletti (Italy)	Sept. 2014
France	C 1465	Champagne Hillsides, Houses and Cellars	Urs Steiger (Switzerland)	Oct. 2014
Germany	C 1467	Speicherstadt and Kontorhaus District with Chilehaus	Mart Kalm (Estonia)	Sept. 2014
Germany	C 1470	The Naumburg Cathedral and the landscape of the rivers Saale and Unstrut - territories of power in the High Middle Ages	Ana Luengo (Spain)	Sept. 2014
Iceland/ Denmark/ Germany/ Latvia/ Norway	C 1476	Viking Age Sites in Northern Europe	Cynthia Dunning (Switzerland) – Denmark, Germany Cyril Dworsky (Austria) – Iceland, Norway, Latvia	Dunning: Sept. 2014 Dworsky: Sept. 2014
India	C 1479	Delhi's Imperial Capital Cities	Sharif Shams Imon (Bangladesh)	Oct. 2014
Iran	C 1455	Susa	Tang Jigen (China)	Nov. 2014
Iraq	C 1481	The Ahwar of Southern Iraq: refuge of biodiversity and the relict landscape of the Mesopotamian Cities	Postponed	-
Israel	C 1471	The Necropolis of Bet She'arim – A Landmark of Jewish Renewal	Angela Maria Ferroni (Italy)	Sept. 2014
Italy	C 1487	Arab-Norman Palermo and the Cathedral Churches of Cefalú and Monreale	Antonio Almagro Gorbea (Spain)	Sept. 2014
Japan	C 1484	Sites of Japan's Meiji Industrial Revolution: Kyushu-Yamaguchi and Related Areas	Sarah-Jane Brazil (Australia)	Sept. – Oct. 2014
Jordan	C 1446	Baptism Site "Bethany Beyond the Jordan" (Al-Maghtas)	Christopher Cleere (UK)	Oct. 2014
Kenya	C 1450	Thimlich Ohinga Cultural Landscape	Menno Welling (Malawi)	Sept. 2014
Mexico	C 1463	Aqueduct of Padre Tembleque, Renaissance Hydraulic Complex in America	Michael Taylor (USA)	Sept. 2014

State Party	ID number	Name of the property	Field mission	Date
Mongolia	N/C 1440	Great Burkhan Khaldun Mountain and its surrounding sacred landscape	Natalia Turekulova (Kazakhstan)	Août - Sept. 2014
Norway	C 1486	Rjukan – Notodden Industrial Heritage Site	Helmuth Albrecht (Germany)	Sept. 2014
Republic of Korea	C 1477	Baekje Historic Areas	Wang Lijun (China)	Sept. 2014
Romania	C 1473	The Monumental Ensemble of Târgu Jiu	Christiane Schmuckle-Mollard (France)	Oct. 2014
Saudi Arabia	C 1472	Rock Art in the Hail Region of Saudi Arabia	Dirk Huyge (Belgium)	Sept. 2014
Singapore	C 1483	Singapore Botanic Gardens	Stuart Read (New Zealand)	Sept. 2014
Spain	C 1482	La Rioja and Rioja Alavesa wine and vineyard cultural landscape	Albert Fekete (Hungary)	Oct. 2014
Turkey	C 1488	Diyarbakır Fortress and Hevsel Gardens Cultural Landscape	Nicolas Faucherre (France)	Août 2014
Uganda	C 1491	Nyero and other hunter-gatherer geometric rock art sites in Eastern Uganda	John Kinahan (Namibia)	Sept. 2014
United Kingdom	C 1485	The Forth Bridge	Michel Cotte (France)	Oct. 2014
United States of America	C 1466	San Antonio Missions	Ángela Rojas (Cuba)	Sept. 2014
Uruguay	C 1464	Fray Bentos Cultural-Industrial Landscape	Marcela Hurtado (Chile)	Sept. 2014
Extensions				
Georgia	C 710bis	Gelati Monastery [extension of “Bagrati Cathedral and Gelati Monastery”]	Bernhard Furrer (Switzerland)	Oct. 2014
Spain	C 669bis	Routes of Santiago in Northern Spain [extension of “Routes of Santiago de Compostela”]	Rosário Correia Machado (Portugal)	Sept. 2014
Deferred nominations				
Jamaica	N/C 1356rev	Blue and John Crow Mountains	Liana Müller (South Africa)	Oct. – Nov. 2014
Turkey	C 1018rev	Ephesus	Margaret Gowen (Ireland)	Sept. 2014
Referred back nominations				
Iran	C 1423rev	The Cultural Landscape of Maymand	Monica Luengo (Spain)	Nov. 2012

III Mixed properties

A Latin America and the Caribbean

Nominations referred back by previous sessions of the World Heritage Committee

Blue and John Crow Mountains (Jamaica) No 1356 rev

Official name as proposed by the State Party

Blue and John Crow Mountains

Location

County of Surrey

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

St. Mary

Jamaica

Brief description

The Cultural and Natural Heritage of the Blue and John Crow Mountains encompasses a rugged and densely-wooded mountainous region in south-east Jamaica that offered refuge to Maroons (escaped slaves) and the tangible cultural heritage associated with the Maroon story. This includes settlements, trails, viewpoints, hiding places, etc. that form the Nanny Town Heritage Route. The forests and their rich natural resources provided everything that the Maroons needed to survive, to fight for their freedom and to nurture their culture. Maroon communities still hold strong spiritual associations with these mountains, expressed through exceptional intangible manifestations.

Category of property

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

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

1 Basic data

Included in the Tentative List

28 August 2006

International Assistance from the World Heritage Fund for preparing the Nomination

None

Date received by the World Heritage Centre

25 February 2009

31 January 2014

Background

This is a deferred nomination (35 COM, Paris, France, 2011).

The World Heritage Committee adopted the following decision (35COM 8B.16):

The World Heritage Committee,

1. Having examined Documents WHC-11/35.COM/8B, WHC-11/35.COM/INF.8B1 and WHC-11/35.COM/INF.8B2,

2. Defers the examination of the nomination of the **Blue and John Crow Mountains National Park, Jamaica**, to the World Heritage List under criteria (ix) and (x), to allow the State Party, with the assistance of the World Heritage Centre and IUCN as requested, to consider options for a future revised nomination related to natural criteria in Jamaica;

3. Notes the national and regional biodiversity importance of the nominated property and encourages the State Party to strengthen the management of the site to address threats to its natural values, including agricultural encroachment both for subsistence and commercial purposes, alien invasive species, unregulated non-timber products harvesting, fires and poaching;

4. Encourages the State Party to consider experience elsewhere with environmentally friendly forms of coffee production, including certification schemes and compensation schemes for water provision for industry, drinking water and agriculture;

5. Defers the examination of the nomination of **Blue and John Crow Mountains National Park, Jamaica**, to the World Heritage List on the basis of cultural criteria in order to allow the State Party to:

a) Deepen the comparative analysis in order to demonstrate the Outstanding Universal Value of the property by examining how, and to what extent, the nominated property bears witness to the associated values in respect to other properties related to other relevant Maroon groups,

b) Revise the nomination dossier so that the values of the property can better present the proposed Justification for inscription and the selected criterion,

c) Modify the boundaries of the nominated property or of the buffer zone to include the cultural resources documented in the additional information, received by ICOMOS on 8 November 2010, as well as those areas with the potential to yield additional information on Maroon culture in future archaeological campaigns,

d) Develop and enforce as soon as possible protective measures, both legal and planning-based, for the cultural heritage of the nominated property,

e) Develop and adequately fund a comprehensive strategy for cultural heritage within the 2011-2016 Management Plan under elaboration, including inventorying, documentation, conservation, maintenance, disaster management, promotion and tourism,

f) Finalize and implement the 2011-2016 Management Plan without delay;

6. Recommends that the State Party gives consideration to criterion (iii) in a revised nomination;

7. Also recommends that the State Party give consideration to the following:

a) Involve representatives of the Maroon community in the management framework,

b) Develop training programmes in cultural heritage for the Park rangers, so that they can be involved in the daily protection of cultural resources;

8. Requests the Advisory Bodies and World Heritage Centre to provide support, if required by the State Party, in order to assist it to identify and prioritise Jamaican sites which have the strongest potential for nomination to the World Heritage List,

including an assessment of the potential of the Cockpit Country Forest Reserve.

On 31 January 2014 the State Party submitted a revised nomination.

In response to the World Heritage recommendations, the State Party changed the name of the property, added criterion (iii), reduced the boundaries of the nominated property and slightly expanded those of the buffer zone (see relevant sections in the dossier).

Consultations

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

Technical Evaluation Mission

A joint ICOMOS/IUCN technical evaluation mission visited the property from 27 October to 5 November 2014.

Additional information received by ICOMOS

On 10 October 2014 ICOMOS sent a letter to the State Party requesting an expanded comparative analysis, additional information on the legal designation as Protected National Heritage of the nominated property, the integration of cultural heritage into the management system, the role of the Maroon Advisory Committee in relation to management and the state of implementation of the management system. A response was received on 11 November 2014, providing the requested information which has been incorporated into the relevant sections below.

On 23 December 2014, ICOMOS sent a second letter to the State Party, proposing a meeting to discuss aspects of protection and management in need of further clarification. On 16 January 2015, ICOMOS sent a third letter to the State Party proposing a set of activities to be carried out as a matter of urgency accompanied by an implementation calendar to be discussed with the State Party. The State Party responded on 5 January 2015 proposing a video conference with the participation of the professional team set up for the nomination.

On 21 January 2015 the State Party provided further comparative elements and provisional additional documentation on the management of the property as a basis for discussion. A Skype conference with representatives of the State Party and of ICOMOS took place on 22 January 2015, during which a number of points were discussed, and clarifications given and requested.

The State Party formally submitted additional documentation on 26 February 2015 and the information provided has been incorporated into the relevant sections of this report.

Date of ICOMOS approval of this report

12 March 2015

2 The property

Description

The nominated property is located on the eastern side of Jamaica and comprises two different mountain ranges separated by valleys. The Blue Mountains range, or Central Ridge, runs from northwest to southeast and contains several peaks exceeding 2,000m, the average altitude of the ridge being more than 1,800m; and the John Crow, which is separated from the Blue Mountains by the Rio Grande Valley.

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

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

Maroonage is a phenomenon closely linked to the European colonisation of the New World. It arose in Jamaica almost immediately after the Spanish took over the island. Initially, the word was used to indicate resistance to the enslavement of indigenous people in Nueva Sevilla, but it came to define, more generally, any effort made by groups of people to avoid colonial oppression by fleeing to either inaccessible locations or urban areas where they continued their lives in freedom.

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

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

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

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

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

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

The tangible Windward Maroon cultural heritage revolves around the routes and places associated with the fighting and the signing of the Nanny Town Treaty with the British in 1739, and forms the cultural core of the nominated property, in combination with the rich natural heritage, which provided refuge to the Maroons and made possible their fight against colonial oppression.

In response to the decision 35COM 8B.16, Item 5. b) and c) the nomination was revised to improve the coherence of the nominated area with the proposed justification for inscription and the selected criteria. In particular, the current proposal has excluded from the nominated property the Port Royal Range, which exhibits a lesser density of known cultural attributes, and so its size is reduced to 26,251.60ha while its buffer zone has been extended to 28,500ha, by covering areas that *"include the immediate setting of the nominated property, important views and other areas or attributes that are functionally important as a support to the property and its protection"* (OG WHC 13/01 paragraph 104).

At the core of the Treaty, a tract of land in the Blue and John Crow Mountains was assigned to the Windward Maroons, and until today, they still are the stewards of parts of it and the network of known and secret routes, passes and sacred sites located in the mountains themselves.

This network of trails is collectively termed the Nanny Town Heritage Route and serves as the spiritual memorial and sovereign centre of the Windward Maroons. It includes the Cunha Cunha Pass Trail, which runs across the north-eastern Blue Mountains and was the spine of several other trails leading to settlements, hiding-places or important spots for the Maroons, as well as the Corn Puss Gap Trail, Morant Bay Trail, and Woman's Town Trail. Other trails connecting to sacred sites or used for hunting and gathering are said to exist but their location is not disclosed due to secrecy reasons. A number of other trails opened by Maroons were later used by the British to assault Maroon settlements. At least four have been identified through research: Stony River Trail, Two Clay Ridge Trail, Captain Stoddart's Trail and John's Hall and the Corn Husk River Trail.

These routes also include important nodes such as the settlement of Nanny Town (then called Stony River), Guy Town, Katta-a-Wood (Woman's Town), Pumpkin Hill, Brownsfield and Watch Hill.

Nanny Town was the main settlement connected to the fight for freedom of the Windward Maroons; it lies approximately 32km northeast of Kingston on the northern side of the Blue Mountain ridge at 600m a.s.l. The site was excavated in the 1970's and traces of three different levels of occupation were found: the first by the Taino, who probably used the area as a sacred site, then by the Maroons (from around 1655 to 1734) and finally by the British for less than one year (1734-1735).

Guy's Town was a sort of farming area for the Maroons to support their community: different crops were cultivated and small animals grazed. Katta-a-Wood is located at the foothills of John Crow Mountain Ridge: this was the settlement of the Maroons' ancestors, the Taino people, and it was also a hunting area; after the capture of Nanny Town by the British, the Maroons found refuge here. Brownfields sits on a hill overlooking the modern settlement. It was settled by Maroons after they obtained additional land. Pumpkin Hill is one of the sites where Maroons hid runaway slaves and it is associated with Maroon oral tradition about Queen Nanny and the Maroons.

Further settlements which were founded after the Maroons gained autonomy are Moore and Charles Towns, Scots Hall, and Hayfield.

Several sites within the nominated property and its buffer zone (often with special natural features such as waterfalls, valleys and viewpoints) had a particular importance to the Windward Maroons. These places were usually associated with specific events and oral history or remembered for their usefulness in the Maroons' everyday lives or for their role in Maroon resistance strategy. Look Out on the Cunha Cunha Pass Trail, Nanny Falls, Mammee Hills, Quao Falls, Three Finger Spring, and Pumpkin Hill are all central to Maroon stories about episodes of resistance.

Windward Maroon intangible heritage is deeply connected with the nominated property and exhibits cultural and social elements adapted and transplanted from African society. Among the components of the intangible Maroon legacy, literature identifies historical consciousness, oral traditions, religious rites, traditional medicine, language, music and dance, as well as legal and constitutional systems and food preparation. Some of the above are still practised today. For instance, tradition is embodied in the village government systems under the form of 'kamiti,' or local councils.

The mountains in themselves are held sacred by the Maroons, firstly because they are the burial ground of their ancestors and, according to West African belief, their spirits live close to these sites. Therefore, these places and, by extension the mountains, carry great spiritual importance for the Maroons.

The Windward Maroon religious rites and associated manifestations of culture are very rich. Music, in particular, is associated with important religious ceremonies and

especially with the Kromanti Play, which is a ritual meant to cure sick people. This rite is unique to Jamaican Maroons and is still practiced within the community. Two specific instruments are used during the ritual: the Abeng, a kind of horn made from a cow's horn, which was also used to send messages, and the Kromanti drum, which is made by hollowing a tree trunk and covering it in goatskin.

Language also represents one important element of the intangible heritage of Maroons. Two languages have been retained by Windward Maroons: one is a sort of Creole, which combines words and grammatical forms from different languages, with a structure similar to Jamaican Creole. The second, Kromanti, has been largely influenced by the Twi language from Ghana. The first is still practiced but only during certain community ceremonies. Likewise, Kromanti is only used as a liturgical language.

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

History and development

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

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

According to Maroon oral tradition, transported Africans soon rebelled against the Spaniards and fled into the forest, joining the Taino. However, it was only afterwards, but apparently before the arrival of the British in 1655, that the Maroons moved away from the Nueva Sevilla area to the north-eastern region of the island, where the nominated property is located. Here the Maroons settled, founded villages and farms and developed their own particular culture. The Maroons lived on fishing, poultry-raising, hunting and fruit and vegetable growing. Despite their clandestine life, the Maroons did trade with the Spaniards and established a network of contacts with enslaved Africans in the plantations, from whom they obtained essential goods such as salt, tools, weapons and information.

Open and long-lasting conflicts exploded under British rule, particularly when white settlements started springing

up in the areas under Maroon control. The Maroons chose to fight the British through guerrilla activities rather than open attacks, and the tactics developed by the Maroons caused considerable difficulties for the British, who imported mercenaries to fight this war. Two Maroon communities developed in Jamaica: the Leeward Maroons, who found refuge in the Cockpit Country in the west of the island, and the Windward Maroons, associated with the nominated property. Due to the particular conditions in which these groups found themselves living, Maroons formed with enslaved workers an ambiguous relationship and, at the same time, developed a profound sense of exclusive identity.

The Maroon-English war came to an end in 1739, on the basis of two distinct treaties signed in that same year with the two Maroon communities, when the British authorities agreed to give land, civil autonomy, peaceful coexistence and the possibility for the Maroons to move freely in the forests. From that moment onwards, the Windward Maroons settled in their own villages, maintaining their autonomy and their spiritual linkage with the Blue Mountains.

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

3 Justification for inscription, integrity and authenticity

Comparative analysis

In response to the Decision 35COM 8B.16 Item 5. a), in the submitted revised nomination dossier, the State Party integrated the comparative analysis elaborated for the first nomination proposal by developing an internal comparison with the Leeward Maroon area and experience, by commenting upon the observations on the first comparative analysis contained in the 2010 ICOMOS evaluation, and by underlining that this type of cultural heritage remains underrepresented on the World Heritage List, in terms of density of cultural heritage, associated natural features, and protection status.

According to the State Party, the Windward Maroon experience and related property bears substantial differences to the Leeward Maroons, and Windward heritage has survived to a greater extent.

The nominated property is held to be distinct from the Le Morne Cultural Landscape (Mauritius, 2008 (iii) and (vi)) as this does not mention trails or routes. Additionally, the nomination dossier underlines that the values of Maroon communities associated with several properties already inscribed on the World Heritage List are not represented,

as they are not part of the justification for inscription. Additionally no property associated with the Maroon experience is currently on the Tentative Lists of the States Parties.

Finally the nomination dossier claims the Jamaican Treaties were the earliest to be signed, e.g., in respect to the United States or to Haiti.

In its letter of October 2014, ICOMOS requested the State Party to develop further the comparative analysis by considering the Leeward Maroons and other Maroon experiences associated with World Heritage properties inscribed on the World Heritage List for their natural values.

The State Party responded in two different stages (November 2014 and January 2015) providing: a) more elaborate arguments to compare the Windward and Leeward Maroons which highlighted the differences between the two groups, mainly related to their political organisation, and culinary and other practices as a response to different environments; b) a deepened comparative analysis with other properties related to Maroon experiences, including some World Heritage properties previously not considered.

ICOMOS recognises that differences do exist between the Leeward and Windward Maroons, but both communities contribute to illustrating the fight for freedom of enslaved people in Jamaica and their success in achieving early formal recognition and autonomy by the British authorities. ICOMOS also notes that the reasons for not considering the Cockpit Country and Leeward Maroonage as a possible component of the proposed mixed property relate mainly to integrity, protection and management issues that concern the natural heritage of the Cockpit Country and appear to be difficult to overcome in the short term.

Overall, ICOMOS considers that the augmented comparative analysis provided by the State Party through the additional information has strengthened the comparison elaborated in the first nomination and its integration presented in the revised dossier.

ICOMOS finally considers that it would be important that a thematic study could be developed for this type of property associated with the Maroon experience, so as to sustain the process of the Global Strategy to achieve a representative, balanced and credible World Heritage List.

ICOMOS considers that the augmented 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 Blue and John Crow Mountains became the place of resistance of Maroons, firstly indigenous Tainos and then enslaved Africans who resisted the European colonial system, by establishing a network of trails, hiding places and settlements, by making use of the natural resources to sustain themselves and thus developing a strong link with the mountains and a deep knowledge of it;
- Nanny Town represents the spiritual, political and symbolic centre of the Windward Maroons, as well as their headquarters for the guerrilla actions that forced the British authorities to sign a peace treaty which eventually led to the formation of a Maroon autonomous entity within the British dominion;
- The Maroon war inspired other liberation movements of enslaved people and the Jamaican Maroon experience was influential, serving as an earlier example of the success against slavery exploitation.

ICOMOS considers that the cultural justifications for inscription of the nominated property are based on its association with Jamaica's Windward Maroons, both historically and to the present day.

The tangible cultural heritage represented collectively by the Nanny Town Heritage Route serves as the spiritual, memorial and sovereign centre of the Windward Maroons. The significance of the Nanny Town Heritage Route is reinforced by the associative values of the tangible heritage and by the living traditions of the Windward Maroons. The cultural significance of the natural environment resides in the fact that the Maroons utilised the unique vegetation and animal life borne out of the unique geological and geographic conditions to develop defence and combat strategies to defeat the British. The guerrilla warfare was based on an intimate knowledge of the natural environment, and the landforms and dense forest also served to protect the Maroons from easy detection.

As a result of the 1739 Treaty, a tract of land in the Blue and John Crow Mountains came under the stewardship of the Windward Maroons, and up until today, they still have collective ownership rights over parts of it.

Integrity and authenticity

Integrity

According to the State Party, the nominated property contains all the tangible elements that are necessary to convey its significance: archaeological deposits remain in-situ and the sacred sites are mostly inaccessible due to the difficult terrain, which also contributes to preserving it from adverse impacts of human activities. The commitment of the State Party to ensuring that the integrity of the nominated property be sustained has led to the formal designation of the nominated property and its buffer zone as Protected National Heritage.

ICOMOS notes that, in terms of physical integrity, the nominated property is relatively intact. There have been

very few adverse effects of human developments such as coffee plantations or other farming or settlement activities and the culturally significant sites related to the Nanny Town Heritage Route have been preserved within the nominated property and in the buffer zone and some, e.g., Charles Town, even outside it. However, the most important among these places, namely Charles Town, Scots Hall, and Bayfield, have all been declared protected national heritage and will be treated as 'satellite sites' related to the nominated property.

In terms of functional integrity of the property in relation to the wider context of Jamaican Maroonage, ICOMOS notes that both the Windward and Leeward Maroons have successfully pursued freedom through flight into remote forests, active resistance, and guerrilla tactics, despite differences between the two groups.

The nomination, however, focuses on the Windward Maroons' tangible and intangible heritage, and particularly the Nanny Town Heritage Route, as the Leeward Maroon base is located in the Cockpit Country – a hilly area in western Jamaica separated from the Blue and John Crow Mountains.

Therefore, ICOMOS considers that the majority of elements necessary to express the values of the property as presented in the dossier are included within the boundaries of the nominated property. Additionally, the sites lying outside the nominated property have been protected as national heritage and will be associated with the nominated property.

ICOMOS considers that the property is of adequate size to ensure the representation of the features and processes which convey the property's significance. A significant proportion of the elements necessary to read and understand the values conveyed by the property survives and is included in the nominated property. The physical fabric of the property and of its significant features is in a fair condition; however maintenance needs to be carried out.

On the other hand, the buffer zone suffers from adverse effects of development and neglect and the impact of deterioration in the buffer zone currently lacks control. The relationships and dynamic functions present in the cultural landscape and the living properties essential to its distinctive character are maintained but require substantial improvements. In summary, the property still satisfies the condition of integrity but requires correct conservation and management measures, and direct mitigation measures are necessary to protect future loss of integrity.

Authenticity

According to the State Party, several tangible and intangible attributes may be considered when assessing the conditions of authenticity. In relation to tangible heritage, permanence of location, continuity of use and function, archaeological evidence and documentary and oral toponymy have been used as the main references to

assess the authenticity of the trails, towns and important places. The surviving practice of religious rites and ceremonies, accompanied by traditional music, songs and dances, attests to the continuity and liveliness of Maroon culture. The wealth of documentary and archaeological evidence as well as oral history confirms the authenticity of the nominated property.

ICOMOS considers that the Nanny Town Heritage Route comprises a number of routes and sites which have no physical, tangible manifestation other than the intimate intangible knowledge of the Windward Maroons. This knowledge of the location and spiritual or traditional significance of the sites is passed down from generation to generation. Only a few sites have been mapped and partially documented also due to secrecy requirements. The association of Maroons with their heritage places reveals the sense of place at the most significant sites such as Nanny Town, Quao Pools and Quao Settlement. Traditions, techniques, language and management systems, as part of the Windward Maroon culture, altogether truthfully express the significance of these sites in a variety of forms.

In conclusion, ICOMOS considers that the conditions of integrity and authenticity have been met. However, the property requires conservation, management and direct mitigation measures to protect it from future loss of integrity. Additionally, ICOMOS recommends that 'satellite sites' located outside the nominated property and the buffer zone be included in the narrative to present the values of the nominated property. ICOMOS also considers it desirable that the Leeward Maroon experience is also reflected in the overall presentation/interpretation strategy for the nominated property and for Jamaican Maroonage.

Criteria under which inscription is proposed

The property is nominated on the basis of cultural criteria (iii) and (vi) 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 Blue and John Crow Mountains bear witness, in an exceptional manner, through the excavated archaeological sites and buried deposits associated with the Nanny Town Cultural Heritage Route, to the efforts made to resist enslavement and to the resilience of the movements for freedom. In these mountain ranges secret trails, settlements and natural resources were intelligently used in the war for liberation against British oppression during the first quarter of the 18th century.

ICOMOS considers that the nominated mountainous region served as a haven for Maroons, escaped enslaved Africans and native people, for hundreds of years. From these mountain strongholds, they developed a self-reliant, free community and waged a successful war of liberation against the European colonizers. These conflicts culminated in the Treaties of 1739 between the Maroons

and the island's English Governor, which granted certain sovereign rights to the Maroon people.

ICOMOS notes that Maroonage is not unique to Jamaica; Maroon communities formed throughout the Western Hemisphere and across the globe in response to enslavement of indigenous people and forced migration of enslaved people, primarily from Africa. However, the Treaties signed in Jamaica in 1739 were among the first formal recognitions of a Maroon autonomous political and territorial entity in the New World. It is of exceptional importance as an early example of a colonial power recognizing the sovereignty of a Maroon community, the autonomy and rights of which have lasted until today.

Archaeological investigations have identified Nanny Town, once the centre of Maroon resistance in the early 18th century. The remains of the site have yielded evidence of multiple levels of Taino, Maroon and British occupation. Different sources of evidence and oral traditions demonstrate that the region's mountains were linked by a defensive network of trails and secret settlements. Today these trails are recognized as the Nanny Town Cultural Heritage Route and are important as a pilgrimage route and a way to experience this cultural tradition.

ICOMOS considers that this criterion has been justified.

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

This criterion is justified by the State Party on the grounds that the Blue and John Crow Mountains are directly and tangibly associated with historical events and the living tradition of Queen Nanny, who was the commander in chief and spiritual icon of Jamaican Maroons who led the community to gain liberation and self-determination rights through the 1739 Treaty. The Jamaican government has designated Nanny of the Maroons as a National Hero.

ICOMOS considers that the World Heritage Convention is a site-based convention, therefore it is sites that are inscribed on the World Heritage List and not ideas or persons.

However, ICOMOS considers that the nominated property is indeed associated with and bears outstanding witness to important historical events and living traditions developed by the Maroon community in their secluded life in an exceptionally rich natural environment.

This is evident in the special status achieved by the Maroons which is still present in the group's semi-autonomous governance structure and the maintenance of traditional common landownership. Also well documented is the merging of the cultural practices of the New World with those of the African Diaspora. This is supported by the language, which includes words from West African languages and religious practices with distinct African roots.

Intangible cultural traditions include outstanding expressions such as the Kromanti Play or "The Maroon Heritage of Moore Town", which was inscribed on the Representative List of the Intangible Cultural Heritage of Humanity in 2008.

ICOMOS considers that this criterion has been justified.

ICOMOS considers that the nominated property meets criteria (iii) and (vi) and conditions of authenticity and integrity. ICOMOS however recommends that the 'satellite sites' be included in the interpretation/communication strategies that will be elaborated to present the values of the nominated property. This also applies to the Leeward Maroon story which represents an integral aspect of Jamaican Maroonage.

Description of the attributes

The precipitous geography, the dense forests and the rich and diverse resources of the natural environment of the Blue and John Crow Mountains bear evident and exceptional witness to the fundamental role played by the natural heritage in providing the ideal conditions for Maroons to survive and to develop their guerrilla strategy which ultimately forced the British rulers to sign a peace treaty that granted Maroons rights over a tract of land, self-determination and autonomy.

The peculiar culture that Maroons developed in isolation and rooted in their search for freedom is embodied both in tangible and intangible heritage. The first is represented by the sites, trails and sacred places that collectively form the Nanny Town Heritage Route, whilst the intangible expressions of Maroon heritage encompass religious rites, music and performing expressions such as the Kromanti Play, traditional languages, cooking methods, and a deep connection with the mountains. The Maroon Heritage of Moore Town was listed in 2003 as a Masterpiece of the Oral and Intangible Heritage of Humanity and then relisted in 2008 on the Representative List of Intangible Cultural Heritage of Humanity.

4 Factors affecting the property

The State Party holds that the nominated property is not under risk from any serious development threats, due to its geomorphological conditions, and the poorness of the soil, to be threatened by agriculture. Additionally, nobody is allowed to inhabit the nominated property and the population of the buffer zone amounts to approximately 30,000 people. All activities are regulated under the Jamaican National Heritage Act (JNHT 1985) through its preservation scheme.

ICOMOS notes that, while not mentioned in the nomination dossier but reported in the management plan, the nominated property is threatened by deforestation

practices due to enlargement of coffee farms on the periphery of the boundaries of the Blue and John Crow Mountains National Park (BJCMNP), thus infringing on the buffer zone and posing a threat to the natural heritage associated with the cultural significance of the property. One further threat is the continued use of chemical pesticides on coffee farms, that may threaten the flora and fauna associated with Maroon cultural values.

Further threats come from overfishing and over-harvesting of shrimp and freshwater snails that will deplete food resources in the BJCMNP. Illegal fishing methods (such as poisoning) are also practiced. Despite the efforts being made, littering still represents a problem along the trails, especially those most used.

Climate change is likely to increase the occurrence and ferocity of hurricanes and tropical storms on the island. They are currently already severely destructive and may result in significant loss of vegetation, landslides and also impact on the lives of the Maroon communities.

ICOMOS considers that there are signs of an increasing pace of change in the nominated property as the population is more and more attracted by modern life. This means that the traditional management system needs to be proactive in understanding change and to provide the most effective form of protection over time.

Tourism is currently limited in the BJCMNP, however in case of a World Heritage listing it is likely to increase with more facilities needed to accommodate larger numbers of visitors. Additionally, there is some interest in opening new trails to currently inaccessible peaks and ridges for tourism purposes, which may threaten the property's heritage.

In this regard, the State Party has clarified that all parties concerned agree that no additional trails will be opened within the nominated property.

ICOMOS notes that the region has mining potential and therefore in its letter of 16 January 2015 requested the State Party to provide a statement on the existence of mining permits which concern the nominated property.

The State Party responded that 5 mining prospection licences have been issued and concern areas outside the nominated property but contiguous with its buffer zone. The State Party also clarified that Jamaican legislation does not allow for mining activities within protected areas (category I and II) nor in national parks, unless mandated by the Cabinet. Environmental Impact Assessments are envisaged for mining activities that are likely to have a negative impact on the environment and that they should fully reflect the economic cost of natural resources and eco-systems of protected areas that may be affected.

ICOMOS considers that the State Party should provide a map of the areas where locations of authorised prospections and identified mining potential are clearly

identified, along with information on the types of ore found and the possible size of mining areas, extraction and duration of possible concessions.

ICOMOS considers that updated information on the results of the licensed prospections should be provided and a Heritage Impact Assessment on the possible mining scenario be carried out and its results submitted to the World Heritage Centre by 1 December 2015.

ICOMOS considers that the main current threats to the property are encroachment from coffee farming and other agricultural practices, overfishing and over-harvesting of freshwater resources, hurricanes and storms. If not addressed at an early stage, tourism may also become a threat. ICOMOS considers that potentially imminent threats may derive from the decisions concerning mining activity, for which prospection licences have been issued in areas contiguous with the buffer zone. ICOMOS in this regard recommends that a map with details of prospection licenses, types of ore and size of possible mining areas be submitted along with updated information and a Heritage Impact Assessment on the mining scenario by 1 December 2015.

Finally, plans to open new trails to make accessible more areas within the nominated property or its buffer zone should be discouraged; not only will this impact on the integrity of the cultural heritage, but also pose a risk to the natural heritage.

5 Protection, conservation and management

Boundaries of the nominated property and buffer zone

The boundaries of the nominated property were reduced in response to the decision 35COM 8B.16. Item 5.c). Originally, the boundaries followed that of the National Park and included a 1 kilometre buffer zone around it, which did not take into account the cultural dimension of the nominated property. At present, the boundary of the nominated property falls within the National Park but does not coincide with it. The outer boundary of the buffer zone now roughly follows that of the National Park, but also includes the Rio Grande Valley. The Port Royal Mountains have been excluded from the nominated property and now fall within the buffer zone. Adequate legal protection based on a cultural perspective has been given to both the nominated property and the buffer zone.

The higher elevations of the Blue and John Crow Mountains, together with a network of trails and a few sacred sites associated with the Windward Maroons, encompasses the nominated property. This area could be seen as the core of the present National Park and has been reduced to cover ~26,250ha (as opposed to ~48,650ha in 2010), with a buffer zone now covering almost 28,500ha. The Management Plan 2011–2016 includes a zoning scheme, although this follows the previous boundaries.

While the maps show clearly and unambiguously the boundaries of the nominated property and its buffer zone, these are clearly marked only along hiking trails, but they are not clearly recognisable on the ground, especially with regards to the Rio Grande Valley and should be made evident through physical markers.

ICOMOS considers that the boundaries have been conceived to include within the key cultural and natural heritage areas of significance, as part of the Nanny Town Heritage Route.

ICOMOS further considers that there is a need for clarification with regard to the extent and number of 'satellite sites' mentioned in the nomination dossier, taking into account that Charles Town, Bayfield and Scots Hall have been considered as such.

In the additional information provided on 26 February 2015, the State Party has clarified the number of satellite sites through cartographic documentation: 14 sites are indicated, 6 are outside both the nominated property and the buffer zone, whilst 8 are encompassed within the buffer zone.

In conclusion, ICOMOS considers that the boundaries of the nominated property and of its buffer zone may be considered adequate for the purpose of the representation of the cultural processes associated with the proposed Outstanding Universal Value.

Ownership

The land of the nominated property is owned by the Commissioner of Lands (Government of Jamaica). Most of the buffer zone is stated to be publicly-owned, with some privately-owned land. The Rio Grande Valley, part of the buffer zone, but mostly outside of the national park, is an exception, as most of the land here is privately owned, including by members of the local Maroon community. Some conflicts are reported as a result of competing formal and customary land ownership. A particularity of the BJCMNP is leases granted to war veterans by the Forestry Department, some of which remain active.

Protection

The nominated property is at the core of the BJCMNP, an area which the nomination dossier has informed is protected at the national level also for its natural and cultural heritage.

Additional information was requested from the State Party with regard to the updated protection status of the nominated property.

The State Party responded that, in response to the decision 35COM 8B.16 item 5.d), the nominated property and its buffer zone in their entirety have been designated as "Protected National Heritage" under the Jamaica National Heritage Trust Act (1985), along with Satellite Areas, since January 2014. A draft Preservation Scheme

has been elaborated for the property to provide protective measures under this designation.

Most of this area is a National Park, designated under the Natural Resources Conservation Authority (NRCA) Act (1991) since 1993. In addition, the National Park and some areas around it are designated as Forest Reserve under the Forest Act (1996) and since 1950 under the earlier Forest Act (1937) and its 2001 regulation.

Traditional protection is also provided for the nominated property by the Windward Maroon Community.

While the overlap of designations illustrates the importance granted to the area it also raises questions of legal clarity and harmonization among and between institutions and the Maroon community.

ICOMOS notes that traditional protection by the Maroon Community cannot be really operational within the nominated property, as this area is under the jurisdiction of the BJCMNP management authority.

ICOMOS requested additional information from the State Party, who clarified the whole institutional framework for the protection and conservation of protected cultural heritage and detailed the aims and content of the Preservation Scheme.

The State Party provided the text of the Preservation Scheme and the other official texts concerning legal protection, as well as the cooperative Memorandum of Understanding between the Windward Maroon Community and the JNHT that was signed on 10 November 2014.

ICOMOS considers that the preservation Scheme is crucial to ensure effective protection and conservation of the nominated property from a cultural perspective and therefore it is necessary that it is finalised as soon as possible.

This point was discussed during the Skype conference on 22 January 2015 between ICOMOS and the State Party's representatives. In February 2015, the State Party submitted additional information on the finalisation timeframe of the Scheme, which is expected to be completed and enforced within 12 months.

ICOMOS confirms that its approval is very important for the overall effective protection of the nominated property.

ICOMOS also notes that the National Park Rangers are understaffed and under-equipped to monitor and enforce even the core of the nominated property. They are not trained as cultural officers, not being in association with the Jamaica National Heritage Trust (JNHT), which does not have any active plan or the means to monitor the integrity of the cultural heritage sites within the nominated property and its buffer zone. At present, they rely on the Maroons to notify them of any misdemeanour related to archaeological or sacred sites.

The Maroon Councils have undertaken active measures to educate the youth on Maroon cultural traditions so as to address the need to strengthen the appropriation of Maroon values by younger generations and the traditional protection and management vis-a-vis the increasing attraction of modern economic systems for the populace. Currently these measures seem effective to conserve the intangible values associated with the nominated property.

ICOMOS therefore considers that to address the urgent issues concerning patrolling it would be useful if training of members of the Maroon community as park rangers be stabilised so that they take an active part in the conservation of the Park and its natural heritage in conjunction with its cultural heritage.

This point was included in the letter sent to the State Party on 16 January 2015 and it has been addressed by the State Party in their 3-year Joint Work-Plan submitted along with the requested additional information in February 2015.

In conclusion, ICOMOS considers that the legal protection in place will be fully adequate when the Draft Preservation Scheme is approved and enforced.

Conservation

The Management Plan 2011–2016 for the nominated property deals with conservation in detail, providing a Conservation Programme for both the natural and cultural aspects of the property. This envisages the conservation and preservation of the tangible and intangible heritage of the Maroons, the promotion of research on and awareness of this heritage, and to establish intellectual property rights for the Maroon heritage.

Human and financial resources are limited, therefore in addition to working with the Maroon communities, the National Park management work with relevant organizations such as the JNHT, the African-Caribbean Institute of Jamaica and the University of the West Indies Archaeological Department. ICOMOS considers that most of the objectives can be met through the relevant education, enforcement and recreation and tourism programmes if the proposed budgets are approved.

Inventory of cultural heritage is centred on the Creative Heritage Project, funded by the World Intellectual Property Organisation. Its goal is to build community capacity to document their own traditions: the project has indeed managed to capture valuable information in the form of audio interviews and video on a variety of Maroon traditions. The information is however not organised spatially and is very general. There is still very little information on the elements of the Nanny Town Heritage Route.

ICOMOS considers it necessary that a proper GIS-based cultural landscape map and inventory be developed as a basis for conservation of the nominated property. This

map should be based on a Geographic Information System, where existing and new data on cultural heritage sites and their associated oral traditions are combined.

Following the January 2015 letter from ICOMOS and the Skype conference, the State Party submitted additional information accompanied by a 3-year Joint Work-Plan which also addresses the aspects concerning the inventory and landscape mapping. Whilst the former is already being carried out and a multi-disciplinary team is already set up, the landscape mapping is planned to be elaborated within 24 months. GIS technologies are already in use and this will facilitate the implementation of the above.

In conclusion, ICOMOS considers the conservation programme is realistic but requires strong coordination between all actors, the integration of the Maroon community in pursuing conservation objectives, and the allocation of the necessary budgets.

Management

Management structures and processes, including traditional management processes

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

A co-management agreement was signed by NEPA, the Forestry Department and the JCDDT in 2000 to ensure coordination and collaboration with the other agencies responsible for the site. This agreement is currently being updated following the revision of the National Protected Area System Master Plan completed in 2013.

ICOMOS requested additional information from the State Party on the role of the Maroon community within the management system and of the state of implementation of the management system.

The State Party responded in November 2014 clarifying that the Windward Maroon communities of Moore Town, Charles Town and the Rio Grande Valley have traditional roles with respect to managing their sovereign lands and are also involved in the Advisory, Co-management and Maroon Heritage Committees of the National Park.

The lead agency for management of the nominated property is the Jamaica Conservation and Development Trust (JCDDT). The JCDDT is a non-government organisation and has had a delegation agreement with the

Natural Resources Conservation Authority (NRCA) through NEPA for Park management since 1996.

ICOMOS observes that the protection of the cultural heritage is very recent, therefore joint management is in its initial stages. To ensure the long-term effectiveness of management, this process of integration needs to be sustained by revising the management structure for the property to include a technical unit for the nominated property, within which technically suitable, adequately trained and experienced representatives from the JCDDT, JNHT and IOJ (Institute of Jamaica), can jointly plan the management of the property, and ensure proper integration of traditional management and of any state initiatives and processes for natural and cultural heritage.

This point was addressed in the January 2015 ICOMOS letter, and in the additional information provided, the State Party presented a comprehensive and updated management structure that clarifies the roles of the JNHT, which will be part of the Cultural Heritage Office and of the Education and Community Outreach, and of the Maroon community, which is involved in the Advisory and Co-management Committees.

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

The nominated property was initially protected under its National Park status, and the main institutions involved in planning and management under this are: Natural Resources Conservation Authority (NRCA) through its agent, the National Environment and Planning Agency (NEPA), Jamaica Conservation and Development Trust (JCDDT), Forestry Department (FD), and Jamaica National Heritage Trust (JNHT).

Since 2011, cultural heritage preservation has become a formal component of the management of the Blue and John Crow Mountains National Park and as such the JNHT became the newest member of the agreement. In line with the mixed nomination approach, the current Management Plan 2011–2016 establishes the conservation of both cultural and natural heritage as the overarching goal with a mission statement calling for a *“balance between biodiversity conservation and socio-economic development”*.

Tourism is managed by the JCDDT at the ecotourism initiatives Holywell and Portland Gap/Peak Trail. The Cunha Cunha Pass and Corn Puss Gap Trails with the associated Ambassabeth Eco-Tourism accommodation and interpretation centre are managed by the Bowden Pen Farmers Association.

ICOMOS notes that the Management Plan is not sufficiently developed to identify possible threats and resultant mitigation measures for increased tourism in the area, and needs to be substantially reinforced.

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

ICOMOS notes that financial resources allocated to conservation and management of the area are very limited and need to be increased: a clear funding commitment is necessary if the objectives included in the management plan are to be achieved.

Additional support in terms of resources should also be allocated to Maroon Councils to sustain the already activated measures to educate youngsters on Maroon cultural traditions.

ICOMOS notes that a robust and multifaceted expertise is needed to manage the property: a capacity-building strategy and a training programme should be formulated and included in the management plan and its operational action plans. Relevant training areas concern World Heritage management, recording, analysis, conservation practice, monitoring and reporting, fund-raising, as well as theoretical and practical knowledge of integrated Cultural Landscape management.

Finally, ICOMOS notes that the Management Plan does not explain how tradition is maintained or change is to be managed, how the relationship between local communities and the property management system will be sustained, and how local communities will direct the future of the property through various participatory decision-making processes and a participatory forum.

In particular, the current Management Plan should include a detailed definition of the traditional management system, and how it will relate to the property and protection of its proposed Outstanding Universal Value; what the desired state of conservation should be; and what the critical objectives are to achieve that. These elements should be integrated into the management plan and its action plan.

These issues were mentioned in the January 2015 ICOMOS letter to the State Party, in which ICOMOS also proposed a number of actions with different levels of urgency. This was also discussed during the Skype conference and finally the State Party submitted on 26 February 2015 additional information and a 3-year Joint Work-Plan covering the activities necessary to address the identified issues.

ICOMOS considers that the concerned authorities show a substantial commitment to building an effective management system to ensure that the nominated property be preserved, protected and managed according to adequate principles.

In conclusion, ICOMOS considers that important steps have been undertaken to ensure management of both natural and cultural heritage and these need to be continued. In particular, it is important that the 3-year

Joint Work-Plan be progressively implemented according to the envisaged timeframe.

6 Monitoring

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

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

ICOMOS recommends that monitoring be applied also to the 3-year Joint Work-Plan, for which indicators have already been identified within the Plan itself. Indicators related to intangible heritage may need to be developed in conjunction with the Maroon Community.

7 Conclusions

The revised nomination dossier and the work done by the State Party to fulfil the recommendations of the 2010 World Heritage Committee bear witness to the commitment of the State Party in improving the understanding, protection and management of the nominated property.

The cultural heritage of the Blue and John Crow Mountains, specifically residing in the Nanny Town Heritage Route and its associated satellite sites and living traditions, bears witness to the distinct Windward Maroon culture that was able to develop thanks to the rich natural environment and the difficult morphology of the area.

The cultural heritage of the Blue and John Crow Mountains is now entirely protected as National Heritage since January 2014 and this represents a crucial step in ensuring the protection of the cultural heritage encompassed within the nominated property, the effectiveness of which requires that the Preservation Scheme be finalised and implemented.

Other sites related to the values of the nominated property but not encompassed within it have been equally protected and are associated with it as satellite sites. In this regard, it is important that they be integrated into the presentation and communication strategy, as well as a complete depiction of the overall Maroon story in Jamaica.

The tangible and intangible cultural heritage and related archaeological and anthropological evidence exhibit sufficient integrity and authenticity; however changes have been occurring both to the physical attributes and

to the social dimensions of Maroon communities: they should be carefully monitored and controlled.

The management and conservation of the nominated property, however, needs to be substantially improved, refined and resourced to ensure that the current level of integrity and authenticity is not lost and will be sustained into the future.

To assist the State Party in strengthening the management system for the nominated property from a cultural heritage perspective, ICOMOS entered into close dialogue with the State Party and proposed two sets of actions to be implemented according to a calendar with two separate timelines (a six–twelve months horizon for urgent issues and an 18–24 months horizon for other, important, but less urgent issues).

The State Party elaborated a first draft that has been discussed with ICOMOS during a Skype conference.

The definitive roadmap with the associated implementation calendar was submitted by the State Party on 26 February 2015.

ICOMOS considers that the State Party has elaborated a coherent and comprehensive roadmap that covers objectives and related activities relevant to addressing the identified needs and to achieve the overall goal of the equitable, participated conservation and promotion of the nominated property, at least from a cultural perspective. The plan of actions appears realistic, and the identification of responsible and funding agencies reassures also in its operational nature.

ICOMOS finally considers that the revision of the Management Plan for the Blue and John Crow Mountains National Park, the validity of which will expire in 2016, is a unique opportunity to integrate within the new version of the BJCMNP management plan and related action plans the scope and objectives of the protection, sustenance and promotion of the cultural values of the nominated property. The 3-year Joint Work-Plan will assist the State Party and all entities concerned in this task.

However, it remains a matter of profound concern that mining prospection licenses have been issued in areas contiguous with the buffer zone and, therefore, the possibility of future mining close to the nominated property remains open, with adverse impacts unknown at this stage.

8 Recommendations

Recommendations with respect to inscription

ICOMOS recommends that Blue and John Crow Mountains, Jamaica, be inscribed on the World Heritage List on the basis of **cultural criteria (iii) and (vi)**.

Recommended Statement of Outstanding Universal Value

Brief synthesis

The Cultural and Natural Heritage of the Blue and John Crow Mountains encompasses a rugged and densely-wooded mountainous region in south-east Jamaica that offered refuge to Maroons (escaped indigenous slaves) and the tangible cultural heritage associated with the Maroon story. This includes settlements, trails, viewpoints, hiding places, etc. that form the Nanny Town Heritage Route. The forests and their rich natural resources provided everything the Maroons needed to survive, to fight for their freedom, and to nurture their culture. Maroon communities still hold strong spiritual associations with these mountains, expressed through exceptional intangible manifestations.

Criterion (iii): The Blue and John Crow Mountains in combination with its cultural heritage, materialised by the Nanny Town Heritage Route and associated remains, i.e. secret trails, settlements, archaeological remains, look-outs, hiding places etc., bear exceptional witness to Windward Maroon culture which, in the search for freedom from colonial enslavement, developed a profound knowledge of, and attachment to, their environment, that sustained and helped them to achieve autonomy and recognition.

Criterion (vi): Blue and John Crow Mountains is directly associated with events that led to the liberation, and continuing freedom and survival, of groups of fugitive enslaved Africans that found their refuge in the Blue and John Crow Mountains. The property conveys outstandingly its association with living traditions, ideas and beliefs that have ensured that survival, and the specificity and uniqueness of which was recognised by UNESCO in 2008 through its inscription in the Representative List of Intangible Heritage.

Integrity

The Cultural and Natural Heritage of the Blue and John Crow Mountains encompasses the core cultural properties, sites and vestiges that support its significance as the refuge of the Windward Maroons. Its physical fabric is in a fair condition. The relationships and dynamic functions present in the landscape and the living properties essential to its distinctive character are maintained but require strengthening. The effective protection of the buffer zone is essential in order to sustain the integrity of the property.

Authenticity

The cultural heritage of the Blue and John Crow Mountains related to the story of the Windward Maroons exhibits a high degree of authenticity in terms of location and setting. The rugged topography and the impenetrable vegetation convey the function as refuge played by the area. Continuity of names of specific places and stories associated with them contribute to sustaining their authenticity. However, the most important aspect of authenticity for this cultural heritage is the meaning and significance attributed by Maroons to their heritage, and the strength and depth of linkages established by them to it. The mountains are also home to Maroon ancestors' spirits and therefore provide a link for Maroons to their past and preceding generations.

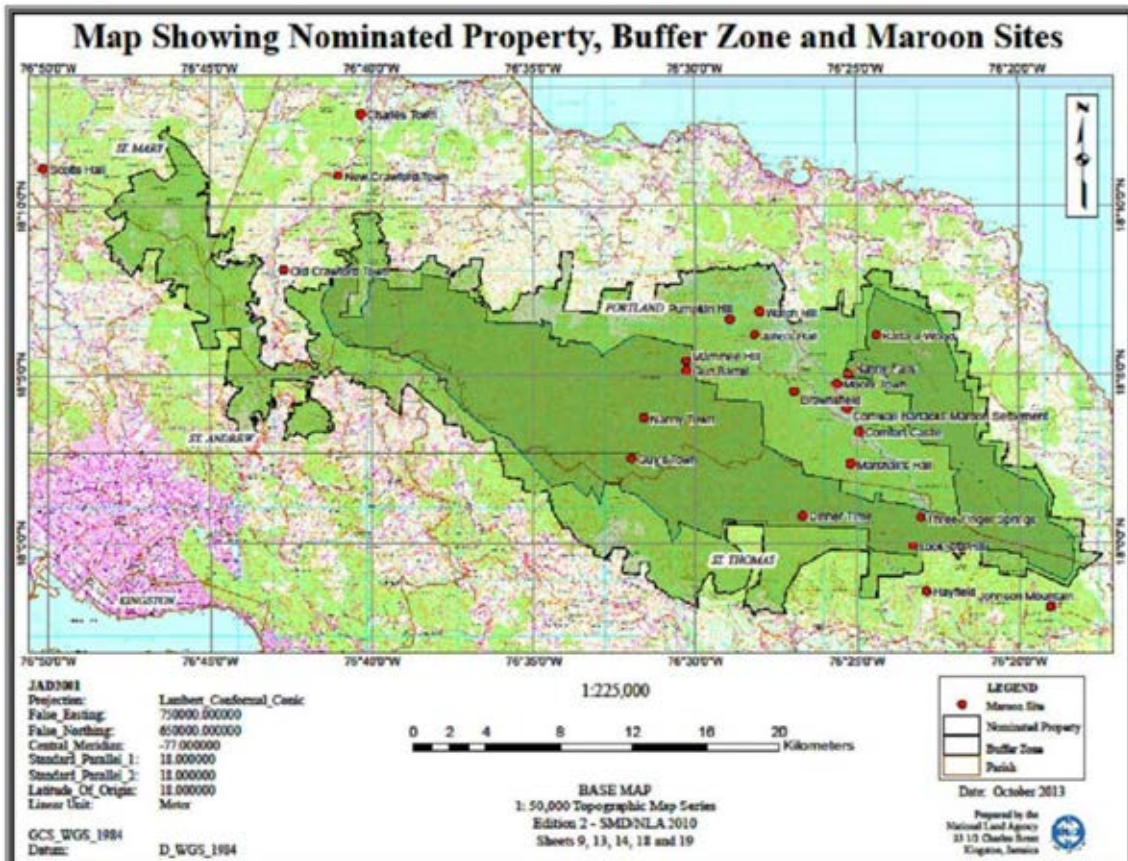
Management and protection requirements

The property and its buffer zone are protected both for their natural and cultural values according to different pieces of legislation and under the responsibilities of different agencies. This requires coordination and a spirit of cooperation among all actors. The integration in protection and management activities of Maroon community members helps sustain their links with their heritage and the state agencies to achieve their mandates for the safeguarding of the property. Stringent monitoring of activities carried out within the nominated property and its buffer zone is fundamental. Accurate and comprehensive assessments of the consequences to the attributes conveying the Outstanding Universal Value of possible mining activity in the vicinity of the nominated property are also needed.

Additional recommendations

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

- Submitting a map with details of prospection licenses, types of ore and size of possible mining areas, along with updated information and a Heritage Impact Assessment on the possible mining scenario, to the World Heritage Centre by 1 December 2015, for examination by the World Heritage Committee at its 40th Session in 2016;
- Integrating the satellite sites outside the nominated property or its buffer zone into the interpretation and presentation programme of its cultural values as well as of the Jamaican Maroonage phenomenon at large;
- Providing a periodic updated state of implementation of the 3-year Joint Work-Plan proposed in February 2015 to the World Heritage Centre by 1 December 2015 and 1 December 2017, with a final report and the revised management plan 2016-2021, for examination by the World Heritage Committee at its 42nd Session in 2018.



Map showing the boundaries of the nominated property



Quaq Falls Sacred Site



Remains of the old road connecting the relic settlement of Contingent



Nanny Town excavation

IV Cultural properties

A Africa

New nominations

B Arab States

New nominations

C Asia – Pacific

New nominations

D Europe – North America

New nominations

Extensions

Nominations deferred by previous sessions of the
World Heritage Committee

E Latin America and the Caribbean

New nominations

Thimlich Ohinga Cultural Landscape (Republic of Kenya) No 1450

Official name as proposed by the State Party

Thimlich Ohinga Cultural Landscape

Location

Migori County, Kenya

Brief description

Located 181km south of the city of Kisumu, and 46km northwest of Migori Town, Thimlich Ohinga Cultural Landscape is a complex of stone structures comprising five main *Ohingni* (settlements) that date from the 14th century, and have historically been occupied by successive Bantu and Nilotic peoples. The main *Ohinga* is referred to as Kochieng, while the others are Kakuku, Koketch and Koluoch. Each of the *Ohingni* has internal enclosures as well as smaller extensions adjacent to them. There is also an industrial and iron working site referred to as blacksmith enclosure. The stone enclosures are surrounded by thick forest vegetation which afforded extra protection to the inhabitants.

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 2013), it is nominated as a *cultural landscape*.

1 Basic data

Included in the Tentative List

12 February 2010

International Assistance from the World Heritage Fund for preparing the Nomination

2010

Date received by the World Heritage Centre

24 January 2014

Background

This is a new nomination.

Consultations

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

Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the property from 8 to 15 September 2014.

Additional information received by ICOMOS

A letter was sent by ICOMOS to the State Party on 8 September 2014 to request further information about maps, comparative analysis, development and restoration projects, excavations, statement of authenticity, tourism, management and protection, bibliography and community involvement. The State Party provided additional information on 17 December 2014 that has been taken into account in this evaluation.

Date of ICOMOS approval of this report

12 March 2015

2 The property

Description

The term *Thimlich* is derived from a local community word referring to a scary jungle. *Ohinga* (*Ohingni*-plural) on the other hand, is a form of earth/stone built settlement or enclosure found within the Lake Victoria region.

Thimlich Ohinga Cultural Landscape is a 14th century stone-built complex representing a tradition of dry-stone building/construction that characterized the early settlement of the Lake Victoria Basin.

The nominated property comprises five main *Ohingni* (although six are mentioned in the nomination dossier) all of which have extensions, except one, which is a single unit enclosure. The main *Ohinga* is referred to as Kochieng, while the others are Kakuku, Koketch and Koluoch. Each of the *Ohingni* has enclosures within them and smaller extensions. There is also an industrial and iron working site referred to as the blacksmith enclosure. The stone enclosures are surrounded by thick forest vegetation which afforded extra protection to the inhabitants.

Structures at the Thimlich Ohinga Cultural Landscape fall into two categories, namely, simple and complex ones. Simple structures consist of single enclosures which do not share walls with other structures. Simple structures are also found in multiple structure sites as single enclosures forming isolated units. Simple structures are joined together by abutting walls or corridors to form complex structures. Complex structures were built by connecting different categories with shared walls. Attached to the complex structures are smaller extensions which suggest population increase among the original inhabitants.

Both simple and complex *Ohingni* have interior structures of various kinds. These include small enclosures, depressions and corridors. The small enclosures are grouped into 3 categories: cattle kraals, pens for smaller animals and garden fence structures. Cattle kraals or pens for smaller stock are defined by their size. The kraals are larger and usually located at the centre of the structures, while the pens are extensions to the outer walls of major structures or the walls of the kraals. Garden fences are small enclosures close to outer walls which were thought

to have been *orundu* for growing vegetables. *Orundu* is a local name given to small gardens within the homestead on which vegetable or other food crops are grown to supplement what is grown on larger farms.

Depressions found within the *Ohingni* have been identified as house pits. The depressions are circular with an average diameter of 5m in conformity with the shape of the *Ohinga*. One such depression is at Kochieng enclosure and is associated with food preparation and storage. These depressions may also have been used for other functions, including threshing grain, fire pits or for drying grain. The majority of these are found in the Kochieng enclosure (at least five), which seems to have been recently occupied. These houses were probably built of mud and thatch hence they were ephemeral in comparison to the site's stone walls.

Within the structures are smaller enclosures that were used as cattle kraals. The main enclosure has six of these while the others have at least one. There are also a couple of smaller circular walls. In addition to the kraals, the enclosures also contain external support ramps and buttresses against the walls. Between the enclosures are passageways and corridors lined with low walls of stone. Some of these have been reconstructed during the ongoing conservation work at the property. A designated industrial area lies just outside the northern wall of the main enclosure. Here iron smelting and working took place, as indicated by the presence of a furnace area containing smooth stones that could have acquired that texture as a result of being used as anvils. Pieces of *tuyere* litter the area and there is also a mound of iron slag, refuse and pottery. An ancient version of the game known today as *Bao* was also found carved on a rock nearby, an indication that the area could also have been used for leisure activities.

Kochieng, as the main *Ohinga*, consists of an outer compound wall which is approximately 140m in diameter from the north to the south and stands 2.5m to 4.2m high. There are three gateways, one to the west and two to the east. These are in the form of passage-type doors. There are depressions which contain features that have been identified as cooking places and raised platforms, which were possibly used as stores.

Inside Kochieng enclosure are also found five smaller enclosures which were probably used as cattle kraals or pens for small stock. The largest of the stone-built cattle kraals is found at the centre of the original oval compound wall.

The outer wall of the Kochieng enclosure appears to have undergone modification during the site's occupation. The extant structure is not circular in plan. However, it is possible to identify the joint where an extension has been added to the north-eastern section.

Archaeological excavations at the site have yielded faunal, ceramic and lithic materials. Ceramics associated with the site are mainly cord rouletted. The cord roulette decorative

motif is principally Nilotic while iron working is associated with the Bantu groups. The site, therefore, represents an early interaction between two main groups. These materials have been used to explain the dynamics of settlement patterns in the region.

The architectural technique used at the site is a three-phase design where the walls have an outer and inner phase neatly arranged stones of all shapes and sizes and a middle phase consisting of smaller stones. The middle held together the stones in the inner and outer phases of the walls. Due to lack of distinct shapes of the rocks used, the walls do not exhibit clear coursing. Stones were placed in an interlocking system that enhanced overall stability without the use of any mortar or cement. The walls range from 1.5m to 4.5m in height, with an average thickness of 1m. The thickness of the walls increase at the entrances from 2m to 3m and rectangular slabs were used as the lintels.

Thimlich Ohinga Cultural Landscape is rich in flora and fauna. The region in its entirety exhibits a very high level of biodiversity. The local community occupying the area today has a deeply rooted knowledge of the animals and plants which have a variety of uses. There are over 21 plant species in the landscape that the local communities have traditionally used for medicine, construction material, basketry, food and for magical purposes. Of the 21 species some have more than one use. 15 species have medicinal use while 5 species being useful for their fruits. The traditional use is still relevant in the present generation and is evident as traditional healers still collect the materials from the site for trade.

History and development

The history of Thimlich Ohinga Cultural Landscape dates to 500 years ago. According to oral tradition, the earliest inhabitants were Bantu groups including the Wagire and Kamageta. The Nilotic group that passed through the area consisted of the Kabuoch-Kachieng, Kadem, Kaler, Kanyamwa and Karungu. However, these groups later split and moved in different directions. The groups continued with the practice of stone structure construction. Both the Bantu and Nilotic groups seem to have adopted similar strategies in establishing their settlements, indicating that the period of construction and occupation of the site is likely to be between 1590 and 1680, when such groups are known to have settled in the south western Kenya's Lake Victoria region. These dates also correspond with charcoal samples from excavations at Thimlich Ohinga, which gives dates ranging from 1650 to 1900 AD.

According to oral traditions, successive occupation by different groups has been the norm in this area. Its history is characterized by periodic occupation and out-migration until the site was finally abandoned in the early twentieth century. In the 1680s, the Nilotic Kabuoch-Kachieng group moved into the area, expanded the existing structures and built others further uphill, but later moved away. The site was then occupied by the Kanyamkago people who were led by Chief Ndisio, who was a magician, as they

expanded their territory southwards. They eventually established themselves across River Kuja some 20km away, where Ndisio established his headquarters and controlled much of the region that included the Thimlich Ohinga area. The control of such a wide territory, especially land across the River Kuja, could not be sustained for long and soon the coveted settlement site of Thimlich Ohinga was occupied by the Kadem people, another group that was also expanding southwards from their Raguda settlements in the present day Karubgu region. For reasons that are not clear, the Kadem people later handed over the site to the Kanyamwa who remained there until the beginning of the 20th century. While not living on the site after this period, they continued to use it for various other purposes, mostly farming and grazing.

Throughout the different periods of occupation, the site was modified with additional walls, repairs and general maintenance, as well as additional structures constructed uphill. These were mainly built by the Kabuoch-Kachieng people. The main enclosure has a demolished wall on the northern side where an extension was built, probably as a response to an increasing population. Enclosures to the main one, especially to the northeast, were also constructed to meet this particular need.

Several reasons have been given for construction of *Ohingni*. The structures are seen as manifestation of areas of occupation by particular groups, symbols of land ownership possibly evidenced by different engravings on gate lintels. The structures were defensive forts and therefore have been called Hill Forts which were used for protecting livestock against wild animals and raiders, especially Maasai people at a later period.

Another reason for construction of the *Ohingni* is that the practice was more secure than other forms of fencing, such as, wood or tree fencing.

The enclosures at Thimlich Ohinga acquired Luo names during the 17th century, with the arrival in the area of people from Siaya through Mirunda Bay. Over time, the Bantu speakers were assimilated or moved elsewhere.

Complete abandonment of the site occurred in the early 20th century. Families that lived nearby continued to use land within the enclosures for livestock grazing and cultivation. This period coincided with the end of inter-clan conflicts and land acquisition demands.

In 2000, the National Museums of Kenya completed fencing and a detailed condition survey of Thimlich Ohinga Cultural Landscape.

3 Justification for inscription, integrity and authenticity

Comparative analysis

The comparative analysis for Thimlich Ohinga Cultural Landscape compares the nominated property with other fortified settlements, and includes consideration of World

Heritage List properties such as Great Zimbabwe National Monument [Zimbabwe, 1986, (i), (iii) & (vi)], and other settlements such as the City Walls in Xingcheng and Xi'an (China) and the Western Stone Forts of Ireland. These comparisons largely focus on the form of the fortifications, the stone building techniques, drainage systems and towers. Some similarities were noted, for example in relation to the drainage systems and security towers in both Xi'an (China) and Thimlich Ohinga.

Furthermore, the State Party, in the additional information provided in December 2014, included in the comparison Engaruka in Tanzania, Konso Cultural Landscape [Ethiopia, 2011, (iii) & (vi)], Fortresses of Sudan, Ruins of Loropéni [Burkina Faso, 2009, (iii)] and the Sukur Cultural Landscape [Nigeria, 1999, (iii), (v) & (vi)]. In the view of the State Party, comparison with these properties was based on the premise that Thimlich Ohinga was functionally a pastoral economy.

ICOMOS considers that this comparative analysis is limited, especially because it has not been framed according to the nomination of this property as a cultural landscape that includes more than its fortified stone building components. Many of the examples that have been cited are functionally different and do not express the same values as the nominated property.

ICOMOS considers that the comparative analysis has not justified consideration of this property for the World Heritage List at this stage.

Justification of Outstanding Universal Value

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

- These imposing and structurally complex stone enclosures exhibit a highly developed indigenous architecture with in-depth knowledge of material, form and structure.
- Thimlich Ohinga typifies what can be referred to as the archetype of three-phased stone layering technology.
- The *Ohingni* were part of an elaborate system of defence and an expansionist agenda by early settlers of southwestern Kenya.
- Thimlich Ohinga was a major point of confluence for cultural interaction and peopling in the Lake Victoria Basin of East Africa and beyond.
- Thimlich Ohinga represents an advanced stage of indigenous African architectural technology which can be traced to the Sirikwa late Iron Age settlement sites in the Rift Valley of Kenya and Northern Tanzania as well as the livestock enclosures in the Horn of Africa.
- The property is a rare feat of well-developed stone architecture of pure dry stone building.

ICOMOS considers that the justification provided by the State Party is potentially appropriate, but that the evidence provided to substantiate the consideration of the property as a cultural landscape is not sufficient. ICOMOS considers that there is stronger arguments presented for consideration of the nominated property as an archaeological site, although some further research could be undertaken (as discussed below).

Integrity and authenticity

Integrity

According to the State Party, the nominated property of approximately 21ha contains all the elements necessary to express the Outstanding Universal Value of the Thimlich Ohinga Cultural Landscape. It includes the stone walls with their low entrances, the structural support features known as buttresses, low water/sludge drainage vents from the inner livestock enclosures (kraals), the three-phase wall design, the inner and outer enclosures, industrial site and house pits.

ICOMOS agrees that these elements comprise a single village settlement but considers that the nominated property does not adequately include the setting. This limits the ability of the nominated property to convey all the values associated with the proposed justification for Outstanding Universal Value, leading ICOMOS to question the suitability of this nomination as a *cultural landscape*.

Moreover, the identified archaeological elements should consist of more than the current stone enclosures, as there is a possibility of more archaeological evidence outside the nominated property. In the nomination document, the State Party also confirmed that other additional structures were built further uphill in the 1680s by the Nilotic Kabouch-Kachieng group. Since no archaeological research has been done outside the enclosures, this possibility of evidence of other structures and features remains unexplored particularly on the south-east side of the property where the boundary fence is near to the entrance to the Koketch enclosure.

ICOMOS therefore considers that while the elements for a single settlement identified by the State Party appear complete, the selection of a single village settlement amidst hundreds of *ohingni* inadequately justifies the nomination of this property as a cultural landscape.

Authenticity

According to the State Party, the Bantu people built and occupied the Thimlich Ohinga stone structures around the 14th century. The Nilotes arrived in the Lake Victoria region around the 16th century and occupied the already existing stone structures until the early 20th century. According to the State Party, oral history indicates that the Nilotic occupants carried out maintenance work on the structures using the original materials and the traditional techniques. These periods of occupation and repair did not interfere with the architecture of the structures. After

their abandonment, the structures at Thimlich Ohinga became ruins.

The State Party considers that the original fabric of the structures has been conserved and that the most recent repairs have applied the original techniques of construction, ensuring that the property retains its character in design and material. The protective apparatus of the complex has been maintained as found.

ICOMOS notes that today, what used to be ruins are now fully restored, and that documentation of the restorations is not available. Some walls have been added to demarcate the boundary between the archaeological site and the forest, but this new work is not easily distinguishable from the stone structures. ICOMOS considers that some of the restoration work could possibly have been executed overzealously. ICOMOS therefore supports some of the arguments put forward by the State Party about the authenticity of the outer wall, but that these other factors mean that the authenticity of the stone structures is not self-evident.

ICOMOS further notes that the discussion of the authenticity of the nominated property has been focused on the archaeological remains, but not on the cultural landscape as a whole.

In conclusion, ICOMOS considers that lack of detailed records on the site prior to reconstruction and details on reconstruction itself creates some doubts on whether the conditions of integrity and authenticity have been met for the archaeological stone structures. More research is needed for firmly establish this in relation to the archaeological structures; and the conditions of authenticity and integrity have not been met for the property as a cultural landscape.

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

Criteria under which inscription is proposed

The property is nominated on the basis of cultural criteria (iii) and (iv).

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 three grounds: that Thimlich Ohinga embodied the complex social system that defined the cultural group; that the layout of the site points to evolution from simple structures to more complex ones; and that walls within the complex were believed to be a link with the ancestral spirits.

ICOMOS notes that the State Party has proposed a justification for this criterion for the archaeological components but not for the property as a cultural landscape.

ICOMOS therefore considers that the justification provided does not go sufficiently beyond the stone settlement which is one element of the nominated cultural landscape and thus does not provide clarity on how the cultural landscape as a whole is unique or provides exceptional testimony to a cultural tradition.

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

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

This criterion is justified by the State Party on the grounds that Thimlich Ohinga Cultural Landscape is an exceptional example of indigenous architecture characterized by a three-phase dry stone building technology which is not known to exist anywhere else. The development of the Cultural Landscape epitomizes a higher stage of architectural evolution in the sub-Saharan region.

ICOMOS notes that the State Party has proposed a justification for this criterion based mainly on the archaeological components, but considers that this justification is weak for the property as a cultural landscape.

ICOMOS considers that criterion (iv) could be potentially applicable should the nomination be reconceptualised as an archaeological site rather than as a cultural landscape.

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

In conclusion, ICOMOS does not consider that the criteria have been justified at this stage, and considers that the exclusion from consideration of archaeological areas outside the nominated property and lack of documentation of restoration work limit the ability of the nominated property to meet the conditions of integrity and authenticity at this stage.

4 Factors affecting the property

The nominated property is affected by the following factors:

- Human and animal activities: There is occasional illegal grazing, collection of firewood and harvesting of sisal which grows naturally within the nominated property. There is also encroachment of wildlife as this is the only dense thicketed area with vegetation in the local area. Animals such as monkeys occasionally climb on the walls, although this does not seem to have had much impact on their stability or state of conservation.

- Environmental pressures: Trees growing near the walls are potential threats to their stability, but these are removed periodically.
- Tourism: Use of undesignated footpaths has caused conservation pressures in the past, but is now controlled.

ICOMOS considers that the main threats to the property are human and animal activities and tourism. Identified pressures are currently well managed.

5 Protection, conservation and management

Boundaries of the nominated property and buffer zone

The boundary of the nominated property seems to coincide with the gazetted boundary of Thimlich Ohinga national monument. This boundary is clearly demarcated by a barbed wire fence and encloses all the stone structures the State Party has identified in order to convey the values of the settlement. Because of the archaeological potential of features located on the south side of the property where the fence comes near to the entrance to Koketch, ICOMOS considers that the area currently within the south-east buffer zone should be included in the property boundary. ICOMOS requested additional information from the State Party on the possibility of extending the property boundary for this reason, but the responses did not address this issue.

The buffer zone is established by two roads on the west and north (-east), and two plots on the south. The northern road (to Gogo Falls) is 16 metres wide, and the road that forms the western buffer has a 9 metre road reserve.

ICOMOS notes that the two plots which make up the southern buffer zone belong to two community members that consented to their plots being included in the buffer zone. Given the potential for visual and/or noise pollution, ICOMOS considers that the buffer zone needs to be extended to include all the plots bordering the nominated property, including those on the other side of the road as well as the plot on which the church is located. Formal agreements and legal mechanisms need to be put in place to make the protection of the buffer zone effective.

In conclusion, ICOMOS considers that the boundaries of the nominated property and of its buffer zone are not adequate and need to be adjusted.

Ownership

The property is owned by the National Museums of Kenya, which is a state corporation with headquarters in Nairobi. Parts of the buffer zone are privately owned.

Protection

The nominated property is protected by the National Museums and Heritage Act, Cap 216 of 2006 and is managed by the National Museums of Kenya. The site

was gazetted and declared a national monument on 25th September 1981 and confirmed as a national monument on 27th May 1982 under the then Antiquities and Monuments Act, Cap 215 which was repealed and replaced with the National Museums and Heritage Act 2006. The latter Act consolidates the laws relating to national museums and heritage; provides for the establishment, control, management and development of national museums; and the identification, protection, conservation and transmission of the cultural and natural heritage of Kenya.

The Act allows the Minister in respect of a protected area, to prohibit or restrict by notice in the Kenya Gazette access, development, agriculture or livestock use or any other activity which is liable to damage a monument or object of archaeological or palaeontological interest. The Minister may also direct or authorize the National Museums of Kenya to take such steps that are necessary or desirable for the maintenance of the protected area. The National Museums of Kenya may formulate necessary by-laws for controlling access, with or without payment, and enforce laws for the conduct of visitors in the protected area.

Thimlich Ohinga Cultural Landscape is also protected through other Kenyan laws. These include the Government Land Act Cap 280 of 2010 which make further provision for regulating, leasing and disposal of Government land; and the Environmental Management and Coordination Act 1999, which provides for the establishment of appropriate legal and institutional frameworks for the management of the environment and for matters connected to it. There is also the Wildlife (Conservation and Management) Act Cap 376 of 1985 that handles the protection, conservation and management of wildlife in Kenya. In addition, the Forests Act of 2005 provides for the establishment, development and sustainable management, including conservation and rational utilization of forest resources and for the socio-economic development of the country.

Although ICOMOS considers that in general the protection system is adequate, it also considers that formal agreements and legal mechanisms need to be put in place to make the protection of the buffer zone effective.

In conclusion, ICOMOS considers that the legal protection and the protective measures are in general adequate but formal agreements and legal mechanisms need to be put in place to make the protection of the buffer zone effective.

Conservation

According to the State Party, archaeological research at the site can be traced from early field survey reports, studies of the structures and in archaeological investigations conducted by the National Museums of Kenya, especially since the 1990s. The property was identified by the World Monuments Fund Watch list of the 100 most endangered sites in the world for the periods 2000-2001 and 2001-2002. In 2007, a systematic

archaeological study was carried out by the National Museums of Kenya to determine the content and possible functions of some of the features found within or in association with the large stone-walled enclosures. Excavations were conducted on four of the small circular stone-walled enclosures and two house depressions within two of the four major enclosures.

Despite this, ICOMOS considers that relatively little archaeological research has been conducted on the property and that little of the excavated material has been subjected to systematic analysis.

Fencing of Thimlich Ohinga property by the National Museums of Kenya was completed in 2000. This was followed by a detailed condition survey of Thimlich Ohinga Cultural Landscape undertaken by the National Museums of Kenya the same year. In 2001-2003 the American Express Company through the World Monuments Watch funded the first major restoration of the walls of Thimlich Ohinga; however, these funds did not cover the entire site and much of Koketch enclosure was not restored. In 2007 to 2008 the Ministry of State for National Heritage through the National Museums of Kenya funded restoration of the walls and excavation works in the Koketch enclosure, the industrial area and the blacksmith enclosure.

Following the condition survey, the 'Thimlich Ohinga Cultural Landscape Restoration Project' was carried out from the second half of 2001. Restoration of the walls and entrance corridors was completed in 2012. Maintenance and other conservation practices are needed to ensure continued stability of the walls.

ICOMOS considers a single database of all conservation work that has been carried out on the site should be established; and that documentation of the related corpus of oral traditions associated with Thimlich Ohinga should also be a priority.

In conclusion, ICOMOS considers that state of conservation of the stone structures within the nominated property is good, although the documentation of conservation works should be strengthened.

Management

Management structures and processes, including traditional management processes

The agency responsible for the daily management of the site is the National Museums of Kenya, which is a state corporation established by an Act of parliament, the National Museums and Heritage Act, Cap 216, 2006. The Thimlich Ohinga Management Plan (2012-2017) has been prepared to direct current and planned future conservation activities. The main focus of the plan is conservation of the key attributes of the landscape, particularly the outer walls and the interior enclosures, and the natural vegetation.

The nominated property has a caretaker and 4 on-site staff.

ICOMOS notes that, although the management plan outlines the key issues and planned activities for the duration of the plan, it is silent on the protection of the exposed archaeological material and excavated areas.

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

As noted above, the management plan prepared by the National Museums of Kenya provides the framework for conservation and visitor management. In addition, the 2010-2015 Tourism Strategic Plan recognizes the potential of culture and heritage in the improvement of economic vitality of the Kenyan communities, and will apply to the nominated property. Presentation of the property might be enhanced with the completion of the document centre which is under construction near the entrance.

Involvement of the local communities

There are a few hundred people residing immediately adjacent to the property. The nominated property serves as a meeting venue for the community where issues affecting them are deliberated.

ICOMOS notes that, in the wider area, the local communities comprise a population of approximately 5000-10,000 people. Based on the observations of the technical evaluation mission that visited the nominated property, ICOMOS considers that although the local communities were not involved in the preparation of the nomination, they have subsequently become actively involved in the conservation of Thimlich Ohinga, and the current community relations are good. Community support for Thimlich Ohinga is indicated through the establishment of Friends of Thimlich Ohinga community-based organisation in 2013, consisting of 49 members who pay a membership fee.

In conclusion, ICOMOS considers that the management system for the property is adequate.

6 Monitoring

Monitoring has been undertaken by the National Museum of Kenya and the following key indicators have been developed for measuring the state of conservation of the property:

- Condition survey: assessments of wall condition and vegetation growth
- Photographs
- Status of fence: Inspection of barbed wire and poles used to construct the fence

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 not to the property as a cultural landscape.

In conclusion, ICOMOS considers that these indicators not adequate to support the effective monitoring of the state of conservation of the nominated property.

7 Conclusions

The nominated property has the potential to demonstrate Outstanding Universal Value, but the nomination of the property as a cultural landscape is inadequately developed. ICOMOS considers that there could be several ways forward in further developing this nomination – including consideration of the property as a *site* which could be an example of traditional human settlement. In its current form, the nomination failed to demonstrate Thimlich Ohinga as an outstanding example of a cultural landscape.

8 Recommendations

Recommendations with respect to inscription

ICOMOS recommends that the examination of the nomination of Thimlich Ohinga Cultural Landscape, Kenya, 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:

- Reconsider the focus of the nomination of this property, including the possibility of nominating it as a site and an outstanding example of a traditional human settlement.

ICOMOS considers that such a new nomination would need to include an augmented comparative analysis.

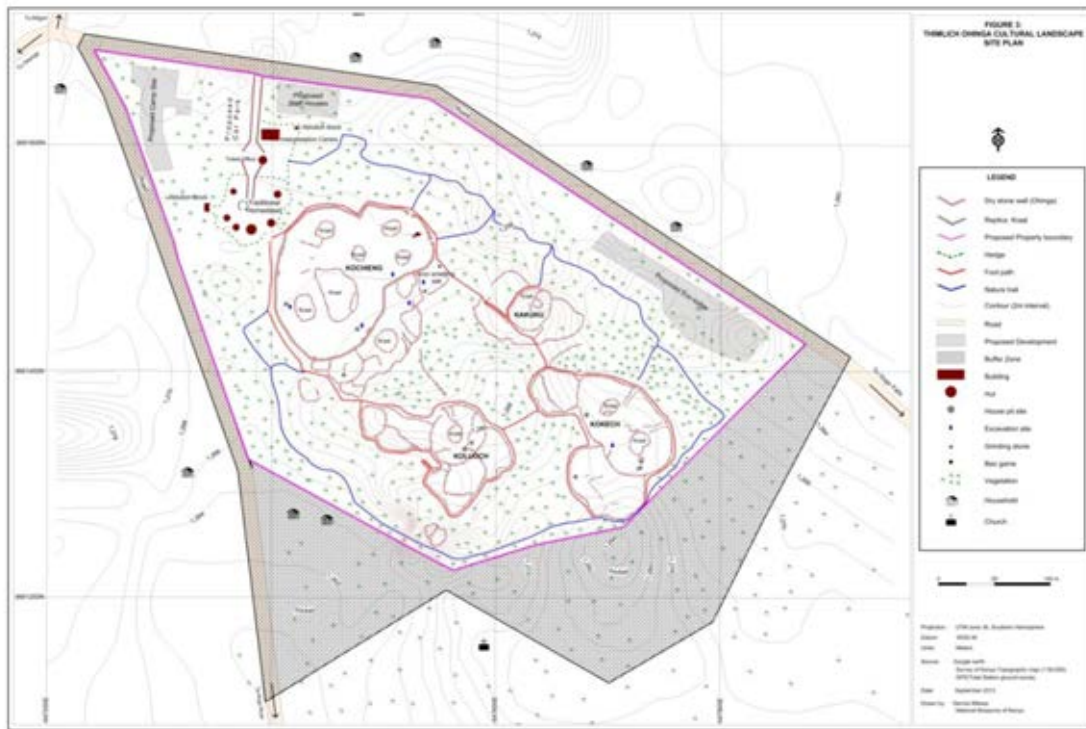
ICOMOS considers that any revised nomination would need to be considered by an expert mission to the site.

Additional recommendations

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

- Increasing the boundary of the property to include the plot to the south-east as well as the buffer zone;
- Conducting archaeological research in and around the nominated property to substantiate some of the site interpretations as well as to determine the extent of archaeological evidence of the wider settlement;
- Defining and putting in place formal agreements with land owners and also provide legal protection that includes clear management and permitted uses in the buffer zone;
- Providing maintenance and other conservation practices to ensure the continued stability of the walls.

ICOMOS remains at the disposal of the State Party in the framework of upstream processes to advise on the above recommendations.



Map showing the boundaries of the nominated property



Entrance to Kochieng



Koechieng



Luo Homestead at Kisumu Museum



Reconstructed traditional Luo homestead

Nyero and other Rock Art Sites (Republic of Uganda) No 1491

Official name as proposed by the State Party

Nyero and Other Hunter Gatherer Geometric Rock Art Sites in Eastern Uganda

Location

Eastern Uganda

Brief description

Nyero and the other geometric rock art sites in Eastern Uganda represent the cultural and spiritual life of pre-historic peoples of East and Central Africa. Sites at Nyero, Dolwe Island, Mukongoro, Komuge, Kakoro and Kapir constitute the serial property which conveys a rock-painting tradition within a ritual context on granite outcrops over a period from around 4000 to 1700 years ago. The rock art continues to have spiritual significance for local inhabitants today and is associated with fertility rituals and rain-making practices.

Category of property

In terms of the categories of cultural properties set out in Article 1 of the 1972 World Heritage Convention, this is a serial nomination of seven *sites*.

1 Basic data

Included in the Tentative List

10 September 1997

International Assistance from the World Heritage Fund for preparing the Nomination

None

Date received by the World Heritage Centre

31 January 2014

Background

This is a new nomination.

Consultations

ICOMOS consulted its International Scientific Committee on Rock Art and several independent experts.

Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the property from 8 to 15 September 2014.

Additional information received by ICOMOS

A letter was sent to the State Party on 28 July 2014 requesting a 1: 50000 map of Dolwe Island showing the rock art sites and also tracks and boat landing places

and any other relevant features and also a timetable for gazettal of the nominated property components Dolwe, Kakoro, Mukongoro, Komuge and Kapir as National Monuments. A second letter was sent on 20 August 2014 requesting clarification as to how the nominated component parts of the property reflect cultural, social or functional links over time and how each component part contributes to the postulated OUV of the property as a whole. A third letter was sent on 8 October 2014 requesting information on protection of the buffer zone. Responses were received on 9 September; 1 October and 1 November 2014 and the information has been incorporated below.

Date of ICOMOS approval of this report

12 March 2015

2 The property

The serial property comprises 16 sites contained in 7 property components at six separate places Nyero (1 property component, 6 sites), Dolwe Island (1 property component, 1 site), Mukongoro (2 property components, 4 sites), Komuge (1 property component, 1 site), Kakoro (1 property component, 3 sites) and Kapir (1 property component, 1 site) each component with their own boundaries in the five administrative districts of Kumi, Namayingo, Pallisa, Ngora and Bukedea. Together the components total 37.235ha. Each has its own buffer zone except at Mukongoro where the two components are enclosed by the same buffer zone. Together they total 2768.127ha. The property components are located in an area of massive gneiss-granite outcrops with overhanging shelters formed beneath huge boulders of Precambrian Meso-archaeal age in the Victoria-Kyoga basin of equatorial East Uganda. The boulder-topped hills formed between 2,700 and 3,500 million years ago dominate a landscape of savannah plains. On Dolwe Island the boulders form a cluster on the west coast some distance from the water. Geometric designs painted predominantly in red and white pigment are found on the inner walls of the rock shelters and on some free-standing boulders. It is thought that they may have been painted by the ancestors of the Forest Pygmies today living in Western Uganda, hunter-gatherers of the Nachikufan culture of which archaeological evidence has been found across the Central African Congo Basin dating from about 17000 BP. Scholars have interpreted the designs as fertility symbols and the sites are associated with fertility and rainmaking practices today. Radio-carbon dates indicate that they were made over a period from 4000 thousand years and the tradition was still being practised 1745 years ago.

Nyero

This component includes six rock shelters amongst the boulders of Nyero Hill, an isolated granite inselberg known locally as 'Moru Ikala'. All contain finger paintings or traces of pigment. Paintings at Nyero 1 are six sets of concentric circles in white paint and 'acacia pod' designs. At Nyero 2 red concentric circles in more than 40 designs have been

identified and one large 'acacia pod' or canoe. Excavated evidence here indicates a long period of occupation from the Late Neolithic and included a bone incised with a concentric circle motif. Barren women today seek to become fertile by touching the surfaces on which the images are painted and deposit monetary tokens in a small cavity among the rocks. At Nyero 3 white concentric circles spiralling to 30cm in diameter and surrounded with multiple rays are superimposed over a similar design in red. Remnants of concentric circles in red are found in Nyero 4, 5 & 6. In addition to the painted shelters within this property component are other shelters where rituals including rain control and tribal justice are said to have been practised until recently. The area includes medicinal plants used to treat various diseases, still collected today by the present Iteso inhabitants.

Dolwe Island

This island in Lake Victoria includes the largest concentration of rock paintings with about 100 designs on the ceiling and five supporting rocks of a large open-ended cave 6m wide and 2m high. Six rock gongs are located nearby. Groups of grinding hollows ("cupules") are located on rock surfaces now encroached by the village at the nearby landing place. Excavated pottery and artefacts indicate that the island was occupied for more than 3000 years by Iron Age agriculturalists. Late Neolithic artefacts were also found on the island but there is no direct evidence that these were the people who made the paintings. The link with the Nyero people depends on them having had boats, hence the problematic interpretation of one of the designs at Dolwe as a 'canoe', as also at Nyero 2. It is alternatively thought possible that the paintings are a much longer tradition and could have been made 14000 years ago when the level of Lake Victoria was low due to the Ice Age. ICOMOS notes that the site is used by the present fishing community for Lake Victoria weather propitiation ceremonies and by women for fertility rituals.

Mukongoro

Mukongoro includes four rock sites. M1 is a rock shelter with several red painted concentric circles as well as a red painted image similar to the one described as a 'canoe' at Nyero 2 and Dolwe, but its interior has been infilled with white. M2 is a small gneiss boulder with one red concentric circle. M3 is the main rock shelter under an exceptionally large gneiss boulder with two clusters of paintings. The first has red stretched hide and oval motifs; the second comprises white dots, zoomorphic and anthropomorphic images and indeterminate forms on the ceiling. M4 is a shelter formed by two large granite boulders with red painted motifs covering an area of about 1m x 80cm on the rear wall. This includes lozenge shapes and a central concentric circle with radiating U shapes which have fine line outer petal-shaped extensions in white.

Komuge

This is a rock shelter formed of two large boulders with several geometric images - circular, rectangular and triangular; and one concentric circle joined by other circles to form a ray pattern, all in various pigments of red, white and yellowish colour. A nearby shelter is used by women for fertility rituals.

Kakoro

This component appears as two hills joined by a saddle. The southern one with the rock art carries a trigonometrical survey beacon. There are three sites. K1 is a rock monolith with red geometric paintings on both sides including concentric circles and a 'dumbbell' shape. The monolith stands on a rock platform at the top of the hill. At its base are three rock gongs originally used for making music and behind them a ritual place for sacrifices which is still in use by those asking the spirits for fertility. K2 is a rock carrying red hemispherical and circular designs and a 'dumbbell'. K3 is a small overhang with 12 red concentric circles similar to those at Nyero 2, but they have been superimposed with an animal-like figure in recent white pigment.

Kapir

This rock shelter looks out over the plains to Lake Bisinia. It contains two rayed circles, six concentric circles, some with lines running through and U-shapes. All are in red similar to Nyero and Dolwe. According to local tradition a small rock platform nearby was used as a rainmaking site.

History and development

The ancient history of the central African region is not discussed in the nomination dossier but it is recorded that three direct dates on pigment from paintings at Nyero and Kakoro were around 4000, 3000 and 1745 BP. Archaeological research publications quoted in the nomination dossier indicate that the late Neolithic people in the region were hunter-gatherers and that Bantu-speaking farmers moved down from the north from the beginning of the first millennium BCE. This suggests that the earliest date of 4000 BP, corresponding to 2000 BCE must relate to hunter-gatherer peoples. This proposition is backed up by comparisons with other sites in the central African region, dating back to 17000 BP. However there is also evidence of pastoral Neolithic societies in the region around Lake Victoria dating from 2000 BCE and of Iron Age agriculturalists on Dolwe Island from 1000 BCE. The next date 3000 BP corresponding to 1000 BCE could therefore relate to hunter-gatherers, existing pastoral Neolithic societies or newly arrived farming communities, as could the 1745 BP date corresponding to 300 CE. The attribution of authorship of the geometric rock art to Pygmy hunter-gatherers appears to rely heavily on research which relates ethnographic studies of present day Pygmy groups and their beliefs associated to the geometric rock art and infers meaning to the symbols by analogy. Other researchers however have considered the fertility preoccupations of agriculturalists and propose that the images were authored by more than one cultural

group including hunter-gatherers, cultivators and pastoralists. ICOMOS considers that on the basis of currently available information, the attribution of the geometric rock art only to Pygmy hunter-gatherers, *ie* the ancestors of today's Forest Pygmies, is not adequately substantiated. ICOMOS considers therefore that should the nominated property be inscribed, its name should be changed to Nyero and Other Geometric Rock Art Sites in Eastern Uganda.

The sites at Nyero, Dolwe and Kakoro were first discovered and published between 1945 and 1953. Mukongoro, Komuge and Kapir were discovered by the local communities and documented by the Department of Museums and Monuments in 1996. Nyero was gazetted as a National Monument in 1973. Its sites were protected from animals by the building of stone enclosure walls in 1966 and fixing of drip line at Nyero 2 to protect the paintings from rain run-off. A metal ladder has been placed to provide access to the Dolwe site, replacing the wooden one erected in 1965.

3 Justification for inscription, integrity and authenticity

Comparative analysis

The State Party has compared the property with 23 World Heritage listed sites containing rock art as set out in Table 4 in the nomination dossier which includes 5 in Africa. Also compared are five other World Heritage listed sites in Africa as set out in Table 3. This includes Chongoni, Malawi (2006, (iii) & (vi)) which contains red geometric rock art similar to that at the Ugandan sites as well as white figurative art attributed to agriculturalists. The State Party considers that the nominated sites would add a tradition that is not yet represented in that on the whole they primarily represent the late Neolithic hunter-gatherer culture whereas Chongoni was listed for its "different geo-chronological and cultural repertoire". The Chongoni rock art is attributed to the BaTwa (hunter gatherers) and Chewa (agriculturalists) people of the Malawi plateau from the late Neolithic period. Symbols used are strongly associated with women and the sites are actively associated with ceremonies and rituals. ICOMOS notes that similar images occur at Chongoni as at the Ugandan sites and considers that the nominated property could also be compared with the site of Tchitundo-Hulo in Angola and the grotto of Kiantapo in La Dépression de l'Upemba, Democratic Republic of Congo on the Tentative List, which contain a similar geometric style of rock art thought to possibly derive from the same late Neolithic culture as the Ugandan sites. This culture is thought to have stretched across the central African region north of the Zambezi River, being represented not only at Chongoni but also at Kasama in Zambia, the Mara region in Tanzania and in Kenya.

ICOMOS considers that the comparative analysis does not justify the selection of sites as the most representative of geometric rock art in the region, given

that the other sites across the region said to represent this culture have not been directly compared. This type of rock art is well represented in the region.

ICOMOS considers that the comparative analysis does not justify consideration of this serial property for the World Heritage List at this stage.

Justification of Outstanding Universal Value

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

- The property bears exceptional testimony to the rock art tradition of Pygmy hunter-gatherers whose art is not otherwise represented on the World Heritage List.
- It offers understanding of the painted imagery not as well represented at any other World Heritage sites.
- It has continued relevance for present-day communities who use the sites for ritual purposes.
- It fills a major geographical gap amongst the major rock art traditions of Africa.

In response to ICOMOS' query the State Party clarified that the nominated sites have been selected to represent the greatest possible variety in this genre of rock art.

ICOMOS considers in relation to the first point that in view of some uncertainty surrounding the age and authorship of the rock art due to there being minimal archaeological data, dating evidence and ethnological records it is perhaps too soon to base the significance of the sites on their attribution only to the tradition of Pygmy hunter-gatherers, given that agricultural societies also held and still hold traditional beliefs related to fertility concepts. ICOMOS considers that the second and third points have not been justified by the comparative analysis, and the second point applies to many rock art sites.

Integrity and authenticity

Integrity

The selected sites were chosen to represent the full scope of geometric rock art designs in East Uganda. Each property component carries some similar designs and also some site specific elements. Each site contributes therefore to the overall potential Outstanding Universal Value of the property and the property includes all elements necessary to express OUV. The property is of adequate size to convey OUV. All sites except Komuge have suffered a degree of damage from graffiti or, in some cases, the effects of repeated touching as part of ritual activities. The sites are also vulnerable to quarrying activities and encroachment of settlement. ICOMOS considers that these factors must be controlled in order to ensure retention of integrity. The communications

masts at Mukongoro and Kapir impact adversely on the visual integrity of the setting of those sites.

ICOMOS considers that the conditions of integrity of the whole series and of the individual sites have been met but are vulnerable due to the inadequacy of current management.

Authenticity

The nominated sites and their rock art are authentic in terms of their design and materials; their location and setting, their function and the associated spiritual traditions in use today. ICOMOS does not consider that the attribution of the rock art solely to hunter gatherers is justified because of the dating issue as described above. However this does not mean the rock art itself is not authentic, only that the interpretation is suspect.

ICOMOS considers that the conditions of authenticity of the whole series and of the individual sites have been met.

In conclusion, ICOMOS considers that the conditions of authenticity of the whole series and of the individual sites have been met and the conditions of integrity as well, but they are vulnerable due to the inadequacy of current management.

Criteria under which inscription is proposed

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

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

This criterion is justified by the State Party on the grounds that the property is exceptional testimony to a cultural tradition which has disappeared – the painting of geometric rock art by the Pygmy hunter-gatherers of the late Neolithic period - and also to a cultural tradition of fertility and potency rituals that is still living today amongst the present population of the area.

ICOMOS considers that the rock art has not been justified as unique or exceptional testimony by the comparative analysis. Attribution of the art to late Neolithic hunter-gatherers has not been adequately supported by dating and archaeological evidence.

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

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

This criterion is justified by the State Party on the grounds that Nyero and other hunter-gatherer geometric rock art sites in Eastern Uganda are some of the last remaining evidence of early Pygmy hunter-gatherers

presence in the region in which a ritual tradition developed over a very long period and lasted thousands of years.

ICOMOS considers that the Nyero and other geometric rock art sites in Eastern Uganda are directly and tangibly associated with ritual traditions practised by the population living around the property today. However this is true of many rock art sites and as a justification is not sufficient on its own.

ICOMOS considers that the serial approach is justified and the selection of sites has been justified.

ICOMOS does not consider that criteria (iii) and (vi) have been justified at this stage.

4 Factors affecting the property

Development encroachment adjacent to Nyero and the Dolwe site due to increased population has been halted by the local authorities, as has illegal quarrying at Nyero. Illegal quarrying is also a factor affecting the property at Mukongoro, Kakoro and Kapir. Although said to have been halted through intervention by the local authorities and the Department of Museums and Monuments, ICOMOS noted ongoing quarrying at Mukongoro.

There are no inhabitants within the nominated property boundaries. The buffer zone at Nyero has 7 inhabitants, at Kakoro there are 6 and at Komuge there are 4. Dolwe Island accommodates around 7,000 temporary residents, mostly fishermen.

Sites have been subject to damage through ritual use, graffiti and dust, bird and animal droppings. Installation of the telecommunication mast and access track at Kapir without permission from the local community resulted in a dispute and graffiti damage. The expanding network of paths at Mukongoro has resulted in erosion and ICOMOS noted during the mission that this has exposed archaeological sites including pottery scatters and remains of iron-smelting furnaces. At all sites, meetings with the local people have been undertaken by the Department of Museums and Monuments to convey the importance of the sites and the need for their protection and maintenance. However ICOMOS considers that the current lack of formal management arrangements and practical guidelines is a major concern.

Environmental pressure includes high rainfall, possibly increasing due to climate change, resulting in water damage to the rock paintings and mould growth. The Dolwe Island site could be impacted by raised water levels in Lake Victoria in future. Visitor numbers are greatest at Nyero, where the site receives over 12000 annually. ICOMOS considers Nyero 3 to be particularly vulnerable to visitor access. It contains the most publicised painting used as the logo of the National Museum of Uganda and on the Uganda 2000 Shilling bank note. Mukongoro

receives around 1200 annually and numbers are very few at the other sites. The State Party considers that all sites could receive increased numbers and measures are planned to deal with any increase should the property be inscribed. No measures are in place to mitigate natural disasters. Flooding seems to be the only likely event.

ICOMOS considers that the main threat to the property is stone quarrying and physical damage to the rock art due to inadequate site management.

5 Protection, conservation and management

Boundaries of the nominated property and buffer zone

The Nyero hill property is bounded by Kumi University to the north and farm and settlement boundaries to the east, south and west. The surrounding buffer zone includes University and farmland and is bounded by the Kumi-Ngora road along the south.

The Dolwe property is bounded by the coastline on the west and includes surrounding rock boulders and the Catholic church. The rest of the island is the buffer zone, including the settlement and boat landing site.

Mukongoro comprises two separate property components. The one on the hill wraps around a telephone mast with its independent diesel generator located on top of the hill and includes sites 1, 2 & 4. The other is further down the slope to the south-west and includes site 3. The buffer zone surrounds both components and is bounded by the sub-county headquarters on the north-east. Along the south-west the boundary coincides with the property boundary and is defined by a fence between it and the adjacent school. ICOMOS notes that the buffer zone appears to adequately enclose the area of archaeological interest.

The Komuge hill property boundary is defined by the base of the granite outcrop. The surrounding buffer zone encloses farmland to the north but is minimal along the south-east side of the property.

The Kakoro hill property boundary is defined by the base of the granite outcrop. The surrounding buffer zone encloses farmland and homes.

The Kapir property boundary is marked by the telephone mast on the west and encloses the hill top. The buffer zone boundary is defined by the base of the granite outcrop on south and west and the Kumi-Soroti road on the north and east.

ICOMOS considers that the property components are essentially islands within the cultural landscape of modern Uganda, representing the last remaining tangible remains of a once extensive cultural tradition. The nominated areas and buffer zones of the seven sites are generally adequate. Boundaries need to be

clearly defined on the ground by visible survey pegs at corner and other appropriate locations.

ICOMOS considers that the boundaries of the nominated property and of its buffer zones are adequate but they need to be clearly defined on the ground.

Ownership

All property components are owned by the State. The buffer zones at Dolwe, Mukongoro and Kapir are government-owned land. The buffer zones at Nyero, Komuge and Kakoro are owned by the communities. ICOMOS notes that the government proposes to acquire the buffer zone lands under a compensation scheme for the present owners.

Protection

Nyero was gazetted as a National Monument in 1973 and is protected under the Historical Monuments Act 1967 and amendment decree 1977. The other property components are in the process of being gazetted as National Monuments. A timetable of actions leading to this has been provided by the State Party in response to ICOMOS' request and it is expected to occur in March 2015. The properties are recognised as sacred places and protected by the local communities to some extent, but ICOMOS noted that they have not been successful in preventing graffiti or other damage at Kapir and Dolwe. The additional information provided by the State Party states that the whole of Dolwe Island will be gazetted as a National Monument and it is intended that all the buffer zones will be legally protected by 2018. In the meantime the buffer zones are protected by means of Memoranda of Understanding (MOU) with the land owners/users. ICOMOS recommends that the MOU be reinforced by further consultations with the communities.

ICOMOS considers that the protective measures for the property are not yet adequate. Legal protection in place will be adequate when all property components are protected under the Historical Monuments Act and when all buffer zones are legally protected.

Conservation

The 16 sites have been individually recorded and results of a condition survey are tabled in the nomination dossier. The State Party considers their condition overall to be fairly good. There is some deterioration due to salt deposits caused by exposure to running water. Interventions in the 1960s intended to protect the Nyero sites from vandalism have not been successful and their remains are now themselves exacerbating damage by retaining water. There is some graffiti over the rock art at Nyero, Mukongoro and Dolwe, and beside the rock art at Kapir. Ritual use involving sprinkling with oil at Nyero 1 & 3 has caused staining. The authorities have countered this by involving the communities in guarding the property. ICOMOS noted that some inadequate and damaging attempts have been made to remove graffiti. It is noted in the nomination dossier that professional conservation works will be required to deal with deterioration, removal

of graffiti and other damage. ICOMOS also noted that archaeological remains revealed by erosion at Mukongoro were not known to the authorities, suggesting that all the buffer zones should be considered potential archaeological zones. ICOMOS considers that further research and archaeological investigation would greatly benefit the understanding and interpretation of the sites, particularly in view of the lack of secure dating evidence for attribution of the sites to hunter gatherers. Specialist conservation works to remove graffiti should be prioritised at Dolwe and Kapir.

ICOMOS considers that the photographic record as it stands is inadequate as an inventory of the rock art. A more detailed inventory/data base needs to be prepared as a basis for monitoring and conservation. Other features of the sites including grinding hollows ("cupules") and rock gongs should be included. Current ritual practices and related features should also be documented and included in the data base.

In conclusion, ICOMOS considers that the conservation will be improved through the preparation of a conservation strategy for the property which will include a detailed data base as a baseline for future conservation works, professional conservation assessment and archaeological surveys of the buffer zones.

Management

Management structures and processes, including traditional management processes

The Ministry of Tourism, Wildlife and Heritage has overall responsibility for the sites and manages them through its Department of Museums and Monuments (DMMs). Currently Nyero, Mukongoro and Dolwe are managed by 2 staff of the DMMs. The other three components are managed by community site management committees. The proposed management structure has a World Heritage Committee and a Regional Conservator under the DMMs. The former will advise the local authorities and site management committees and the latter will supervise assistant conservators at each of the property components. In addition one DMMs general manager will oversee all the sites, with 6 site attendants/guides based at Nyero and 2 each at the other components. Expertise is provided by DMMs staff, external consultants and the Trust for African Rock Art in Nairobi.

DMMs staff are funded by the State; project funding is sourced from the US Embassy, the African World Heritage Fund and individuals. The World Bank is expected to fund an interpretation/cultural centre at Nyero, pathways and amenities.

A disaster and risk management process was considered as part of the management planning process and a plan will be developed by June 2015.

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

There are no district or sub county plans involving the nominated property. The integrated Property Management Plan 2013-18 was developed with input from the five administrative districts, village committees, schools and community members, the Sub County and local authorities. It sets out aims and objectives; measures to be implemented within 3-5 years, and tourism strategies. An implementation timetable is set out in Table 7. ICOMOS considers that the Management Plan needs to be extended to incorporate duty descriptions covering such practical matters as clearing of paths, gathering litter, soil erosion control, maintenance of structures, liaison with communities, monthly reporting and collation of visitor statistics. Tourism management needs to include restrictions on visitor access and group size at vulnerable sites such as Nyero 3.

A guide book and documentary have been produced. Currently there is an information centre, toilets and visitors' shelter at Nyero. A new visitor centre is proposed at Nyero, and reception offices, toilet facilities and signage at the other components. Dolwe envisages specific boat access for visitors. Education and public awareness programmes are proposed. ICOMOS considers that not all local guides appear to have adequate knowledge of the sites at present. ICOMOS also considers that interpretation would benefit from more research before the current attribution of the sites to Pygmy hunter gatherers is formally presented. ICOMOS notes that there is a high expectation that World Heritage listing will bring tourists and a consequent improvement in the local economy. However no business plan had been developed for the sites; there were no real estimates of likely visitor numbers based on the statistics of the national tourism agency. ICOMOS considers that local communities need to know the likely benefits of tourism so that they can decide on the degree to which they want to be involved at the sites and the range of possible business opportunities they might expect. Without a well-informed community involvement it is likely that community support for site management and conservation will decline, to the ultimate detriment of the sites.

Involvement of the local communities

It is proposed that site management committees will have input from the Sub County authority, DMMs staff, local communities, civil society, educational institutions and traditional institutions and will continue to provide protection and guiding roles.

ICOMOS considers that management has not been adequate to date.

In conclusion, ICOMOS considers that the current management system for the overall serial property is not yet adequate; the management system and plan should be strengthened and extended at all of the individual properties so that local communities are practically

empowered to undertake protection and guiding roles. Management plan should be extended to include analysis of potential tourism opportunities and community involvement in these, as well as practical duty descriptions and visitor management guidelines. Furthermore, ICOMOS recommends that further research be undertaken as a basis for interpretation and presentation.

6 Monitoring

The research section of the DMMs will be responsible for monitoring the property components. Indicators, periodicity and location of records are indicated in Table 8. ICOMOS notes however that there is currently no adequate baseline for the monitoring of sites and a detailed inventory; systematic photographic record and data base of the paintings and vandalism is required together with a site audit procedure and schedule.

In conclusion, ICOMOS considers that the monitoring system is not yet adequate. A baseline needs to be established for the proposed monitoring system in the form of a detailed data base of the sites.

7 Conclusions

ICOMOS considers that the comparative analysis does not justify consideration of this serial property for the World Heritage List at this stage. The nominated property does not meet appropriate criteria at this stage. Inadequate site management is the main threat to the property. The boundaries of the nominated property and of its buffer zones are adequate but protection is not yet adequate. Legal protection will be adequate when all property components are protected under the Historical Monuments Act. Protective measures agreed in the Memoranda of Understanding with land owners/users need to be reinforced and the buffer zones need to be legally protected. The boundaries of the property components and buffer zones need to be clearly marked on the ground.

Furthermore, ICOMOS considers that conservation is not yet adequate. A detailed data base of the rock art and site features is required as a baseline for future conservation works; professional conservation assessment is required and buffer zones should be considered potential archaeological zones. Specialist conservation works to remove graffiti should be prioritised. ICOMOS considers that the current management system for the overall serial property is not yet adequate; the management system and plan should be strengthened and extended at all of the individual properties so that local communities are practically empowered to undertake protection and guiding roles. Management plan should be extended to include analysis of potential tourism opportunities and

community involvement in these. Furthermore, ICOMOS recommends that further research be undertaken as a basis for interpretation and presentation, and the name of the property should be changed to Nyero and Other Geometric Rock Art Sites in Eastern Uganda.

ICOMOS considers that a major issue is the current lack of an adequate baseline for the monitoring of sites and that a detailed inventory comprising a systematic photographic record and data base of the paintings and all associated features including ritual practices is required together with a site audit procedure and schedule.

8 Recommendations

Recommendations with respect to inscription

ICOMOS recommends that the examination of the nomination of Nyero and Other Hunter Gatherer Geometric Rock Art Sites in Eastern Uganda, Uganda, 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 investigate geometric rock art sites in the region in order to establish whether the nominated sites can be considered *unique or exceptional testimony to a cultural tradition or to a civilisation which is living or which has disappeared*, and thereby justify criterion (iii);
- Complete formal gazettal of all property components as national monuments;
- Provide legal protection of the buffer zones and reinforce the Memoranda of Understanding with land owners/users by further consultation with the communities;
- Define boundaries clearly on the ground by visible permanent markers at corner and other appropriate locations;
- Prepare a conservation strategy which will include a detailed inventory comprising a systematic photographic record and data base of the paintings, rocky outcrops with “cupules”, rock gongs, ritual practices and their related features as a basis for conservation assessment and monitoring, together with a site audit procedure and schedule;
- Prioritise specialist conservation works to remove graffiti at Dolwe and Kapir;
- Formally prohibit quarrying from encroaching on the buffer zones;
- Strengthen and extend management system and plan at all of the individual properties so that local communities are practically empowered to undertake protection and guiding roles;

- Extend management plan to include analysis of potential tourism opportunities and community involvement in these; as well as practical duty descriptions and visitor management guidelines.

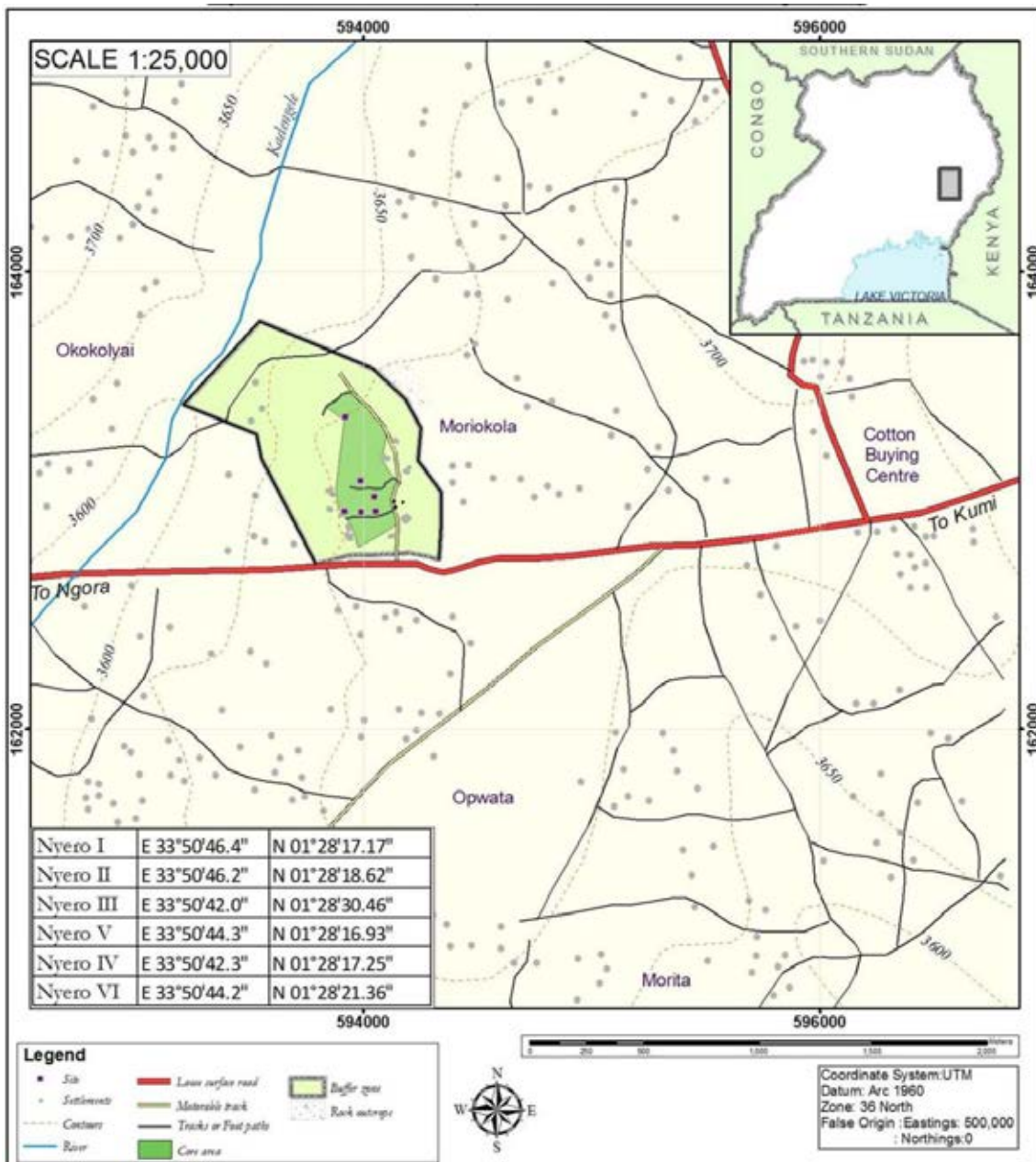
ICOMOS further recommends that the name of the property be changed for "Nyeru and Other Geometric Rock Art Sites in Eastern Uganda".

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

Additional recommendations

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

- Undertaking further research as a basis for interpretation and presentation including archaeological investigation of buffer zones;
- Inviting the international community to consider support for the management and conservation of the property.



Map showing location of the nominated properties



Rock art at Nyero 2



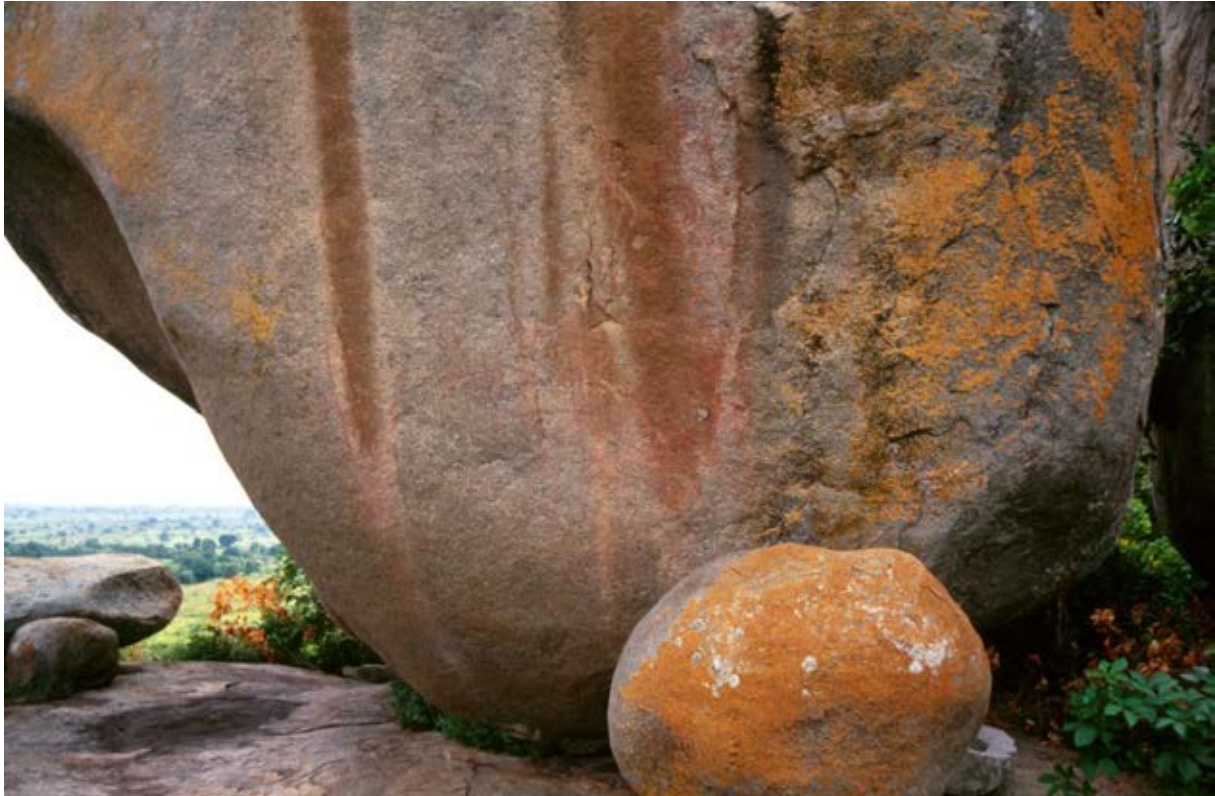
Dolwe Grinding hollows ("cupules")



Mukongoro 2.



Kapir Site



Rock art at Kakoro site

IV Cultural properties

A Africa

New nominations

B Arab States

New nominations

C Asia – Pacific

New nominations

D Europe – North America

New nominations

Extensions

Nominations deferred by previous sessions of the
World Heritage Committee

E Latin America and the Caribbean

New nominations

“Bethany Beyond the Jordan” (Jordan) No 1446

Official name as proposed by the State Party

Baptism Site “Bethany Beyond the Jordan” (Al-Maghtas)

Location

South Shunah District, Governorate of Al-Balqaa
The Hashemite Kingdom of Jordan

Brief description

The Baptism Site “Bethany beyond the Jordan” is located in the Jordan Valley, north of the Dead Sea. The site contains two distinct archaeological areas, Tell el-Kharrar, also known as Jabal Mar Elias, and the area of the Churches of St. John the Baptist. The property is believed the location where Jesus of Nazareth was baptised by John the Baptist and is a popular pilgrimage destination for Christians. Physical remains associated with the commemoration of this event include a water collection system and pools as well as later built churches, chapels, a monastery, hermit caves and pilgrim stations.

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

18 June 2001

International Assistance from the World Heritage Fund for preparing the Nomination

None

Date received by the World Heritage Centre

27 January 2014

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 21-25 September 2014.

Additional information received by ICOMOS

ICOMOS sent a letter to the State Party on 7 October 2014 requesting additional information with regard to development projects in the property, the management plan as well as monitoring procedures established. A second letter was sent on 19 December 2014 requesting further information on boundaries, a construction moratorium for the site, maintenance, visitor- and disaster management, as well as once again monitoring procedures.

The State Party responded by letters of 2 November 2014 and 4 February 2015, submitting additional information on all the requested items, including a management plan prepared for the site and revised maps of the property and buffer zone.

Date of ICOMOS approval of this report

12 March 2015

2 The property

Description

The archaeological site “Bethany Beyond the Jordan” is located on the eastern banks of the Jordan River, nine kilometres north of the Dead Sea. The property has a size of 533.7 hectares and includes two principal archaeological areas, Tell Al-Kharrar, also known as Jabal Mar Elias (Elijah’s Hill), and the area of the Churches of St John the Baptist near the Jordan River.

The property includes archaeological structures of Roman and Byzantine origin, such as churches and chapels, a monastery, hermit caves and pools in which the act of baptism was celebrated. The archaeological remains will be described in four parts, focusing on Tell Al-Kharrar (Elijah’s Hill), the churches of the Zor area (Churches of St John the Baptist), the caves and the tombs.

The archaeological area of Tell Al-Kharrar (Elijah’s Hill) is located two kilometres east of the Jordan River. As the name indicates, according to tradition Elijah’s Hill is the place from which the Prophet Elijah ascended to heaven and hence a Byzantine monastery was built at the location, the Monastery of Rhetorios in the 5th century. The hill was occupied during the Roman and Byzantine periods. Excavations revealed three churches, three baptismal pools and a circular well in addition to an outer wall which surrounded the hill. Archaeological investigations also revealed the presence of ceramic pipes transporting water from springs further east to the baptism site, which continue to provide water to the property at present.

The churches of the Zor area includes the Pillared Hall, a basilica church referred to as the Church of St John the Baptist, the Lower Basilica Church, with geometrically patterned marble floors, the remains of the Upper Basilica Church, the Marble Steps, the four piers of the Chapel of the Mantle, the Small Chapel, the Laura of St Mary of Egypt and a large pool. Noteworthy are the marble steps,

including 22 authentic black marble steps, which were constructed around 570 CE and which lead from the Upper Basilica to a baptismal pool. This pool is surrounded by four piers, which are assumed to have once supported the Chapel of the Mantle.

A cluster of monk caves carved into the Qattara Hills, also called hermit cells, is located at 300 metres distance to the Jordan River. These caves were in the past accessible from the western and south-western sides by ropes, ladders or staircases which no longer exist. Semicircular niches are carved into the eastern wall of each cave, which was divided into two rooms, assumed to have been reserved for praying and for living.

A number of tombs were identified adjacent to or within the churches. They seem to be burial places of monks or individuals closely associated with the churches. Most graves are rectangular and adequate in size to receive a single outstretched body. The burials have been dated to the Byzantine and early Islamic periods (5th 7th century CE). The property revealed archaeological finds, including coins and ceramics and serves as an epigraphic reference.

History and development

Based on the archaeological evidence, the site was first inhabited in the Chalcolithic period (ca. 3500 BC) by a small farming community. The subsequent settlement remains date to Hellenistic times, but the key development of the site occurred during the Roman and Byzantine eras, in the 1st to 7th centuries CE, with the main structures dated to after the 4th century when Christianity was declared the official state religion. The site flourished as a pilgrimage site especially during the Byzantine period; however, all buildings of this time were destroyed as a result of earthquakes and floods and rebuilt multiple times in later periods until the site was abandoned by the late 15th century.

The Byzantine occupation clustered in two areas, along the east bank of the Jordan River and around the hill of Tell Al-Kharrar, often called Elijah's Hill. The first church of St John the Baptist was built by the Byzantine Emperor Anastasius in the period 491-518 CE. It was destroyed by floods and earthquakes twice, until the third church reconstruction and the chapel on piers collapsed during a major flood in the 6th or 7th century CE. The main buildings on Elijah's Hill date to the 5th and 6th century CE.

Several of the Byzantine structures continued to be used during the early Islamic period. An Orthodox monastery was established in the 13th century on the remains of the earlier Byzantine but it is uncertain how long it continued to be used. The number of travellers dropped at the time and most elements of the property fell into disuse. A pilgrim visiting the site in 1484 reported it to be in ruins. It appears that the property was hardly visited between the 15th and the 19th centuries, when a small chapel dedicated to St. Mary of Egypt, a hermit from the

Byzantine period, was built but then again destroyed in the 1927 earthquake.

In the early 20th century the site was used by a local community of farmers, and after the Six-Day war in 1967 it became a closed military zone until the signing of a peace treaty between Jordan and Israel in 1994. In the 1990s the archaeological excavation of the site started, and basic conservation and restoration works began in the early 21st century. Visitor structures and facilities were established outside the archaeological areas, which include a car park, a ticket office, management offices, a conference centre, a store, souvenir shops, a wastewater treatment plant and a desalination plant.

3 Justification for inscription, integrity and authenticity

Comparative analysis

The comparative analysis is divided into two main sections. The first section considers sites of relevance to historical events of Christianity as well as sites that have become pilgrimage destinations to Christian communities. This comparison is predominantly focused on the region and considers sites like Mount Nebo, according to tradition the place where Moses looked at the promised land, Deir ain Abbata, supposedly the cave where Lot and his two daughters stayed after the destruction of Sodom and Gomorrah, the Church of the Nativity and the Pilgrimage Route in Bethlehem, Palestine, (2012, criteria (iv) and (vi)), Saint Catherine's Monastery at the foot of Mount Sinai, Egypt (2002, criteria (i), (iii), (iv), and (vi)) and several other sites, especially in the Jordan Valley.

The State Party concludes in this section that several other sites are comparable or even superior in material remains but that "Bethany beyond the Jordan" has unique and exceptional significance in terms of its association with the baptism of Jesus. ICOMOS considers that the judgment concerning the lack of exceptionality of the physical remains is appropriate and that the site – in comparison to the places compared – gains its exceptionality through its association to the historic event and the practice of pilgrimage over two millennia. ICOMOS further notes that historical structures associated with the baptism of Jesus exist on the western banks of the Jordan River. However, it seems that pilgrimage of most churches is focused on "Bethany Beyond the Jordan" as the likely baptism site as a result of the wilderness character, described as the setting of the baptism, which seems lacking on the opposite banks.

The second section of the comparative analysis considers on a global scale sites of religious significance and pilgrimage, with emphasis on properties already inscribed on the World Heritage List. Properties compared on the basis of their religious significance include the island of Pátmos, Greece (1999 criteria (iii), (iv), and (vi)) and Lumbini, the Birthplace of the Lord

Buddha, Nepal (1997, criteria (iii) and (vi)). ICOMOS considers that other sites of religious pilgrimage, such as Mount Wutai, China (2009, criteria (ii), (iii), (iv) and (vi)), the Rock-Hewn Churches, Lalibela, Ethiopia (1978, (i), (ii) and (iii)), the Mahabodhi Temple Complex at Bodhi Gaya, India (2002, criteria (i), (ii), (iii), (iv), and (vi)), the Bolgar Historical and Archaeological Complex, Russian Federation (2014, criteria (ii) and (vi)) or the Bahá'í Holy Places in Haifa and the Western Galilee, Israel, (2008, criteria (iii) and (vi)) could have been added for further comparison. However, ICOMOS considers that none of these would have led to a different result than that the Baptism Site "Bethany beyond the Jordan" is unique in its association to the sacrament of baptism in Christian faith.

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 Baptism Site "Bethany beyond the Jordan" is tangibly associated with the ministry of John the Baptist and the baptism of Jesus in the early 1st century.
- The site is also associated with the life and ascension of Elijah (also called Elias and Elisha), which is of common relevance to the monotheistic religions as well as the last years of the life of St Mary of Egypt.
- The special significance attributed to the baptism of Jesus encouraged generations of monks, hermits, pilgrims and priests to reside in and visit the site, and to leave behind testimonies of their devotion and religious activities, dating to between the 4th and the 15th century CE.
- The continuous reconstruction of churches destroyed by floods and earthquakes illustrates the enormous importance that was attributed to the site, despite the fact that the location was not suitable for permanent constructions.

ICOMOS considers that the evidence provided in the nomination dossier does not doubtlessly prove that the archaeological structures of Jabal Mar Elias and the churches near the Jordan River are indeed related to the baptism of Jesus of Nazareth, while also noting that several locations along the Jordan River have historically made similar claims. However, ICOMOS notes that the Baptism Site "Bethany beyond the Jordan" is of immense religious significance to the majority of denominations of Christian faith, who have accepted this site as the location in which Jesus was baptised by John the Baptist. The archaeological structures testify to the early beginnings of this attributed importance which initiated the construction of churches and chapels, habitation of hermit caves and pilgrimage activities.

ICOMOS considers that the above justification is appropriate in relation to the significance attributed by Christian believers.

Integrity and authenticity

Integrity

The area proposed for inscription corresponds to the area administered by the Baptism Site Commission. It is maintained as a wilderness area and locates within all the known archaeological remains relevant to the significance proposed. The size of the property allows the whole valley to be viewed and appreciated by visitors and in most directions integrates the wider setting of the Jordan Valley, from the vista points established for such purpose. All the elements necessary to read and understand the values conveyed by the property are still present and are encompassed by the nominated area.

However, towards the north-east and south-west, the initially proposed property included areas, free of archaeological remains which have been designated for the establishment of religious, administrative and visitor infrastructure. At the request of ICOMOS these areas have been excluded from the property. The construction area is now located in the buffer zone of the property. ICOMOS requested the removal of the above areas to allow for a construction moratorium to be issued for the remaining site, which is yet to happen.

ICOMOS notes that despite the exclusion of the above named areas from the property scrutiny needs to be applied to the approval of any future projects envisaged in these. The planned pilgrimage village should further be considered through comprehensive Heritage Impact Assessments (HIA) before any approval is granted for its construction. The commitment of the State Party to present any plans to the World Heritage Centre and the Advisory Bodies before approval is helpful in this context. ICOMOS further recommends the development of construction guidelines for the churches to provide a shared framework of scale, designs and construction schemes.

In the past the property has been prone to flooding, causing the architectural structures to be destroyed several times. Most recently flooding occurred when dams upstream on the Jordan were opened to relieve high water levels in the dam lakes. Agreements have been put in place to control and coordinate these releases to avoid flooding in the future. The flow of the Jordan is now controlled so that flooding due to natural climatic events is no longer possible.

Authenticity

The site of "Bethany Beyond The Jordan" (Al-Maghtas) is considered by the majority of the Christian Churches to be the location where John the Baptist baptised Jesus. The continuing pilgrimage and veneration of the site is a credible expression of the spirit and feeling attributed to it and the atmosphere, which the property conveys to the

believers. As the location of Jesus' baptism is described as wilderness, the preservation of the Zor, the green wilderness along the Jordan River, is essential to maintain this attribution. Despite the large volume of visitors to the site, a wilderness feeling still exists, which is enhanced by the natural materials and simple local construction technology that are used to build the shelter structures and visitor rest areas.

As an important religious site, several Christian Churches desire to have their presence in places of veneration and accordingly locations just outside the property have been and continue to be allocated for the construction of churches. Although these recent structures could be seen as compromising the authenticity of the setting of the site, they do not presently impinge on or negatively impact the central area containing the archaeological remains.

The archaeological areas have been preserved in their original materials, but have in many places been restored adding similar materials from the area to allow for easier interpretation or use of the structures. In some cases archaeological fragments have been reassembled by means of anastylosis. ICOMOS considers that the restoration undertaken does in some places reduce the authenticity in material and workmanship. However, ICOMOS considers that this reduction of material authenticity does not affect the significance or credibility attributed to the site by Christian believers.

In conclusion, ICOMOS considers that the condition of integrity has been met. ICOMOS further considers that although material authenticity is at times compromised, authenticity in relation to the property's associated significance as the location of Jesus' baptism and the cultural tradition of pilgrimage has been met.

Criteria under which inscription is proposed

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

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

This criterion is justified by the State Party on the grounds that the archaeological remains illustrate the continuous use of the site over millennia for pilgrimage and provides a unique testimony to the cultural and religious tradition of baptism and the importance it holds in the Christian belief system. The State Party further claims that recent discoveries demonstrate that the Baptism Site, "Bethany Beyond the Jordan" (Al-Maghtas) is the site of Jesus' baptism by John, and its association with the life of John the Baptist, with the ascension to Heaven of Prophet Elias/Elijah, and the life of St Mary of Egypt,

ICOMOS considers that the property best represents the tradition of baptism, an important sacrament in Christian faith, and with it the continuous practice of pilgrimage to the site. This tradition is illustrated by the archaeological

evidence, which references the practice of baptism since the 4th century, a practice that is continued again at present time. ICOMOS considers that the claims concerning the authenticity of the site as the baptism site of Jesus or the location of Elijah's ascension cannot be confirmed from an archaeological point of view but have been accepted by the majority of Christian connotations, which seems more relevant for the historic and present practice of the cultural tradition.

ICOMOS considers that this criterion has been justified.

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

This criterion is justified by the State Party on the grounds that the Baptism Site, "Bethany Beyond the Jordan" exhibits outstanding examples of buildings and architectural ensembles which illustrate a fundamental event in the history of one of the world's great religions. The State Party explains that the buildings illustrate specific construction techniques, such as building on piers to protect churches from flooding or the use of marble staircases. These structures match the descriptions of early pilgrims and travellers who visited the baptism site of Jesus of Nazareth.

ICOMOS considers that the collection of historic structures which were added to the property over several centuries can hardly be described as a specific type of architectural ensemble. ICOMOS also considers that the archaeological evidence of the site as baptism site of Jesus remains questionable and that the ongoing practice of religious communities is better recognized under criteria (iii) and (vi).

ICOMOS considers that this criterion has not been justified.

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

This criterion is justified by the State Party on the grounds that the Baptism Site, "Bethany Beyond the Jordan" (Al-Maghtas) is directly associated with the Christian tradition of baptism as well as being associated with important individuals and events in the three monotheistic religions. These include the baptism of Jesus by John the Baptist, the ascension of Elijah (also called Elias and Elisha) and the last years of life of St Mary of Egypt.

ICOMOS considers that the property is indeed of high significance to several Christian denominations as the baptism site of Jesus of Nazareth and for millennia has been a popular pilgrimage destination. ICOMOS considers that the associations to this historic event, believed to have taken place in the property, and the

contemporary beliefs still associated allow for justification of this criterion.

ICOMOS considers that this criterion has been justified.

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

Description of the attributes

The attributes of Outstanding Universal Value are in the landscape features of the Jordan River and the natural vegetation perceived as wilderness which support the association of the location to the baptism of Jesus of Nazareth by John the Baptist. The archaeological remains are attributes of the early practices of pilgrimage, hermit life and religious veneration that were responses to the associations of this location. In addition the continuing visits of Christian communities to the site highlight the continuation of the cultural tradition of baptism and pilgrimage to its place of origin.

4 Factors affecting the property

Development pressures are low due to the application of national and regional laws pertaining to land use and building development along with the bylaws of the Baptism Site Commission. Any threat to the site from planned or illegal development is extremely remote. The construction of religious buildings near the property is confined to specific areas in the buffer zone that is tightly controlled by the Baptism Site Authority, which has full control over all aspects of design, form and building consent. However, Heritage Impact Assessments should be conducted for any future development in the larger setting as well as for any visitor infrastructure added on site.

The main environmental factors affecting the site are large temperature fluctuations and salt crystallisation on the exposed archaeological materials. Conservation strategies have been designed to mitigate the impact of these environmental conditions and reduce the result of the deterioration processes. Flooding was a recurrent threat in the past, but analysis of flood damages allowed building small dikes around the archaeological remains to hold back flood water and reduce the impact of flooding. In view of natural disasters, earthquakes remain possible in the area and had negative impact on the site in the past. Wildfires could affect the vegetation in the Jordan Valley which retains the imagination of wilderness.

While the visitation of the site by pilgrims contributes to its significance, a massive increase of visitors and tourism activities could have negative impacts on the site. Based on past records of visitor numbers, the Baptism Site Commission undertook studies to determine the approximate carrying capacity of the site. The study highlighted that even a considerable visitor

increase would still remain within the limits of acceptable change. As the site is fenced and the entrance secured by ticket offices, the Baptism Site Commission has the ability to prevent visitors beyond the calculated benchmark amount.

ICOMOS considers that the main threats to the property are major floods, earthquakes, wildfires and uncontrolled visitor increase.

5 Protection, conservation and management

Boundaries of the nominated property and buffer zone

The boundaries of the property are clearly delineated and correspond in part to the perimeter of the designated site. The boundary also partly corresponds to tarmac and dirt roads that surround it and a barbed wire topped, chain-link fence which encloses the site. Sections of the initially designated site to the north-east and south-west have been designated for development of churches by the religious communities and other visitor infrastructure and have therefore been defined as buffer zone, to allow for a construction moratorium to be applied to the remaining parts of the site. The moratorium should prevent the construction of any architectural structures with a exceptions of structures created with the sole purpose of protection of archaeological elements. This legal commitment is yet to be issued. Sufficient archaeological research has been undertaken at the site and the extent of the relevant archaeological remains is well established.

ICOMOS is satisfied with the delineation of the boundaries in terms of inclusiveness. At the suggestion of ICOMOS the areas set aside for the establishment of modern church buildings, the proposed pilgrim village and the current administration centre have been designated as buffer zone and are now no longer within the property boundary. Archaeological excavations have shown that these areas contain no significant archaeological remains so that constructions can be permitted in the area according to guidelines which need to be drawn up.

The buffer zone surrounds the site towards the north, east and south with a distance of approximately 600 metres to each direction. It is zoned as either agricultural land or natural protected area in which no development is permitted. There is no buffer zone foreseen to the west, where the Jordan River defines the national border. Given the topography of the site and the importance of the Jordan River in its historical context, it appears that a number of important views and view sheds are towards the west pointing at the opposite banks of the Jordan River. ICOMOS acknowledges that these are not included in the buffer zone as they fall outside the Jordanian territory. However, ICOMOS considers that international cooperation for the protection of essential views across the River should be encouraged to ensure protection of the property's landscape character in all directions.

In conclusion, ICOMOS considers that the boundaries of the property include all attributes of Outstanding Universal Value. ICOMOS further considers that the buffer zone is adequate but that protection of the western banks of the Jordan River would be desirable in the future to protect important view sheds across the River.

Ownership

The property ownership is divided between two parties. The key areas are defined as Christian Waqf (endowment) belonging to the Greek Orthodox Church. The remainder of the surrounding area belongs to the management authority, the Baptism Site Commission.

Protection

Both the property and buffer zones enjoy legal protection at all levels. At state level the property is designated as an antique site according to Antiquities Law 21/1988, art. 3, par 8. This law prohibits destruction, damage or alteration of the antiquity itself and regulates development works around it, so as to avoid major impact on the antiquity and on its contextual perception. ICOMOS recommended to the State Party that a construction moratorium be issued for the nominated property, which is intended to prevent any structures except those exclusively dedicated to the protection of archaeological remains. The State Party's response accepted the boundary changes suggested to allow for the moratorium but did not indicate if or when this would be issued.

On a regional level the property and buffer zone are protected by the Jordan Valley Authority Laws and on the site level by the By-Laws of the Baptism Site Commission. The objective of these laws is to protect the property from potential future threats, focused mainly on development and tourism projects that might jeopardize the nature and character of the Site and its immediate surroundings. Irrespective of ownership indicated above, the Baptism Site Commission has full legal control of the site.

Although not indicated in the nomination dossier, the veneration of the place, the presence of several church communities and the continuing pilgrimage add a level of traditional protection. It is not in the interest of the Christian communities that the property changes its character and accordingly visitation is arranged with respect to the site's significance. The protection measures of both the national level and in particular the Baptism Site Commission are effective and will, if consistently implemented, prevent negative impacts to the property.

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

Conservation

The property has been well described, documented and inventoried in 2012, with records and archives available at the Baptism Site Commission archives and at the Department of Antiquities in Amman. The present state of conservation is good. The managers and staff at the

Baptism Site Commission are versed in current approaches to the conservation of archaeological sites, understand the processes of deterioration that occur on the site and are implementing conservation strategies to mitigate the effects.

The general approach to active conservation is based on minimal intervention focusing on consolidation and stabilization rather than reconstruction. Any stabilization designed to recreate a weather resistant condition for the archaeological remains is distinguished from the original fabric and completely reversible. This also includes the introduction of protective shelters which were constructed in three locations of the site. These shelters are designed to be self-supporting and clearly designed as new additions to the site rather than trying to mimic a historic architectural style.

Conservation projects are programmed on an annual basis and a maintenance team is present on site. Visitors access the property accompanied by guides, who are asked to report all problems they observe back to the conservation manager. The Department of Antiquities supplies conservation expertise whenever specialized knowledge is required. In such cases the site conservation and maintenance team receive on the job training from these experts as part of their work. At present, the site does not seem to require major conservation intervention and ICOMOS considers that the conservation measures in place are effective.

ICOMOS considers that the conservation approaches and expertise applied are adequate and effective.

Management

Management structures and processes, including traditional management processes

The authority responsible for the Baptism Site, "Bethany Beyond the Jordan" is the Baptism Site Commission, which is directed by an independent board of trustees appointed by H.M. King Abdullah II bin al-Hussein and chaired by H.R.H. Prince Ghazi bin Muhammad. The day-to-day management is guided by the Director-General of the Baptism Site Commission and his deputy, who is in charge of conservation. Both are based on site full time and guide a team of 55 employees.

The Board of Trustees meets at regular intervals and receives update information on all relevant issues on site. They have full decision-making authority without referring to any other government agency. All revenues generated on site are utilized for the administration and management of the property. As result of these adequate financial resources, the management team is well staffed and qualified.

Risk preparedness has not been a key focus of the management but the State Party has provided additional material on risk management and maintenance

procedures, which ICOMOS recommends to be integrated in the overall management system.

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

At the request of ICOMOS the State Party submitted the management plan of the property. Although a voluminous document, large parts of it are repetitive of the nomination file. The management plan remains analytical and descriptive and gives little emphasis to maintenance schemes as well as future strategies, activities and actions. It does also not address the future risks and threats it has identified. As such, the management plan is a comprehensive analytical tool of the present state of conservation and services but does not qualify as a strategic management document.

Considering the adequate management arrangements already in place, ICOMOS in its letter requesting additional information suggested that the State Party may wish to give priority to documenting the present management system and developing plans for maintenance, visitor management and disaster response rather than revising the entire management plan. The State Party submitted additional information on aspects currently considered for visitor and disaster response management. ICOMOS recommends that these are formally integrated in the management system.

Visitor access is controlled at one single entrance gate, which allows not only for the control of visitor numbers but also for the distribution of information. Maps and information leaflets are available at the entrance and the site features an audio guide system. From the entrance gate visitors use a shuttle bus which transports them to the starting point of the walking path. Almost all visitors join guided tours, in which the guides convey all necessary information. Occasional information panels in English and Arabic are also available. Specific paths are laid out on site for the visitor walks and pilgrim processions.

Involvement of the local communities

The Baptism Site Commission is keen on spreading awareness and knowledge about the site and its significance to the local community and general public. They presented public lectures to different audiences and held training sessions on site. Furthermore, several workshops were held where invited local community members and general public discussed the topic of religious tolerance and coexistence between different religions in Jordan. A number of staff members of the administration team are from the local community which allows the site to be perceived as a source of income and support.

ICOMOS considers that the management system is well founded and able to address most of the current challenges. However, ICOMOS considers that the management plan presented does not qualify as a

strategic planning document and recommends that processes which are currently being prepared to address maintenance schemes, visitor management and disaster response strategies will be utilized to augment the management system.

ICOMOS considers that the management system for the property is mostly adequate but recommends that processes currently prepared for maintenance, visitor management and disaster response should augment the existing management system.

6 Monitoring

The nomination dossier presented a number of aspects that would be considered in monitoring but did not include specific measures or indicators. At the request of ICOMOS, the State Party submitted in two steps further information on the monitoring procedures including a set of indicators, methods of measurement and periodicity of review. The additional information further highlights that a full monitoring programme is developed as part of an annual maintenance plan.

ICOMOS considers that the monitoring indicators presented cover relevant areas and that the monitoring programme should be integrated in the annual maintenance plan.

7 Conclusions

ICOMOS considers that the Baptism Site "Bethany Beyond the Jordan" (Al-Maghtas) presents an exceptional testimony to Christian religious practice through its association with the baptism of Jesus by John the Baptist and in general terms the Christian sacrament of Baptism. Although ICOMOS cannot follow the archaeological arguments presented to prove the authenticity of the exact location where the baptism of Jesus took place, ICOMOS notes that the Baptism Site "Bethany beyond the Jordan" is of immense religious importance to the large majority of Christians, who have accepted this site to be the very location from which the sacrament originated.

The archaeological remains testify to the beginnings of this importance which led to the construction of churches and other religious structures used for hermitage or pilgrimage. The topography of the Jordan River and the vegetation, perceived as a landscape of wilderness, support the association to the baptism of Jesus of Nazareth by John the Baptist. The pilgrimage activities of Christian visitors highlight the continuation of the cultural tradition of baptism at its assumed place of origin. ICOMOS considers that the property justifies criteria (iii) and (vi) and meets the conditions of integrity and authenticity.

The site is well protected by its national designation as an antique site and appropriate development restrictions at a

regional and local level. Conservation measures follow current international standards for archaeological conservation and maintenance is undertaken according to annual planning tools. The state of conservation is adequate and no major conservation interventions seem required at present. Responsible for the management of the site is the Baptism Site Commission, guided by a board of trustees and managed on a day-to-day basis by its director and deputy who are both based on site. Since the site can directly utilize its revenues from ticketing, adequate financial resources are available.

The management plan presented remains descriptive and analytical but does not provide strategic guidance for future management. Following the recommendation of ICOMOS the State Party has prepared an initial overview of procedures in relation to maintenance, visitor management and disaster response. ICOMOS further recommends that the monitoring procedures be integrated in the annual maintenance schemes.

While the site boundaries are adequate in terms of inclusiveness of all archaeological remains, the State Party followed the recommendation of ICOMOS to exclude the areas in which construction of churches, administration offices and pilgrimage accommodation and other visitor infrastructure is foreseen. ICOMOS further recommended to apply a construction moratorium to the remaining parts of the site, which would prevent any construction except those exclusively dedicated to the protection of archaeological structures. However, the State Party has not yet provided indications as to if and when such moratorium might be formally issued. The buffer zone provides adequate protection towards the North, East and South, but no buffer zone is foreseen to the West across the Jordan River, which is the national boundary. Given the importance of the Jordan River in its historical context and significance, a number of important views are pointing at the opposite banks. ICOMOS acknowledges that these fall outside the Jordanian territory, however, ICOMOS considers that international cooperation for the protection of essential views across the river should be encouraged by the World Heritage Committee to ensure protection of the property's landscape character in all directions.

8 Recommendations

Recommendations with respect to inscription

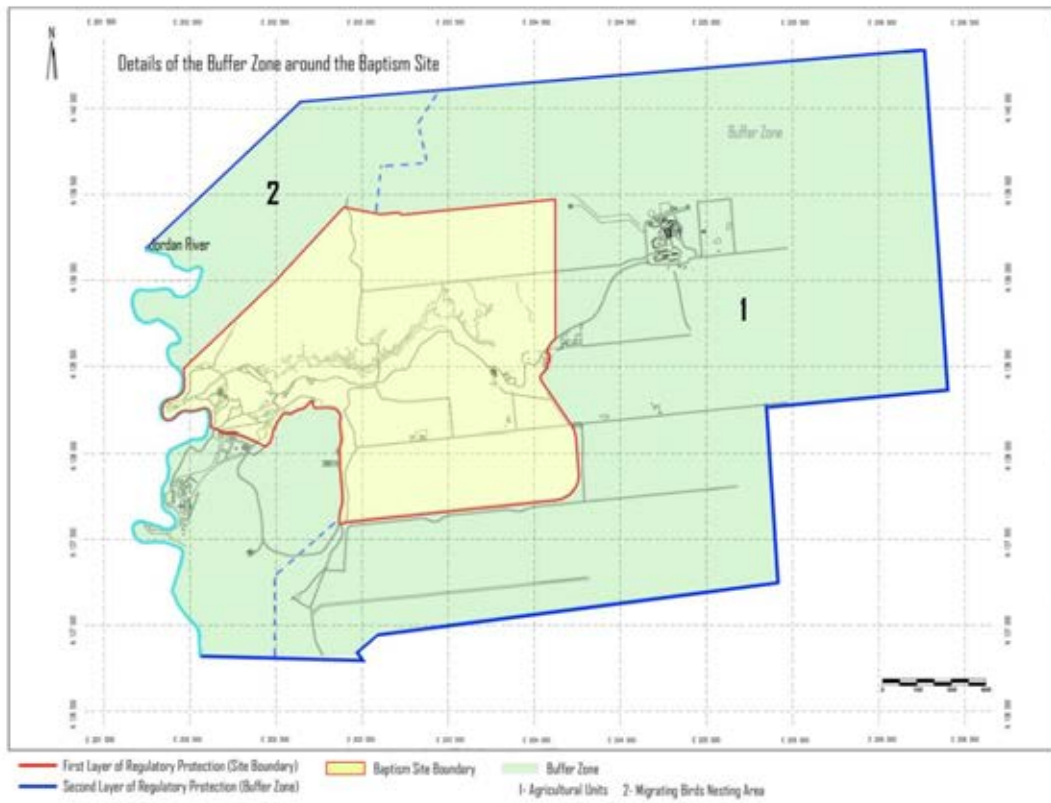
ICOMOS recommends that the nomination of the Baptism Site "Bethany Beyond the Jordan" (Al-Maghtas), Jordan, be **referred back** to the State Party in order to allow it to:

- Issue a construction moratorium for the property, which prevents any construction except for architectural structures created solely to protect archaeological remains;

- Integrate the management procedures on maintenance, visitor management and disaster response in the management system;
- Develop design and construction guidelines for the Churches which are to be constructed in the buffer zone.

Additional recommendations

ICOMOS further recommends that the World Heritage Committee encourages all concerned State Parties to ensure the protection of the western banks of the Jordan River to preserve important vistas and sightlines of the property.



Revised map showing the boundaries of the nominated property



Aerial view of the Baptism Site and the Jordan River



The Church of Saint John the Baptist, remains of the first church



Visitors and pilgrims



Zor area with Churches of St. John the Baptist and baptism pool

Rock Art in the Hail Region (Kingdom of Saudi Arabia) No 1472

Official name as proposed by the State Party

Rock Art in the Hail Region of Saudi Arabia

Location

Northern Province, Hail Region
Kingdom of Saudi Arabia

Brief description

The serial nomination of the 'Rock Art in the Hail Region' comprises two components, namely, the Jabal Umm Sinman at Jubbah and the Jabal al-Manjor/Raat at Shuwaymis. In Jabal Umm Sinman, Jubbah, the ancestors of present-day Arabs left the marks of their presence in numerous petroglyph panels and inscriptions. In Jabal al-Manjor and Jabal Raat, Shuwaymis, the large number of petroglyphs and inscriptions has been attributed to almost 10,000 years of human history. Together, these components contain the biggest and richest rock art complexes not only in Saudi Arabia, but in the Arabian Peninsula and the Middle East generally.

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 two *sites*.

1 Basic data

Included in the Tentative List

17 September 2012

International Assistance from the World Heritage Fund for preparing the Nomination

None

Date received by the World Heritage Centre

24 January 2014

Background

An ICOMOS Advisory mission within the framework of the first phase of a Pilot project for the Upstream Process (WHC-11/35.COM/12C) was undertaken on 10-17 April 2013.

Consultations

ICOMOS consulted its International Scientific Committee on Rock Art and several independent experts.

Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the property from 9 to 15 September 2014.

Additional information received by ICOMOS

A letter was sent to the State Party on 8 September 2014, requesting additional information, and a State Party response to the letter was obtained on 23 October 2014.

A second letter was sent to the State Party on 23 December 2014 to request additional information on boundaries of the nominated property and buffer zone, developments, visitor management and the name of the property. On 8 February 2015 the State Party provided additional information, which has been considered for the elaboration of this report.

Date of ICOMOS approval of this report

12 March 2015

2 The property

Description

The 'Rock Art in the Hail Region' serial nomination is composed of two properties, namely, the Jabal Umm Sinman at Jubbah and the Jabal al-Manjor/Raat at Shuwaymis. Jabal Umm Sinman is located about 90 km northwest of the city of Hail and is bounded in the west, north and south by desert sands and in the east by a security fence that borders the town of Jubbah.

The second component of the serial nominated property is parallelogram-shaped and comprises two hill ranges, namely, Jabal al-Manjor and Jabal Raat, that are in the Wadi al-Mukhayet, about 40 km west of Shuwaymis, situated about 250 km south of Hail. Both sites are bounded by security fences along the foot of the escarpments enclosing the rock art sites, and by the edges of the plateaus above, but including ruins of ancient structures.

Together, the components of the serial nominated property cover an area of about 2,043.8ha and are surrounded by a buffer zone measuring a total of 3,609.5ha.

Jabal Umm Sinman, Jubbah

Overlooking the freshwater lake that once existed here and which provided water to people and animals in the southern part of the Great Nafud Desert, is the hill range of Umm Sinman. Here, on these hills, the ancestors of present-day Arabs left the marks of their presence: their religious, social, cultural, intellectual and philosophical perspectives on their beliefs about life and death, their metaphysical and cosmological ideologies.

During the region's desertification, beginning in mid-Holocene times, the oasis of Jubbah provided the only substantial source of water within the desert, facilitating its continuing human occupation up to the present and the gradual adaptation of the population to the significant environmental changes. These changes are distinctly expressed in the numerous petroglyph panels and rich inscriptions, the greatest concentrations of which occur in

the lower rock exposures of the eastern flanks of Jabal Umm Sinman.

Jabal al-Manjor and Jabal Raat, Shuwaymis

Jabals al-Manjor and Raat are rock escarpments of a now sand-covered wadi that is thought to have been a broad valley with flowing water during the early Holocene. Both Jabal al-Manjor and Raat contain a large number of human and animal figures, and other hills and outcrops within the buffer zone feature smaller concentrations.

The large number of petroglyphs and inscriptions at these site complexes has been attributed to almost 10,000 years of human history. Although the bulk of this vast corpus of petroglyphs is of a single cultural period of human history, preceding and subsequent rock art traditions have been identified and dated. As the aquifer subsided, probably around mid-Holocene times, the formerly-permanent human population became increasingly transient, but the sites were still visited in recent millennia as indicated in the rock art. The intensive and comprehensive survey of the Jabal al-Manjor and Raat complexes since their recent re-discovery resulted in the locating of hundreds of rock art panels, several stone structures, and typical stone objects of the Neolithic era.

History and development

Observation of Middle Palaeolithic stone tools both on Umm Sinman and in its immediate vicinity, suggests that, already in the Pleistocene, climatic variations attracted human occupation of the Jubbah oasis during dry periods, perhaps acting as a refuge area to both humans and fauna. Near the Shuwaymis sites, streams and lakes occurred during Pleistocene periods and some of this surface water also persisted well into the Holocene. Here too, Middle Palaeolithic occupation evidence has been reported.

Present data indicates that the record of surviving rock art commences shortly after 10,000 years ago, providing an insight into the Neolithic culture through thousands of petroglyphs. Through the depicted fauna, the pictorial content of the rock art indicates clearly that living conditions were favourable during this period, at both components of the serial nominated property.

However, this record provided by the rock art continues through the remainder of the Holocene, firstly as pictures and eventually these are supplemented by inscriptions. This veritable library provides a continuous record illustrating how human populations coped with environmental fluctuations marking an overall deterioration and gradual desertification. After the lake of Jubbah disappeared, wells had to be dug, which, by the late 19th century, were up to 23 m deep. But as the Jubbah lake bed became the only secure water source in the Nafud Desert, the occupants remained and adapted to the arid conditions they faced. This is well reflected in the late Neolithic, Chalcolithic and Bronze Age rock art. The introduction of Thamudic writing, probably about 3000 years ago, is documented in thousands of inscriptions at

Jubbah, compared with significantly lower numbers at Shuwaymis. From the locations and contents of these early inscriptions, it is evident that Jubbah had become an important staging place for camel caravans, whereas there was rather less human activity at Shuwaymis. Jubbah lies on an ancient caravan route to Jordan and Syria.

Between 3000 and 2000 years ago, the desertification process became complete across Arabia. Camels now became the dominant animal motif in the surviving rock art. The next major change in the rock art record comes with the introduction of Islam around 1400 years BP, when earlier scripts were replaced by early Arabic writing (Kufic), and the depiction of living things, especially humans, declined markedly. Nevertheless, there are still a small number of depictions found from the subsequent period.

The Jubbah oasis was visited by several European travellers and historians in the late 19th and early 20th centuries, who wrote brief accounts of the site and nothing on rock art or inscriptions from the area. Scientific archaeological investigations at Jubbah began after the Department of Antiquities and Museums initiated a Comprehensive Archaeological Survey of the entire Kingdom in 1976. The rock art of Jubbah was first thoroughly investigated and recorded by the Rock Art Survey team of the Department of Antiquities and Museums in 1986, which published its initial report on Jubbah in *Atlat* in 1987.

Later on, the Ministry of Education erected extensive fencing on the eastern side of Jabal Umm Sinman, facing the town of Jubbah, to prevent uncontrolled access to the rock art. Site guards and facilities were installed. In recent years a visitor centre has been built at Jubbah, and a new museum in Hail is under construction, all as part of the development of the cultural heritage of the region.

The Shuwaymis sites, although always known to the local Bedouin, were officially rediscovered only in 2001, which led to the undertaking of the first scientific investigation of Shuwaymis' rock art. In the subsequent years a sealed road was constructed up to Shuwaymis village, and this is now being extended to the visitor centre at the boundary of the buffer zone of the rock art sites.

3 Justification for inscription, integrity and authenticity

Comparative analysis

An analysis undertaken by the State Party illustrated a comparison of the serial nominated property with other sites in Saudi Arabia, the Middle East and around the world. In the nomination dossier, a comparison with Saudi Arabian sites indicates them to be generally of significantly smaller assemblages, with the exception of the Al Qara complex. Unlike other sites, this complex houses several tens of thousands of petroglyphs, and it is reported that its substantial library of Arabian rock

inscriptions may exceed those at Jubbah in numbers. However, their Thamudic content is very low, Kufic and recent Islamic texts clearly dominating.

As far as the Middle East is concerned, the analysis concludes that there is no rock art site in the region that would match the values of the two components of the serial nominated property, or qualitatively match their petroglyphs, preservation or management. The State Party pointed out that, on the basis of current information, three of the four largest rock art collections of the Middle East are in Saudi Arabia. Of these, Jubbah and Shuwaymis have the densest concentrations, show the most impressive artwork by far, and they also include the oldest tradition represented.

In a global context, the State Party states that, if compared to rock art panels located in the Sahara, China, India, South Africa, the Americas or Australia, the nominated property eclipses them in terms of age, and matches these properties in terms of visual qualities and technical perfection.

ICOMOS considers that the nominated property has some similarities with other properties located in the wider region, among them stylistic similarities with rock art in the Libyan Messak and in North Yemen, and the most ancient images exhibit influences from Egypt. Despite these similarities, ICOMOS considers that, when considering the age, span of time, amount and quality, the nominated property bears specific features that justify its consideration for the World Heritage List.

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:

- It is a visually stunning expression of the human creative genius.
- It archives more than 6,000 years of continuous human occupation in both rock art and inscriptions.
- The petroglyphs reveal the use of the sites in different cultural periods during which populations adapted successfully to severe environmental changes by acquiring domesticated animals such as cattle and horses, and later the camel.
- The Jubbah and Shuwaymis rock art catalogue and archaeological features are among the world's largest and most magnificent surviving corpus of Neolithic petroglyphs.
- Collectively, the Jubbah and Shuwaymis rock art represent a continuous record of human endeavour covering the past 10,000 years. The record commences with a massive component of Neolithic artwork, followed by comprehensive Chalcolithic, Bronze Age, Iron Age and Historic traditions, all of

which used the same localities to create their respective art corpora.

- In contrast to most other rock art sequences in the world, the approximate antiquity of the components of the Hail rock art is reliably known, because their ages are anchored to a series of direct dates derived from key elements.

ICOMOS considers that there are several reasons to support the Outstanding Universal Value of the property, among them the recognition of a "Jubbah style" indicates the importance and uniqueness of the site. The components of the serial nominated property bear an exceptional importance from the point of view of the amount of petroglyphs and of their high quality. As for the evolution of the environment, it is well documented by the studies on lacustrine deposits, by archaeology and by palaeo-environmental studies, which have been multiplied over the last few years. These studies support that the rock art images in the property can contribute to documenting civilisations that have left practically no other kind of vestiges. It is therefore possible to follow their evolution by adaptation to aridification of the environment.

Integrity and authenticity

Integrity

In the case of Jabal Umm Sinman, the boundary encompasses 14 clusters of petroglyphs on all sides of the mountain. The buffer zone extends northwards to enclose several smaller rocky outcrops with fewer petroglyphs. ICOMOS noted that the area of cluster 8, in the south-western part of the property, is badly vandalized with recent graffiti (mostly names painted in various colours often obliterating the ancient rock art), and littered with garbage. Furthermore, the Municipality of Jubbah has constructed a rain water diversion dam or water barrier of several kilometres length inside the buffer zone's eastern border. This dam is clearly visible from the westernmost north-south road of Jubbah, which bounds the buffer zone on the east, and somehow spoils the views from there towards Jabal Umm Sinman. On the eastern side of Jabal Umm Sinman, immediately north of the nominated property and located within the buffer zone next to the existing freshwater reservoir (in existence for the past 16 to 17 years), is the construction of a huge water tower that is visible from within the nominated property.

The property at Shuwaymis includes both rocky outcrops, Jabal Raat to the west and Jabal al-Manjor to the east, as well as the sandy valley between them. Neighbouring rocky outcrops to the north are incorporated into the buffer zone as they have not yet been thoroughly investigated. Apart from a Bedouin camp with fewer than 25 people living in the buffer zone, there is no town or large settlement nearby.

Covering more than 8 km at Jabal Umm Sinman and about 6 km at Manjor and Raat, steel fences, bars and locked access gates protect these examples of rock art.

According to the State Party, all elements necessary to express the Outstanding Universal Value of the serial nominated property, namely numerous well-preserved petroglyphs, identifiably different rock art traditions over the period from hunting and gathering to animal domestication and writing, independent evidence for climatic change at nearby palaeolake deposits, and evidence for human interaction in a vulnerable environment, are amply represented in the property, and both components are of adequate size to ensure the complete representation of the features that convey the Outstanding Universal Value.

ICOMOS considers that the components that make up the serial nomination contain the attributes to convey its Outstanding Universal Value and that the size of the nominated zones is adequate. Nevertheless, ICOMOS notes that measures to ensure adequate protection should be implemented, something that will be dealt with in the following sections of this report.

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, although measures regarding protection should be reinforced.

Authenticity

The petroglyphs at the two components of the serial nominated property, Jabal Umm Sinman at Jubbah and Jabal al-Manjor/Jabal Raat at Shuwaymis, have retained their original location, setting, materials, form and design even though they do not function within a cultural tradition. According to the State Party, their patination, which is full in the case of the Neolithic petroglyphs and of a decreasing degree for the subsequent Chalcolithic, Bronze Age, Iron Age and Islamic periods, and different phases of weathering, attest to their authenticity.

ICOMOS considers the elements on site to be authentic.

ICOMOS considers that the authenticity of the whole nominated series has been justified; and that the authenticity of the individual sites that comprise the series has been demonstrated.

In conclusion, ICOMOS considers that the conditions of integrity and authenticity of the nominated series have been met; and for individual sites, the conditions of integrity and authenticity have been met.

Criteria under which inscription is proposed

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

Criterion (i): *representing a masterpiece of human creative genius;*

This criterion is justified by the State Party on the grounds that the exceptionally large number of

petroglyphs, created by using a range of techniques with simple stone hammers, against a background of gradual environmental deterioration, are, by world standards, visually stunning expressions of the human creative genius, comparable to the messages left by doomed civilizations in Mesoamerica or on Easter Island. In that sense alone they are of the highest Outstanding Universal Value.

ICOMOS considers that the arguments advanced by the State Party are admissible and that the images are outstanding in visual terms, together with terms of employed techniques and location. At the same time, the so-called "Jubbah style" is a testimony to the recognition of this remarkable artistic achievement, which also exhibits an outstanding use of skills to handle both tools and materials.

ICOMOS considers that this criterion has been justified for the whole series.

Criterion (ii): *exhibiting 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 Jubbah and Shuwaymis exhibit more than 6000 years of continuous human occupation, which is reflected in both rock art and inscriptions.

ICOMOS considers that the State Party had not satisfactorily justified the extent to which the nominated property had influenced other areas, in addition to being a recipient of external influences. ICOMOS considers that, on the basis of the information available, it is not evident that the nominated property has influenced rock art in other areas.

ICOMOS considers that this criterion has not been justified for the whole series.

Criterion (iii): *bearing 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 at Jubbah the battles of past societies can be followed against the environmental catastrophe they experienced and adapted to in a truly exceptional example of such a situation, where the petroglyphs record the nature of the changes and the stone artefacts show where people lived in relation to the rock art and to the lake as it gradually dried up. At Shuwaymis, by contrast, the petroglyphs are all that remains of the testimony of a society that vanished, leaving behind a pristine record of its existence that is of a magnitude rarely encountered elsewhere in the world.

ICOMOS considers that the arguments presented are worthy of consideration.

ICOMOS considers that this criterion has been justified for the whole series.

Criterion (v): *being 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 description as a traditional human settlement or human interaction with a vulnerable environment “under the impact of irreversible change” could have been formulated specifically for the Saudi site complexes. It is hard to think of alternative, similarly comprehensive records of civilizations facing environmental oblivion anywhere in the world that have left such brilliant testimony of their genius. The two properties nominated literally exemplify this criterion.

ICOMOS considers that the property witnesses a period of the history of the region, but that this does not constitute a living tradition and does not represent a significant part of the culture of a present society. ICOMOS considers that the arguments to support this criterion have been taken into account by the justification of criterion (iii).

ICOMOS considers that this criterion has not been justified for the whole series.

ICOMOS considers that the serial approach is justified.

ICOMOS considers that the nominated property meets criteria (i) and (iii), as well as the conditions of integrity and authenticity.

Description of the attributes

The attributes that convey the Outstanding Universal Value are the environmental setting in the midst of a desert; the large numbers of petroglyphs of exceptional quality attributed to between 6000 and 9000 years of human history, and archaeological features; and the inscriptions that reflect the last 3000 years of the early development of writing (Thamudic) that represents the Bedouin culture, ending in Quranic verses.

4 Factors affecting the property

ICOMOS noted that there are no modern constructions within the boundaries of the nominated property.

However, there is a construction of a dam underway near Jubbah, of which about 3.8 km length has been completed. At the time of the technical mission, the construction was halted as part of a consultation process between the Municipality and the Saudi Commission for Tourism and Antiquities, to determine how to proceed. In

response to ICOMOS’s concerns on the visual impacts of the dam, the State Party committed to framing and masking the dam with typical low desert vegetation (shrubs and scattered tamarisk trees). With regard to another construction work of a tower within the buffer zone of Jabal Umm Sinman around an existing fresh water reservoir, also noted by ICOMOS, the State Party reported that the impact of the water tower will be reduced by repainting the tower with a matching colour and texture.

The identified threats include climate change and rain water flow from the mountain slopes at Jubbah, which occurs occasionally.

ICOMOS notes that there are currently no plans for management of large-scale visitation to the nominated property, something which renders the property ill-prepared for a sudden increase in tourist numbers. For instance, there is no visitor infrastructure, such as marked routes, raised walkways and viewing platforms, that prevent visitors from making direct contact with the rock art panels and thus disturbing archaeological features and deposits.

ICOMOS considers that the main threats to the property are development and tourism.

5 Protection, conservation and management

Boundaries of the nominated property and buffer zone

Jabal Umm Sinman

The area of the component of the nominated property in Jubbah, Jabal Umm Sinman, measures 1783.9ha and is surrounded by a buffer zone of 1951ha. According to the State Party, Jabal Umm Sinman is bordered in the west, north and south by desert sands and in the east by a security fence that borders the town of Jubbah. ICOMOS noted that the security fence referred to borders the buffer zone, not the property as recorded in the nomination dossier, and in the west, north and south, the boundary of the property follows the edge of the rocky mountain outcrop. The importance of the views from the west and especially the one from the south towards Jabal Umm Sinman is considered, in the Management Plan, to be key and also contributing to the visual integrity of the property. Despite this importance, the view is currently not protected. In the State Party’s response to the ICOMOS letter, it was reported that the buffer zone in this particular area will be extended to an extra 50 to 100 metres and that the variance will depend on the general topography. The State Party also reported that an agreement with the Municipality had been reached and the demarcation poles for the buffer zone, as well as a map showing the extended buffer zone, will be provided by 30 April 2015. Currently, the buffer zone boundary is properly materialized on the ground with large white concrete blocks placed about 50 to 100 meters apart, depending on the topography of the terrain.

ICOMOS considers that an extension of 50 to 100 metres to be inadequate for the protection of such significant views to the property. ICOMOS considers that a major extension, between 1.0 to 1.5 km west and south could be achieved with no major effort and costs. The pylons of the mountain outcrop could be used as demarcation poles of the boundary of the buffer zone.

ICOMOS is also concerned that in the western part of the nominated property, where Rock Art clusters 8-14 are situated, there is no fence, and apparently cluster 8 has been badly vandalized with graffiti. This constitutes a clear indication that here the property is inadequately protected as the area is used as a picnic spot. In response to this, the State Party stated that a protection fence will be extended to protect the Rock Art clusters 8-14 as well as 15-24. All this work, together with a map showing the extension of the protection fence, will be provided by 30 April 2015.

Jabal al-Manjor/Raat

Both Jabals al-Manjor and Raat are included within a parallelogram-shaped nominated component of the nominated property which measures 259.9ha and is surrounded by a buffer zone of 1658.5ha. These Jabals are bounded by security fences along the foot of the escarpments enclosing the rock art sites, and by the edges of the plateau above, but including ruins of ancient stone structures. ICOMOS noted that the parallelogram-shaped demarcation only exists on a map and will therefore need to be marked with beacons or demarcation poles on the ground. On-site demarcation currently covers only 30 to 40 percent of the total area. ICOMOS also noted that the State Party is to fence the parallelogram-shaped component of the property within 3 to 4 months after the technical mission.

It was noted during the technical mission that the buffer zone is also demarcated with large white concrete blocks spaced about 30 to 50 meters apart, some with the inscription "SCTA" on them.

ICOMOS considers that the buffer zone for this component of the nominated property is sufficient.

In conclusion, ICOMOS considers that the boundaries of the Jabal al-Manjor/Jabal Raat component of the nominated property and its buffer zone to be adequate, and that the buffer zone of the Jabal Umm Sinman component should be adjusted towards the western part of the nominated property to protect the view.

Ownership

Jabals Umm Sinman, al-Manjor and Raat are government-owned properties and are protected zones under national law.

Protection

Protection of the heritage sites of the Kingdom is through a Royal Decree No. M/26 dated 23/6/1392 H (1972 AD) which was issued over 40 years ago, and also through the

Resolution by the Council of Ministers No. 78 dated 16/3/1429 H (2008 AD).

King Abdullah bin Abdulaziz al-Saud and Prince Saud bin Abdulmushin bin Abdulaziz al-Saud, the Governor of Hail Region, are keenly interested in preserving and highlighting the cultural heritage of the country, and the government provides substantial support for the safeguarding of the Jubbah and Shuwaymis rock art.

The site at Jabal Umm Sinman has been fenced (8 km long) by steel posts and wires. A 6 km-long fence was erected around Jabal al-Manjor and Jabal Raat. ICOMOS notes that there are plans to fence the entire area of Jabal al-Manjor and Jabal Raat, for which a proposal was being considered by the finance department.

The actual legal protection process involves submission of a report, by a site guard or any citizen about any infringement of the law, especially any interference with or defacement of a rock art panel, to the local police.

There is a museum and antiquities office in Hail where the museum staff and its director are responsible for the protection and management of rock art sites and all antiquities in the Hail region.

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

Conservation

Jabal Umm Sinman at Jubbah and Jabal al-Manjor at Shuwaymis are being intensively investigated, and most of the petroglyph and inscription localities are registered and properly documented. A computer record of these sites is available on the websites of the National Museum and Saudi Commission. Also, hard copies of all records of registered sites and petroglyphs are safely stored in the Survey and Excavation Centre, with original digital photographs, maps and charts, etc. available for researchers and students.

There are some joint archaeological projects with foreign institutions who have also trained Saudi archaeologists working on the sites in various aspects of archaeology and rock art. The current Palaeodeserts Project with British archaeologists and palaeo-environmentalists is an example of such a collaboration, in this case between Oxford University and King Fahd University in Riyadh.

In conclusion, ICOMOS considers that conservation of the property is adequate.

Management

Management structures and processes, including traditional management processes

The serial nominated property is managed by the provincial Saudi Commission for Tourism and Antiquities (SCTA) in Hail, which operates under the supervision of the SCTA head office in Riyadh. On-the-ground protection

of the Jubba site complex is provided by staff already operating there, including controlling access to the site. ICOMOS notes that site guards will be installed at Shuwaymis once the road and the interpretation centre have been completed.

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

A Provincial Tourism Plan for the Kingdom of Saudi Arabia was completed in 2002, and was followed with the preparation of a plan specifically for Hail in 2004. There is also a management plan that was submitted together with the nomination dossier, of the site, that considers the long-term development, preservation and protection of the sites, governance arrangements with the local mayor, and administration of Jubba and Shuwaymis villages. Currently, a 40 km-long road is under construction, joining the village of Shuwaymis to the interpretation centre at the entrance to the buffer zone, which will facilitate the transport of visitors.

In a response to ICOMOS's concerns over lack of on-site visitor infrastructure, the State Party reported that work on the infrastructure will commence as soon as the specifications are outlined by the tourism management strategy and the interpretation strategy.

ICOMOS concurs that the visitor-related challenges could be properly addressed through the tourism management strategy and the interpretation strategy, that will address the increase in visitation as part of the management plan, once completed.

Involvement of the local communities

Local Bedouin tribesmen are involved in protecting the rock art and have reported misdemeanours to their sheikh or directly to the police, and people defacing rock art have been prosecuted under existing legislation. The local community plays an important role not only in preserving and protecting the sites but also takes an interest in the development of the area and welcoming visitors.

In conclusion, ICOMOS considers that the management system for the overall serial property is adequate.

6 Monitoring

There has been no previous monitoring or reporting of the detailed conditions of both rock art properties. Since it would be impractical for each of the petroglyphs to be monitored individually, the State Party has committed to doing sampling. The SCTA will be responsible for monitoring, for storing the data, and for designing and implementing conservation measures.

In conclusion, ICOMOS considers that monitoring for the rock art is adequate; however, there is a need to monitor development and tourism impacts, and implement remedial measures where necessary.

7 Conclusions

ICOMOS recognises the Outstanding Universal Value of the Rock Art in the Hail Region serial nominated property, which meets criteria (i) and (iii). The required conditions of integrity and authenticity have been met, although attention should be paid to improving the protection measures that ensure preservation of the attributes that convey the Outstanding Universal Value.

ICOMOS thanks the State Party for taking up the challenge of the heritage conservation of a property of this kind. Nevertheless, ICOMOS notes that some measures should be assured, among them those related to preserving the visual integrity of the property and those related to visitor management. ICOMOS has identified development and tourism impacts as factors that, if not properly addressed, could threaten the Outstanding Universal Value of the property. The State Party has agreed to implement measures to mitigate the visual impact of the dam and of the water tower, which will be completed by 30 April 2015. Regarding visitor management, the State Party has announced some measures that will be completed between June and October 2015.

ICOMOS has also noted that, although the boundaries of the components that make up the serial nomination can be considered adequate, it would be necessary to redefine the boundaries of the proposed buffer zone for Jabal Umm Sinman as explained above, considering the possibility of an extension of 1.0 to 1.5 km towards the west and south.

ICOMOS has proposed to change the name of the property to "Rock Art in the Hail Region", a proposal that has been agreed to by the State Party by letter dated 8 February 2015.

8 Recommendations

Recommendations with respect to inscription

ICOMOS recommends that the nomination of 'Rock Art in the Hail Region (Kingdom of Saudi Arabia)', be **referred back** to the State Party in order to allow it to:

- Extend the buffer zone of the Jabal Umm Sinman component of 1.0 to 1.5 km towards the west and the south, in order to preserve the long-term visual integrity of the property;
- Frame and mask the rain water diversionary dam or water barrier near Jubba with typical low desert vegetation in view of the necessity of the structure and the substantial investment already made in its construction;
- Consider ways of reducing the visual impact of the water tower that is constructed on the eastern side of

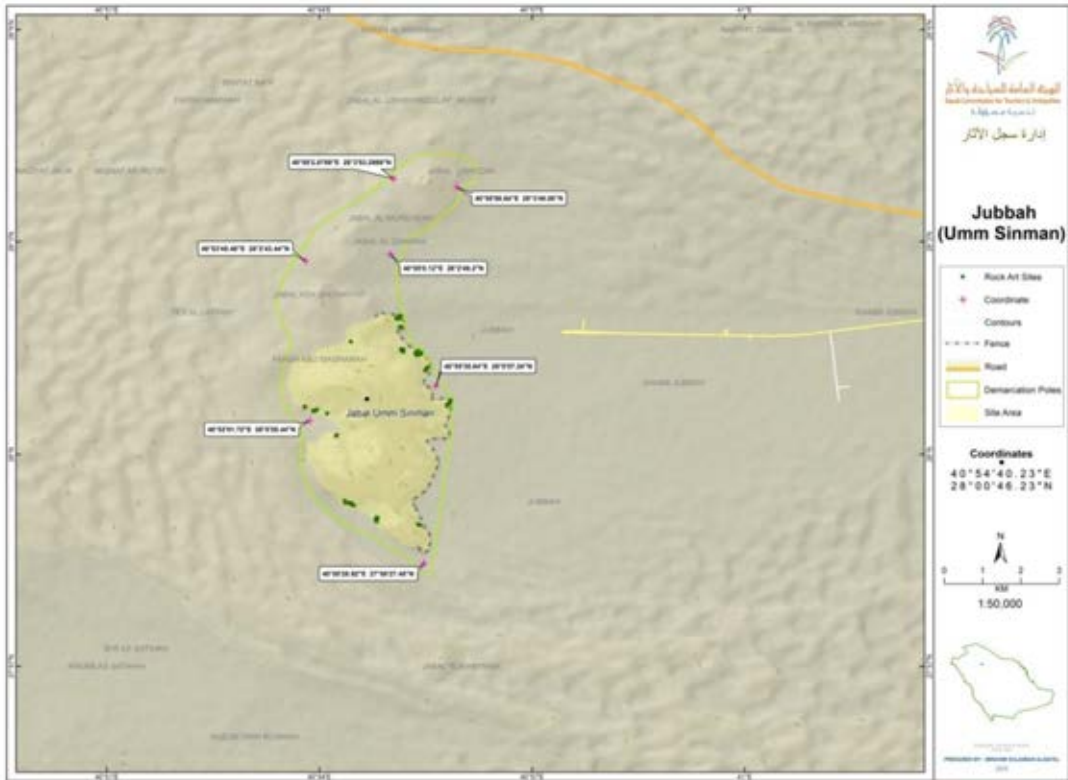
Jabal Umm Sinman, near the existing fresh water reservoir;

- Set up visitor infrastructures that will include marked routes, raised walkways and viewing platforms, that will prevent visitors from making contact with the rock art panels, and carry out this work in accordance with the *ICOMOS Guidance on Heritage Impact Assessments for Cultural World Heritage Properties*;
- Develop a tourism management strategy including an interpretation strategy, that will address the increase in visitation numbers as part of the management plan.

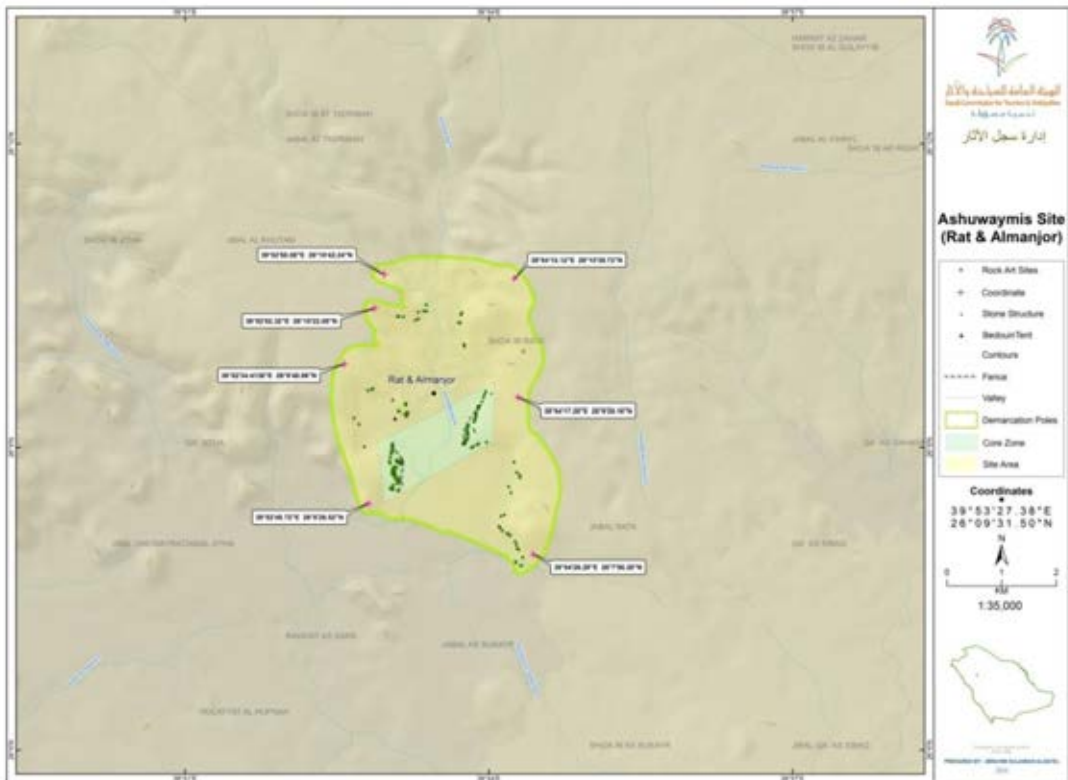
Additional recommendations

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

- Developing monitoring indicators for impacts of development and tourism on the attributes of the nominated serial property.



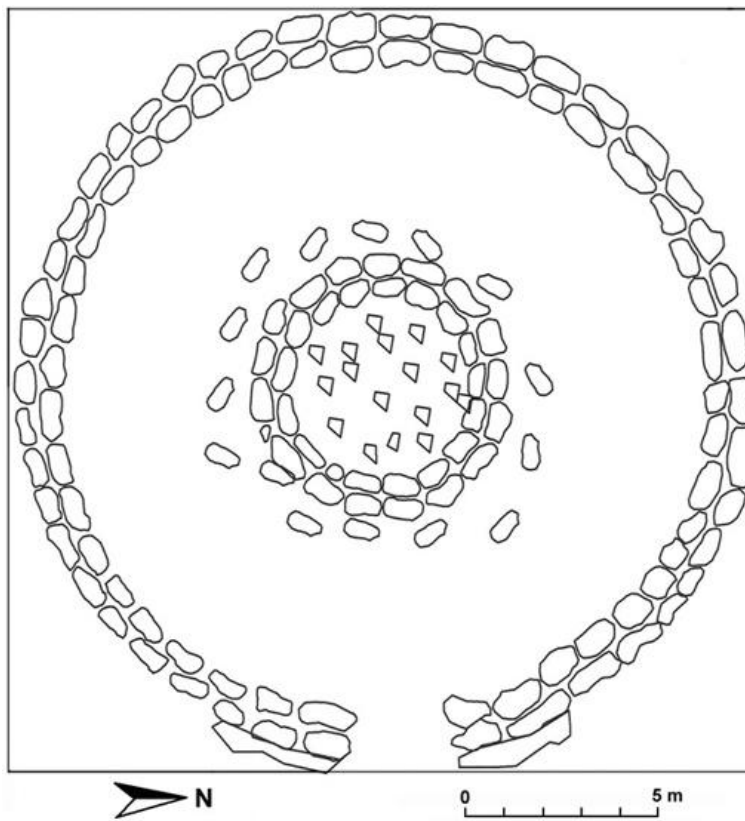
Map showing the boundaries of Jabal Umm Sinman component site



Map showing the boundaries of Jabal al-Manjor and Jabal Raath component site



Major stone structure on the edge of the Jabal al-Manjor plateau



Map showing the stone structure



Neolithic petroglyphs at Jabal Raat



"The Lion of Shuwaymis"

IV Cultural properties

A Africa

New nominations

B Arab States

New nominations

C Asia – Pacific

New nominations

D Europe – North America

New nominations

Extensions

Nominations deferred by previous sessions of the
World Heritage Committee

E Latin America and the Caribbean

New nominations

Tusi Sites (People's Republic of China) No 1474

Official name as proposed by the State Party

Tusi Sites

Location

Hunan Province, Hubei Province and Guizhou Province

Brief description

Distributed around the mountainous areas of south-west China are the remains of tribal domains whose leaders were appointed as rulers of their regions by the central government from the 13th to the early 20th century. This 'Tusi' system of administrative government was aimed at unifying national administration while simultaneously allowing ethnic minorities to retain their customs and way of life. The three sites of Laosicheng, Tangya and the Hailongtun Fortress comprise the serial property representing this system of governance. Their combinations of local ethnic and central Chinese features exhibit an interchange of values and testify to imperial Chinese administrative methods, while retaining their association with the living cultural traditions of the ethnic minority groups.

Category of property

In terms of categories of cultural property set out in Article I of the 1972 World Heritage Convention, this is a serial nomination of three *sites*.

1 Basic data

Included in the Tentative List

29 January 2013

International Assistance from the World Heritage Fund for preparing the Nomination

None

Date received by the World Heritage Centre

27 January 2014

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 site from 10 to 20 September 2014.

Additional information received by ICOMOS

A letter was sent to the State Party on 21 August 2014 requesting clarification on how each component contributes to the proposed Outstanding Universal Value of the property as a whole; a timetable for completion of the Conservation Master Plan for the Tangya component; and information on conservation measures at Hailongtun Fortress, protection within the buffer zone and visitor facilities. A second letter was sent to the State Party following the ICOMOS Panel meeting in December 2014 regarding conservation, management and implementation of the monitoring system and requesting further justification of criterion (vi) for the whole series. Additional information on protection, conservation and visitor facilities together with updated information on ownership and staff numbers was provided to the mission expert and received on 11 October 2014. Additional information in response to the mission including lists of intangible heritage items related to each site, archaeological work plans and Villagers' Agreements was provided on 18 October 2014. Additional information in response to ICOMOS' first letter was received on 27 October 2014. A response to ICOMOS' second letter was received on 21 February, 2015. The information has been incorporated below.

Date of ICOMOS approval of this report

12 March 2015

2 The property

Description

Three sites are nominated from more than 100 sites of Tusi remains as representative of the Tusi system of administrative government in the mountainous region of south-west China from the 13th-20th centuries. These are Laosicheng Tusi Domain, Tangya Tusi Domain and Hailongtun Fortress, which together total 781.28ha. Each is surrounded by a buffer zone.

The administrative system adopted by the Yuan, Ming and Qing Empires appointed tribal leaders in the south-western cultural minority regions as hereditary rulers of their people called 'Tusi'. This allowed the local social structures to be retained, reinforcing the local chieftain's authority while tying the leadership to the central administration covering inheritance, tribute, taxation, education and other rights and obligations. The nominated series is comprised of the sites of official Tusi residences and buildings set up within the minorities' settlements and the remains of the settlements themselves, which continued to retain their traditional layout, local temples and sacrificial places, handcraft areas and local building styles. Their mountainous locations were difficult to access except by river travel.

Laosicheng

This was the seat of the Peng family from the 13th century, who governed Xizhou Prefecture of mainly Tujia people. Representing the highest rank of the Tusi system,

governing a large territory, the residence and administrative area was appropriately large in scale. The property area is 534.24ha and is surrounded by a buffer zone of 1023.93ha. Located on a terraced hillside sloping down to the east bank of a bend in the Lingxi River, the settlement faces south-west across to the Luosiwan Hills. It comprises the walled official residential area and adjoining walled administration area including the extant Peng Ancestral Hall, with the market area lower down, close to the river bank. The local temple is on higher ground along the river to the north-east and the Zijinshan burial ground of the Peng family containing 29 Ming period tombs is along the river to the south, with the Yacaoping burial ground of the Tujia people further south again. The remaining Wenchang Pavilion and the Huangjing Hall of the Patriarch Temple complex represent the characteristics of the Diaojiao Lou as the local Tujia ethnic architectural style. Paving of streets and lanes features decorative geometric patterns similar to Tujia traditional brocade patterns and pebble paving between the tombs in the Zijinshan burial ground is worked with flower patterns typical of the Tujia people. On the other hand, administrative buildings exhibit the central government administrations' five-bay design layout and the extant memorial archway is in the official style of the central government. The Patriarch Temple complex buildings were wooden post and lintel structures as commonly used in Central China.

Tangya

This was the seat of the Qin family from the 14th century, who ruled the south-western region of Shizhou Prefecture, where Tujia people were the major ethnic group. Representing a Tusi rank several grades lower than at Laosicheng, Tangya's administrative centre is of corresponding smaller scale. The property area is 86.62ha and is surrounded by a buffer zone of 973.61ha. This site is located on a natural triangular terrace surrounded on three sides by rivers and backed by hills to the north and west. The settlement is surrounded by the remains of walls with nine gates. Remains of the Zhangwang and Yuhuang temples and six tombs as well as garden remains are located outside the walls on higher ground to the north-west. Another six tombs are located in the forest to the west and south. Building remains within the walls follow a street and drainage system on the terraced hillside sloping down to the Tangya River on the east. The excavated areas of the administration area include the Guanyan Hall and Da Yamen (main government office) while the memorial archway is the only standing element. As at Laosicheng, this is an official-style structure and carries Central Chinese decorative themes but the frieze portraying the Tusi's tour of inspection displays local Tujia motifs. The settlement contains remains of barracks buildings, an execution stand, and at the Zhangwang Temple site stone statues of soldiers and horses on a platform commemorate a famous general. These are protected by a pavilion erected in 1983. There are also remains of 17 wells, quarries and artefacts which testify to a stone carving industry and fragments of ceramics and porcelain.

Hailongtun Fortress

This was the seat of the Yang family from the 13th century, and became a dedicated mountain defensive fortification of Bozhou Prefecture of Sichuan rebuilt in 1595-1600. Like Laosicheng, Hailongtun represents the highest rank of the Tusi system and the administrative area is correspondingly large. Located at the strategic junction of Sichuan, Guizhou and Huguang the site was both a military and administrative centre where Gelao and Miao people were the major ethnic groups. It has a property area of 160.42ha and is surrounded by a buffer zone of 1288.21ha. The stone fortress is spectacularly located on a mountain surrounded by ravines with an extensive walled defensive system including elaborate gateways, watchtowers and barbicans still standing. The stone gateways followed the design of those in central China but the window with perforated diamond pattern in the Feilong gate reflects local decorative patterns. The remains of the walled Xinwanggong official residence and temple, the Laowanggong official residence, administrative buildings, wells quarry and kiln remains, barracks and drilling ground all accessed by stone-paved paths and steps are located on the flat top of the hill. Recovered artefacts include decorated ceramic roof tiles, porcelain and ceramics, some marked with imperial motifs, and inscribed stele. Documentary records mention the copper drums captured by the Ming army which were important in the culture of the Gelao people.

History and development

The Tusi system derived from earlier systems of ethnic minority government by dynasties going back to the 3rd century BCE which were increasingly standardized over time. The title 'Tusi' appeared for the first time in the Ming period. In the 18th century the Tusi were replaced by administrative bodies of Central China under the Gaitu Guiliu policy in many areas and the system ceased with the end of the feudal period in the early 20th century.

Laosicheng retained the system until the administrative seat was relocated to Kesha Domain in 1724 and the site was abandoned. The Patriarch Temple complex was repaired and maintained by government authorities from 1960 and it and the Zijinshan burial ground were designated as Provincial Protected Heritage Sites by the People's Government of Hunan Province in 1983. The whole Laosicheng Tusi Domain was designated as a National Cultural Heritage Site in 2001.

With the enforcement of the Gaitu Guiliu policy the Tangya Tusi presented the domain to the central government in 1735. At that time, the administration moved to Xianfeng and the site was abandoned. In 1978 the domain was registered as immovable cultural heritage by Xianfeng County; in 1992 it was designated a Provincial Protected Cultural Heritage Site by Hubei Province and in 2006 it was designated as a National Cultural Heritage Site.

Following defeat in a battle against the Ming emperor in 1600, Hailongtun was surrendered in 1601. Officials of the Ming dynasty subsequently built the Haichao Temple. The

extant building remains in the centre of the Xinwanggong official residence date from 1929. In 1982 the fortress was designated a Provincial Protected Cultural Heritage Site by Guizhou Province and in 2001 it was designated as a National Cultural Heritage Site.

3 Justification for inscription, integrity and authenticity

Comparative analysis

The sites that comprise the series have been selected from 101 identified sites of Tusi domains in South-west China on the basis of their protected status, and the nature, pattern, scale and value of the remains as the most representative of the Tusi system. A detailed comparative table of these has been provided in the nomination dossier, as well as a comparative evaluation table of those protected at national or provincial levels.

ICOMOS considers that the comparative analyses demonstrate that the selected sites complement each other in terms of the different aspects of the Tusi system. As confirmed by the additional information provided by the State Party, the selected sites share common attributes such as a central administration area on the imperial model surrounded by topographically arranged local habitation, with its cultural and religious features. The selected sites also carry some site-specific elements including that: the size of the administrative areas corresponds to the highest Tusi rank at Laosicheng and Hailongtun and to the lowest but one at Tangya; each site contains different expressions of the relevant local decorative traditions and motifs; burial traditions are attested at Laosicheng and Tangya; mountain fortification and military aspects are demonstrated at Hailongtun and to a lesser extent at Tangya; ethnic communities still reside within the property at Laosicheng and still practise their cultural traditions there.

The property has been compared by the State Party with the World Heritage listed properties of Chief Roi Mata's Domain in Vanuatu (2008, (iii), (v) & (vi)) and Sukur Cultural Landscape in Nigeria (1999, (iii), (v) & (vi)), which are not considered particularly relevant by ICOMOS. It was concluded that these are clearly different in terms of attributes and values. It has also been compared with a number of other administrative centres ruled by minorities of a unified multi-ethnic country including the Inca Empire's Curaca system, which lacks physical remains; the Roman Empire's appointment of local governors at various sites, which do not reflect an inheritance of minority cultural diversity; and, the Russian Empires of the Kievan Rus and Tsarist Russia, the duchies and vassal states of which do not demonstrate an evident central administration but rather exhibit dominant local ethnic features.

ICOMOS notes that Qhapaq Ñan (2014, (ii), (iii), (iv) & (vi)), the transboundary Andean Road System of the Inca empire that includes Bolivia, Argentina, Chile,

Columbia, Ecuador, and Peru illustrates similar accommodations as the Chinese with local and regional tribal and state level societies and incorporated them into their network of roadways, trading settlements, and administrative nodes. The ancient Inca Tambu located along the roadway incorporated an Inca administrative plan with local and regional cultural flavour. ICOMOS also considers that the Gusuku Sites and Related Properties of the Kingdom of Ryukyu in Japan (1999, (ii), (iii) & (iv)) has some commonalities with the Tusi sites. However ICOMOS considers that the physical remains of the three Tusi administrative centres with their mountainous landscape among otherwise dispersed highland villages express a distinctively Chinese administrative and socio-political system for interacting with ethnic minorities and preserving cultural diversity in peripheral zones which cannot be constructively compared with other sites having broadly similar values.

The property has also been compared with others inscribed on the World Heritage List that are associated with cultural minorities in South-west China, including the Old Town of Lijiang (1997, (ii), (iv) & (v)); the Cultural landscape of Honghe Hani Rice Terraces (2013, (iii) & (v)); and on the Tentative List including the Dong Villages; Diaolou Buildings and Villages for Tibetan and Qiang Ethnic Groups; Miao Nationality Villages in South-east Guizhou Province; Ancient Tea Plantations of Jingmai Mountain in Pu'er. The State Party concludes that the physical remains of these properties reflect primarily the production and living conditions of the ethnic groups and do not reflect the administrative strategy of the Tusi system.

ICOMOS considers that the nominated sites differ from the others in China in that they contain extensive remains of the central administrative buildings and official residences. In terms of the proposed justification of Outstanding Universal Value, it is the ability to demonstrate the centralised system of governance that is important. Thus ICOMOS considers that the comparative analysis justifies the selection of these sites.

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:

- It is a representative series of sites representing the exchange of human values between national identity as expressed by the central government, and local ethnic cultural minorities;
- The sites represent Chinese administrative strategy from the 13th to 20th century;

- The sites are associated with typical living customs and cultural traditions of the ethnic groups of Southwest China.

The serial approach enables a representative selection of attributes of potential Outstanding Universal Value to demonstrate a fusion of regional ethnic traditions with Central Chinese forms and patterns within the rugged mountainous landscape of southwest China.

ICOMOS considers that this justification is appropriate because the physical remains of the three sites combine to demonstrate the Chinese Imperial government's system of management of minorities over several centuries through the formal, symmetrical layout and imperial architectural style of the Tusi's domain and administrative buildings, while at the same time retaining the character of the dispersed village life ways of the Tujia and Miao peoples as exemplified in the adaptation of the ethnic settlements to the topography of the area, and the locations and architectural features of temples. The incorporation of local ethnic decorative patterns and motifs into the paving of streets and roads at Laosicheng, in the Tusi's frieze on the memorial gateway at Tangya and in the fortified Feilong gateway at Hailongtun are specific examples of the influence of the local minorities on decorative treatment. The Tusi system of government is well documented in historical records and genealogies as well as in the poems, legends and customs of the extant Tujia, Gelao and Miao Ethnic Peoples. The traditional cultures and cultural practices of these ethnic minorities are still present in the region of the Tusi sites and form a backdrop of traditional culture. Tujia dances and ceremonies are still performed at Laosicheng.

Integrity and authenticity

Integrity

According to the State Party, the three sites were selected to bring together a series of attributes to illustrate criteria (ii), (iii) and (vi). The State Party considers that each site is needed in order to include all elements necessary to express the proposed Outstanding Universal Value.

ICOMOS notes that at both Laosicheng and Tangya later layers of habitation and agriculture have occurred over the Tusi period remains; a modern concrete stairway leads to the Patriarch Temple at Laosicheng; and at Tangya the modern road runs over historic street pavements. Power transmission/communications towers have a visual impact on all three sites. At both Laosicheng and Tangya the tombs have been raided in the historic past, removing original relics. Structures at Hailongtun are overgrown with vegetation in many places, making it difficult to discern different periods of construction and allowing walls to decay. At all three sites pre-Tusi and post-Tusi remains could be more clearly identified.

ICOMOS considers that the integrity of Laosicheng is high, although the Left Street group (Laosicheng Village) within the property overlays the Tusi period habitation, and it is not clear to what extent this impacts on the below ground remains. At Tangya the limited extant remains and relatively early stages of archaeological excavation (compared with the other two sites), together with the present state of the remains and the coverage of almost all the Tusi period courtyard housing by later layers of fields and dwellings, as well as later additions/alterations like the street paving, compromise the integrity as compared with Laosicheng and Hailongtun. However some elements of Tangya, particularly the intact Memorial Archway and the remains of the excavated remains of the administration area, have good integrity and are key to the justification of criteria (ii) and (iii). Hailongtun has the most extensive extant remains but they are in a poor state of conservation.

ICOMOS considers that the nominated serial property contains elements of good integrity necessary to demonstrate the proposed values; and that the integrity of Laosicheng and Hailongtun is demonstrated (particularly for Laosicheng), but is less well demonstrated for the Tangya component.

Authenticity

ICOMOS considers that overall the authenticity of material remains at the three nominated sites in terms of function, form and layout, materials and style of construction, location and setting is retained, although vulnerable due to the variable state of conservation of some of the elements of the property. ICOMOS considers that authenticity of spirit and traditions is high in Laosicheng due to the presence of Tujia ethnic minority groups in the property area.

ICOMOS considers that the authenticity of the whole series and that of the individual sites that comprise the series, has been demonstrated.

In conclusion, ICOMOS considers that the conditions of integrity are less well demonstrated for the Tangya component, but are demonstrated for the series overall, given that the key elements of Tangya have good integrity. Conditions of authenticity of the whole series and for the individual components have been justified, although vulnerable due to the variable state of conservation of some of the elements.

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 Tusi sites clearly exhibit the interchange of human values between local ethnic cultures of Southwest China, and national identity expressed through the structures of the central government.

ICOMOS considers that the sites convey a sense of their use and function in these remote settings far from the core of dynastic administration, reflecting the interchange between the cultures represented by the central government and the tribal villages.

ICOMOS considers that this criterion has 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 the sites bear a unique testimony to the cultural traditions of central China in administering the culturally diverse regions of Southwest China through the Tusi system of governance that allowed retention of local cultural traditions while incorporating them into national administration systems.

ICOMOS considers that the sites are evidence of the Tusi system of governance in the South-western region of China and thus bear exceptional testimony to this form of governance, which derived from earlier systems of ethnic minority administration in China, and to the Chinese civilisation in the Yuan and Ming periods.

ICOMOS considers that this criterion has been demonstrated.

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 sites are directly associated with the typical living customs and cultural traditions that are still alive amongst the ethnic groups in Southwest China, due to the Tusi system.

ICOMOS notes that the Tujia and Miao peoples retain their traditional culture and social and economic integrity within the former Tusi regions, although apparently only the Tujia at Laosicheng still use the site for performances and ceremonies. The continuity of these cultures is attributed in part to the policies of the former Tusi system. ICOMOS also notes the lists of performances, crafts and ceremonies associated with each site in the additional information provided by the State Party in response to the mission. The links can be discerned today at Laosicheng as documented in the report provided to the mission "Laosicheng and Surrounding Villages Investigation and Survey Report" commissioned by the Western Hunan Autonomous

Prefecture Cultural Heritage Administration and Yongshun County Cultural Heritage Administration (2013).

In response to ICOMOS' query regarding the direct association of all nominated component properties with events or living traditions, the State Party has provided additional information on the rituals associated with "chief worship" at Laosicheng and Tangya, but notes that due to the nature and history of Hailongtun as a fortress, rituals were not continued at the site, although they do continue in the surrounding area.

ICOMOS considers that this criterion has been demonstrated at Laosicheng and Tangya.

ICOMOS considers that the serial approach is justified and ICOMOS considers that the selection of sites is appropriate.

In conclusion, ICOMOS considers that criteria (ii) and (iii) have been justified for the series but criterion (vi) has not been demonstrated for the whole series. Conditions of authenticity and integrity have been met for the whole series, but conditions of integrity are less well met at Tangya.

Description of the attributes

ICOMOS considers that the attributes of Outstanding Universal Value are the archaeological sites and standing remains of Laosicheng Tusi Domain and Hailongtun Fortress, being domains of highest ranking Tusi that display values of the Tusi system and philosophy of governance; the Memorial Archway and remains of the Administration Area, boundary walls, drainage ditches and tombs at Tangya Tusi Domain, representing the domain of a lower ranked Tusi together with the cultural traditions and practices of the Tujia communities of Laosicheng.

4 Factors affecting the property

Being located in remote mountain areas and containing only a small number of inhabitants, the nominated component properties are not considered to be under development pressure from large scale urban development. Environmental pressure is considered negligible. Natural disasters such as earthquakes and landslides are considered rare; major risks are from storms, flash floods and forest fire. Most parts of the property are not open to visitors and visitor pressure is currently negligible, although this could become a significant pressure following World Heritage listing if visitor levels and the development of tourism infrastructure were to increase. ICOMOS notes that in all three property components there are sections of masonry walls shrouded with thick vegetation; in some cases trees have taken root in the masonry.

Laosicheng

There are 6 villages with 502 inhabitants within the property and 333 inhabitants in the buffer zone. The Conservation Management Plan (CMP) controls construction of dwelling houses, village development and visitor facilities. Flood control measures and contingency plans are in place to mitigate flood disaster. Fire prevention and contingency plans are in place. A visitor carrying capacity study has been undertaken. ICOMOS notes that some village houses within the property date from the Qing dynasty (late 19th century) and in some cases are located over areas of archaeological potential. Laosicheng Village, built over Tusi period remains in the centre of the property is recognised at the provincial level as a Historic Village. Cultivation over the remains of the market area is being addressed by control of plant species to types with limited root depth and no extension of the current area is permitted. The issues of building/cultivation over areas of archaeological potential are addressed in the CMP. The telecommunications tower opposite the Zijinshan Temple impacts visually on the property. At present artefacts from the site are displayed in a museum 45 minutes drive away in Yongshun but they will be exhibited in the new visitor centre currently being constructed across the river from the main site but still within the property boundary.

Tangya Tusi Domain

There are 305 inhabitants within the property and 9,853 in the buffer zone. Planning policies are in place to control development of Jianshan Town (north) and the three villages within the buffer zone, as well as agricultural production and activities including environment pollution controls. The property has good drainage and is not considered to be subject to flood. Contingency plans are in place. A visitor carrying capacity study is being undertaken and a presentation strategy is being developed. ICOMOS notes that the terraced plantations within the property are built over areas of archaeological potential and in some cases over building foundations. The site management office and visitor facilities including a small site museum are provided in traditional buildings within the property, some of which have been built over the remains of earlier courtyard houses. The additional information provided by the State Party indicates a new visitor centre and exhibition building are planned within the buffer zone. Modern residential buildings and transmission towers in the buffer zone impact visually on the property.

Hailongtun Tusi Fortress

The property component is remote, accommodates 143 inhabitants and is not under development pressure. However there are three villages containing an agricultural population of approximately 1394 in the buffer zone. Houses date from the 1950s. Restrictions on location, scale and appearance of new dwelling development and controls on use of agricultural land are in place. Storms and floods are the main hazards. Warning systems have been installed, rock faces consolidated and counter-disaster contingency plans are in place. A visitor carrying capacity study has been undertaken and new visitor facilities and a site management office have been

constructed in the buffer zone. ICOMOS notes that vacated timber houses have been re-used to accommodate tourist facilities, a museum on ethnic culture and archaeological work station as well as accommodation for researchers. High tension power transmission lines have a visual impact on the site.

ICOMOS considers that the main threats to the property are erosion impacts of heavy rainfall. Tourism could also be a factor if visitor levels and the development of tourism infrastructure were to increase following World Heritage listing.

5 Protection, conservation and management

Boundaries of the nominated property and buffer zone

Property component boundaries follow natural topographical lines including hills, rivers and streams and are physically marked on the ground. In response to ICOMOS' request, revised maps have been provided by the State Party showing the names of the individual peaks/ hills marking the ridgeline. Buffer zone boundaries pick up the peaks of surrounding hills/ mountains in order to enclose the contiguous landscapes of each component and follow natural topographical lines such as hills, rivers and streams where appropriate, and are marked on the ground. The south-west boundary of Tangya Tusi Domain's buffer zone coincides with Zhaojiahe Tourism Road. Property and buffer zone boundaries of Tangya Tusi Domain and Hailongtun Fortress coincide with the protection boundaries defined for the sites as State protected Cultural Heritage Sites. Laosicheng's boundaries coincide with protection boundaries defined in the Conservation Plan for Laosicheng Site, Yongshun County, Hunan Province.

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

Ownership

According to new information provided to the mission expert, the nominated property components Tangya Tusi Domain and Hailongtun Fortress are now completely owned by the State. At Laosicheng Tusi Domain, around 12% is owned by the State, the remainder is in Collective ownership.

Protection

The nominated property components are designated as State Priority Protected Cultural Heritage Sites under the Law on the Protection for Cultural Relics 1982, amended 2007. They are also protected under relevant provincial legislation. Laosicheng and Tangya Tusi sites are within designated National/Provincial Scenic Areas and protected by the Regulations on Scenic Areas 2006. On inclusion in China's Tentative List in 2006 they became subject to additional administrative protective measures relating to China's World Heritage Sites. The buffer zones

are protected in accordance with regulations relating to the Protected Area and Construction Control Zone of State Priority Protected Cultural Heritage Sites.

ICOMOS considers that the legal protection is adequate. ICOMOS considers that the protective measures for the property are adequate.

Conservation

Inventories prepared for the purpose of assessing and monitoring the state of conservation of the three properties have been provided in the Conservation and Management Plans attached to the nomination dossier as Annex II. Records of research, surveys and archaeological investigations are listed in the nomination dossier. ICOMOS notes that archive centres have been established at all three sites which contain a digitised catalogue of published archaeological reports and inventories of artefacts discovered during excavations. Original manuscripts of County Annals or family genealogies are kept at the county archives. Digital photo archives are kept at the respective Institutes of archaeology working at the three properties.

According to the State Party the sites are well-maintained and conserved. Conservation Master Plans have been approved by the State Administration of Cultural Heritage (SACH) for Laosicheng and Hailongtun and one has been submitted to SACH for Tangya. ICOMOS notes that while many elements of the sites are in good or moderate condition, there are also some elements at each site in poor condition including the Dezheng Stele platform at Laosicheng; wall section remains, the Memorial Archway and Tomb M9 at Tangya; and several passes/gates at Hailongtun. Proposed interventions at the sites include some practices such as the use of cement mortar which need to be technically evaluated. Active conservation works at Laosicheng include stabilisation of the Dezheng Stele platform with a temporary buttress; backfilling and covering of archaeological areas; cleaning and grouting of walls and timber and roof repairs to the Patriarch Temple. At Tangya the Memorial Arch is being monitored following insertion of a metal tie to prevent movement, and buttresses have been provided to prevent collapse of the terrace boundary walls of the Administrative Area. At Hailongtun metal scaffolding has been inserted at the Erdao Pass to prevent collapse and repair work is scheduled to start later this year. Archaeological investigation is continuing at each site.

In response to ICOMOS' second letter regarding the need for conservation work plans detailing methods and materials for each component property, the State Party has provided satisfactory additional information.

ICOMOS considers that the state of conservation is variable and potentially vulnerable, but considers that appropriate measures are now being taken to conserve the value of the property.

Management

Management structures and processes, including traditional management processes

Management of the three sites is co-ordinated at the provincial level under the State Administration of Cultural Heritage (SACH) by a steering group created by the Joint Agreement Concerning Protection and Management of Tusi Sites. This comprises representatives of Hunan, Hubei and Guizhou Provinces in which the component properties are located. Management offices at each of the sites relate through their relevant county administration and People's Government and Autonomous Prefectures to the People's Government of their relevant provincial administrations. The Steering Group is led by the Cultural Heritage Bureau of Hunan Province to establish common standards for management of the sites including joint research projects, meetings and training courses for staff. Staff numbers given below are the updated figures provided to the mission.

Laosicheng site management office has access to county departments including Cultural Relics, Water Resources, Meteorology, Land and Resources, Tourism, and Forestry personnel for monitoring and other assistance and employs 28 staff responsible for exhibitions, archives, cultural relics protection and maintenance together with 2 invited experts for professional guidance on archaeology and conservation. In addition 160 villagers are employed to participate in site works including road, visitor and river cleaners; security staff, antiquities guards, forest protectors, 75 in the cultural and art group and 35 boatmen.

Tangya site management office has access to county department personnel as required for monitoring and other assistance and employs 11 staff responsible for conservation, exhibitions and presentation, monitoring, and security. In addition 19 local residents are employed as guides, security guards, and cleaners.

The site management office for Hailongtun Fortress has access to county and provincial department staff as required for monitoring and other assistance and has 20 staff in 5 sections: protection and management (4); exhibitions (4); monitoring (3), museum (4) and administration (5). In addition 148 local villagers are employed as interpreters, routine inspectors, and cleaners.

According to the Comprehensive Management Assessments in the Conservation and Management Plans for the three properties, staff training and professional capacity could be improved.

ICOMOS considers that given the large scale of the three sites, regular monitoring and maintenance would appear to be challenging. Monitoring relies heavily on cameras installed across the three sites.

Funds are provided through annual appropriations of national and local governments to the Conservation and Management Fund of the Tusi Sites. This is considered to meet basic requirements for heritage management and protection. ICOMOS notes that the funds are spread across many areas including requisition of land, relocation of residents as part of tourism proposals, surveying, and archaeological excavations and it is not clear how much is available for the implementation of conservation works. ICOMOS considers that the relocation of inhabitants is not necessary to sustain the conservation of the property.

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

Master Plans, Land Use Plans and Tourism Plans exist for the cities/counties in which the nominated properties are located and relate to protection and management of the sites with a focus on potential tourism. ICOMOS notes that the Mengdong River National Scenic Area Tourism Plan for Laosicheng aims to project Tujia culture and the Tusi system and proposes relocation of the remaining residents out of the property area, at the same time proposing a new tourism village. At Tangya, the Tourism Master Plan for Xianfeng County proposes a "Tangya Tusi Domain Folk Cultural Tourism Zone" connected to Jianshan town by a bridge and rebuilding the two gardens located within the property area. ICOMOS considers that these tourism plans need to be considered by the overall Steering Group in terms of the conservation and management measures needed to retain Outstanding Universal Value. Additional information provided by the State Party in response to ICOMOS' second letter sets out the process for tourism development at the component properties but did not specifically address how this would retain Outstanding Universal Value.

Conservation and Management Plans have been prepared for each of the sites for the period 2013-2030 using essentially the same model for each in terms of content structure. They include visitor management and presentation and monitoring of factors relating to natural disasters.

Currently only Hailongtun is open to the general public. It has a visitors' route guided by signs and maps. Laosicheng is open to small groups for special purposes. Tangya Tusi Site is not yet open to the public. At all sites it is proposed that visitors will arrive at the visitor centres from where they will be taken to the site by golf carts. They will then follow marked visitor routes with timber viewing platforms provided over fragile remains. Detailed plans showing tourism arrangements at each property component have been included in the additional information provided by the State Party. ICOMOS notes that Hailongtun, having very steep access, could be considered dangerous in wet weather. There is also a risk to the remains of tourists climbing over partially collapsed and structurally unstable passes or boundary walls at Hailongtun and at Tangya for the lower boundary wall remains and tombs in the forested area.

The State Party has provided a statement regarding measures to be taken to deal with this issue.

Involvement of the local communities

The Management Plans for the properties require involvement of local communities and a considerable number are employed by the local site management offices in maintaining the sites

ICOMOS considers that management of the sites has not yet reached the level projected in the CMPs. However it appears to be reasonably effective at present given that Laosicheng and Tangya are yet to be opened to the public.

ICOMOS considers that the management system for the serial property is adequate; however, the management system and plans should be strengthened to ensure overall control of tourism projects to ensure retention of Outstanding Universal Value.

6 Monitoring

Monitoring systems are set out in the Management Plans in accordance with the joint provincial agreement. These cover indicators, periodicity and responsible agency. ICOMOS notes that a monitoring system using security cameras is in place at all sites which is providing high quality baseline data on both the archaeological and standing remains, although the presence of extensive vegetation cover on some standing structures must inhibit this. According to the Comprehensive Management Assessments in the Conservation and Management Plans, the system is not yet fully implemented. In response to ICOMOS' query, the State Party provided further detailed information on the monitoring system and how it will be implemented.

ICOMOS considers that the monitoring system will be adequate when it is fully implemented.

7 Conclusions

ICOMOS considers that the comparative analysis justifies consideration of this serial property for the World Heritage List. ICOMOS considers that criteria (ii) & (iii) have been justified for the series but criterion (vi) has not been justified for the whole series. Conditions of integrity have been met for Laosicheng Tusi Domain and Hailongtun Fortress and for key elements of Tangya Tusi Domain. Conditions of authenticity have been met for the whole series. ICOMOS considers that the whole series is required in order to fully express the Tusi system.

ICOMOS considers that the main threats to the property are erosion impacts of heavy rainfall. The boundaries of the nominated property and of its buffer zone are adequate. ICOMOS considers that the legal protection is

adequate and protective measures for the property are adequate. ICOMOS considers that the state of conservation is variable and potentially vulnerable, but that measures now being taken are appropriate. Management appears to be reasonably effective at present given that Laosicheng and Tangya are yet to be opened to the public but has not yet reached the level projected in the Conservation and Management Plans. The property could be very vulnerable to visitor pressure and development associated with tourism infrastructure following World Heritage listing. The monitoring system will be adequate when it is fully implemented.

8 Recommendations

Recommendations with respect to inscription

ICOMOS recommends that Tusi Sites, People's Republic of China, be inscribed on the World Heritage List on the basis of **criteria (ii) and (iii)**.

Recommended Statement of Outstanding Universal Value

Brief synthesis

Distributed around the mountainous areas of south-west China are the remains of tribal domains whose leaders were appointed by the central government as 'Tusi', hereditary rulers of their regions from the 13th to the early 20th century. This system of administrative government was aimed at unifying national administration while simultaneously allowing ethnic minorities to retain their customs and way of life. The three sites of Laosicheng, Tangya and the Hailongtun Fortress combine as a serial property to represent this system of governance. The archaeological sites and standing remains of Laosicheng Tusi Domain and Hailongtun Fortress represent domains of highest ranking Tusi; the Memorial Archway and remains of the Administration Area, boundary walls, drainage ditches and tombs at Tangya Tusi Domain represent the domain of a lower ranked Tusi. Their combinations of local ethnic and central Chinese features exhibit an interchange of values and testify to imperial Chinese administrative methods, while retaining their association with the living cultural traditions of the ethnic minority groups represented by the cultural traditions and practices of the Tujia communities at Laosicheng.

Criterion (ii): Tusi sites of Laosicheng, Tangya and the Hailongtun Fortress clearly exhibit the interchange of human values between local ethnic cultures of Southwest China, and national identity expressed through the structures of the central government.

Criterion (iii): The sites of Laosicheng, Tangya and the Hailongtun Fortress are evidence of the Tusi system of governance in the South-western region of China and thus bear exceptional testimony to this form of governance which derived from earlier systems of ethnic minority administration in China, and to the Chinese civilisation in the Yuan and Ming periods.

Integrity

The property contains all elements necessary to express its Outstanding Universal Value and is of adequate size to ensure the complete representation of the features and processes which convey the property's significance. Later layers of occupation overlay parts of the Tusi period remains at Laosicheng and Hailongtun but there is sufficient evidence to demonstrate Outstanding Universal Value. Parts of the property at Hailongtun and Tangya are vulnerable to vegetation growth. The property is vulnerable to erosion impacts of heavy rainfall, and could become vulnerable to pressure due to visitor numbers and the development of tourism infrastructure.

Authenticity

The authenticity of material remains at the three nominated sites in terms of function, form and layout, materials and style of construction, location and setting is retained. ICOMOS considers that authenticity of spirit and traditions is high in Laosicheng due to the presence of Tujia ethnic minority groups in the property area.

Management and protection requirements

The property components are designated as State Priority Protected Cultural Heritage Sites under the Law on the Protection for Cultural Relics 1982, amended 2007. They are also protected under relevant provincial legislation. Laosicheng and Tangya Tusi sites are within designated National/Provincial Scenic Areas and protected by the Regulations on Scenic Areas 2006. The buffer zones are protected in accordance with regulations relating to the Protected Area and Construction Control Zone of State Priority Protected Cultural Heritage Sites.

Management of the three sites is co-ordinated at the provincial level under the State Administration of Cultural Heritage (SACH) by a steering group created by the Joint Agreement Concerning Protection and Management of Tusi Sites. This comprises representatives of Hunan, Hubei and Guizhou Provinces in which the component properties are located. Management offices at each of the sites relate through their relevant county administration and People's Government and Autonomous Prefectures to the People's Government of their relevant provincial administrations. The Steering Group is led by the Cultural Heritage Bureau of Hunan Province to establish common standards for management of the sites including joint research projects, meetings and training courses for staff.

Conservation and Management Plans have been prepared for each of the sites for the period 2013-2030 including visitor management and presentation and monitoring of factors relating to natural disasters. The management system and plans will be strengthened to ensure overall control of tourism projects directed at retention of Outstanding Universal Value.

Additional recommendations

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

- Strengthening the management system and plans so as to ensure overall control of tourism projects directed at retention of Outstanding Universal Value;
- Fully implementing the monitoring system.



Map showing the location of the nominated properties



The Site of Tangya Tusi Domain



The Domain and Lingxi River



Chaotian Pass



Exterior of Tomb M1



Aerial View of Xinwanggong Remains



Excavated Tomb of Zijinshan Burial Ground

Susa (Islamic Republic of Iran) No 1455

Official name as proposed by the State Party

Susa

Location

Khuzestan Province, Susa County
Islamic Republic of Iran

Brief description

Located in the lower Zagros Mountains, in the Susiana plains between the Karkheh and Dez Rivers, Susa comprises a group of artificial archaeological mounds rising on the eastern side of the Shavur River encompassing large excavated areas where has been brought to light abundant evidence, of scientific importance and artistic interest, of its thriving existence over several millennia, between the late 5th millennium BCE and the 13th century CE. The architectural and urban monuments revealed by the excavations and still in-situ include administrative, religious, residential and palatial structures as well as production and cemetery areas.

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

9 August 2007

International Assistance from the World Heritage Fund for preparing the Nomination

None

Date received by the World Heritage Centre

1 February 2013

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 4 to 7 November 2014.

Additional information received by ICOMOS

On 22 December 2014 ICOMOS sent a letter to the State Party requesting additional information concerning the following:

- expand the arguments to justify the criteria;
- clarify the rationale of the delimitation of the boundaries of the nominated area and buffer zone, in relation to research results;
- provide updated information on legal protective measures and additional cartography;
- provide an implementation calendar for the finalisation of the archaeological map for the landscape and buffer zones; the development of a risk strategy, the envisaged enhancement programmes; and guidelines for constructions;
- strengthen the engagement for inter-institutional cooperation by formalising the commitment of all relevant parties involved.

The State Party responded on 26 February 2015 providing the requested additional information, which has been incorporated into the relevant sections of this report.

Date of ICOMOS approval of this report

12 March 2015

2 The property

Description

Susa is located in south-western Iran, in the lower Zagros Mountains in the Susiana Plain, formed by the pediment erosion and fluvial accumulation of the Karkheh and Dez Rivers which flow through the plain, and which made the lowlands of Khuzestan highly fertile, facilitating the development of agriculture.

The nominated serial property comprises two components: the Susa archaeological complex and the area of Ardeshir's Palace. Urban development which has occurred along the banks of the Shavur River in the last decades has guided the choice to propose two distinct components encompassed by one buffer zone.

Overall the nominated serial property includes c350ha and is surrounded by a buffer zone encompassing four archaeological mounds, adjacent grounds and parts of the city developed immediately north of the archaeological site and along the eastern bank of the Shavur River, totalling 600ha. Altogether the nominated property with its buffer zone covers 950ha.

Component 1 - Susa archaeological site

The archaeological site comprises four distinct mounds, which archaeologists have named *Acropolis* ('high city'), the highest and oldest area of occupation, *Apadana* where Darius' palace was erected, *Shahr-e Shahi* (Royal City) and a fourth mound, the lowest and widest one, *Shahr-e Sanátgaran* (*Ville des Artisans* or City of Craftsmen), which is in fact formed of high and low land.

Excavations began at Susa at the end of the 19th century and have continued intermittently since then, revealing several layers of human settlement covering a span of time longer than 6000 years (5th millennium BCE - 13th century CE).

A rough description of the city plan in the Elamite period can be built on the basis of complementary sources, including archaeological excavations, Elamite inscriptions and certain Mesopotamian texts (namely the description of Assurbanipal's sack of Susa). The three millennia of occupation preceding the Achaemenids have yielded abundant finds and left built evidence in the Acropolis, the Apadana and the Royal City mounds.

The *Acropolis* contains the most ancient evidence of settlement and was probably the core of Proto-Elamite Susa. The most significant finding in this area has been a massive brick terrace which has suggested that a system of accumulation and redistribution of resources supported by considerable management capabilities was in place as early as the 5th - 4th millennium BCE.

During the Elamite phase (2400 – 539 BCE) this area included a sacred sector called *kizzum* where temples dedicated to Inshushinak and Ninkhursak, presumably in the form of ziggurats, were located and where tablets and seals were found. It is in this area that, in 1902, the Code of Hammurabi (18th century BCE) was discovered. Another important piece yielded by excavations in the Acropolis is the bronze statue of Napir-Asu (13th century BCE).

During the early French excavations on the Acropolis, a castle, known as Susa Castle, was built to serve as the base for the archaeological missions and to conserve finds yielded during the excavations.

The area of the Elamite Royal Palace is presumed to coincide with that of *Apadana*, where the remains of Darius' Palace were discovered and which Darius reshaped completely to build his vast residence by creating a large terraced platform and levelling previous structures. The palace itself comprised several buildings clustered along an east-west axis. Excavations revealed the layout of a large part of this complex and of several open spaces: the Audience Hall, the great enamelled court and related halls, the Treasury court, the forty-columned court, and the northern buildings. Here a large statue of Darius was found in 1972.

According to a contemporary inscription, the construction of the palace was a major undertaking, with construction materials and workforce coming from as far away as Egypt, Bactria, Lebanon and Ethiopia. Apadana Palace is said to have served as the prototype for palaces in Persepolis.

To the east of the Acropolis and of the Apadana, lies another mound, known as *Shahr-e Panzdahom* or Fifteenth City, which excavations proved to have been settled from the early Elamite until the Islamic period. To

the Elamite phase belongs a luxurious residential area, the *Shahr-e Shahi*, where are attested the existence of fireplaces for heating and cooking and sanitary installations (the earliest buildings hail from as early as 1700 BCE).

The area named *Shahr-e Sanátgaran* lies further east of the previous three and revealed sequences of occupation from late Elamite to the Islamic period. It comprises workers' quarters with housing for shopkeepers, artisans and workers, mainly from the Achaemenid period.

In the same area, important remains from the Islamic period of Susa, namely the sugar cane factory (12th century CE) and the Grand Mosque (presumed to be 7th century CE) were also discovered. The mosque is said to be one of the earliest built in Iran.

Study of aerial photographs has revealed the structure of the early Islamic city.

Component 2 - Ardeshir's Palace

On the western bank of the Shavur River, which flows in a north-south direction west of Susa's Acropolis and Apadana, another palace was discovered and excavated since the 1960s. It has been found to have many similarities with Darius' palace in Apadana but is smaller in size: it had a large hall (37.5x34.6m) and subsidiary facilities; here, columns were in wood with stone bases. On the hall walls early evidence of figurative paintings with a wide colour palette (red, carmine, blue and white) were found. It is thought that the palace was constructed by Artaxerxes II in the 4th century BCE.

History and development

Wealth in natural resources and the strategic location along the overland trade routes between Mesopotamia and the Indus Valley contributed to the prosperity of the populations of the Iranian Plateau during the Neolithic and the Bronze Ages.

According to archaeological findings, the Khuzestan region passed from the prehistoric into the proto-historic period in the mid-4th millennium BCE, and when Susa gained in importance, the region already bore traces of human settlement, as the sites of Jafarabad, Jowi, Band-e bal, Eyvan-e Karkkeh, Chogha Mish or Chogha Zanbil demonstrate. Stamp seals found in the excavations are indicative of ranking within society and of ritual activities possibly aimed at increasing socio-political ties and organisation between Susa and the surrounding sites.

Finds belonging to the Uruk culture suggest that the centre passed through a different phase of cultural/political influences, the nature and duration of which are still debated. Nevertheless, the area of occupation at Susa expanded throughout the Uruk phase.

Evidence has been found that, at the end of the 4th millennium BCE, settlements throughout Iran were part

of a common cultural network, known as the “Proto-Elamite horizon.” In Susa a wealth of stamp seals and small clay tablets, dated to the end of the 4th millennium, with texts in Proto-Elamite script, have been found. Similar material was dug out in several centres to the east and north of Susa, where commerce among trade centres and settlements was well established by 3100 B.C, suggesting Susa’s prominent role in the Iranian Plateau.

Excavations and findings in the form of clay tablets attest to the cyclical advance/regression of Mesopotamian and Elamite influence over Susa and its territory until the end of the 20th century BCE, when Susa fell under Elamite control and remained so until the Achaemenids took over in the 6th century BCE. It is assumed that ecological disasters and political unrest contributed to the decline of Elamite Susa.

Under the Achaemenids, and particularly from Darius’ reign, Susa was one of the elected residences of the Kings. It was probably for symbolic reasons, that Darius built his palace at Susa, which was later reconstructed by Artaxerxes II. The trade routes developed in the previous millennia got a significant boost due to the construction of a royal road connecting the Aegean Sea with Susa through Anatolia and Mesopotamia to continue into the Iranian Plateau as far as Persepolis.

After the fall of the Achaemenids, Susa underwent a Hellenization process and, with the division of Alexander the Great’s empire, it fell under Seleucid and then Parthian spheres of influence. It is assumed Susa became a colony of retired soldiers who settled there and were given land plots to be cultivated. During Parthian rule improvements to the irrigation system contributed to increasing the fertility of the surrounding area.

In the early 3rd century CE, the Sassanids rose at the expense of the Parthians and Susa came under their control, when it became an important centre for trade and sugar cane production, which continued also under the Arabs who conquered Susa in the mid 7th century CE until the 14th century, when the Mongol invasion marked the definitive decline of the city.

The history of excavations commenced in 1851-1852 with two campaigns carried out by a British expedition. Thirty years later, a French mission inaugurated a long season of campaigns that lasted until 1979.

Early excavations were mainly aimed at revealing the Elamite period, so more recent phases were treated with less attention and often destroyed. First excavations focused on the Acropolis, Apadana and the Royal City. Attempts to develop a stratigraphy for Susa were initiated in the 1940’s and continued in the 1970’s. The Iraq–Iran war stopped archaeological research which was resumed only in the 1990’s.

Since then, the State Party has tried to improve the state of conservation of the excavated remains through systematic maintenance and restoration.

Along with excavations the history of archaeological conservation of the site also began (see Section 4).

3 Justification for inscription, integrity and authenticity

Comparative analysis

The nomination dossier has first examined comparable sites within the country and then has widened the scope of the analysis to the Near East and Central Asia.

The comparison with sites from Iran has been able to highlight the ancientness and prominence of Susa in terms of continuity and size of settlement, urban development in different epochs, particularly the Elamite one, in respect to other sites which lasted only for shorter periods or were used for specific purposes. The only example that would share some similarities with Susa in terms of long and continuous occupation would be Tell-e Malyan; however research there has been much shorter in comparison to Susa and has not revealed palaces or temples but mainly residential, administrative or production districts.

The comparison with other important ancient cities in the relevant geo-cultural region has highlighted the specificities and importance of each example. However, Susa stands apart for its early settlement, continuity of occupation, size, or density of excavated in-situ monumental remains.

ICOMOS first notes that a number of relevant sites for the present nomination have not been examined, e.g., the World Heritage properties of Ashur (Qal’at Sherqat) (Iraq, 2003 (iii) (iv)), Ancient Thebes with its Necropolis (Egypt, 1979 (i) (iii) (vi)), the Archaeological Site of Troy (Turkey, 1998 (ii) (iii) (vi)), or the Archaeological Sites of Mycenae and Tiryns (Greece, 1999 (i) (ii) (iii) (iv) (vi)). The analysis could also have examined Biblical Tels - Megiddo, Hazor, Beer Sheba (Israel, 2005 (ii) (iii) (iv) (vi)) for the same span of time covered and the biblical references, the city of Balkh on the Tentative List of Afghanistan, or Ugarit, in Syria, for its ancientness; also Knossos in Greece could have been taken into consideration.

Among sites located in Iran, further examples could also have been analysed, e.g., Tepe Yahya, Godin Tepe, or Chogha Mish. As for the Achaemenid period, ICOMOS considers that parallel examples from contemporary competing powers, e.g., Greece, could also have been included.

Nonetheless, ICOMOS considers that Susa provides specific contributions in depicting the history of urbanization processes as well as of commercial and cultural influences and exchanges between the ancient

Near-East, Central Asia and the Indus Valley through the Iranian Plateau, particularly between the 4th millennium BCE and the 3rd century BCE.

Susa does also represent an important early development in Achaemenid royal architecture. Persepolis and Pasargadae appear to represent different functional requirements of the Achaemenid kings: Susa was more an administrative centre located within an urban environment whilst Persepolis is likely to have been a purely ceremonial centre with no attached settlement. In other words, Susa was a vital component of Achaemenid culture.

Although not discussed explicitly in the comparative analysis, also due to the particular nature of the proposed series, ICOMOS considers that the selection of the components is reasonable.

ICOMOS considers that, despite weaknesses in the comparative analysis, the property justifies consideration 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:

- Susa is one of the oldest known urban settlements in the region and in the world, in which first evidence of activities related to urban dwelling, long-distance trade, administration, monumental and religious architecture can be found;
- Susa exhibits a millennia-long history of continuing occupation from the 5th millennium BCE to the 13th century AD;
- Susa has been a creative protagonist in urban planning, arts, architecture and metallurgy;
- At the cross roads of other civilisations, Susa played a central role as a hub of cultural exchanges, influences and as a generator of values: Susa was one of the centres in the Middle East where early writing systems began, with the Proto-Elamite script, along with Sumerian cuneiform script.

ICOMOS considers the proposed justification is appropriate: Susa did indeed develop as early as the late 5th millennium BCE as an important centre, presumably with religious importance, to soon become a commercial, administrative and political hub that enjoyed different cultural influences thanks to its strategic position. Archaeological research can trace in Susa the most complete series of data on the passage of Iran from prehistory to history and Susa acted as the converging point of two great civilisations which reciprocally influenced each other: the Mesopotamian and the Iranian plateau civilisations. Susa's long-lasting and prominent role in the region, either as capital of the Elamites, or of the Achaemenid Empire, or as a strategic centre sought by neighbouring powers (e.g., Assyrian, Macedonian, Parthian, Sassanid) is witnessed by the abundant finds, of

disparate provenance and of exceptional artistic or scientific interest, by monuments and traces of urban layout (e.g., the remains of the *Haute Terrasse* in the Acropolis, the Palace of Darius in the Apadana, the residential or production quarters) that more than 150 years of archaeological investigations have yielded or revealed.

Integrity and authenticity

Integrity

The nomination dossier holds that the excavated and buried urban/architectural vestiges of Susa have been included in the nominated property, which, despite the fact that most of the finds that emerged during excavations are today in museums, the nominated archaeological site contains the essential attributes to make manifest its Outstanding Universal Value. The buffer zone encompasses further areas that may, in the future, yield other finds or structures from which it will be possible to draw additional information on the property and its significance. The archaeological potential of the buffer zone is protected through ad hoc measures.

ICOMOS considers that major relevant excavated archaeological features and most of the buried traces are included in the nominated property and therefore the boundaries can be considered to cover the elements necessary to express Susa's Outstanding Universal Value. Its size sufficiently ensures the representation of the features and processes which convey the property's significance.

ICOMOS also considers that the components selected to make up the nominated series reflect the proposed Outstanding Universal Value of the property. The four mounds and the associated excavated remains bear witness to the long history of occupation and the relevance of Susa throughout the many centuries of its life and to different phases of urban development and design. The Ardeshir palace on the other hand complements Darius' Palace in the illustration of architecture of the Achaemenid period.

However, in the light of the results yielded by the recent resumption of research, ICOMOS asked for clarifications to the State Party with regard to the delimitation of the boundaries of the nominated property and of the buffer zone.

The State Party responded on 26 February 2015, explaining that the Ayadana is an ancient mound where investigations revealed only fragmentary remains from the Parthian period. The site is included in the buffer zone and it is the State Party's intention to purchase, investigate and preserve it. With regard to the Hussein-Ābād cemetery, located south of the Susa nominated area, it has not so far been ascertained if the area corresponds to an Achaemenid cemetery, despite the discovery of two coffins. The ICHHTO has nevertheless planned to purchase the area and investigate it through

geomagnetic survey and, in case of positive results, to excavate it.

ICOMOS considers that the response and explanations provided by the State Party can be considered satisfactory, although it recommends that investigations within and beyond the buffer and landscape zones be continued to highlight further remains relevant for the understanding of the civilisations that made Susa grow as a prominent urban centre over several millennia.

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. ICOMOS also considers that continuing archaeological research and documentation in the surroundings of the Susa archaeological site sustains the integrity of the nominated property.

Authenticity

The finds yielded during extensive and long lasting excavation campaigns carried out over more than 160 years in the nominated property bear credible witness to the enunciated values of Susa. Scientific and archaeological methods have been used to reveal and to date the buried remains or to preserve them once exposed. Urban and architectural structures have been preserved in situ, whilst decorated panels, or architectural elements, have been removed and displayed in museums. Original materials dating back to different eras are crucial for their informative potential, therefore once exposed they have been protected with proven materials and techniques.

ICOMOS considers that more than 150 years of archaeological excavations at the property have yielded a considerable amount of information and archaeological remains that bear credible and exceptional witness to the significance of the nominated property.

ICOMOS however also notes that recent investigation results and a more territorial approach to archaeological research have highlighted the importance of geographical and environmental features as well as of the wider historic setting and of sites or traces discovered therein related to the development of Susa. They could enhance the understanding of the nominated property and its role in its historical and geographical context.

This more comprehensive approach should sustain the safeguarding of Susa's archaeological environment, beyond the strict delimitation of the boundaries of the nominated property and of its buffer or landscape zones.

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.

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.

Criteria under which inscription is proposed

The property is nominated on the basis of cultural criteria (i), (ii), (iii) and (iv).

Criterion (i): represent a masterpiece of human creative genius;

This criterion is justified by the State Party on the grounds that Susa represents a masterpiece of human creative genius in urban planning and design, being one of the earliest urbanised settlements in the world. The Apadana with Darius' Palace with its sequences of halls, porticoes, colonnades with gigantic capitols and bases, and ceramic decorations, created an innovative artistic expression characteristic of the Achaemenid Empire. Susa contributed to the development of the technologies for metalwork, glyptic art, the lost-wax technique, ceramics' soldering and enamelling, demonstrating itself to be an active part of a large scale network of interchanges.

The property could indeed represent a masterpiece of human achievement, certainly in relation to the Achaemenid period; however, the nomination dossier does not develop sufficient and persuasive arguments in this regard for the whole nominated property and does not clarify which attributes support, and how, the justification for this criterion.

In its letter sent on 22 December 2014, ICOMOS requested the State Party to expand the justification for this criterion.

The State Party responded on 26 February 2015, providing further arguments to justify this criterion to cover the entirety of the property and the relevant periods. Susa demonstrates outstanding achievements in monumental and proto-urban and urban organisation, illustrating the development of the early state and of urbanization. Thus, Susa is among the few sites in the Middle East where the dynamics and processes that led to these monumental human achievements have been documented.

ICOMOS considers that the expanded justification for this criterion convincingly demonstrates its validity.

ICOMOS considers that this criterion has been justified for the whole series.

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 Susa's remains and archaeological finds bear witness to an important interchange of influences and values deriving from commercial and cultural exchanges occurring among different civilisations for thousands of years along trade routes of central Asia. Susa played a key role in developing technological knowledge and skills as well as artistic, architectural and urban design within the region.

ICOMOS considers that the nominated property could document exceptionality in the archaeological finds, works of art, or monumental and urban structures, shifting cultural affiliations and interchanges over a long period; however the justification for this criterion only alludes to these interactions and would need to be expanded and better linked to relevant attributes.

In its second letter, ICOMOS requested the State Party to further justify this criterion on the grounds of the arguments exposed in the description section and of the relevant attributes.

The State Party responded on 26 February 2015, providing an expanded justification for this criterion. Susa exhibits unique and millennia-spanning cultural interchanges with lowland Mesopotamia, Zagros intermountain valleys, highland Fars, the southern coast of the Persian Gulf and the Iranian Central Plateau. The far-reaching influence of Susa's proto-Elamite civilization has been documented through the widespread presence of its tablets in many sites in Iran and beyond. Archaeological and architectural materials discovered at Susa exhibit a variety of styles and forms, bearing witness to an international ancient city that was both influenced and imitated by its neighbours. Developments in metallurgy, stone carving, glyptics, and monumental building concur to demonstrate the importance and qualities of these interchanges.

ICOMOS considers that the proposed expanded justification fully illustrates the global relevance of Susa as one of the cradles of complex human civilisations.

ICOMOS considers that this criterion has been justified for the whole series.

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 Susa bears exceptional testimony to ancient civilisations – Elamite, Achaemenid and Parthian, particularly – over several millennia. Its remains contain several layers of superimposed urban settlements in continuous succession from the 5th millennium BCE to the 13th century CE. Ancient sources cited Susa as an important centre of civilisation of the then-known world.

In ICOMOS' view, archaeological evidence does indicate that Susa bears an exceptional testimony to the Elamite, Persian and Parthian cultural traditions that have largely disappeared; in particular it bears a unique witness to the prominence of one city throughout several millennia and in subsequent kingdoms or empires.

ICOMOS considers that this criterion has been justified for the whole series.

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 Susa is an outstanding example of urban settlement illustrating the dawn of urban development in the Proto-Elamite and Elamite Periods; whilst from the 6th century BCE, as the capital of the Achaemenid Empire, Susa, and in particular Apadana and the Ardeshir Palace, shaped a prototype of ceremonial architecture, which spread within the Iranian Plateau.

ICOMOS considers that the argument proposed for the property being an outstanding example of a type of building or architectural ensemble does not adequately explain how the Proto-Elamite and Elamite phases contribute to demonstrate this criterion.

ICOMOS requested the State Party to expand further the justification for this criterion in relation to the relevant attributes and phases.

The State Party responded on 26 February 2015, explaining that in Susa processes of urbanization crystallized in the late 5th millennium BC. The focal point of this early urban settlement was a large monumental platform at the zenith of which a complex of temples had been erected; parts of the temple complex and the urban architecture have been revealed by scientific excavations and philological research carried out between the 1960s-1970s. They also documented the development of this early urban centre throughout the millennia. Material evidence of this is concentrated in the urban setting of the *Shahr-e Shahi* (Ville Royale), dating back to the Sakkalmah Period (1900-1700 BC). Also, neo-Assyrian stone reliefs from the palace at Nineveh in northern Iraq attest to Susa's town planning and cityscape during the neo-Elamite period (1000-640 BC).

Further information on Susa's political and cultural role and of its heritage survives potentially in the huge parts of the site still non-excavated and unexplored.

ICOMOS considers that the expanded justification provided by the State Party confirms the importance of Susa in town planning and monumental architecture throughout several millennia of its history.

ICOMOS considers that this criterion has been justified for the whole series.

ICOMOS considers that the serial approach is justified and that the selection of sites is appropriate.

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

Description of the attributes

The site of Susa, in the fertile Susiana plains, between two important rivers and close to the Shavur River, conveys the reasons for its flourishing. The four mounds contain structures from different phases of occupation. The continuous stratigraphy of 27 layers that has been documented by more than 150 years of excavations and archaeological investigations bears exceptional witness to the most complete series of information on the passage from prehistory to history in the region. The Acropolis exhibits the most ancient remains, dating back to proto-history, as well as remains of residential quarters dating back to the neo-Elamite phase. It also encompassed the Haute Terrasse (today lost to a large extent but carefully documented after its excavation), an imposing stepped platform, which attested to the existence of an early but highly complex and organised society capable of achieving a prominent technological and architectural undertaking. The royal ensemble of the Palace of Darius and Apadana, with its tall hypostyle hall and porticos, lofty stone columns, gigantic capitals and column bases, and the wall decorations, altogether represent an innovative contribution to the architectural and artistic development characteristic of the Achaemenid Empire. The royal city with its traces of settlement organisation and palatial complexes attests to the urban nature of Susa. The *ville des artisans* has revealed the Parthian/Seleucid city with its necropolis. The wide corpus of documentation and reports on archaeological campaigns, as well as the wealth of materials and artistic pieces retrieved during the excavations and mostly preserved in the Louvre, contribute to conveying the exceptional importance of Susa. Similarly, its surroundings, where several mounds and areas that have yielded important findings are located, also contribute to shed further light on the evolution of Susa and its region throughout the millennia.

4 Factors affecting the property

Within the nominated property nobody resides permanently, except for the staff of the ICHHTO Susa base, whilst in the buffer zone there live 4500 inhabitants.

The State Party explains that urban pressure commenced as early as the 1950s but continued more rapidly in the last two decades of the 20th century. Infrastructures and buildings have encroached upon the immediate setting and the archaeological context of the

nominated property. Rehabilitation is planned in three phases in cooperation with the municipality of Shush.

Some of the conservation problems affecting the remains of Susa date back to the early excavations, which were not carried out according to correct methodologies, to environmental conditions and to consequences of the Iran–Iraq war.

The extreme climatic conditions in combination with the particularly vulnerable materials, also cause damage to building materials, e.g., surface water erosion and mechanical stress. Further problems derive from vegetation growth and nesting of insects and small animals.

The area is prone to earthquakes, although flooding is no longer a problem following the construction of the Karkheh Dam and several dykes upstream of the Shavur, as is explained in the additional information received from the State Party in February 2015.

Visitor pressure does not appear a concern at present, apart from during Iranian New Year, when major numbers of tourists visit the site.

ICOMOS confirms that the assessment presented in the nomination dossier reflects the current situation, although ICOMOS believes that urban development needs to be strictly monitored and urban pressure reduced so as to prevent any further form of encroachment on the archaeological remains.

ICOMOS considers that the main threats to the property are rainwater erosion, urban development and earthquakes.

5 Protection, conservation and management

Boundaries of the nominated property and buffer zone

The nominated area of Susa includes two parts: the four archaeological mounds (350ha) with the most relevant excavated monuments and still-buried relics associated with the development of Susa throughout the millennia, and a second component, the Ardeshir or Shavur Palace (3.5ha), dating back to the Achaemenid phase of the city, lying on the opposite bank of the Shavur River.

The buffer zone of Susa has been designated so that, in addition to the nominated area, potential surviving archaeological traces or structures are also preserved.

Out of the buffer zone, a landscape zone (14,000ha) has been set up, for which measures have been foreseen also to protect potentially-buried archaeological remains.

In relation to recent investigation results, ICOMOS asked for additional clarification from the State Party on the

rationale adopted to define the boundaries of the nominated property and of the buffer zone.

The State Party responded on 26 February 2015, explaining that the mound of Ayadana dates back to the Parthian period and revealed only fragmentary remains, while the cemetery (see integrity section) has not been confirmed yet to be an Achaemenid burial ground. However, both areas are within the buffer zone and their purchase and investigation are planned. The delimitation towards the east of the buffer zone is justified by the fact that the area between the Shavur and the Karkheh Rivers, before the construction of the Karkheh Dam, was flooded, so no settlement could have developed there. Additionally, what is not included within the buffer zone is nevertheless protected by the provisions of the landscape zone.

ICOMOS considers that the additional information provided by the State Party is satisfactory.

However, ICOMOS considers that strict implementation of the protection provisions for the archaeological remains in the buffer and landscape zones is necessary as it is likely that some important archaeological features exist in the surroundings of the nominated area.

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

Ownership

The nominated property is owned by the State which manages the property through the Cultural Heritage Base of Susa, a peripheral branch of the ICHHTO. In the buffer zone the ownership is both public and private.

Protection

The nominated property has been registered in the List of Iranian national monuments since 1932 and thus covered by the provisions of the law for protection of national monuments (1930) as well as other general and specific provisions, e.g., the Constitution Law of the Islamic Republic of Iran (1920), the Iranian Civil law (1939), the Islamic Penal Law (1996), the Law for Punishment of those interfering in the national economic system (1991), the law for Property acquisition for implementing public development, and military projects of the Government (1979).

Further specific provisions for heritage protection include: the Bylaw concerning the prevention of unauthorized excavations (1980), and the Law concerning acquisition of land, buildings and premises for protection of historic properties (1969). Altogether, the legal system in place ensures the protection of registered monuments.

Specific regulations have been elaborated for the nominated property (defined as 'core zone' in the nomination dossier), for the buffer zone and the landscape zone. These regulations must be incorporated into the regulations of the master and detailed plans.

With regard to urban planning, the law for establishing the Higher Council for Architecture and Urban Planning (HCAUP) foresees that all urban plans have to be confirmed by this Council prior to their approval. HCAUP includes among its members the Minister of Culture and the head of ICHHTO. Revisions of urban plans are carried out by the HCAUP technical committee and by the Ministry of Housing and Urban Development (MHUD) Physical Plan Review Office.

Implementation of protection and conservation measures within the nominated property is the responsibility of ICHHTO, and specifically of the ICHHTO Susa Base; however the legislation in force provides that all citizens, governmental and non-governmental organisations shall comply with the law.

The protection measures in place for the 'core zone', 'buffer zone' and 'landscape zone' are all in place and incorporated as prevailing provisions into the planning system.

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.

Conservation

Conservation of the remains of Susa commenced much later than the excavations: the earliest conservation works on the excavated remains started in the 1940's. But it was only in the late 1960's that systematic conservation entered into the excavation programme.

Between the late 1970's and mid 1990's, conservation was limited to emergency activities; in the following decade, conservation and modest excavations aimed also to improve the readability of the remains; whilst since 2005, photogrammetric documentation of all mounds and archaeological remains has been carried out. Conservation has continued with the aim of correcting previous interventions and preserving exposed remains.

Currently, all conservation operations as well as investigations and archaeological excavations are conducted by the ICHHTO Susa Base in consultation with the Iranian Centre for Archaeological Research (ICAR). Experience gained in conserving and managing the Chogha Zanbil and Shushtar Hydraulic System World Heritage properties is said to have proved useful also at Susa.

Cooperation with experts and university students has been established to build training opportunities for young professionals.

ICOMOS observes that the protection measures for the landscape zone require the urgent completion of the archaeological map for Susa's buffer and landscape

zones. This needs to be implemented as a priority and extended further if research results suggest to do so.

ICOMOS considers that the plan to purchase land near the *Acropolis* and *Shahr-e Shahi* mounds and to remove buildings and to enhance the area is an important measure to improve the visual integrity of the site.

In its second letter, ICOMOS asked for updated information and for an implementation calendar on the above points.

The State Party responded on 26 February 2015, providing an implementation calendar for a number of activities concerning the identification and protection of archaeological remains within the buffer and landscape zones. The implementation calendar also envisages a number of further important actions for the protection and conservation of the property, including purchase of land likely to yield further remains.

ICOMOS considers that the submitted calendar represents an important step to operationalise the envisaged actions. However, ICOMOS also notes that, apart from a few, very urgent activities, which are planned to be carried out within 4-5 years, the time-scale horizon for the other actions is rather long – 15 years – and is the same for all of them. ICOMOS in this regard suggests that the State Party further develops the submitted implementation timeframe, by including the necessary financial resources and institutional/administrative steps, so as to achieve a more detailed action plan for the different envisaged activities that could orient implementation.

ICOMOS suggests that protective layers (*kahgel* plaster and bricks) be finished in a way that allows an understanding of the different textures of the structures they protect.

ICOMOS also considers that preventive conservation strategies should be envisaged to reduce the impact of run-off on the surface of the mounds to safeguard buried cultural deposits.

ICOMOS finally recommends that a comprehensive database and GIS system be established integrating all information and data yielded by the archaeological campaigns and excavations at Susa and in its wider setting.

In conclusion, ICOMOS considers that the state of conservation of the nominated property is currently stable, although there are erosion problems that need to be systematically addressed. Overall, conservation measures are adequate although aesthetic improvement of the finishing of protective layers is desirable. With regard to the constructions currently encroaching on the fringe of the nominated property, ICOMOS recognises the State Party's commitment to improving the situation through a programme of land purchase and rehabilitation

and suggests to further develop the implementation calendar so as to use it as an operational instrument.

Management

Management structures and processes, including traditional management processes

While the ICHHTO Susa Base is responsible for everyday conservation work at the nominated property, long term policies for conservation, enhancement, research and promotion are the responsibility of a Steering Committee supported by a technical committee.

The first encompasses political representatives from the region (i.e. the deputy Governor of Khuzestan Region, the Governor and the Mayor of Susa), regional and local ICHHTO officials, and scholars from the university and the research sphere. The Technical committee includes mainly officials and technical staff from the regional and local branches of ICCHTO and other experts in archaeology.

In the nomination dossier it states that the HCAUP and the ministry of Power as well as the Islamic Consultative Assembly are also represented in the Steering Committee, although the list of names provided in the nomination dossier does not include specifically any representatives from these institutions. It would therefore be useful if they could be included.

With regard to the nominated property, this is managed directly by the ICHHTO Susa Base, which was established in 1993. Initially, its tasks related to carrying out emergency measures for the conservation of the Susa remains.

The management strategy for the nominated property is grounded in regular meetings of the steering and technical committees to achieve a common perspective and to assess the issues and needs of Susa. Areas covered by the strategy and related action plans (developed for short, medium, and long terms) encompass improvement of: quality of restoration and conservation, monitoring, tourism facilities and services, security systems, documentation and databases, education and training plans.

Given that the property is in the ownership of the State and being managed by the same ICHHTO Base of Susa, one single management is granted to the property.

ICOMOS notes that the State Party has set up a comprehensive management structure, however, it seems that some overlapping between the steering and the technical committees could hinder their effectiveness and suggests that their roles be clarified. ICOMOS also recommends that the technical staff from the regional government of Khuzestan from Susa province and from the municipality of Shush be included in the technical committee.

Considering the interrelation of various plans concerning different portions of territory, ICOMOS observes that there is a need to achieve a better coordination of these instruments, their provisions and related action plans.

In its second letter, ICOMOS suggested strengthening the commitment of the concerned authorities for coordinated protection and management

The State Party responded on 26 February 2015, informing that there is a cooperation agreement concerning the integrated management of the property, aimed at ensuring joint cooperation of state administrations, public institutions and NGOs.

ICOMOS considers that the cooperation agreement is a very important step in the improved management and enhancement of the nominated property and its buffer zone. The areas of cooperation and identified actions are concrete and their implementation will improve the protection and conservation of Susa.

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

The territory of the nominated property is covered by several plans at different scales. One is the Development Plan for Northern Khuzestan. The scope of the plan has resulted from a study on the influence of Susa over the surrounding territory – it appears comprised between the Dez and Kharkheh Rivers – and on the potentials and weaknesses of the area. The main goals of the plan comprise: environmental considerations in localising new services and industrial facilities and reorganising existing ones, conserving natural and cultural resources, expanding tourism, reorganising farming activities, and improving communication with other regions.

On the basis of the regional plan above, Susa Development plan has prioritized six areas of activities, including protection and improvement of natural and cultural heritage. Projects related to cultural heritage conservation include: preventing and controlling floods in city suburbs, improving drainage systems, and improving urban traffic and transportation systems with specific attention to the central area of Shush.

In particular, areas belonging to the historical setting of ancient Susa have been delimited and a specific Master Plan has been developed with regulations for land use, building plot subdivision, protection measures for heritage areas, quality of cityscape, façade cleaning, and building materials. In the nominated area and buffer zone, strict regulations apply and any allowed intervention must be approved by ICHHTO.

With regard to the action plan for the nominated property presented in the nomination dossier, it would be important that financial and human resources as well as expertise needed for their implementation are also included.

ICOMOS asked for clarification from the State Party with regards to the need for a specific risk preparedness strategy.

The State Party responded on 26 February 2015, informing that the town of Susa has a municipal crisis management headquarters for natural disasters encompassing also the nominated property. The State Party also clarified that hydraulic works carried out upstream of the Shavur River make flooding impossible.

ICOMOS however notes that, according to the nomination dossier, the development plan for Susa envisages flood control and prevention, therefore ICOMOS considers that risk preparedness considerations that specifically address the cultural value of Susa in relation to this risk be included in the Susa Development Plan and related to the management framework.

Involvement of the local communities

The nomination dossier does not contain any specific item concerning involvement of local communities.

ICOMOS recommends that a program to promote participation of the residents of the buffer zone in the nomination and management process be developed and implemented.

Since the nomination dossier mentions that plans do exist to augment tourism-related facilities, ICOMOS underlines the need to comply with paragraph 172 of the Operational Guidelines.

ICOMOS considers that special attention is needed to ensure that the Steering and the technical committees have identifiable profiles and tasks. The latter should include representatives of the technical staff of the municipality of Shush. Additionally, ICOMOS considers that specific risk preparedness considerations be included in the Susa Development Plan and the management framework of the property.

6 Monitoring

The nomination dossier contains different sets of indicators concerning the conservation of the property but also some performance indicators in relation to management objectives. The measurement method and/or tool are also indicated, along with periodicity.

ICOMOS believes that these indicators are a good foundation, which nevertheless require further development as there is a need to distinguish between monitoring objectives and indicators. Additionally, it would be helpful that management objectives be more consistently related to indicators.

Finally, ICOMOS considers that identifying indicators to monitor the implementation of the actions included in the

cooperation agreement would be of help for periodically checking the effectiveness of cooperation.

ICOMOS considers that the monitoring system should be more closely connected with management objectives and that a clear distinction between monitoring goals and indicators be made. Additional indicators to monitor the effectiveness of the cooperation agreement would also be helpful.

7 Conclusions

Located in the lower Zagros Mountains, in the Susiana plains between the Karkheh and Dez Rivers, Susa comprises a group of artificial archaeological mounds rising on the eastern side of the Shavur River, encompassing large excavated areas where abundant evidence of its thriving existence over several millennia, between the late 5th millennium BCE and the 13th century CE, has been brought to light. The architectural and urban monuments revealed by the excavations and still in-situ include administrative, religious, residential and palatial structures as well as production and cemetery areas.

Susa has been archaeologically investigated from the mid-19th century until the end of the 1970s, yielding a large amount of finds and information on the settlement and on its cultural and economic links. Following the forced interruption of research due to the Iraq-Iran War, investigations have been revived at Susa but also in the plain surrounding the city, revealing a much wider and more complex pattern of settlements and occupied areas, and also shedding light on the characteristics of the natural environment that sustained the nomadic and sedentary communities that were attracted here.

The territorial scope pursued by contemporary archaeology, which in this specific case seems to have provided promising results, is only partly reflected in the nomination. The nominated property includes the components strictly sufficient to reflect the history of excavations and discoveries that made it possible to establish Susa as a major and very ancient urban centre throughout the millennia, and which had been the capital of the Elamite confederacy and then of the Achaemenid Empire. While the buffer zone includes areas close to the nominated property, the established landscape zone makes an effort to recognise the archaeological potential of the wider setting of Susa and to encompass Susa National Protected Monument as of its latest update.

The small village of Shush has grown since the late 1980s to become a town; urban development, in this process, has encroached upon the edges of the mounds and, in a few cases, also inside the archaeological area. Remedial measures have been initiated by the State Party to improve the situation, and these need to be sustained and implemented in a stringent manner, with

the support of all authorities concerned and through the sensitisation of inhabitants and stakeholders.

Considering the richness of remains in the surroundings of Susa and the urban pressures to which the site is prone, being encompassed by the town of Shush (approximately 65,000 inhabitants as of the 2006 census), the implementation of the protection measures established for the buffer and landscape zones should be stringent and closely monitored by the responsible authorities. Adequate resources should be provided to ensure the full implementation of the conservation and enhancement programme of Susa and of its immediate setting.

The territorial scope of contemporary archaeology, in the case of Susa, has led to the identification of several sites that have been revealed to be connected to, or under the sphere of influence of Susa in its close and wider territorial context. It would be wise if the role and influence played by Susa within its closer area and territory of influence were taken into due consideration through appropriate legal and planning protective measures. Interpretation strategies for Susa would gain from a territorial approach, able to integrate different sites that, not being proposed for inscription or not being part of the buffer or landscape zones, nevertheless contribute to a better understanding of the dynamics of human occupation, sedentarization and state-building in the region.

8 Recommendations

Recommendations with respect to inscription

ICOMOS recommends that Susa, Islamic Republic of Iran, be inscribed on the World Heritage List on the basis of **criteria (i), (ii), (iii) and (iv)**.

Recommended Statement of Outstanding Universal Value

Brief synthesis

Located in the lower Zagros Mountains, in the Susiana plains between the Karkheh and Dez Rivers, Susa comprises a group of artificial archaeological mounds rising on the eastern side of the Shavur River, encompassing large excavated areas, as well as the remains of Artaxerxes' palace on the other side of the Shavur River. Susa developed as early as the late 5th millennium BCE as an important centre, presumably with religious importance, to soon become a commercial, administrative and political hub that enjoyed different cultural influences thanks to its strategic position along ancient trade routes. Archaeological research can trace in Susa the most complete series of data on the passage of the region from prehistory to history. Susa appears as the converging point of two great civilisations which reciprocally influenced each other: the Mesopotamian and the Iranian plateau civilisations. Susa's long-lasting and prominent role in the region, either as the capital of the

Elamites, or of the Achaemenid Empire, or as a strategic centre sought by neighbouring powers (e.g., Assyrian, Macedonian, Parthian, Sassanid) is witnessed by the abundant finds, of disparate provenance and of exceptional artistic or scientific interest, and by the administrative, religious, residential and palatial, as well as functional structures and traces of urban layout (e.g., the remains of the *Haute Terrasse* in the Acropolis, the Palace of Darius in the Apadana, the residential or production quarters, the Ardeshir Palace) that more than 150 years of archaeological investigations have revealed.

Criterion (i): Susa stands as one of the few ancient sites in the Middle East where two major social and cultural developments took place: the development of the early state, and urbanization. Susa is among the few sites in the Middle East where the dynamics and processes that led to these monumental human achievements has been documented, and still holds a huge body of important tangible evidence to understand better the early and mature stages of social, cultural and economic complexity. In its long history, Susa contributed to the development of urban planning and architectural design. The royal ensemble of the Palace of Darius and Apadana, with its tall hypostyle hall and porticos, lofty stone columns and gigantic capitals and column bases, and the orthostatic and ceramic wall decorations, together represent an innovative contribution to the creation of a new expression, characteristic of the Achaemenid Empire.

Criterion (ii): The proto-urban and urban site of Susa bears testimony, from the late 5th millennium BCE to the first millennium CE, to important interchanges of influences, resulting from ancient trade connections and cultural exchanges between different civilizations, namely the Mesopotamian and Elamite. Susa has been identified as the focal point of interaction and intersection between the nomadic and sedentary cultures. It played a key role in creating and expanding technological knowledge, and artistic, architectural and town planning concepts in the region. Through its sustained interaction with nearby regions, archaeological and architectural materials discovered at Susa exhibit a variety of styles and forms, shedding light on an international ancient city that both influenced and was imitated by its neighbors.

Criterion (iii): The remains of the ancient city of Susa bear exceptional testimony to successive ancient civilizations during more than six millennia, as well as having been the capital city of the Elamite and Achaemenid Empires. It contains 27 layers of superimposed urban settlements in a continuous succession from the late 5th millennium BCE until the 13th century CE. Susa is on the most ancient of the sites, where the processes of urbanization crystallized in the late 5th millennium BC. A decade of scientific excavations from 1968 to 1978, and philological works at Susa, also documented the development and changing character of this early urban centre throughout the millennia.

Criterion (iv): Susa is an outstanding and rare example of a type of urban settlement representing the beginnings of urban development in the proto-Elamite and Elamite periods, from the late fifth millennium BCE. Furthermore, from the sixth century BCE, as the administrative capital city of the Achaemenid Empire, Susa contributed to the creation of a new prototype of ceremonial architecture, which became a characteristic feature of the Iranian Plateau and its neighbouring lands.

Integrity

The excavated site of the ancient urban and architectural remains of Susa is included within the boundaries of the property. Even though many of the finds are today exhibited in museums, Susa still includes the essential elements to express its Outstanding Universal Value. The nominated property covers the known part of the ancient city, which is now protected against adverse development. Due to the high archaeological potential of the area that surrounds Susa, continuing archaeological research and documentation sustains the integrity of the nominated property. The recent haphazard urban development of modern Shush threatens the edges and immediate setting of the nominated property; however, strict regulations have been elaborated, integrated into the planning system and enforced. Their stringent implementation is crucial to maintaining the integrity of the property.

Authenticity

More than 150 years of archaeological research and historical sources confirm that the nominated property encompasses the site of the ancient city of Susa. The material and form of the architectural remains are historically authentic, although many of the decorative elements are now deposited in museums for protection. As a protected archaeological property, Susa is being conserved using scientific and philological methods and approaches. Therefore, the excavated remains have been stabilized and conserved respecting their architectural and planning design as well as their building materials. From its initial formation and in the course of its development until its final decline, Susa has always remained on its present site; its environmental setting has, however, changed, with the hydraulic works carried out upstream of the Karkheh and the Shavur Rivers; however, these changes do not prevent the understanding of the role played by the environmental setting in the long-lasting prominence of Susa.

Management and protection requirements

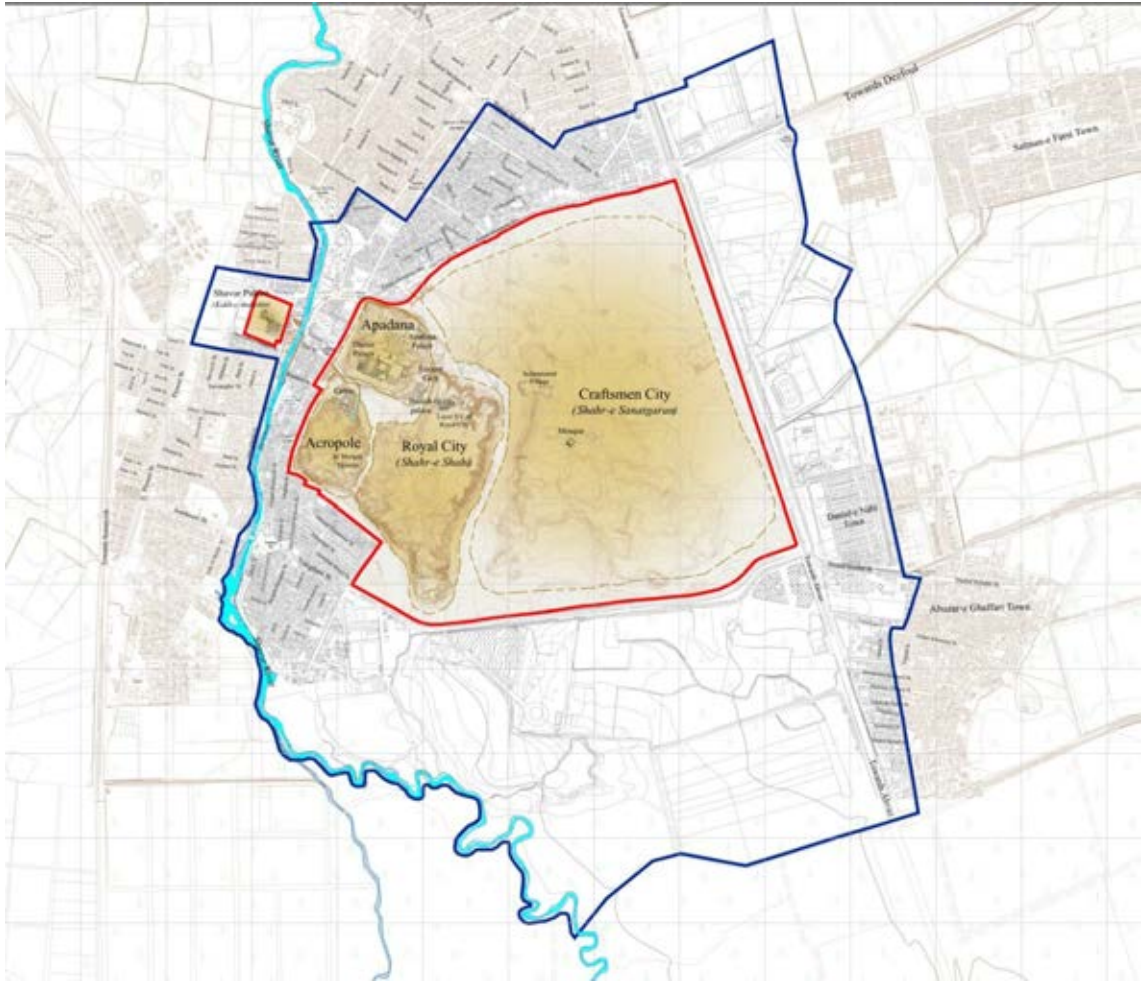
Susa is protected as a National monument and falls under the responsibility of the ICHHTO which protects and manages the property through its Susa Base. Regulations for the property and its buffer and landscape zones have been incorporated into the planning instruments as prevailing norms. Their stringent implementation is crucial to guaranteeing the adequate protection and preservation of Susa's buried and unburied archaeological remains. Inter-institutional cooperation and coordination among existing instruments in the management of the property,

and particularly of its immediate and wider setting, is fundamental to ensuring that urban growth respects the archaeological potential of the area and makes it an asset for a compatible and equitable development of Shush within its wider region.

Additional recommendations

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

- Ensuring stringent implementation of the protection measures established for archaeological remains in the buffer and landscape zones;
- Including representatives of the technical staff of the municipality in the technical committee;
- Ensuring effective coordination among the territorial and urban planning instruments in force in the buffer and landscape zones;
- Developing ad hoc indicators to monitor the effectiveness of the inter-institutional agreement recently signed;
- Strengthening the protection measures for archaeological remains and mounds within the buffer zone on the grounds of the specific measures for archaeological mounds envisaged in the landscape zone regulations;
- Including risk preparedness considerations in the Susa Development Plan and in the management framework of the property;
- Providing an updated implementation calendar for the action plan, by including the necessary financial resources and institutional/administrative steps as well as a progress report on the implementation of the above-mentioned recommendations, particularly those related to the protection of the archaeological remains, to be submitted to the World Heritage Centre by 1 December 2015 and 2016, for examination by the World Heritage Committee at its 41st Session in 2017.



Map showing the boundaries of the nominated property



General view of the Susa Castle



View of the Achaemenids Village



View of the Acropolis



Shapur Palace

Sites of Japan's Meiji Industrial Revolution (Japan) No 1484

Official name as proposed by the State Party

Sites of Japan's Meiji Industrial Revolution: Iron and Steel, Shipbuilding and Coal Mining

Location

Fukuoka Prefecture, Saga Prefecture
Nagasaki Prefecture, Kumamoto Prefecture
Kagoshima Prefecture, Yamaguchi Prefecture
Iwate Prefecture, Shizuoka Prefecture
Japan

Brief description

A series of industrial heritage sites, focused mainly on the south-west of Japan, is seen to represent the first successful transfer of industrialization from the West to a non-Western nation.

The rapid industrialization that Japan achieved from the middle of the 19th century to the early 20th century was founded on iron and steel, shipbuilding and coal mining, particularly to meet defence needs.

The sites in the series reflect the three phases of this rapid industrialisation achieved over a short space of fifty years. The initial phase in the pre-Meiji Era was one of experimentation in iron making and shipbuilding, sponsored by local clans and based mostly on Western textbooks, and copying Western examples; the second phase brought in with the new Meiji Era, involved the importation of Western technology and the expertise to operate it; while the third and final phase in the late Meiji period, was full-blown local industrialization achieved through the active adaptation of Western technology to best suit Japanese needs and social traditions, on Japan's own terms.

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 23 components in 11 *sites* and 8 areas.

1 Basic data

Included in the Tentative List

5 January 2009

International Assistance from the World Heritage Fund for preparing the Nomination

None

Date received by the World Heritage Centre

14 January 2014

Background

This is a new nomination.

Consultations

ICOMOS consulted TICCIH and several independent experts.

Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the property from 24 September to 7 October 2014.

Additional information requested and received from the State Party

On 4 October 2014, ICOMOS requested further information from the State Party on the following aspects:

- Outstanding Universal Value (OUV) and the attributes of OUV;
- Timeframe and selection of sites, particularly in relation to the exclusion of sites reflecting the industrialisation of textiles.

The State Party responded on 10 November 2014 and the further documentation provided is reflected in this report.

On 22 December 2014, ICOMOS requested further information on:

- How individual sites convey innovation;
- Changing the name of the series;
- Minor adjustments to the boundaries of four sites.

The State Party responded on 27 February 2015 and the further documentation provided is reflected in this report.

Date of ICOMOS approval of this report

12 March 2015

2 The property

Description

Although the title refers to 'Sites of the Meiji Industrial Revolution', the nominated sites cover not only the Meiji Period or Era (1868 – 1912) but also the Bakumatsu Period (1853 – 1867) which immediately preceded it. There is fundamental difference between the two periods in relation to Western technology.

In the Bakumatsu period, at the end of Shogun era in the 1850s and early 1860s, prompted by the need to improve the defences of the nation and particularly its sea-going defences, in response to foreign threats, industrialisation was developed through second hand knowledge, from such sources as Dutch text books, and combined with traditional craft skills. This was not the introduction of western technology on a large scale that prompted rapid industrialisation – rather it is its precursor

when development was rooted in feudal traditions and what can be called the 'closed system'.

Sites in five of the eight nominated areas are confined to this period and show proto-industrial sites, some of which were unsuccessful.

By contrast, the Meiji Period reflects a new 'open system' when there was direct introduction of Western technology, first in the two decades from 1860 through buying Western know-how and equipment with implementation by Western engineers, and then from the early 1890s to early 1910s, with the successful introduction of Western techniques by Japanese who had studied in the west, and their implementation by industrial capitalists who engaged directly with British and Dutch companies, all of which led to industrial autonomy in a distinctive national style. Sites in three of the eight areas reflect this Period.

The 23 nominated components are in 11 sites within 8 discrete areas. 6 of the 8 areas are in the south-west of the country, with one in the central part and one in the northern part of the south island.

The eight areas are as follows:

Bakumatsu Period Areas 1-5

1 Hagi

- Hagi Reverberatory Furnace
- Remains of Ebisugahana Shipyard
- Remains of Ohitayama Tataro Iron Works
- Hagi Castle Town
- Shokasonjuku Academy

2 Kagoshima

- Shuseikan
- Terayama Charcoal Kiln
- Sekiyoshi Sluice Gate of Yoshino Leat

3 Nirayama

- Nirayama Reverberatory Furnaces

4 Kamaishi

- Hashino Iron Mining and Smelting site

5 Saga

- Mietsu Naval Dock

Meiji Period Areas 6-8:

6 Nagasaki

- Kosuge Slip Dock
- Mitsubishi No.3 Dry Dock
- Mitsubishi Giant Cantilever Crane
- Mitsubishi Former Pattern Shop
- Mitsubishi Senshokaku Guesthouse
- Takashima Coal Mine
- Hashima Coal Mine
- Glover House and Office

7 Miike

- Miike Coal Mine & Port

- Misumi West Port

8 Yawata

- The Imperial Steel Works
- Onga River Pumping Station

These 8 Areas are presented in more or less chronological order with sites in Areas 1-5 reflecting early attempts to copy western industrial practices in the Bakumatsu Period, and sites in Areas 6-8 reflecting Japan's fully developed industrial processes in the Meiji Period – although only in heavy industry and shipbuilding, as textile manufacturing, and particularly cotton spinning and weaving, a large component of the overall industrialisation process, are not covered (see discussion below).

The sites include not only industrial prototypes, and fully fledged industrial complexes, some of which are still in operation, or are part of operational sites, but also associated buildings such as offices and a guesthouse as well as an urban area that is seen to reflect the context for the proto-industrialisation process.

The two groups of Areas are discussed in turn.

Bakumatsu Period Eleven components in five Areas

1 Hagi

- Hagi Reverberatory Furnace
- Remains of Ebisugahana Shipyard
- Remains of Ohitayama Tataro Iron Works
- Hagi Castle Town
- Shokasonjuku Academy

The Hagi area is associated with one of the mid-19th century progressive feudal clans. In response to calls to mobilise for the defence of the nation (see History), and to try and improve iron making processes for shipbuilding, the clan gleaned information on industrial processes from Dutch textbooks.

A Reverberatory Furnace was built in imitation of an earlier one constructed by the Saga Clan (and no longer extant). The structure of the furnace still survives and at its base demonstrate local adaptations to resolve on-going moisture problems. Although a failure, it paved the way for further developments.

The Ebisugahana Shipyard was constructed to build Western style naval vessels. Its large breakwater (the only part to survive) incorporated a deep-wharf platform which appears not to have been copied from Western designs, but rather to have been a local innovation.

The Hagi Castle town is nominated to provide a context for these new ideas. However its structure reflects a much earlier period of prosperity in the 17th century. Although the castle was lived in by the last Mori feudal lord, who was associated with proto-industrial trials, it was demolished in 1874 shortly after his death. The merchants' houses are seen to reflect the craft basis for the early industrialisation process.

The slight upstanding remains of the small Ebisugahana Shipyard (mostly a breakwater) testify to experiments in building western style wooden and iron ships. As the Reverberatory Furnace had not worked, the iron for the ships was made in the traditional way at the already existing bellows-blown furnace of the Ohitayana Tataro Iron Works. The site has been partially excavated to show the layout of the furnace.

The Shokasonjuku Academy was one of the bases of the respected royalist teacher, Shoin Yoshida, who aspired to progressive ideas based on Western education, science and industry but with respect to Japanese traditions.

2 Kagoshima

- Shuseikan
- Terayama Charcoal Kiln
- Sekiyoshi Sluice Gate of Yoshino Leat

The industrial complex of Kagoshima is located in a garden at Shuseikan created in 1658. Its aim was to manufacture iron for cannons and shipbuilding. There are surface remains of a reverberatory furnace and its water channel, a charcoal kiln, the foundations of a spinning mill, and a sluice gate. There are also two standing buildings: a former machinery factory, 1864-5, the earliest surviving in Japan, and a house for foreign engineers involved in the spinning mill, built in 1866-7.

The Shuseikin reverberatory furnace demonstrate variants from Dutch plans in terms of size and the way local traditional such as cylindrical firebricks were used for the furnace instead of Western technology. This illustrates local experimentation and adaptation of Western prototypes. Like the Hagi furnace it was ultimately unsuccessful.

3 Nirayama

- Nirayama Reverberatory Furnaces

The reverberatory furnace with twin towers of brick, each with two furnaces, built between 1854-7, survives almost intact. Its design was based on Dutch drawings. The furnace was the centre of a cannon manufactory which has not survived. The towers were braced with iron in 1957.

4 Kamaishi

The Hashino iron mining and smelting site produced pig iron from local iron ore. It was constructed in 1858 copying Dutch plans, but fusing western and Japanese traditions and building on the experience of experimental furnaces. In particular it adapted Dutch technology to cope with indigenous mineralogy – magnetite iron ore rather than haematite iron oxide. Hashino is seen as the birthplace of the modern iron and steel industry in Japan. It consists of the remains of a stone blast furnace and a mining site.

5 Saga

- Mietsu Naval Dock

The dock was constructed in 1861 to repair western steam ships that the local clan had acquired to help defend Nagasaki. Its remains have been excavated.

Meiji Period Twelve components in three Areas

6 Nagasaki

- Kosuge Slip Dock
- Mitsubishi No.3 Dry Dock
- Mitsubishi Giant Cantilever Crane
- Mitsubishi Former Pattern Shop
- Mitsubishi Senshokaku Guesthouse
- Takashima Coal Mine
- Hashima Coal Mine
- Glover House and Office

6 of these 8 sites are clustered around Nagasaki harbour, at the mouth of the Urakami River while the two coal mines are on offshore islands out in the bay. Nagasaki was a focus for industrial development and its sites, dating from 1869 to 1910, relate to building and repair of steamships and coal mining – both needed to defend Nagasaki.

Nagasaki was the only authorised entry point for foreign powers. The dock sites reflect early collaboration with the West. The Slip Dock for repairing ships was built with British expertise and its main components imported from Scotland, while the Giant Cantilever Crane was also exported from Scotland and is now the oldest working example.

Within Takashima Coal Mine, the Hokkei Pit is all that survives intact of Japan's first Western-style mine shaft on what is now one island and was originally three. The mine was the first to adopt Western-style mechanization (1868) and became Japan's leading coal producer until the late-1880s. The Hashima Coal Mine, now ruined, is on an artificial reclaimed island and was the site of Japan's first major undersea coal exploitation in 1895.

Now used as a museum, the former pattern shop building was originally use for making patterns for iron castings.

The Guesthouse, Glover house and Office all reflect a mixture of Japanese and European architectural styles.

The Dry Dock, Slip Dock Giant Crane, Pattern Shop, Guesthouse all lie within the modern working Mitsubishi Nagasaki Shipyard.

7 Miike

- Miike Coal Mine & Port
- Misumi West Port

Experience gained during the operation of the Takashima Coalfield laid the foundation of modern coal mining in Japan and this was subsequently diffused to Miike. The coal mine, whose construction started in 1901, retains a head frame and winding gear imported from England.

The port of 1908, connected to the mine by railway, was the largest Western-style coal export facility constructed in Japan during the Meiji period. The design of the port fused traditional Japanese techniques with then modern Western ones. Of particular note is the coal loading system based on a combination of an inner harbour that allowed coal loading irrespective of tides, and protected an outer harbour to allow movement to deeper water. This was quite different from European and American systems and an innovation that contributed to the development of international marine engineering. The masonry elements reflect local techniques.

The port retains equipment and buildings, such as the British steam powered hydraulic Lock-gates (1908) and operating building, and the customs house (1908).

The success of Miike Port, prompted the foundation (from 1912) of the Mitsui chemicals and electro-chemicals industries in and around the Port. The port is still in use today for industrial purposes.

The earlier Misumi West Port was constructed to the design of Dutch engineers to export coal from the Miike mine. One of three large port construction projects during the Meiji period, it opened in 1887 but was abandoned by 1903.

As well as the quays, a number of port-related buildings survive. It, too, demonstrates Japanese masonry techniques blended with Western designs.

8 Yawata

- The Imperial Steel Works, Japan
- Onga River Pumping Station

Within the modern Yawata steel works, are remains of the Imperial steel works constructed around 1900. These consist of a German built Repair Shop, a Former Forge Shop, and the Onga River Pumping Station that supplied water for the works. The Western-Japanese style, two-storey brick-built, central bureau or head office (1899) contained the Director General's and foreign engineers' offices.

The Imperial steel works used imported German steelmaking technology that was modified over a ten-year period to allow it to cope with local raw materials of ore and coke, with production needs and with local management approaches. These modifications included the re-design of the chimney, blast furnace and coke making processes. The outcome was a rapid increase in steel production.

History and development

The essential context for the industrialisation of Japan was the need for national protection. Since the 1600s, Japan had been closed to foreigners, and Christianity outlawed. A prohibition of the construction of large ships had been put in place in 1635, and Japanese citizens banned from sailing offshore or travelling abroad. And in 1639 a strict policy of maritime restrictions and controls

on foreign trade was established. Thus began the period of national seclusion.

This isolation began to change after 1853, when the United States sent Commodore Matthew C. Perry to Japan with a letter to the Emperor from President Millard Fillmore requesting a treaty. The Americans wanted to profit from the lucrative China trade in tea, silk and porcelain, and in order to do so they needed a refuelling port for coal-powered, steam ships. Japan had coal. The arrival of Perry's huge steamship terrified the Shoguns, the hereditary military commanders. Over the next few years Japan was pressed into various unequal treaties with America, Britain, France and Russia and soon begun to realise that it was in danger of losing control in the face of competing foreign influence. Many also realised that until Japan caught up with the west technologically, they would not have the strength to repel foreign advances, especially from the sea. The quest for industrial strengths was thus directly linked to national security.

In the 1850s, Japan's shipbuilding technology was pre-modern and substantially behind that of the West. Alarmed by foreign threats, the Tokugawa Shogunate and its feudal clans sought to develop a strong defensive navy and efficient merchant fleet. In 1853, as a direct response of Perry's visit, the Shogunate abolished its Prohibition of the Construction of Large Ships and instigated an emergency policy to construct a navy. They requested the Dutch navy to establish the Nagasaki Naval Training Institute in 1855 and started the construction of the Nagasaki Foundry in 1857, Japan's first Western-style marine engine repair facility. This marked the beginnings of heavy industry in Japan.

From 1851, Nariakira Shimadzu, the feudal lord of Satsuma, studied Western-style shipbuilding, and constructed or expanded four shipyards around Kagoshima Bay.

In 1861 one of Japan's oldest surviving dry docks was built for the repair of a Western-style ship - the steam-powered *Denryu-Maru*. Its construction used a traditional Japanese wooden design that accommodated the dimensions of the steamer. The yard also served as the base for other Western-style ships bought by the clan. In 1865 the second Japanese-built steamship, the *Ryofu-Maru*, was completed here.

Between 1863 and 1865 the Dutch *Nederlandsche Stoomboot Maatschappij (NSBM)* Company, of Rotterdam, delivered a range of machine tools to the feudal lord of Satsuma. In 1865 the Shuseikan Machinery Factory was completed, modelled on that built by Hardes in the Nagasaki Ironworks. There were also various attempts to construct Western style warships. It was around this time and also at Shuseikan, that Japan's first mechanized spinning mill was completed, with machines supplied by Platt Brothers in Manchester, UK.

In parallel with these shipbuilding initiatives were many other incentives to copy western technologies such as blast furnaces and kilns – as illustrated by the sites.

What radically changed the approach to industrialisation was the Meiji Accession in 1867. The Tokugawa Shogunate was overthrown and new emperor ascended the throne, in no small part as a result of the unequal treaties. The power in the new Era lay with a small group of men known as the Meiji oligarchs who set about transforming the country between 1867 and 1912 in the name of the Emperor.

Transformation meant reforms and modernisation. The old class system of Japan was abandoned and warrior Samurai were forbidden to carry their traditional swords. New universities and transport systems were rapidly established. This was achieved by 'borrowing technologies from the West', together with social systems, infrastructural systems and educational methods, and adapting them to Japanese needs and culture.

To help with this process, in 1871 the Meiji dispatched a delegation to the United States, England and Europe, to study everything they encountered, bring back what might work. Several students, who were a part of the delegation stayed for longer periods. Foreigners were also invited to serve Japan in an advisory capacity.

This contact heralded the first phase of industrialisation in the Meiji period when western ideas and practices were imported and adapted. The Meiji Government started a state-controlled shipping company *Kaiso Kaisha*, largely funded by Mitsui Gumi (the predecessor of Mitsui Trading company) to start international shipping operations. Foreign vessels were purchased and foreign captains and engineers were hired. Soon private companies were formed and eventually superseded the state company.

Other state controlled initiatives included the Meiji Government in 1869 purchasing the Kosuge Shipyard from the Scottish merchant Thomas Glover in 1869, making large scale steamship repair possible. The Meiji Government also opened the new Tategami Dock in 1879, a move that marked the starting point of greater ship maintenance capability. The opening of the biggest dry dock in Japan attracted a growing number of foreign vessels due to its advantageous capacity and location. In particular, naval ships from the Russian Vladivostok Fleet were regularly maintained here because, at the time, there was a lack of ice-free ports that possessed docks. Private initiatives also flourished such as the development of the Nagasaki shipyard.

Gradually this phase of importation of western knowledge metamorphosed into a further phase when local innovation and industrial development took over and a mature and distinctive industrialisation emerged in which the initiatives came from within.

One of the key factors in this third technological acculturation period from 1890s until 1901, which might be called, the most innovative, outstanding facet of Japanese industrialisation, was the national framework set by the government such as the *Zosen Shorei Ho* (Shipbuilding Encouragement Law) in 1896 the Meiji Government provided to boost shipping production. This allowed the Mitsubishi Nagasaki Shipyard, for instance, to virtually dispense with on-site Western engineers and supervisors.

After 1910, the cut-off date for this nomination, Japanese industrial development continued to grow, relying more and more on imported raw materials, but its concentrated period of technological innovation associated with the blending of western and Japanese technologies had come to an end: the Japanese industrial system was established.

3 Justification for inscription, integrity and authenticity

Comparative analysis

Although comparisons are made with industrial sites already inscribed on the World Heritage List, many in Europe, ICOMOS considers that this comparative analysis is seen to be of limited value as the case is well made for Japan being seen as the first non-Western country to industrialise. It is thus unique in Asia and needs to be seen in that context.

Japan's industrialisation began in the second half of the 19th century and by the early-20th century it had become an industrial nation alongside those of the West. Industrialisation elsewhere in Asia is much later, such as Russia in the 1920s, Taiwan, Singapore, South Korea and Hong Kong during the 1960s-1990s, and more recently China, India, the Philippines, Malaysia and Thailand. Worldwide newly industrialised countries include Brazil, Mexico and South Africa. The historical, social and economic context for Japan's emergence as an industrial nation are therefore completely different from elsewhere in Asia, and in comparison to countries worldwide.

Nevertheless comparisons are looked for within the early industrial iron making in India in the mid-19th century which was based on long established traditions of iron smelting, ship building and coal mining. The conclusion is that this development took place under a British colonial model. Similarly comparisons are made with China and the conclusion drawn is that early industrialisation in that country was very different from that in Japan in that it was pursued during a period of considerable colonial influence by the great powers.

ICOMOS notes that within Japan, a comparative analysis was undertaken of relevant industrial heritage sites to justify the selection of sites for the series. Comparisons were made between properties that shared the principal heavy industrial typologies of iron and steel,

shipbuilding and coal mining that characterised the emergence of industry during the period 1850-1910. Each site was considered with reference to a range of criteria that included relationship to the potential Outstanding Universal Value, relationship to innovation and the transfer of Western technology and its impacts both domestically and globally.

In many cases the remains were not found, were very slight and insufficient for nomination, or were less representative than the chosen sites. The detailed analysis confirmed the selection of sites as representing the heavy industries in the Meiji Period.

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 series spans the range of chronological developments in technology that characterise Japan's Meiji industrialisation, demonstrating the rapid evolution from proto-industrial sites of the clans and Shogunate during the 1850s, to transplanted, fully-fledged, large-scale Western industrial ensembles at the beginning of the 20th century;
- The series reflects Japan's unique and major achievement, which eluded all other non-Western countries until much later, to progress from being Asia's first industrialised nation to become one of the world's leading industrial nations;
- This industrial transformation from the mid-19th century, in the space of a mere two generations, is unparalleled in history;
- The component parts of the series are all linked, historically, to the Kyushu-Yamaguchi region of southwest Japan where many of the events that initiated industrialisation took place, and where some of the most significant centres of heavy industry first developed;
- The series reflects the strategic decision within Japan to industrialize on its own terms and the decisions taken to implement this during three phases:
 - The first trial and error approach during the Bakumatsu period when Japanese clans and the Shogunate initially believed that they could replicate successfully Western technology by copying from translated text books and Western ships; and its varying successes that marked a substantial move from the isolationism of the Edo period, and in part prompted the Meiji Restoration;
 - The second phase in the 1870s marked by the importation of Western technology and the expertise to operate it;
 - The third phase in the early 20th century when full-blown industrialisation was achieved with newly-acquired Japanese expertise, with the adaptation of Western technology and with the development of distinctly Japanese company structures to suit Japanese raw materials, economic needs, and social traditions.

Japan is undoubtedly the first non-European country to industrialize. The first phase reflects the emergency response by the Japanese Government after four "black ships of the US Marine commanded by Commodore Perry arrived in Edo Bay in June 1853" when the shoguns, the country's feudal authorities, negotiate a unique cooperation agreement with some of the European countries, at a time when the latter was imposing colonization on other kingdoms and empires. Japan's first industrialization stands as a model in terms of diplomacy that was subsequently copied elsewhere in the world.

The Japanese industrialization process is also unique in terms of economics: it was preceded by and successfully achieved through the exploitation of resources in the interest of national security and it managed to a degree to reconcile modernity and tradition. The subsequent long technological training missions undertaken by young Japanese in Europe do stand as pioneers.

This overall story of the three phases of industrial development is coherent. ICOMOS considers that there are two issues with this justification. These relate to how far the nominated sites can convey this narrative in a clear and readily accessible way, and whether the series can be seen to represent the overall industrial revolution given that it is restricted to heavy industry (coal, iron and steel and the needs for defence).

The nominated monuments – reverberatory furnace stacks, ship maintenance, coal mines – and the equipment – turbines, cranes, and furnaces – are extraordinary survivals many of which cannot be paralleled elsewhere in the world in purely technological terms.

For these sites to fully reflect the three stages that led to industrial autonomy, there is a need for more context to be provided in the way each of the sites is interpreted. For the early sites to reflect innovation rooted in feudal traditions, and for the Meiji sites in order to allow a better understanding of how and why certain pieces of imported equipment such as Nagasaki, for example, led on to the final stage of national industrial autonomy.

In other words how did Japan, having borrowed the best of the West in terms of technology, mould it to fit Japan's needs? This crucial aspect of the narrative remains less clear than it should, in relation to what the sites convey, both in the nomination dossier and in the way they are interpreted. (see recommendation below on improved interpretation)

There is a further issue as to whether the chosen sites can be seen to reflect adequately the scope of what exists. There is to a degree an imbalance between the early industrialization process, which is well represented, and that of the Meiji period during which the full industrial transition took place: more sites reflect the former rather than the latter. Nevertheless the comparative analysis of remaining sites has shown that it would be difficult to redress this balance.

In relation to whether the series can be seen to represent the overall industrial revolution given that it is restricted to heavy industry, ICOMOS notes that the State Party has stated that it has already inscribed aspects of silk spinning and weaving and wishes in the future to explore the nomination of other aspects of the industrial revolution in a similar way to how the UK has reflected its industrial legacy through several properties.

ICOMOS considers that the vast legacy of Japanese industrialisation does indeed appear to have the potential to be recognised in a broader way. If that is to be the case, the name of the current nomination presents a difficulty in its aim to represent the whole of the Meiji's Industrial Revolution. There are many other aspects of that revolution, separate from heavy industry and its focus on defence, such as spinning industries (at the end of the Meiji period, more than a third of the world's supply of silk came from Japan and the spinning industries in general provided the resources necessary for defence), gas works, paper mills, canning factories, etc. that could be reflected and linked to local enterprise and initiative, as well as elements in the landscape that speak to the enormous social upheavals that the industrial revolution initiated when workers moved away from agricultural societies to work in the rapidly expanding towns and cities.

ICOMOS considers that the current series demonstrates well the technology associated with the Meiji's industrial revolution and the main sponsors of change, but covers less well other aspects such as the impact on, and contribution from ordinary people, and the transformation of urban and rural landscapes. During this period, Japan did not just borrow or import technology or technological ideas, and mould them for their own purposes, they also introduced social systems, educational methods and governance structures and similarly shaped them to local requirements, in ways that irreversibly altered the structure of society.

The phrase, *Industrial Revolution*, adopted by British and historians was meant to celebrate the development of industrial processes in the hundred and fifty years from the mid-18th century in Great Britain, France, and the Netherlands that led to the development of huge industrial towns and the massive re-structuring of society. The meaning of the term as now widely used goes beyond technology to embrace educational and social change and the negative, as well as positive consequences of industrialisation.

The nominated series reflect only technological progress, related to some industries in a specifically Japanese context. It does not address the wider transformation to society brought about by that technology. Nor does it address the complex, sweeping social and political changes that were the pre-requisites for industrial progress and which were undertaken with astonishing speed such the abandonment of the old class system, the opening of universities, the construction of telegraph and railway lines, and the development of shipping lines.

In these circumstances, ICOMOS does not consider that the series reflects the full scope of the Industrial Revolution. To do that the emphasis would need to be broadened to cover more social aspects, such as workers' housing, schools, hospitals, etc., other industries, and the impact of industrialisation on both rural and urban landscapes and their societies.

Given that the State Party has indicated that it wishes to explore further industrial nominations, it would seem preferable if each of such nominations could be focused on certain aspect of the overall industrial revolution, whether historical, geographical, social or technical.

Integrity and authenticity

Integrity

The selection of the component parts of the series adequately encompasses all the necessary attributes of outstanding Universal Value.

In terms of the integrity of individual sites, though the level of intactness of the components is variable, they demonstrate the necessary attributes to convey OUV. The archaeological evidence appears to be extensive and merits detail recording research and vigilant protection. It contributes significantly to the integrity of the nominated property.

A few of the attributes are vulnerable or highly vulnerable in terms of their state of conservation. These are:

Hashima Coal Mine: the state of deterioration at the mine presents substantial conservation challenges which are detailed under Conservation below.

Miike Coal Mine and Miike Port: some of the physical fabric is in poor condition.

Imperial Steel Works: the physical fabric of the Repair shop is in poor condition but temporary measures have been put in place.

In a few sites there are vulnerabilities in terms of the impact of development, particularly in visual terms.

These are as follows:

Shokasonjuku Academy

The visual integrity of the setting is impacted by the subsequent development of the place as a public historic site and experience. However, this development does not adversely compromise its overall integrity.

Takashima Coal Mine: the visual integrity is compromised by small scale domestic and commercial development.

Shuseikan

The Foreign Engineer's Residence has been relocated twice and is now located in the proximity of its original location. The residence is surrounded by small scale urban development that adversely impacts on its setting. The setting can only be enhanced if and when the surrounding buildings are demolished and any further development is controlled through the legislative process and the implementation of the conservation management plan.

Authenticity

In terms of the authenticity of individual sites, though some of the components' attributes are fragmentary or are archaeological remains, they are recognisably authentic evidence of the industrial facilities. They possess a high level of authenticity as a primary source of information, supported by detailed and documented archaeological reports and surveys and a large repository of historical sources held in both public and private archives that were provided to the mission expert, as requested.

Overall the series adequately conveys the way in which feudal Japan sought technology transfer from Western Europe and America from the middle of the 19th century. And adapted it to satisfy specific domestic needs and social traditions.

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

Criteria under which inscription is proposed

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

Criterion (ii): *exhibit and 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 series of heritage sites, together, uniquely illustrate the process by which feudal Japan sought technology transfer from Western Europe and America from the middle of the 19th century. This technology was adopted and progressively adapted to satisfy specific domestic needs and social traditions, thus enabling Japan to become a world-ranking industrial nation by the early 20th century.

ICOMOS considers that subject to the suggested emphasis on technical aspects of the industrial revolution, the series could be seen to represent an exceptional interchange of industrial ideas, know-how and equipment, that resulted within a short space of time, in Japan in an unprecedented emergence of autonomous industrial development in the field of heavy industry which had profound impact on East Asia.

ICOMOS considers that this criterion has been fully justified.

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

This criterion is justified by the State Party on the grounds that the series of sites is an exceptional affirmation of the strength and durability of a local cultural tradition that underpinned the pioneer period of Japanese industrialization from the 1850s to the early 20th century. In the course of this industrialization a distinct form of 'industrial culture' developed and survives to this day. The moulding of the industrialization of a nation by a cultural tradition, and the survival of that tradition after modernization, adds to the human experience of a major phase in world history. Companies founded in this period still retain the industrial cultural traditions that echo those of Japan itself, an exceptional testimony to the strength of a cultural tradition in the face of unprecedented social, technological and economic change.

ICOMOS considers that the justification puts forward the idea of already existing cultural traditions leading on to a distinctive industrial culture. What has not been clearly described in the dossier are the characteristics of those cultural traditions, either the Shogun culture or the new industrial culture, as conveyed by the sites.

Even if this were done, ICOMOS considers that the 'cultural traditions' as defined, although important could not be seen be a primary driver of the industrial development.

ICOMOS considers that this criterion has not been justified.

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

This criterion is justified by the State Party on the grounds that the technological ensemble of key industrial sites of iron and steel, shipbuilding, and coal mining is testimony to Japan's unique achievement in world history as the first non-Western country to successfully industrialize. Viewed as an Asian cultural response to Western industrial values, the ensemble has no counterpart elsewhere in the world.

ICOMOS considers that the series could be seen to be an outstanding technological ensemble of industrial sites related to iron, steel, ship-building and coal that reflected the rapid and distinctive industrialisation of Japan based on local innovation and adaptation of Western technology.

ICOMOS considers that this criterion has been fully justified.

ICOMOS considers that the serial approach can be justified.

ICOMOS consider that criteria (ii) and (iv) and Outstanding Universal Value have been justified.

4 Factors affecting the property

ICOMOS notes that the key developments within the nominated properties are two road construction projects at Shuseikan and Mietsu Naval Dock and a new anchorage facility at Miike Port. There are also five proposals for the upgrade or development of visitor facilities in four of the Areas. The forum in which these and future developments will be discussed and assessed for their impact on OUV will be the Local Conservation Councils and this will be done before legislative approval is sought.

Proposed road at Shuseikan

Japan's National Route 10 currently runs just outside the boundary and is within the buffer zone. There is a proposal to bypass the road through the nearby mountain. The agency responsible for the development of bypass is required to undertake its design and development in accordance with the Japanese Government's Cabinet Decision for the protection of World Heritage, and with conservation management plan and all relevant legislation. This project is currently in the planning phase. There is no date yet for construction to commence. This proposal provides the opportunity to enhance the component's setting with the removal of some modern small-scale commercial buildings and provide opportunities to enable more archaeological surveys to enhance understanding of the site.

Proposed road at Mietsu Naval Dock

Consultation locally, nationally and internationally has been undertaken to modify the original design for the construction of a road and bridge just outside the north east side of the buffer zone. As a result, the original bridge design has been modified to try and avoid impact on the site or on the visual setting with its distant views across the river. This development is still in the planning phase and a date for the commencement of construction is yet to be set. As this is a comparatively major project, further details should be submitted for review.

Proposed development at Miike Port

There is a proposal for the development of a new small anchorage facility for the local fishing fleet to provide safer access between the fishing fleet and much larger shipping vessels and to protect the fishing fleet from tidal surges. Planning for this development commenced prior to the development of the nomination but construction is not due to commence until the 2020s. However, subsequent to the nomination's development, the original design has been amended to minimise its physical and visual impact. The new facility is to be located at the western tip of the port and will 'cut into' the existing dock. Further details should be provided for review.

Proposals for new Visitor Centres/Facilities

There are proposals to develop new visitor facilities in the buffer zones to accommodate the anticipated visitor increase at:

- Hagi: new facility planned (construction from 2015 and open in 2017);
- Nirayama: new facility planned (construction from 2015 and open in 2016);
- Miike: new facility for Miike Port planned (construction from 2016 or later);
- Yawata: new facilities planned (new or extension at Kitakyushu, and new construction in Nakama from 2016 or later).

The facilities' design and development will be managed through the Local Conservation Councils in accordance with the relevant conservation management plans and legislative protection.

Natural disasters

Japan is located in a part of the globe, where earthquakes, typhoons, tsunamis, volcanic eruptions, localised heavy rainfalls and flooding and other natural disasters are highly likely to occur and could have a major impact on the nominated sites.

The Japanese Government has established a national Basic Disaster Prevention Plan (2012) based on Japan's recent disaster history. The plan sets out the roles of the national, local and public organisations, businesses and residents in disaster prevention and management. In addition, the regions have in place a regional disaster prevention plan that aims to reinforce each region's ability to manage disasters.

ICOMOS considers that measures to strengthen buildings and structures to mitigate the impacts of earthquakes could have the potential to impact adversely on their value. Safety, particularly in places with public access, is the first priority in determining whether or not such measures are required. Any measures are guided by the Agency for Cultural Affairs' manual for the seismic diagnosis and strengthening for Important Cultural Property.

ICOMOS observed a number of different strengthening treatments during the technical evaluation mission. In the case of the Imperial Steel Works, these had had an adverse visual impact on the original fabric, yet a minimal impact on the fabric and design features. At Miike Coal Mine, the interventions had a minimal visual and physical impact on the fabric and design features.

ICOMOS considers that any such works required in the future should be assessed and designed in consultation with both heritage and engineering specialists and in accordance with the conservation management plans to minimise impacts both visually and in terms of historic fabric.

Visitor pressure

The number of visitors at component sites is likely to increase based on the trend for previously inscribed properties in Japan. The level of increase will vary at each component due to their geographical location, ease of access and the number of hours they are open for public access. Monitoring measures will be put in place to record the level of visitation if the nominated property is inscribed.

ICOMOS considers that a strategy needs to be developed to assess and determine the acceptable carrying capacity at each component site to ensure that there are no adverse impacts on the fabric particularly at such sites as the Shokasonjuku Academy and Glover House. Glover House is a key tourist destination in Nagasaki with a high level of visitor numbers. The local government is actively pursuing an increase in tourism to the city, especially to build capacity to accommodate large cruise ships.

ICOMOS recommends that the State Party defines acceptable visitor threshold levels at each component site to mitigate any potential adverse impacts, commencing with those most likely to be at risk.

ICOMOS considers that the main potential threats to the property are unregulated visitors and infrastructural development together with the lack of conservation of some components – see below.

5 Protection, conservation and management

Boundaries of the nominated property and buffer zone

The boundaries for the components of the nomination and the proposed buffer zones are clearly delineated on the maps supplied with the nomination dossier.

The boundary for each component has been drawn to include the essential features that overall contribute to the potential OUV. The boundaries have been defined by historical records and site boundaries, legal

protection, integrity and authenticity and advice from subject experts.

In most cases the boundaries include all the necessary attributes as well as areas that in light of future research might have the potential to contribute and enhance the understanding of the site. Minor modifications to the boundaries at four of the areas were undertaken following discussions during the ICOMOS mission.

In Area 1 at Hagi Castle town there is a residential block located in the “District of the Merchant Class” which is excluded from the boundary. The reason for this exclusion is that the owner did not agree to it being included in this site listed under the *Law for the Protection of Cultural Properties* and subsequently put forward as part of this nomination (owners’ agreement is essential for listing places under this law). However ICOMOS was satisfied that there is adequate enforceable legal protection under the local city’s planning ordinances to protect this block from adverse development and change.

Each component site of the nomination is provided with an adequate buffer zone that is clearly delineated and takes account of important views, topographical features such as mountain ranges, and areas that are functionally important such as rivers and seas.

The buffer zones provide protection for the nominated components through the existing enforceable legal protection mechanisms and the conservation management plans that have been developed for each of the eight Areas.

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

Ownership

For the overall series there is a mixture of public and private ownership. This mixture is also seen in some of the component parts where the owner of a road or river within the boundaries might be different from the major owner of the industrial component. A detailed list is provided in the nomination dossier.

Protection

There are a number of existing legislative protection instruments, both national and regional, that provide a high level of protection for the nominated sites and associated buffer zones. Details are provided in the nomination document. The relationship between the different types of legislation is provided in the conservation management plans for each area.

The most important of these with respect to protecting the nominated property are:

- *Law for the Protection of Cultural Properties* that is applied to the non-operational sites.

- *Landscape Act* that applies to the privately owned and still operational sites that are protected as Structures of Landscape Importance. This applies to the four components owned and operated by Mitsubishi Heavy Industries at Nagasaki Shipyard, and the two components owned and operated by Nippon at Imperial Steel Works.

The *Law for the Protection of Cultural Properties* is the primary mechanism for regulating any development and change of the existing state of a designated place and under this law permission must be granted by the national government. Similarly, under the *Landscape Act* permission must be sought to change any Structure of Landscape Importance and owners of such structures must conserve and manage them appropriately.

The control of development and actions within the buffer zones is largely controlled by city landscape ordinances that limit the height and density of any proposed development.

Further to the legislative measures, the Japan's Government Cabinet decision of May 2012 requires that all relevant Government ministries must now participate in World Heritage protection. This now encompasses not only the ministries of Education, Culture, Sports, Science and Technology and the Environment, as well as such agencies for responsible for roads, tourism and ports.

The legislative and regulatory measures at the national and local levels provide adequate protection of the nominated property.

ICOMOS considers that the legal protection in place is adequate.

Conservation

The nomination dossier provides a list of the condition of the each of the nominated component sites ranging from poor to good. ICOMOS mission visually checked the condition of each component within the time available. From this cursory assessment, ICOMOS considers that that the condition of some of the components may need to be reassessed, particularly:

- Hashima Coal Mine – although the condition stated for this component is poor, fair and good condition, the overall site was observed to be in a poor condition.
- Glover House and Office – although the condition stated for this component is good, the site was observed to be in fair condition.
- Miyanohara Pit – although the condition stated for this component is poor, fair and good condition, the site was observed to be in poor and fair condition.
- Manda Pit – although the condition stated for this component is fair and good condition, the site was observed to be in poor and fair condition.

- Repair Shop – although the condition stated for this component is poor, fair and good condition. The place was observed to be in poor and fair condition.
- Onga River Pumping Station – the condition stated for this component is fair and good condition. The place was observed to be in fair condition.

The State Party provided documentary evidence at each of the archaeological components, which have all been conserved and protected since they were investigated, to support that they are in good condition.

Conservation management plans for each of the components have been developed that detail how each component contributes to the OUV of the nominated series.

"Basic Policies" in the plans provide an overarching consistent conservation approach though there are variations in the level of detail provided for the implementation of work in each component.

For example the Miike Coal Mine and the Imperial Steel Works conservation management plans provide detailed policies and strategies for the ongoing conservation and maintenance of the attributes of these components, appropriate for sustaining OUV. In contrast, the plan for Niryama Reveratory Furnaces provides less detailed guidance. In general, the more detailed plans have been developed for the privately owned and managed sites.

ICOMOS considers that the plan for the Hashima Coal Mine needs to be more detailed. The state of conservation of this site is poor and requires urgent conservation work on a large scale. The conservation management plan provides general policies to prevent further deterioration of the attributes related to the Meiji era. There is currently not a prioritised program of works based on its overall state of conservation, nor a time frame for works to commence. However immediate action is required particularly for the revetment to retain not only the wall but also the whole island. It was confirmed to ICOMOS that ¥200M/year will be made available over the next five financial years to undertake works.

ICOMOS recommends that the State Party develop a detailed conservation works programme for Hashima Island as a priority and submit details for review.

In general, ICOMOS notes that ongoing routine conservation programmes are being developed and implemented in accordance with the conservation management plans and it appears that there are adequate resources. It is unclear how more major conservation works are to be prioritised across the nominated property and when they will be undertaken. It is recommended that the State Party develop a prioritised conservation programme for the nominated property as a whole and for each of its component sites.

ICOMOS considers that the state of conservation is satisfactory for most sites, but urgent conservation work and a long term conservation strategy are needed at Hashima Coal Mine and there is also a need for a prioritised conservation programme for the overall property and each of the sites.

Management

Management structures and processes, including traditional management processes

The Japanese Government has established a new partnership-based framework for the conservation and management of the nominated property and its components including the operational sites. This is known as the *General Principles and Strategic Framework for the Conservation and Management of the Sites of Japan's Meiji Industrial Revolution: Kyushu-Yamaguchi and Related Areas*. Japan's Cabinet Secretariat has the overall responsibility for the implementation of the framework.

Under this strategic framework a wide range of stakeholders, including relevant national and local government agencies and private companies, will develop a close partnership to protect and manage the nominated property. The framework details 13 basic principles for the conservation and management of the nominated property.

1. Partnership-based approach
2. Clarifying the role of the stakeholders
3. Holistic approach
4. Global approach
5. Flexible design of conservation methods
6. Precautionary risk analysis
7. Integration with regional and local plans
8. Sustainable conservation and management
9. Involvement of local communities
10. Handing over the associated knowledge to the next generation
11. Feedback cycle for better conservation
12. Capacity building
13. Transparency and accountability

The governance structure established by the Cabinet Secretariat to oversee the implementation of the strategic framework consists of:

- A National Committee of Conservation and Management with representatives from relevant national and local government agencies who will provide advice and make decisions regarding issues related to the overall nominated property.
- Local Conservation Councils with representatives, including heritage experts, from relevant national and local government agencies and private companies. The Councils' role is to ensure that the components are conserved and managed in accordance with the conservation management plans. They shall also be the fora by which any

proposals for development and change as well as other issues are discussed and/or resolved prior to seeking the relevant legislative approval. The Councils shall also undertake a monitoring role for the nominated property that will be coordinated by the National Committee of Conservation and Management. The Councils are currently scheduled to meet once each year.

An Industrial Heritage Expert Committee has also been established to provide additional conservation and management advice.

In addition to these mechanisms, the private companies Mitsubishi, Nippon and Miike Port Logistics Corporation have entered into agreements with the Cabinet Secretariat to protect, conserve and manage their relevant components. This will largely be achieved with the implementation of the relevant conservation management plans and in accordance with relevant legislation. The legislation provides a clear process to manage any potential developments or activities that may lead to an adverse impact on OUV. It appears to be unlikely that there will be a change in ownership of these components. However, in the event that ownership is changed and the new owner does not enter into an agreement with Cabinet Secretariat, the existing legislation appears adequate to protect OUV.

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

Though the conservation management plans provide consistency on the overall policies for the components conservation and management, there are variations between the plans as mentioned above. In order to ensure consistency across each of the components, ongoing regular training and capacity building is needed on the appropriate conservation and management methods.

ICOMOS recommends that the State Party monitor the effectiveness of the new partnership-based framework for the conservation and management of the nominated property and its components on an annual basis. It is also recommended that the State Party monitors the implementation of the conservation management plans.

The components are currently largely interpreted and presented by means of on-site signage, self-guided and guided tours, and in some cases educational programmes. The presentation of the components is mainly place specific and does not present the OUV or indicate how each component relates to each other or to the whole property.

ICOMOS considers that what was not demonstrated is how all the 23 components are to be interpreted to relate them to the overall OUV of the nominated property. What is urgently needed is clear interpretation to show how each site or component relates to the overall series,

particularly in terms of the way they reflect the one or more phases of Japan's industrialisation and convey their contribution to OUV.

The State Party is responding by setting up a Committee to address the issue that is to include interpretation, marketing and education experts.

ICOMOS recommends that the State Party prepare an interpretive strategy for the presentation of the nominated property.

Details of the staffing levels at each Area are provided in the nomination dossier. However this does not include the staff at Meitsu Port Logistics Corporation, Mitsubishi Heavy Industries and Nippon Steel though it is claimed that they *"staffs fully in house and affiliate to conservation and management of the component parts they own"*.

Under the Strategic Framework, an Industrial Heritage Expert Committee has been established whose role is to provide advice on technical conservation measures. The Committee consists of domestic expertise including industrial archaeology, history of industry, architecture, city development and heritage conservation. It also includes international experts on industrial archaeology and world heritage.

Relevant expertise, such as archaeologists and engineers, are readily available at the local and national government levels. The Local Conservation Councils aim to provide the day-to-day managers with access to relevant expertise and to develop tailored and targeted approaches for the ongoing conservation and management of a component.

ICOMOS considers that capacity building through training needs to be better articulated, particularly to ensure a consistent conservation and management approach across all components of the nominated property.

It has not demonstrated that the private companies have internal heritage expertise. It is essential that the relevant managers and staff within the private companies undergo training to understand OUV and how each of the sites contributes. It is also important that the companies engage/consult with relevant heritage experts as required, particularly with regard to balancing the need for routine maintenance with the need for conservation.

ICOMOS recommends that the State Party establishes and implements an on ongoing training program for all staff and stakeholders responsible for the day-to-day management of each component to build capacity and ensure a consistent approach to the nominated property's ongoing conservation, management and presentation.

ICOMOS notes that there is adequate funding and/or access funding for the conservation and management of the nominated property.

In general, the local government is responsible for funding the day-to-day conservation and maintenance of the components across the nominated property. If substantial funding is required (approximately ¥2M), applications for funding can be made to the national government which, in general, provides a 50% contribution. The Japanese Government has established a tax incentive scheme to encourage private companies to fund the conservation and management of component parts. In the case of Nippon Steel for the components at the Imperial Steel Works (Area 8) it is estimated that it will receive approximately ¥100K/year.

Involvement of the local communities

Extensive community consultation was undertaken in 2012 and 2013 during the development of the nomination. These fora included meetings, lectures, tours and seminars held at each Area.

The Local Conservation Councils are the mechanism for the ongoing community engagement for the nominated property's conservation, management and presentation.

ICOMOS considers that the overall management system for the property is adequate but that attention should be given to monitoring the effectiveness of the new partnership-based framework, and to putting in place an on-going capacity building programme for staff. There is also a need to ensure that appropriate heritage advice is routinely available for privately owned sites.

6 Monitoring

The nominated property's component sites have been inventoried, described and documented in the preparation of the nomination dossier and the accompanying conservation plans.

This inventory was based on the Japanese Government's two research reports developed in 2007 and 2008 that researched, described and documented heritage places significant to its industrial modernisation. In addition, the National Committee for Utilising Industrial Heritage, chaired by the President of ICOMOS Japan, was established to provide expert assessment of significant places of industrial heritage.

ICOMOS considers that monitoring processes are adequate.

7 Conclusions

ICOMOS considers that the current series demonstrates well the technology associated with the Meiji's industrial

revolution and the main sponsors of change, but covers less well other aspects such as the impact on, and contribution from ordinary people, and the transformation of urban and rural landscapes. During this period, Japan did not just borrow or import technology or technological ideas, and mould them for their own purposes, they also introduced new social systems, educational methods and governance structures and similarly shaped them to local requirements.

The phrase, *Industrial Revolution*, as now widely used goes beyond technology to embrace educational and social change and the negative, as well as positive consequences of industrialisation. The nominated series reflect only technological progress, related to some industries in a specifically Japanese context. It does not address the wider transformation to society brought about by that technology. Nor does it address the complex, sweeping social and political changes that were the pre-requisites for industrial progress, and which were undertaken with astonishing speed, such as the abandonment of the old class system, the opening of universities, the construction of telegraph and railway lines, and the development of shipping lines.

In these circumstances, ICOMOS does not consider that the series reflects the full scope of the Industrial Revolution. Given that the State Party has indicated that it wishes to explore further industrial nominations, it would seem preferable if each of such nominations could be focused on certain aspect of the overall industrial revolution, whether historical, geographical, social or technical. ICOMOS thus supports the name change suggested by the State Party to reflect the fact that this nomination covers certain specific technical aspects of the industrial revolution.

The nominated series presents challenges in terms of interpreting the way component sites each contributes to the Outstanding Universal Value of the property as a whole. More needs to be done to present not only the technical aspects of each site but also how each relates in a readily understood manner to one of the three phases of industrialisation. It would also be appropriate to allow understanding of the full history of each of the sites.

Even greater challenges relate to the conservation of the large, complex and in some cases extremely fragile sites. ICOMOS considers that more work is needed to strengthen the conservation approaches and to set out clear long term plans and how they will be implemented. In the short term, a detailed programme of conservation work needs to be put in place for Hashima Island as a matter of urgency.

8 Recommendations

Recommendations with respect to inscription

ICOMOS recommends that the Sites of Japan's Meiji Industrial Revolution: Iron and Steel, Shipbuilding and Coal Mining, Japan, be inscribed on the basis of **criteria (ii) and (iv)**.

Recommended Statement of Outstanding Universal Value

Brief synthesis

A series of industrial heritage sites, focused mainly on the Kyushu-Yamaguchi region of south-west of Japan, represent the first successful transfer of industrialization from the West to a non-Western nation. The rapid industrialization that Japan achieved from the middle of the 19th century to the early 20th century was founded on iron and steel, shipbuilding and coal mining, particularly to meet defence needs. The sites in the series reflect the three phases of this rapid industrialisation achieved over a short space of just over fifty years between 1853 and 1910.

The first phase in the pre-Meiji Bakumatsu period, at the end of Shogun era in the 1850s and early 1860s, was a period of experimentation in iron making and shipbuilding. Prompted by the need to improve the defences of the nation and particularly its sea-going defences in response to foreign threats, industrialisation was developed by local clans through second hand knowledge, based mostly on Western textbooks, and copying Western examples, combined with traditional craft skills. Ultimately most were unsuccessful. Nevertheless this approach marked a substantial move from the isolationism of the Edo period, and in part prompted the Meiji Restoration.

The second phase in the early 1870s brought in with the new Meiji Era, involved the importation of Western technology and the expertise to operate it; while the third and final phase in the late Meiji period (between 1890 to 1910), was full-blown local industrialization achieved with newly-acquired Japanese expertise and through the active adaptation of Western technology to best suit Japanese needs and social traditions, on Japan's own terms. Western technology was adapted to local needs and local materials and organised by local engineers and supervisors.

The 23 nominated components are in 11 sites within 8 discrete areas. Six of the eight areas are in the south-west of the country, with one in the central part and one in the northern part of the south island. Collectively the sites are an outstanding reflection of the way Japan moved from a clan based society to a major industrial society with innovative approaches to adapting western technology in response to local needs and profoundly influenced the wider development of East Asia.

After 1910, many sites later became fully fledged industrial complexes, some of which are still in operation or are part of operational sites.

Criterion (ii): The Sites of Japan's Meiji Industrial Revolution illustrate the process by which feudal Japan sought technology transfer from Western Europe and America from the middle of the 19th century and how this technology was adopted and progressively adapted to satisfy specific domestic needs and social traditions, thus enabling Japan to become a world-ranking industrial nation by the early 20th century. The sites collectively represents an exceptional interchange of industrial ideas, know-how and equipment, that resulted, within a short space of time, in an unprecedented emergence of autonomous industrial development in the field of heavy industry which had profound impact on East Asia.

Criterion (iv): The technological ensemble of key industrial sites of iron and steel, shipbuilding and coal mining is testimony to Japan's unique achievement in world history as the first non-Western country to successfully industrialize. Viewed as an Asian cultural response to Western industrial values, the ensemble is an outstanding technological ensemble of industrial sites that reflected the rapid and distinctive industrialisation of Japan based on local innovation and adaptation of Western technology.

Integrity

The component sites of the series adequately encompass all the necessary attributes of Outstanding Universal Value.

In terms of the integrity of individual sites, though the level of intactness of the components is variable, they demonstrate the necessary attributes to convey OUV. The archaeological evidence appears to be extensive and merits detail recording research and vigilant protection. It contributes significantly to the integrity of the nominated property.

A few of the attributes are vulnerable or highly vulnerable in terms of their state of conservation. The Hashima Coal Mine is in a state of deterioration and presents substantial conservation challenges. At the Miike Coal Mine and Miike Port some of the physical fabric is in poor condition. The physical fabric of the Repair shop at the Imperial Steel Works is in poor condition although temporary measures have been put in place.

In a few sites there are vulnerabilities in terms of the impact of development, particularly in visual terms. At the Shokasonjuku Academy, the visual integrity of the setting is impacted by the subsequent development of the place as a public historic site and experience. However, this development does not adversely compromise its overall integrity.

The visual integrity of the Takashima Coal Mine is compromised by small scale domestic and commercial development, while at Shuseikan, the Foreign Engineer's Residence has been relocated twice and is now located in the proximity of its original location. The residence is surrounded by small scale urban development that adversely impacts on its setting. The setting can only be enhanced if and when the surrounding buildings are demolished and any further development is controlled through the legislative process and the implementation of the conservation management plan.

Authenticity

In terms of the authenticity of individual sites, though some of the components' attributes are fragmentary or are archaeological remains, they are recognisably authentic evidence of the industrial facilities. They possess a high level of authenticity as a primary source of information, supported by detailed and documented archaeological reports and surveys and a large repository of historical sources held in both public and private archives.

Overall the series adequately conveys the way in which feudal Japan sought technology transfer from Western Europe and America from the middle of the 19th century. And adapted it to satisfy specific domestic needs and social traditions.

Requirements for Protection and Management

A number of existing legislative protection instruments, both national and regional, provide a high level of protection for the nominated sites and associated buffer zones. The relationship between the different types of legislation is provided in the conservation management plans for each area. The most important of these instruments are the *Law for the Protection of Cultural Properties* that is applied to the non-operational sites, and the *Landscape Act* that applies to the privately owned and still operational sites that are protected as Structures of Landscape Importance. This applies to the four components owned and operated by Mitsubishi Heavy Industries at Nagasaki Shipyard, and the two components owned and operated by Nippon at Imperial Steel Works.

The *Law for the Protection of Cultural Properties* is the primary mechanism for regulating any development and change of the existing state of a designated place and under this law permission must be granted by the national government. Similarly, under the *Landscape Act* permission must be sought to change any Structure of Landscape Importance and owners of such structures must conserve and manage them appropriately.

The control of development and actions within the buffer zones is largely controlled by city landscape ordinances that limit the height and density of any proposed development.

Conservation management plans for each of the components have been developed that detail how each component contributes to the OUV of the series. "Basic Policies" in the plans provide an overarching consistent conservation approach though there are variations in the level of detail provided for the implementation of work in each component.

The Japanese Government has established a new partnership-based framework for the conservation and management of the nominated property and its components including the operational sites. This is known as the *General Principles and Strategic Framework for the Conservation and Management of the Sites of Japan's Meiji Industrial Revolution: Kyushu-Yamaguchi and Related Areas*. Japan's Cabinet Secretariat has the overall responsibility for the implementation of the framework. Under this strategic framework a wide range of stakeholders, including relevant national and local government agencies and private companies, will develop a close partnership to protect and manage the nominated property.

In addition to these mechanisms, the private companies Mitsubishi, Nippon and Miike Port Logistics Corporation have entered into agreements with the Cabinet Secretariat to protect, conserve and manage their relevant components.

Attention should be given to monitoring the effectiveness of the new partnership-based framework, and to putting in place an on-going capacity building programme for staff. There is also a need to ensure that appropriate heritage advice is routinely available for privately owned sites.

What is urgently needed is an interpretation strategy to show how each site or component relates to the overall series, particularly in terms of the way they reflect the one or more phases of Japan's industrialisation and convey their contribution to OUV.

Additional recommendations

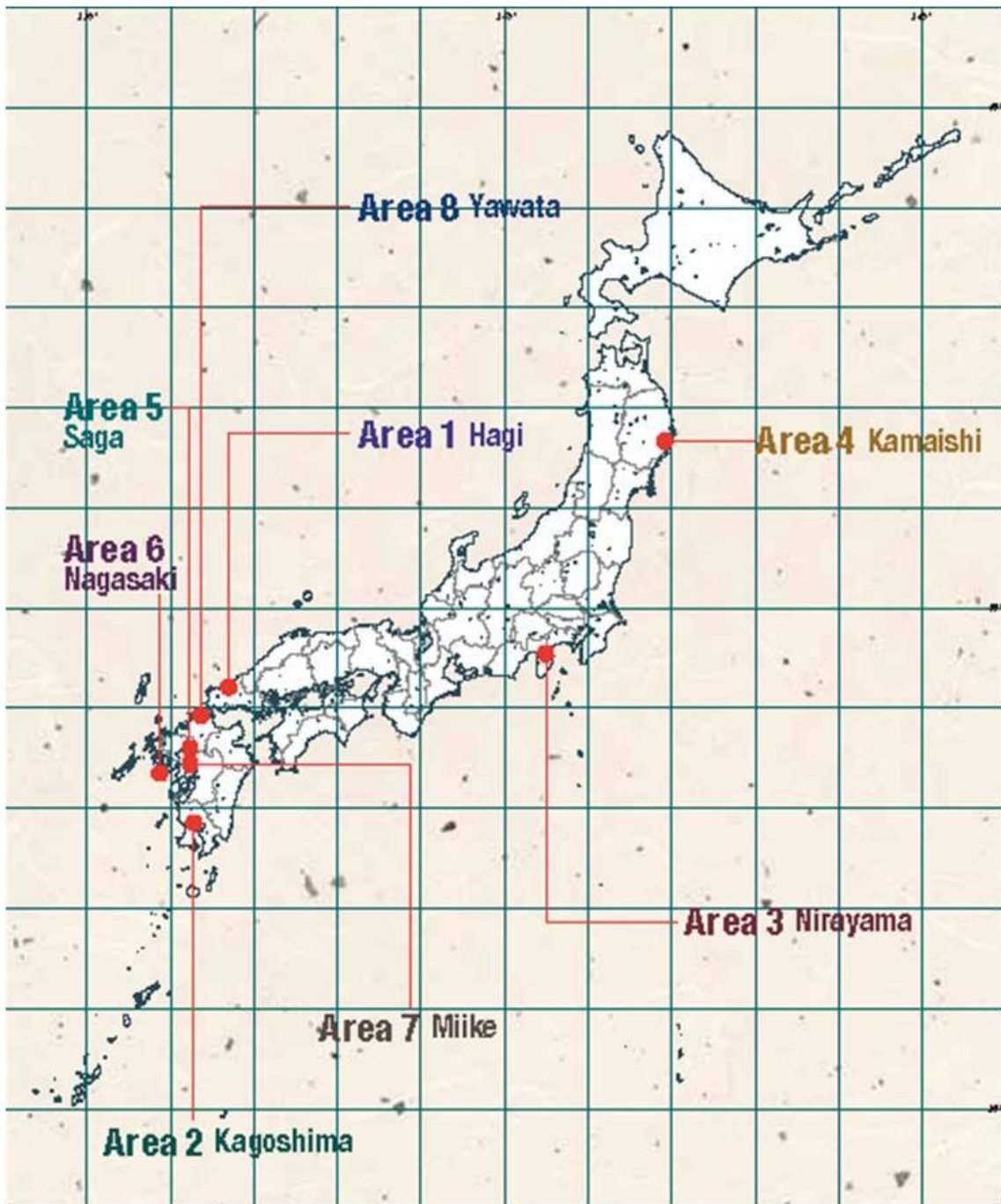
ICOMOS further recommends that the State Party give consideration to the following:

- Developing as a priority a detailed conservation work programme for Hashima Island;
- Developing a prioritised conservation work programme for the nominated property and its component sites and an implementation programme;
- Defining acceptable visitor threshold levels at each component site to mitigate any potential adverse impacts, commencing with those most likely to be at risk;
- Monitoring the effectiveness of the new partnership-based framework for the conservation and management of the nominated property and its components on an annual basis;

- Monitoring the implementation of the conservation management plans, the issues discussed and the decisions made by the Local Conservation Councils on an annual basis;
- Establishing and implementing an on ongoing training programme for all staff and stakeholders responsible for the day-to-day management of each component to build capacity and ensure a consistent approach to the nominated property's ongoing conservation, management and presentation;
- Preparing an interpretive strategy for the presentation of the nominated property, which gives particular emphasis to the way each of the sites contributes to OUV and reflects one or more of the phases of industrialisation; and also allows an understanding of the full history of each site;
- Submitting all development projects for road construction projects at Shuseikan and Mietsu Naval Dock and for new anchorage facility at Miike Port and proposals for the upgrade or development of visitor facilities to the World Heritage Committee for examination, in accordance with paragraph 172 of the *Operational Guidelines for the Implementation of the World Heritage Convention*.

ICOMOS also recommends that the State Party should submit a report outlining progress with the above to the World Heritage Centre, by 1 December 2017, for examination by the World Heritage Committee at its 42nd session in 2018.

ICOMOS would be ready and willing to offer advice if requested.



Map showing the location of the nominated properties



Archaeological excavation of Hashino blast furnace



Hagi Reverberatory furnace



Hashima Coal Mine (Gunkanjima)



Mitsubishi Giant Cantiliver Crane

Great Burkhan Khaldun Mountain and its surrounding sacred landscape (Mongolia)

No 1440

Official name as proposed by the State Party

Great Burkhan Khaldun Mountain and its surrounding sacred landscape

Location

Mungunmorit Soum (District) in Tuv Aimag (Province)
Umnudelger Soum (District) in Khentii Aimag (Province)

Brief description

The nominated Great Burkhan Khaldun Mountain, and its surrounding landscape, lies in the central part of the Khentii mountains chain that forms the watershed between the Arctic and Pacific Oceans in the north-east of Mongolia. This is where the vast Central Asian steppe meets the coniferous forests of the Siberian taiga.

Burkhan Khaldun is associated with the worship of sacred mountains, rivers and *ovoo*-s (shamanic rock cairns), in which ceremonies have been shaped by a fusion of ancient shamanic and Buddhist practices.

Since the 1990s, after sixty years of repression, official support has been given for the revival of traditional practices of mountain worship.

Burkhan Khaldun is also associated with Chinggis Khan, as his reputed burial site and more widely with his establishment of the Mongol Empire in 1206. It is one of four sacred mountains he designated during his lifetime, Khaldun as part of the official status he gave to mountain worship. Burkhan Khaldun is considered to be the cradle of Mongolian nationhood.

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 2013), paragraph 47, it is also a *cultural landscape*.

1 Basic data

Included in the Tentative List

Burkhan Khaldun, as part of a serial site for Mongolia Sacred Mountains: Bogd Khan, Burkhan Khaldun, and Olgontenger, was included in the Tentative List in 1996.

International Assistance from the World Heritage Fund for preparing the Nomination

None

Date received by the World Heritage Centre

27 January 2014

Background

This is a new nomination.

Consultations

ICOMOS 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 2014. ICOMOS carefully examined this information to arrive at its final decision and its March 2015 recommendation; IUCN also revised the presentation of its comments in accordance with the version included in this ICOMOS report.

Technical Evaluation Mission

A joint ICOMOS/IUCN technical evaluation mission visited the property from 26 August to 5 September 2014.

Additional information received by ICOMOS

On 7 October 2014, ICOMOS requested the State Party to provide further information on comparative analysis, boundaries, bibliography and reconstruction work. The State Party responded on 4 November 2014 and the supplementary information provided has been reflected in this text.

A letter was sent to the State Party on 22 December 2014 raising ICOMOS Panel concerns over the proposed boundary of the property and the lack of clarity as to how all the nominated areas related to the main sacred mountain.

A skype meeting between ICOMOS and the State Party was subsequently held on 9 January 2015 and an additional letter was sent on 26 January 2015.

The State Party provided additional information on 18 February 2015 which has been taken into account in this evaluation. The main change proposed in this information was from a serial nomination of three sites (Great Burkhan Khaldun Mountain, the Sacred Mount Binder and the Baldan Bereeven Buddhist Monastery), to the nomination of a single site, the Great Burkhan Khaldun Mountain.

Date of ICOMOS approval of this report

12 March 2015

2 The property

Description

The permanently snow-capped mountains of the Khan Khentii mountain range overlook the vast Eurasian steppe lands. Water running off the mountains feed significant rivers flowing both to the north and south. High up the mountains are forests and lower down mountain steppe, while in the valley below are open grasslands dissected by rivers feeding swampy meadows.

This is a remote landscape with high aesthetic qualities, high bio-diversity, and little modern development.

Great Burkhan Khaldun Mountain

The sacred mountain Burkhan Khaldun is closely associated with Chinggis Khan, with his birthplace, his possible grave, with his establishment of the Mongol empire, and with his formalization of mountain worship.

At the end of the 12th century Chinggis Khan formally established worship of the Burkhan Khaldun Mountain, along with other sacred mountains in his empire (see History).

For many centuries it has been one of the most important sacred natural objects for all Mongol peoples. However, in the intervening centuries, traditions of mountain worship declined as Buddhism was adopted in the late 15th century and there appears to have been a lack of continuity of traditions and associations.

Since the 1990s, the revival of mountain worship has been encouraged and old shamanist rituals are being revived and integrated with Buddhist rituals. State sponsored celebrations now take place at the mountain each summer.

Notwithstanding these strong associations, there is some debate amongst scholars on the precise location of the Great Burkhan Khaldun Mountain.

Evidence from ancient texts, especially *the Sacred History of the Mongols* 1241 (see history), make it clear that the Great Burkhan Khaldun is located in the Khentii Mountain range and near the head of three rivers – the Onon, Kherlen and Tuul. *The Compendium of Chronicles* (1307-1311) suggests that the name might apply to the whole mountain range rather than one mountain. Many scholars and archaeologists have tried to locate Chinggis Khan's burial place but so far without success.

The Great Burkhan Khaldun mountain is the one peak within the mountain range that has three stone *ovoo*-s (or cairns) and a defined pilgrimage route to these and its summit, which it is suggested differentiates this peak from two others that have been considered (although neither of these are mentioned in the *Secret History*). Furthermore there is a suggestion that the remains of a

stone building near the middle *ovoo* could be the remains of a temple built by Chinggis Khan's great grandson (although evidence for this has so far not been substantiated by archaeological investigations).

The Burkhan Khaldun Mountain was named as Khentii Khan (The King of the Khentii Mountain range) for political and religious reasons between the 18th and the early 20th centuries.

The Great Burkhan Mountain has thus come to be known as the mountain celebrated as sacred by Chinggis Khan and where he might be buried. It is clear that further evidence for this burial or other clearer evidence might in the future be found, but meanwhile the Great Burkhan Khaldun Mountain is acknowledged as the most likely peak for these associations.

The Great Burkhan Khaldun Mountain has few structures other than three major stone *ovoo*-s or cairns that have become the focus of worship. These are placed alongside paths connected to a pilgrimage route. The cairns were apparently destroyed in the 17th century but have now been re-constructed with timber posts on top. The pilgrimage path starts some 20km from the mountain by a bridge over the Kherlen River at the Threshold Pass where there is also a major *ovoo*. Pilgrims ride on horseback from there to the large Beliin *ovoo* made of tree trunks and adorned with blue silk prayer scarves and from thence to the main *ovoo* of heaven at the summit of the mountain.

Natural Landscape

The mountain landscape includes such natural features as the sources of the Onon and Kherlen rivers, mountains, lakes, rivers, hot springs, and areas which are home to rare and endangered animals and plants.

Most of the mountain is within an area protected for its natural diversity which has been negatively impacted in other parts of the Eurasian steppe. IUCN notes that: "*the property contain notable natural values, which appear significant at national, and possibly regional, levels.*"

The sacredness of the mountain is strongly associated with its sense of isolation, and its perceived 'pristine' nature. Although this nature might not be related to how the landscape looked in Chinggis Khan's time, it is now an essential part of its sacred associations.

The Sacred Onon Springs with hot, mineralized water are used by local people in winter time as a sort of sanatorium. Over some of them are small wooden structures.

Shamanism

Mongols believe that most of the elevated land in the great Mongolian steppes has spiritual significance and that this has persisted since ancient times. From archaeological and documentary evidence, it is suggested that worship at these mountains could have

begun before or at least during the period of the Hunnu Empire (from 209 BCE until 93AD).

Linking current practices to what existed two thousand years ago is however problematic. The Mongol peoples migrated into the area of the Khentii Mountains only around the 8th-11th century and, until the 12th century, lived alongside many other groups such as Turkic people. Further, the Mongolian steppe has come within the purview of many empires since the fall of the Hunnu Empire and all of them had their social and cultural structures including the organisation of pastoralists and religious practices. Furthermore it appears that mountain worship was widespread.

The nomination stresses that what makes Mongolian Shamanism important is the fact that the protection of pristine and unblemished nature is fundamental to its integrity and authenticity. It suggests that the nature described as experienced by Chinggis Khan in the *Secret History of the Mongols* (see History) still persists today.

History and development

The name "Mongol" is apparently mentioned in Chinese sources from 4th century AD as Shi Wei Mong-gu. Later Chinese sources also confirm that during the Tang Dynasty (618-907 AD), a nomadic people known as the Meng-gu lived in the forests and grasslands to the northeast of Dalai Nuur on the borders of present-day Manchuria.

In the later part of the 8th century it is believed that peoples known as the Mongols migrated south and first settled in the area to the north of Burkhan Khaldun. By the 11th century the Mongols around the Burkhan Khaldun were still small in number, one of many peoples jockeying for power in what is now northern Mongolia.

Between 1188 and 1206, Chinggis Khan successfully unified several groups of peoples inhabiting the Mongolian steppes, such as Turks, Tungus and the various Mongol peoples, including the Borjigin Mongols to which he belonged, and formed what became known as the Mongol people or Mongolian nation. Chinggis Khan was proclaimed the Great Khan and began building the Mongol Empire, the largest that the world has seen. His capital, in the Orkhon Valley in central Mongolia, was inscribed on the World Heritage List in 2004.

Evidence suggests that mountain worship existed in the Khentii Mountains long before the arrival of Mongolian peoples, probably since before or at least during the Hunnu period. The Hunnu (or Xiongnu) empire, which was a confederation of nomadic peoples, dominated much of the Asian steppe (in what is now Siberia, Mongolia, Southern Mongolia, Gansu and Xinjiang) from 209 BCE until 93AD). Their realm could have included the region of Burkhan Khaldun.

After the Hunnu, successive Empires of the Asian steppe included the Sianbe, Jujian, Turkic Empire, Uighur, Kyrgyz, and Xidan States all of whom were underpinned by their own form of nomadic pastoralism and religious practices which have left an imprint on the Mongolian steppe landscape in the form of petroglyphs, burials, deer stones, etc. some of which are in the nominated area.

Details of Chinggis Khan's Empire are recorded in *The Secret History of the Mongols*, written for the Mongol Royal family by an anonymous author sometime after the death of Chinggis Khan and completed in 1241. This book details how Chinggis Khan first declared the Great Burkhan Khaldun Mountain as sacred in the 13th century, and how it was worshipped constantly thereafter during the time of his Empire. Chinggis Khan also declared as sacred Otgontenger of the Khangai Range, the five peaks of Tavan Bogd at the western edge of the Altai Mountain Range, and Bogd Khan of the Khentii Mountain Range.

Chinggis Khan is reputedly buried near a river on the lower slope of the mountain but in a location that was deliberately hidden.

The significance of Shamanism in Mongolia began to decline in the late 15th century, as an organized campaign was undertaken by the ruling Princes to convert Mongolians to Buddhism associated with the Tibet Gelugpa (or Yellow Hat) Sect.

Around three hundred years later, there was a resurgence of interest in mountain worship and a law called "Khalkh Juram," approved in 1709, proclaimed Khentii Khan (Burkhan Khaldun Mountain) and Bogd Khan (near Ulan Batur) as "Mountain reserves" sacred places to be glorified and honoured for the purposes of worship.

By this time Mongolia had submitted to the Qing Dynasty. Later in the Qing dynasty in 1778, as a result of King Yundendorj's efforts, Bogd Khan, Khan Khentii (Burkhan Khaldun Mountain) and Otgontenger Mountains were also officially declared as mountain reserves, and the decision taken to worship them.

Since 1990 with the renewal of older Mongolian practices, these national traditions and customs of nature worship and protection in Mongolia, and the laws associated with "Khalkh Juram", have been revived and these traditions and customs are now incorporated into State policy.

On 16 May 1995, the first President of Mongolia issued a new Decree "*Supporting initiatives to revive the tradition of worshipping Bogd Khan Khairkhan, Burkhan Khaldun (Khan Khentii), and Otgontenger Mountains*". The Decree pronounces the State's support for initiatives to revive Mountain worship as described in the original Mongolian Legal Document and as "set out according to the official Decree". Since 1995, Otgontenger, Burkhan

Khaldun, and Bogd Khan Khairkhan Mountains have been worshipped as State sacred Mountains.

3 Outstanding Universal Value, integrity and authenticity

Comparative analysis

ICOMOS notes that the initial comparative analysis only offered comparisons with properties already inscribed on the World Heritage List. Supplementary information provided by the State Party in November 2014 added comparisons from Tentative List sites.

The main inscribed comparators are two mountains inscribed under natural criteria: Mt. Kenya, Kenya, and Kilimanjaro, Tanzania); seven mountains inscribed as mixed sites: Mt. Athos, Greece, Tongariro, New Zealand, Machu Picchu, Peru, Tai Shan, China, Mt. Emei, China, Mt. Wuyi, China and Huang Shan, China; and two mountains inscribed under cultural criteria alone: Sacred Kii Mountain Range, Japan and Sulaiman-Too Sacred Mountain, Kyrgyzstan. The analysis also mentions Mount Fuji, Japan, for its elements of sacredness.

The analysis tends to point out similarities rather than differences between Tai Shan, China, Mt Athos, Greece, and Sacred Fujiyama, Japan, and the nominated property, as all reflect persistent and unique traditions of worshipping sacred mountains over the past several hundred years, whether associated with Confucianism, Shintoism, or Christianity, and also represent the national identity of those nations within which they are located.

Sulaiman-Too is seen as the only mountain that is part of the Eurasian steppe lands.

The Tentative list sites considered are The Hua Shan Scenic Area, China, Mount Gerizim and the Samaritans, Palestine, and The Four Sacred Mountains as an Extension of Mt. Taishan, China. The nominated property is seen to share similar characteristics with these three but also differences related to nomadic rather than settled agriculture and to different religions.

The analysis also compares Burkhan Khaldun with other sacred mountains in Mongolia especially Bogd Khan, and Olgontenger. The conclusion is that Burkhan Khaldun is the cradle of Mongolian nationhood and the historical spiritual homeland of the Mongol people; Burkhan Khaldun is a national symbol and the totem mountain of Mongolia, while the other two are not. It is also the birthplace of the Mongol Empire and has close associations with Chinggis Khan, the founder of the Mongol nation and Empire. Finally also mentioned is the close association with *The Secret History of the Mongols*, recognized as a unique cultural heritage by UNESCO in 1990.

ICOMOS considers that a case has been made that Burkhan Khaldun, as a sacred mountain associated with

the Empire of Chinggis Khan might be considered for the World Heritage List.

ICOMOS considers that the comparative analysis has justified 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 Great Burkhan Khaldun Mountain, is seen to:

- Reflect deeply rooted traditions of the worship of sacred mountains and sacred sites;
- Reflect associations with Chinggis Khan and in particular his birthplace, his unification of the Mongol tribes and his burial place;
- Represent the idea of Mongolian nationhood;
- Have been at the centre of events that profoundly changed Asia and Europe between the 12th and 14th centuries as the cradle of the Mongolian Empire.

ICOMOS considers that the significance of the Great Burkhan Khaldun Mountain has been established, as has its association with Chinggis Khan, and his support and adoption of mountain worship throughout his empire based on long standing shamanic traditions associated with nomadic peoples.

What has not been established is a continuity of mountain worship first from ancient times to those of Chinggis Khan and then from his time to the present day. The early designation of mount Khan Khentii in the Qing period (early 18th century) suggests that it was an existing sacred site, and may have been for a number of centuries. It is quite plausible that its identity as a sacred mountain dates from the 13th century or even earlier. It is also just possible that there was some continuity in (private) ritual practices since that time. However the specific (very simple) ritual mentioned in the *Secret History of the Mongols* is not mentioned in later periods, and the specific *ovoo* ceremonies and pilgrimages are not mentioned in the *Secret History* or other 13th century texts. It is possible that the practice dates from the Buddhist era. But continuity has so far not been proved.

Also difficult is the association of the nominated property and in particular Burkhan Khaldun with the idea of the Mongolian nation or the birthplace of the Mongolian people. Whereas the extraordinary influence that Chinggis Khan exerted on Eurasia and further afield can readily be seen to have more than national importance, the association with the Mongolian nation is necessarily an importance that relates to national boundaries and cannot be seen as outstanding in wider terms.

Integrity and authenticity

Integrity

The nominated site has adequate attributes within its boundaries to reflect what has been nominated.

Authenticity

All the natural and cultural attributes of the Burkhan Khaldun Mountain display their value. Various parts of the mountain are vulnerable to an increase in tourism which could profoundly change its sense of isolation if not well managed.

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

Criteria under which inscription is proposed

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

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 offers exceptional evidence of and testimony to vital cultural traditions of mountain and nature worship thousands of years old.

On the issue of whether the cultural traditions and particularly nature worship can be seen to be thousands of years old, as set out above, there are issue with the idea of continuity of traditions. There is evidence that mountains in the Khentii range and elsewhere in Mongolia were considered sacred in ancient times – before Mongol people moved into the area and that these practices were adopted by the incomers and reinforced formally by Chinggis Khan. It is less clear that there has been a continuity since that time but there could have been.

ICOMOS considers that this criterion has not been justified.

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

This criterion is justified by the State Party on the grounds that the property has associations with the birthplace of Chinggis Khan, Mongolian nationhood and the founding of the Mongol Empire. For all these reasons, it is seen to demonstrate its vital historical significance within Asian and world history.

The associations of Burkhan Khaldun with Chinggis Khan, and thus with the power of his Empire, are documented in terms of the evidence in the *Secret History of the Mongols* that refers to his relationship with the mountain and his formal State support for mountain

worship, associated with his unification of the Mongol peoples.

It would appear to be more difficult to justify how this mountain is associated, other than in a tangential way, with the creation of the Mongolian Empire or with the Mongolian nation.

ICOMOS thus considers that the criterion could be justified on the grounds that the mountain reflects the formalisation of mountain worship by Chinggis Khan at the time of the Mongolian Empire, a key factor in his success in unifying the Mongol peoples.

ICOMOS considers that this criterion has been justified.

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

This criterion is justified by the State Party on the grounds that within parts of the property is evidence of pastoral land management of grasslands, with herdsman moving their mixed flocks in seasonal patterns of transhumance, a way of life that has become vulnerable with the development of modern technology, a globalized economy and irreversible environmental changes. This pastoralism is well preserved around the area of the nominated property precisely because of the sacred nature of much of the land and its relative isolation from population centres and development.

ICOMOS considers that no clear evidence has been put forward for suggesting that the pastoralism practiced in this area is particularly or unusually distinctive. Movement practices vary from region to region and from era to era. It is possible that some features of pastoralism in this region have greater continuity with historical practices than other remote parts of rural Mongolia.

Furthermore, this type of pastoralism, involving seasonal movement, is also often linked in social and economic terms to sedentary agriculture and settlements as part of a much wider network. It is thus also difficult to see this small area being a coherent and self-contained entity.

Furthermore, the process of settling appears to have begun in the area with permanent houses being built for herder's families.

A more fundamental problem is that it appears that pastoralism is only allowed outside the Khan Khentii protected area – and that this protected area will be extended to cover the whole property (see Protection).

ICOMOS considers that this criterion has not been justified.

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

This criterion is justified by the State Party on the grounds that the property is directly and tangibly associated with *The Secret History of the Mongols*, an historical and literary epic of outstanding universal significance.

ICOMOS considers that *The Secret History of the Mongols* has been recognised as being a literary epic of world importance in its entry in the Memory of the World Register. This text covers many aspects of Mongolian culture but certainly refers to Burkhan Khaldun and its links with Chinggis Khan, in particular to a simple ceremony held on the mountain and its formal recognition, with other sacred mountains, by Chinggis Khan.

ICOMOS considers that this criterion has been justified.

ICOMOS considers that the criteria (iv) and (vi) and Outstanding Universal Value have been justified.

Description of the attributes

The whole of the Burkhan Khaldun Mountain, its sacred ooo-s, pilgrimage path, sacred springs, and its varied nature are all attributes of its Outstanding Universal Value. To these could be added archaeological sites on its slopes and the long views of the mountain.

4 Factors affecting the property

At present the main factors affecting the property are mainly connected with environmental pressures related to wind, fire, floods, drought, extremes of temperature, solar radiation, etc. Development pressures and human impact are very slight but it is possible to see signs of potential growth.

ICOMOS notes that little remedial action is being taken, or can be taken, against wind, fire, floods, and drought even though they can disturb the ecological balance of the landscape.

Control of erosion caused by precipitation, changes of temperature, solar radiation, and wind is foreseen in future activities of the Management Plan for conservation and protection of the nominated property.

In those parts of the nominated property outside the Khan Khentii Special Protected Area and with no legal protection (see below), mining could be a threat.

The remoteness of the property, and the lack of facilities means that tourist pressure is very low at present. However the number of pilgrims and visitors to the property is growing, particularly pilgrims who come to

state supported ceremonies. And the nomination dossier comments on what is seen as the dramatic increase in the number of travellers in tourist camps and the increase in the number of foreign visitors.

At present adverse human impact on the landscape is slight and mainly connected to the use of informal roads across grasslands. ICOMOS considers that there is a need to monitor and control the roads network. Special places for parking and recreation should also be organized. All of these issues have been considered and addressed in the Management Plan.

Growth in the number of livestock in general and in goats in particular could become a threat to the environment in the future by causing desertification of the grassland from overgrazing. ICOMOS considers that this matter is to be addressed through management programs and regulating policies, although it is in part related to the growth in numbers of people living in the area.

There is also the issue of grazing animals impacting adversely on archeological sites. Adequate protection measures would need to be based on adequate documentation and this matter has also been recognized in the Management Plan.

IUCN states that: *“Concerns identified from IUCN’s consideration of the nomination include potential risks from tourism (low intensity at the moment, so low risk if well managed), mining (which would be addressed only provided extant mining regulations are enacted)...”*

ICOMOS considers that the main threats to the property are a combination of unplanned tourism, unplanned vehicular access, overgrazing and mining in unprotected areas.

5 Protection, conservation and management

Boundaries of the nominated property and buffer zone

The current boundary is unrelated to contours and natural features, being delineated by straight lines. ICOMOS considers that further consideration should be given to amending the boundaries to reflect recognisable features. The same situation pertains to the delineation of the buffer zone.

The logic of the area enclosed by the buffer zone is also not clear as it almost touches the property boundary in several places. A clearer rationale needs to be provided for the delineation of the buffer zone.

There also appear to be some discrepancies between the boundaries shown on the various maps provided with the nomination dossier.

ICOMOS considers that the boundaries of the nominated property and of its buffer zone need to be re-drawn to reflect recognisable natural features; and that the rationale for the scope of the buffer zone needs to be clearly defined.

Ownership

All land in Mongolia is at present in the State ownership.

Protection

Not all of the property is legally protected at present: although the majority of the Great *Burkhan Khaldun Mountain* is situated on the territory of the Khan Kentii Special Protected Area (KK SPA), a small area to the north-west and a much larger area to the south lie outside this protected zone.

Even though the KK SPA offers legal protection, it should be noted that this is for natural and environmental protection rather than cultural heritage protection.

The buffer zone is included within the buffer zone of the KK SPA. Currently the property buffer zone has no protection for cultural attributes nor does it have any regulatory procedures related to land-use or new construction.

There are plans to include the whole property and its buffer zone in the territory of the KK SPA in 2015.

Since 1990 and the renewal of older Mongolian practices related to sacred mountains, national traditions and customs of nature protection in Mongolia and the laws associated with “Khalkh Juram” have been revived and are now incorporated into State policy.

On 16 May 1995, the first President of Mongolia issued a new Decree “*Supporting initiatives to revive the tradition of worshipping Bogd Khan Khairkhan, Burkhan Khaldun (Khan Khentii), and Otgontenger Mountains*”. The Decree pronounced the State’s support for initiatives to revive Mountain worship as described in the original Mongolian Legal Document and as “set out according to the official Decree”.

These traditions have been updated to reflect present day circumstances and since 1995, Otgontenger, Burkhan Khaldun, and Bogdkhan Khairkhan Mountains have been worshipped as State sacred Mountains.

ICOMOS considers that the legal protection in place for the cultural aspects of the landscape is not yet adequate and needs to be strengthened; and that specific protection for the buffer zone needs to be defined.

Conservation

On the Burkhan Khaldun Mountain, all the *ovoos* and places associated with sacred rituals are maintained by pilgrims. There appears to be no active management of paths to combat erosion.

There are however controls in place for motor transport but the measures should be strengthened to better organize car parking and recreation zones for visitors.

The Decree of the President on “Regulation of ceremony of worshipping and offering of state sacred mountains and *ovoos*” provides legal tools for visitor organization during the large state worshipping ceremonies.

Any activity on Burkhan Khaldun Mountain itself, other than worshipping rituals, is traditionally forbidden. The KK SPA reserve staff do however undertake fire-fighting, forest protection, forest clearing and renovation, and address illegal hunting and wood cutting.

Little active conservation is undertaken on archaeological sites.

ICOMOS considers that conservation activities are basic and more preventative and active measures need to be taken based on a wide assessment of need and priorities.

Management

Management structures and processes, including traditional management processes

At the national level, management of the site is under the responsibility of the Ministry of Nature, Environment and Green, and of the Ministry of Culture, Sports and Tourism.

ICOMOS notes that at a local level although the nomination dossier states that an Administration for the Protection of the World Heritage Property responsible for both natural and cultural protection and conservation of the property is to be established, no timescale has been provided for its establishment.

Traditional protection is supported through the long standing tradition of worshipping nature and sacred places. For example, it is forbidden to disturb earth, waters, trees and all plants, animals and birds in sacred places, or hunt or cut wood for trading.

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

A draft Management Plan was submitted as part of the nomination dossier. This will run from 2015-2025 and covers both cultural and natural heritage. It includes both long-term (2015-2025), and medium-term (2015-2020) plans.

The version of the Management Plan submitted was an initial version which has not yet been approved or implemented. The text is somewhat tentative in nature. It is stated that it is intended to establish a new Management Administration for the protection and management of the property as a whole and to complete and implement the integrated management plan. Before

completion and adoption, ICOMOS considers that more work is needed to augment the Plan to allow it to provide an appropriate framework for management of the property.

ICOMOS notes that it is not clear when this new system will be put into effect. Furthermore the necessary funding has still to be put in place from stakeholder organisations. However it is acknowledged that this is unlikely to be adequate and further support will be needed from aid and international donor organizations.

Meanwhile it appears that the property is not under active management for its cultural attributes nor is work guided by specific strategies and policies.

Although a management plan exists for the Khan Khentii protected area and this is implemented by the Administration of Khan Khentii Special Protected Area, it is restricted to conservation of the natural environment.

Local authorities at the levels of *aimak*-s, *soum*-s and *bag*-s have responsibility for providing local protection. Although *soum* administrations have people responsible for environmental protection, there appears not to be any formal arrangement for cultural heritage work.

Overall the current management regime does not yet offer effective management of the nominated area or its buffer zone in terms of protecting its cultural attributes.

ICOMOS considers that the current management structure is inadequate; there is a need to establish the proposed new Management Administration and to augment, complete and implement the draft Management Plan as soon as possible.

6 Monitoring

ICOMOS understands that at present archaeological reconnaissance of the property's territory is still under development. The records of sacred and archaeological sites are therefore not yet complete or adequate as a basis for monitoring.

In general there is a lack of research on archaeology, ethnography, local folklore and oral traditions, as well as geology, botany and zoology. Some documentation exists in the form of schematic inventorial records (that identify generic groups of sites rather than individual sites) but there are no detailed maps which could give better understanding of the property and its evolution through the history. This lack is acknowledged in the national programmes and in the Management Plan.

ICOMOS considers that an adequate database to underpin monitoring needs to be established.

7 Conclusions

The sacred mountain of Burkhan Khaldun and its associations with Chinggis Khan are the main focus of this nomination dossier. The precise location of the mountain that is reputedly the burial place of Chinggis Khan and which he established as a centre of mountain worship, is still a matter of some conjecture amongst scholars, but there is no doubt that it lies with the Khan Khentii mountain range. The evidence put forward for Burkhan Khaldun in relation to the pilgrimage paths, *ovoo*-s and links to early texts in the nomination dossier, although not conclusive proof, show that on the basis of present knowledge the mountain has the best claim. As further evidence might only emerge in the longer term, ICOMOS considers that the location of the sacred mountain as now embraced should be accepted.

However the boundary of the mountain need to be more satisfactorily defined in relation to natural features and the inconsistencies between various maps resolved.

The links between the sacredness of the mountain and its pristine nature are strong. The traditions of mountain worship instigated by Chinggis Khan reflected a fusion of shamanism, rooted in the ancient tradition of nature worshiping practices of nomadic peoples, and Buddhism introduced from Tibet.

Although the idea in the nomination dossier that nature as experienced by Chinggis Khan and as described in the *Secret History of the Mongols* still persists today, is difficult to justify, what is important is the sacred association of nature that has been largely unexploited by people. Maintaining that link in the face of increased tourism, will be crucial.

Currently the protection and management of the property is not yet adequate to meet these challenges. The whole property needs legal protection, the protection offered by the buffer zone needs to be clearly defined, and active management of the cultural attributes needs to be put in place on the basis of an approved management plan, based on an augmented version of the current draft plan.

8 Recommendations

Recommendations with respect to inscription

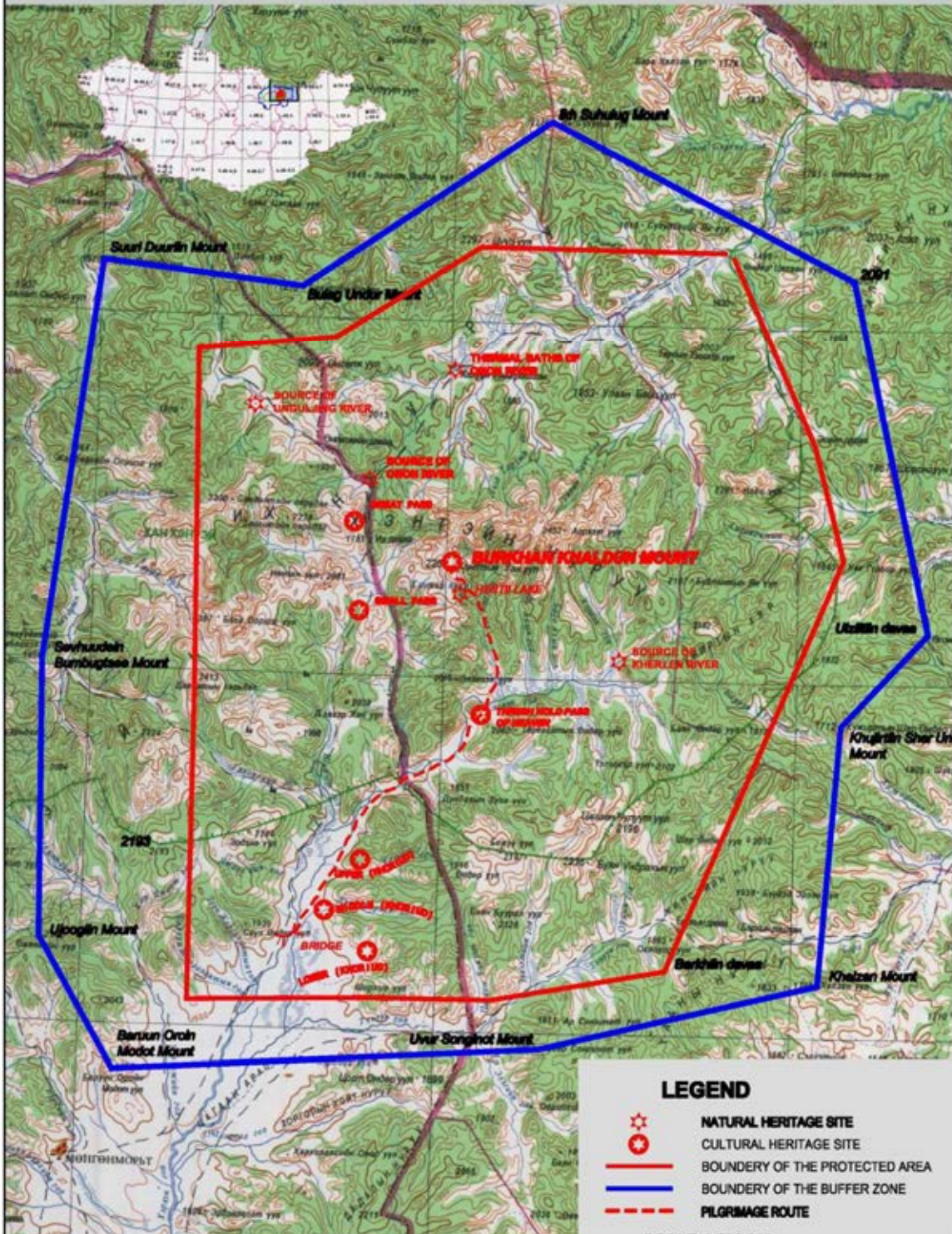
ICOMOS recommends that the nomination of Great Burkhan Khaldun Mountain and its surrounding sacred landscape, Mongolia be **referred back** to the State Party in order to allow it to:

- Put in place legal protection for the nominated area that covers cultural as well as natural attributes;
- Clearly define the protection offered by the buffer zone;

- Re-define the boundaries of the property and the buffer zone to relate them to physical attributes;
- Confirm that no mining or extractive industry will be permitted within the nominated property;
- Put in place an overall management structure with resources to implement an augmented and approved management plan;
- Draw up and implement a conservation programme, covering preventative and active measures, based on a wide assessment of need and priorities.

ICOMOS would be ready and willing to offer advice on these aspects in the framework of the Upstream Processes.

I. BUFFER ZONE OF THE PROPERTY: GREAT BURKHAN KHALDUN MOUNTAIN AND ITS SURROUNDING SACRED LANDSCAPE



Revised map showing the boundaries of the nominated property



Great Burkhan Khaldun Mount



Main Ovoo of Heaven on the top of the Mountain



Shamanism and sacred site



Inside decoration of the Main Temple

Baekje Historic Areas (Republic of Korea) No 1477

Official name as proposed by the State Party

Baekje Historic Areas

Location

Gongju and Buyeo, Chungcheongnam-do
Iksan, Jeollabuk-do
Republic of Korea

Brief description

The Baekje lasted 700 years from 18 BCE to 660 CE and was one of the three earliest kingdoms on the Korean peninsula. The Baekje Historic Areas serial property comprises eight archaeological sites located in the mid-western region of the Republic of Korea. These collectively represent the later period of the kingdom during which there was a considerable interchange of values between China, Korea and Japan (475-660 CE). They are the Gongsanseong fortress and royal tombs at Songsan-ri related to the Ungjin capital Gongju; the Busosanseong Fortress and Gwanbuk-ri administrative buildings, Jeongnimsa Temple, royal tombs in Neungsan-ri and Naseong city wall related to the Sabi capital Buyeo; the royal palace at Wanggung-ri and the Mireuksa Temple in Iksan related to the secondary Sabi capital. Together these sites testify to the adoption by the Baekje of Chinese principles of city planning, construction technology, arts and religion; their refinement by the Baekje and subsequent distribution to Japan and East Asia.

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 eight *sites*.

1 Basic data

Included in the Tentative List

11 January 2010

International Assistance from the World Heritage Fund for preparing the Nomination

None

Date received by the World Heritage Centre

28 January 2014

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 site from 15 to 20 September 2014.

Additional information received by ICOMOS

A letter was sent to the State Party on 21 August 2014 requesting a map showing the location of the 8 component sites; clarification regarding a large building near the Mireuksa Temple, clarification of ownership, protection within the buffer zone and location and of visitor facilities. A second letter was sent to the State Party following the ICOMOS Panel in December 2014 requesting information on the reconstruction of the western pagoda at the Mireuksa temple, an overall tourism strategy and the periodicity of monitoring of the murals in the tombs. A revised nomination with minor errors corrected and an expansion of the comparative analysis was received on 8 September 2014 and a response to queries was provided to the mission and received on 17 October 2014. A response to ICOMOS' first letter including the requested map was received on 15 November 2014. A response to ICOMOS' second letter was received on 16 February 2015. The information has been incorporated below.

Date of ICOMOS approval of this report

12 March 2015

2 The property

Description

The nominated serial property comprises eight components which are archaeological sites relating to the three capital cities of the late period of the Baekje Kingdom (475-660 CE). The Baekje was one of the three earliest kingdoms on the Korean peninsula along with the Goguryeo to the north and the Silla to the east. The nominated component properties are the Gongsanseong fortress and royal tombs at Songsan-ri related to the Ungjin capital Gongju; the Busosanseong Fortress and Gwanbuk-ri administrative buildings, Jeongnimsa Temple, royal tombs in Neungsan-ri and Naseong city wall related to the Sabi capital Buyeo; the royal palace at Wanggung-ri and the Mireuksa Temple in Iksan related to the secondary Sabi capital. The sites total 135.10ha and each is surrounded by a buffer zone.

Gongju

Gongsanseong Fortress (Component 1)

The Ungjin capital Gongju was built by the Baekje from 475-538 CE 130km south of Seoul after the capture of their earlier capital Hanseong by the Goguryeo. The fortress is located on a hill beside the Geumgang River outside the city. It enclosed the royal palace and other buildings within defensive walls built of stone and rammed earth technology first developed in China.

Royal Tombs in Songsan-ri (Component 2)

These are located further south along the Geumgang River and include the tomb of King Muryeong and his Queen (Tomb 7) which together with Tomb 6 is a brick chamber tomb with a vaulted ceiling similar to those in China of the period. Other tombs are stone chambers with a corridor and domed ceiling, the traditional type of Baekje tombs. The king's tomb was undisturbed when excavated and contained a coffin made of Japanese wood and tomb guardian beasts and pottery from China, as well as decorative jewellery that indicates connections with Thailand and India.

Buyeo

The capital was moved again in 538 CE to Sabi which is modern-day Buyeo, 35km south-west of Gongju. King Muryeong's successor King Seong relocated to gain more space for development at a site which had direct access to the sea at high tide. The city was located on a peninsula in the curve of the Geumgang River and defended at the rear by the Naseong City Wall. Within this area are the Archaeological Site in Gwanbuk-ri, Busosanseong Fortress and Jeongnimsa Temple site. The Royal Tombs in Neungsan-ri are outside the Naseong City Wall.

Excavations have revealed that the Archaeological Site in Gwanbuk-ri and Busosanseong Fortress (Component 3) comprise the royal palace area including a Buddhist temple site with remnants of earthen platforms edged in tiles. This technique was adopted by the Baekje from China and further developed with decorative edge facing tiles, a treatment which was then adopted by the Silla and in Japan. The Fortress served as a garden during normal times but became a place of refuge in an emergency. The rammed earth technique was used to build the Fortress and the Naseong City Wall (Component 6). A special technique using branches and plants was used for the foundation of the City Wall in swampy areas, reinforced with stone buttresses. Barracks sites, water storage facilities and wooden barricades found within the Fortress indicate its use over 1,000 years.

The Jeongnimsa Temple Site (Component 4) comprises a prayer hall and extant five-storey stone pagoda on axis with the main entrance. Excavations have shown that there was also a lecture hall on axis at the rear and the whole was surrounded by monks' dormitories and linking corridors. Excavated artefacts include clay figurines similar to archaeological findings at the Northern Wei capital in China.

The seven Royal Tombs at Neungsan-ri (Component 5) are the stone chamber with corridor type. They were robbed before they could be excavated but discoveries at the temple site to the west of the tombs indicate that the tombs were those of the Baekje during the Sabi period. The walls of Tomb 1 contain murals depicting the Four Deities and the ceiling is decorated with lotus and cloud designs.

Iksan

The second Sabi capital was built by King Mu (600-641 CE) in Iksan, 50km south of Buyeo with the aim of gaining control over the southern region of the kingdom. The location is connected to the Geumgang and Mangyeonggang Rivers and inland transport routes in an area of extensive agricultural lands. The Archaeological Site in Wanggung-ri (Component 7) was the royal place as attested by excavation and is similar to that at Gwanbuk-ri, Buyeo. It was located on raised, terraced platforms and contained a Buddhist temple with five-storey stone pagoda. It shares its layout and features with ancient royal palaces in China and Japan including a garden with miniature landscape elements and water control facility. There was also a craft workshop attested by the excavated crucibles, blast pipes and gold and silver objects. A large multiple toilet was excavated to the south of the workshop.

The Mireuksa Temple Site (Component 8) at the foot of Mireuksan Mountain is said to represent the largest temple site discovered in East Asia and comprises three parallel pagoda and prayer halls on axis with their entrances, the central being the largest and was enclosed within its own encircling corridor. The whole complex was enclosed by linking corridors with monks' dormitories and lecture hall centrally placed at the rear. The layout accords with Buddhist scriptures describing that Maitreya, the Future Buddha would come from Heaven to save all people with his three teachings. Ancient texts recount that it was built at the request of King Mu's wife following the appearance of the Maitreya triad to the royal couple at that place. The central timber pagoda is no longer extant. The eastern stone pagoda had collapsed and the one on the west was still standing but unstable when excavations began in the 20th century. The relic found in the *sarira* cavity confirmed that the west unit was built in 639 during the reign of King Mu.

History and development

The Baekje dynasty was founded by immigrants from Goguryeo along the Hangang River at Hanseong (now Seoul) which was a central position in relation to trade, building techniques and cultural exchange. Buddhism was introduced to the Baekje on the Korean peninsula in the 4th century. In the 5th-7th centuries the Baekje forged diplomatic relations with Chinese kingdoms by which time Buddhism was widely accepted in central China. In the mid-6th century the Baekje introduced Buddhism to Japan where it was adopted by the royal family. According to historical records the Baekje invited craftsmen from the Chinese southern dynasties and later sent its own craftsmen to Japan. East Asian exchanges involving the Baekje are said to have included city planning, civil engineering and architectural technology and as a result East Asia acquired a common writing system using Chinese characters, a common religion (Buddhism) and Confucian law codes during the 5th-7th centuries.

In the Ungjin period (475-538) the capital city Gongju made use of the natural defensive topography but later in the Sabi period at the Buyeo capital the Baekje adopted

Chinese principles of city planning while at the same time continuing to use natural topography for defensive purposes. In the later Sabi period the royal palace at Wanggung-ri illustrates the rectangular planned layout of the East Asian royal palace of the 6th-7th century, similar to Luoyang, capital of the Northern Wei Dynasty.

From the 7th century the Baekje stone pagoda technology spread to Silla, Goryeo and Japan as attested by the similarities at the Silla Bulguksa Temple and in Shiga Prefecture Japan.

Archaeological investigation was first undertaken during the Japanese colonial period in the early 20th century. In 1971 the undisturbed tomb of King Muryeong was discovered and systematic archaeological excavations began in the former Baekje capitals in the 1980s.

3 Justification for inscription, integrity and authenticity

Comparative analysis

The nominated component properties were selected from remnants of the Baekje kingdom's historic capitals at Gongju, Buyeo and Iksan to represent the later period of the Baekje (475-660 CE), providing information on capital planning, the life of the royal family, funeral traditions and religious beliefs of the kingdom at the time and illustrating different aspects testifying to the interchange that evolved between Korea, China and Japan during this period.

An extensive table is provided in the revised nomination dossier comparing the nominated property with others already on the World Heritage List, most of which are not particularly appropriate in terms of the values and period claimed. The most relevant comparison is with Gyeongju Historic Areas, Republic of Korea inscribed in 2000 (criteria (ii) & (iii)). This was the capital of the Silla kingdom whose culture flourished there particularly between the 7th-10th centuries, producing outstanding examples of Korean Buddhist art. It can be seen to follow on from the Baekje kingdom in that techniques were adopted from the Baekje structures and while it has remnants of similar features such as a city wall, royal palaces, fortresses, royal tombs and temples, more than half of these are a few centuries later in date.

The nominated property has been compared with The Historic Monuments and Sites in Kaesong, Democratic People's Republic of Korea inscribed in 2013 (criteria (ii) & (iii)), an ensemble representing the ruling base of the Koryo dynasty (918-1392) with its associated tombs. The ensemble embodies the political, cultural, philosophical and spiritual values of the capital of the unified Koryo state as it transitioned from Buddhist to Confucian philosophy, through the geomantic layout of the city, palace and tomb complexes, the urban defence system of walls and gates, and educational institutions. It can be seen that the Baekje city plan exhibits an earlier stage of development than Kaesong.

In China, the nominated property has been compared with Capital Cities and Tombs of the Ancient Koguryo Kingdom (2004, criteria (i), (ii), (iii), (iv) & (v)) which reigned from 277 BCE to 668 CE. This represents the beginnings of the defensive system later developed by successive dynasties on the Korean peninsula, but not a developed system as evidenced at the Baekje sites. The State Party notes that the directly comparable period of Northern and Southern dynasty capitals in China is not represented on the World Heritage List. What particularly distinguishes Baekje in relation to these is King Muryeong's tomb, discovered intact, whereas royal tombs of the Northern and Southern Wei had been looted and destroyed in the past.

In Japan the nominated property has been compared with Historic Monuments of Ancient Nara (1998, criteria (ii), (iii), (iv) & (vi)), the Japanese capital from 710-784 CE. The city originated from a later period and is said to be modelled on Tang dynasty cities in China and those of the Silla in Korea.

The State Party also compared the nominated property with properties on the Tentative Lists including Historical Relics in Pyongyang covering the period from Palaeolithic to the Bronze Age, Goguryeo, Goryeo and Joseon periods in the north-west of the Korean peninsula, and Asuka-Fujiwara, an ensemble of archaeological sites in the Nara Basin region of Japan. The latter comprise remains of royal palaces, temples and tombs of the period (592-710 CE) which indicate strong influences from China and Korea, testifying to cultural and technical exchanges in East Asia at a slightly later period than the nominated property. There is no evidence of a city wall for defensive purposes.

ICOMOS considers that the comparative analysis shows that the Baekje kingdom occupied a specific chronological period as East Asian cities evolved under the influence of Buddhism. The nomination dossier acknowledges that the specific features of the city type were initiated in the capital cities of the Northern Wei Dynasty of China (386-534 CE) such as Luoyang, but states that the archaeological resources representing the walled city there are insufficient compared with the Baekje sites. ICOMOS notes that the question of Luoyang's influence on the development of Japanese cities has been discussed by scholars. While acknowledging that pre-Tang art forms travelled from China to Japan, often by way of Korea, the possibility of the Baekje capitals being the connecting link for the city plans is not investigated.

ICOMOS considers that the comparative analysis justifies the selection of sites, which together show the evolution of the Baekje capital city within an East Asian context.

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:

- Evidence of important cultural, religious and technological exchanges between China, Korea and Japan during the Baekje dynasty;
- Exceptional testimony to the Baekje kingdom;
- Demonstrates development of the East Asian capital city.

The serial approach is justified as providing eight components which collectively represent the most significant and influential periods of the Baekje Kingdom. They each contribute different but complementary aspects of the Baekje royal capitals to provide an overall picture which no single component can provide.

ICOMOS considers that the justification is appropriate.

Integrity and authenticity

Integrity

The eight nominated sites were selected from the known and excavated remains of the three Baekje capitals to build up an overall picture of the middle and late history of the Baekje Kingdom as it reached its peak in terms of cultural development involving frequent communication with neighbouring regions. They include sites of royal palaces, royal tombs, fortresses and temples of the Baekje Kingdom during the Ungjin and Sabi periods and present information on capital planning, the life of the royal family, funeral traditions and religious beliefs of the kingdom at the time.

The nominated property components together contain all the elements necessary to embody the values of the property as a whole. The component parts are of sufficient scale to present the historic function of the capital cities and their relationship to their settings.

The boundaries also include elements which illustrate the evolution of the capital cities through subsequent dynasties, including reconstruction and utilization of the pond at the Jeongnimsa Temple Site in the Goguryeo period and utilization of the Gongsanseong and Busosanseong Fortresses and reinforcement and reconstruction of facilities by the Joseon Dynasty. However the Baekje period of the sites is still paramount.

A number of tombs had been looted prior to archaeological excavation. A pumping station in the vicinity of the northern gate of Busosanseong Fortress has impacted visually on the landscape and four families still reside within the Archaeological Site of Gwanbuk-ri. These are subject to planning controls. Otherwise the sites have not been impacted adversely by development.

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.

Authenticity

Most elements of the eight component parts of the nominated serial property have suffered human intervention including repairs and restoration to different degrees. At the Gongsanseong Fortress, Joseon period wall sections have been capped with a waterproof material containing cement. After archaeological excavation, the sites of royal palaces and tombs have been properly reburied to preserve their authenticity. Burial mounds have been reconstructed and grassed over after excavation. At the Jeongnimsa Temple Buddhist statues of the Baekje period unearthed during excavation have been placed in a protective building in traditional style on the Lecture Hall site which is not consistent with the form of the Baekje era. The eastern stone pagoda at the Mireuksa Temple Site was reconstructed in its original form with traditional building materials but only a few original parts remain. The western stone pagoda is being repaired using traditional stone masonry techniques. In terms of location and setting, the views from the east of the Five-storey pagoda at the Jeongnimsa Temple Site have been interrupted by new construction to the west. Overall however, ICOMOS considers authenticity to be high.

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.

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.

Criteria under which inscription is proposed

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

Criterion (ii): *exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design;*

This criterion is justified by the State Party on the grounds that the archaeological sites and architecture of the Baekje Historic Areas exhibit the interchange between the ancient East Asian kingdoms in Korea, China and Japan in the development of construction techniques and the spread of Buddhism.

ICOMOS considers that the interchange on developments in architecture and building technology is evident in the fortress wall construction, royal tombs, stone pagodas and building platforms.

ICOMOS considers that this criterion has 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 the setting of the capital cities, Buddhist temples and tombs, architectural features and stone pagodas contribute in forming the exceptional testimony to the unique culture, religion and artistry of the kingdom of Baekje.

ICOMOS considers that the extent and type of remains demonstrating layout and topographical setting, architecture and technology combine to provide exceptional testimony to the unique culture, history, religion and artistry of the kingdom of Baekje.

ICOMOS considers that this criterion has been demonstrated.

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

This criterion is justified by the State Party on the grounds that the sites that comprise the Baekje Historic Areas are among the earliest examples clearly expressing the innovative city design marking the start of outer walls encircling the entire city in East Asia, together with the vast influences of Buddhism in the central city layout attesting to the functions of the religion as the ruling ideology. The advanced development of architectural technology is also explicitly presented in the monumental buildings adorned with roof tiles and stone pagodas.

ICOMOS notes that the justification is based on the evidence taken from remains at three former Baekje capital cities of evolution of the Baekje city plan to comprise the spatial layout of royal palace and temples influenced by Buddhism and enclosed by outer walls, with the royal tombs being located outside the walls. However ICOMOS considers that the property is a combination of elements, which although pointing to the development of a type of city plan is in fact a combination of the remains of three separate city plans rather than a single city plan and does not justify the property as an outstanding example of a type in the sense intended in the criterion.

ICOMOS considers that this criterion has not been demonstrated.

ICOMOS considers that the serial approach is justified and that the selection of sites is appropriate.

ICOMOS considers that the nominated property meets criteria (ii) and (iii) and the conditions of authenticity and integrity.

Description of the attributes

The attributes are the sites of royal palaces, royal tombs, fortresses and temples of the Baekje Kingdom during the Ungjin and Sabi periods; the relationship between the selected sites at each capital city (Gongju, Buyeo and Iksan) and topographical features of the settings.

4 Factors affecting the property

According to the nomination dossier the component properties are not subject to development pressure. There are 13 inhabitants of Gwanbuk-ri and Busosanseong Fortress but the other property components have no inhabitants. The number of inhabitants within the buffer zones is less than 100 except in Gwanbuk-ri and Busosanseong Fortress where there are 1,335. ICOMOS notes that the water pump plant at the northern gate of Busosanseong Fortress will not be expanded, and future development in the vicinity of the sites is subject to Urban Construction Control. The intrusive building at Jeongnimsa Temple site will be removed when the opportunity arises.

The Jeongnimsa and Mireuksa Temple Sites and the Archaeological Sites of Gwanbuk-ri and Wanggung-ri are close to residential areas and roads and subject to dust and motor vehicle emission pollution. Studies are underway to investigate treatments to remove pollutants from stone. The other sites are in mountainous areas and while not subject to environmental pollution are more susceptible to natural disaster such as forest fire, storms and floods. These are countered by national risk-preparedness legislation and the Cultural Heritage Administration's safety course run annually on 'Disaster Prevention Day'. In particular, ICOMOS notes that emergency fire plans mean that a response can be made to all component parts within 5 minutes.

Visitor numbers are said to be well within the carrying capacities of the sites and are calculated to still be so in the event of inscription. Current visitor numbers range from 80,877 annually at the Royal Tombs in Neungsan-ri and Naseong City Wall to 680,499 annually at the Mireuksa Temple Site. ICOMOS considers that tourism is a significant factor likely to impact adversely on the property and notes that mitigating measures have already been taken including closure of Tomb 1 of the Royal Tombs of Songsan-ri, which had formerly been open to the public.

ICOMOS considers that the main threats to the property are tourism and forest fire.

5 Protection, conservation and management

Boundaries of the nominated property and buffer zone

The boundaries of the nominated property components follow the exterior of fortress walls and topographical lines where relevant; the exterior of the external boundary walls of the Jeongnimsa and Mireuksa Temple Sites; enclose the width of Naseong City Wall and enclose excavated areas at Gwanbuk-ri and Wanggung-ri. ICOMOS notes that the boundaries either coincide with or enclose a lesser area than the areas protected under the Cultural Heritage Protection Act.

Buffer zone boundaries follow topographical lines and streets and roads and are clearly identifiable. In the case of the fortresses and tombs they enclose landforms and landscapes related to them. They enclose up to 500 metres surrounding the nominated property component as protected under the Cultural Heritage Protection Act and where extending further than that enclose areas protected under the Construction Control Zones of the relevant Historic Cities.

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

Ownership

Most of the nominated property is State-owned. The remaining privately-owned land is less than 10% of the total area and is being continuously purchased.

Protection

The nominated property components are all designated as Historic Sites under the Cultural Heritage Protection Act 1962 amended 2012; the Special Act on the Preservation and Promotion of Ancient Cities 2004, amended 2013 and under local government Cultural Heritage Protection Ordinances: Chungcheongnam-do 2002 and Jeollabuk-do 1999.

The buffer zones are protected under the Cultural Heritage Protection Act up to 500m from the boundaries of the property components. The State Party advised in response to ICOMOS' first letter that where they extend further than 500 metres they are protected under Article 13(3) of that Act. The buffer zones are also protected under the Urban Construction Controls of the Historic Cities legislation which limits the height of new buildings to 8 metres.

ICOMOS notes that it is proposed to improve the street landscape in the buffer zone at Buyeo and that this is funded in the 2015-2020 budget.

ICOMOS considers that the legal protection in place is adequate.

Conservation

The nominated property components have been inventoried for the purposes of assessing their state of conservation and ongoing monitoring. Archaeological investigation and research are continuing at Wanggung-ri.

The property components are considered by the State Party to have been well-maintained since the dates of their designations as Historic Sites. Previous conservation works and archaeological investigations are listed in Tables 4.1-9. Excavations have been back-filled and covered with a protective layer of soil with building layouts outlined on top.

Active conservation works include monitoring of temperature and humidity in royal tombs. At the Songsan-ri and Neungsan-ri royal tomb sites, tombs have been closed to the public to prevent damage to murals and tomb exhibition halls have been created in lieu. The stone pagoda at Jeongnimsa Temple Site has been stabilised and conserved and a movement monitoring system has been installed. At the Mireuksa Temple Site the eastern stone pagoda was reconstructed based on the extant but unstable western pagoda. The latter is currently enclosed within a temporary building while being dismantled and restored. In response to ICOMOS' second letter, the State Party provided detailed information on the restoration process being undertaken. ICOMOS considers the process to be satisfactory.

ICOMOS considers that conservation is adequate and that no emergency measures are currently required.

Management

Management structures and processes, including traditional management processes

The property components are currently managed by the central government's Cultural Heritage Administration and the relevant local governments. Gongju Municipality which manages Gongsanseong Fortress and the Royal tombs in Songsan-ri has 58 personnel engaged in various aspects of cultural heritage management. Buyeo, which is responsible for the Archaeological Site in Gwanbuk-ri and Busosanseong Fortress; the Royal Tombs in Neungsan-ri, the Jeongnimsa Temple Site and Naseong City Wall has over 54; and Iksan which is responsible for the Archaeological Site in Wanggung-ri and the Mireuksa Temple Site has more than 68. The latter also look after the Wanggung-ri and Mireuksaji Relics Museums. Staff training is available at the Korea National University of Cultural Heritage. Expertise and training are also available from the Association of Korean Cultural Heritage Repairmen, the Association of Cultural Heritage Technicians and the Korea Cultural Heritage Foundation. Funding is derived from State allocations (70%), provincial government sources (15%) and from local government (15%). The budget for expenditure in line with the Management Plan for 2015-2019 is US \$63,258,000.

A Baekje Historic Areas nomination office was set up in May 2012 to manage the nomination process. This is being replaced by the Baekje Historic Areas Conservation and Management Foundation as the integrated management body from the middle of 2014. This will have input from central, provincial and local authorities as well as community associations through the Community Council, which in turn co-ordinates three Local Community Councils set up under each municipality involving 50-60 staff. A Disaster Management Plan is included in the Management Plan.

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

A number of Provincial and Municipal Plans relate to the areas in which the nominated property components are located. There are also National and Provincial Tourism Plans. The preservation of Baekje Historic Areas is a key focus of these plans aimed at tourism. In addition there is the Plan for the Establishment of a Baekje History and Culture City (Chungcheongnam-do provincial government) and individual Ancient City Preservation Plans 2009-17 (Gongju, Buyeo and Iksan municipal governments). There are also individual conservation plans for the various sites within the nominated property components. With the nomination of the property to the World Heritage List, a Conservation and Management Plan was developed to integrate all the agencies responsible for the three components with the aim of ensuring maintenance of the proposed Outstanding Universal Value. This was agreed via a Memorandum of Understanding between the Korean central government and the local governments on 22 December 2011 for the period 2015-2019. It includes a Visitors Management Plan, which covers the development of visitor programs, information materials and web sites, but ICOMOS considered that given the focus of provincial and local governments on tourism this needed to be extended to cover visitor management including restrictions on numbers at particular sites. In response to ICOMOS' second letter, the State Party has provided outlines for the development of an overall tourism management strategy and visitor management plans for each component part under the auspices of the Baekje Historic Areas Conservation and Management Foundation set up in September 2014 to oversee management of the total property. The integrated Tourism Management Plan will be completed in May 2015.

As detailed in the additional information provided by the State Party, small on-site museums are provided at the Royal Tombs in Songsan-ri, Busosanseong Fortress, Jeongnimsa Temple Site, Royal Tombs at Neungsan-ri, Archaeological Site in Wanggung-ri and Mireuksa Temple Site. National museums in Gongju and Buyeo display important collections of cultural relics dating from the Baekje period found in the region. Sites open to the public have uniformly designed signs and some also carry a code which can be read by visitors with a mobile

phone or other portable reading device to obtain three-dimensional presentations and other interpretative material. Government and research institute web sites carry sections on the Baekje culture and sites, and a series of lectures and educational projects has been organized for the public, especially students.

Involvement of the local communities

The Local Community Councils for World Heritage Management set up under each municipality are responsible for conservation and management, utilization and publicity, and coordinating community participation.

ICOMOS notes that local residents participate in daily cleaning of the sites and their settings; patrolling and monitoring the sites; guiding in museums and at sites and in educational activities.

ICOMOS considers that the current management is effective.

ICOMOS considers that the management system for the overall serial property is adequate, and notes the State Party's programme for development of an overall tourism management strategy for the nominated property as well as a visitor management plan for each component part.

6 Monitoring

A monitoring system is set out in the nomination dossier covering indicators, periodicity and records location for all property components. Table 6.10 also sets out the responsible monitoring authorities for each component. ICOMOS noted that the periodicity of monitoring the conservation status of the murals and internal environmental changes in the tombs is set at once every five years and considered that this may be inadequate. In response to ICOMOS' query, the State Party has advised that legislation is currently underway to provide for full study monitoring every three years, and clarified that temperature and humidity are monitored daily.

ICOMOS considers that the monitoring system is adequate.

7 Conclusions

ICOMOS considers that the comparative analysis justifies consideration of this serial property for the World Heritage List; that the serial approach is justified and the selection of sites is appropriate. ICOMOS considers that the nominated property meets criteria (ii) and (iii) and conditions of authenticity and integrity. The attributes are the sites of royal palaces, royal tombs, fortresses and temples of the Baekje Kingdom during the Ungjin and Sabi periods; the relationship between the selected sites

at each capital city (Gongju, Buyeo and Iksan) and topographical features of the settings.

ICOMOS considers that the main threats to the property are tourism and forest fire. ICOMOS considers that the boundaries of the nominated property and of its buffer zone are adequate; legal protection in place is adequate, and the protective measures for the property are adequate. Conservation is adequate and no emergency measures are currently required. ICOMOS considers that the management system for the overall serial property is adequate but in noting that the focus of provincial and local plans is on tourism, welcomes the State Party's advice that the management system and plans will be extended to include an overall tourism management strategy for the nominated property as well as a visitor management plan for each component part.

8 Recommendations

Recommendations with respect to inscription

ICOMOS recommends that Baekje Historic Areas, Republic of Korea, be inscribed on the World Heritage List on the basis of **criteria (ii) and (iii)**.

Recommended Statement of Outstanding Universal Value

Brief synthesis

Located in the mountainous mid-western region of the Republic of Korea, the remains of three capital cities collectively represent the later period of the Baekje Kingdom as it reached its peak in terms of cultural development involving frequent communication with neighbouring regions. The Baekje lasted 700 years from 18 BCE to 660 CE and was one of the three earliest kingdoms on the Korean peninsula. The Baekje Historic Areas serial property comprises eight archaeological sites dating from 475-660 CE including the Gongsanseong fortress and royal tombs at Songsan-ri related to the Ungjin capital Gongju; the Busosanseong Fortress and Gwanbuk-ri administrative buildings, Jeongnimsa Temple, royal tombs in Neungsan-ri and Naseong city wall related to the Sabi capital Buyeo; the royal palace at Wanggung-ri and the Mireuksa Temple in Iksan related to the secondary Sabi capital. Together these sites testify to the adoption by the Baekje of Chinese principles of city planning, construction technology, arts and religion; their refinement by the Baekje and subsequent distribution to Japan and East Asia.

Criterion (ii): The archaeological sites and architecture of the Baekje Historic Areas exhibit the interchange between the ancient East Asian kingdoms in Korea, China and Japan in the development of construction techniques and the spread of Buddhism.

Criterion (iii): The setting of the capital cities, Buddhist temples and tombs, architectural features and stone pagodas of the Baekje Historic Areas contribute in forming exceptional testimony to the unique culture, religion and artistry of the kingdom of Baekje.

Integrity

The nominated property components together contain all the elements necessary to embody the values of the property as a whole. The component parts are of sufficient scale to present the historic function of the capital cities and their relationship to their settings. Apart from the pumping station in the vicinity of the northern gate of Busosanseong Fortress and the remaining residential accommodation within the Archaeological Site of Gwanbuk-ri, the sites have not been impacted adversely by development or neglect.

Authenticity

Most elements of the eight component parts of the nominated serial property have suffered human intervention including reparation and restoration to different degrees. Materials and techniques used have largely been traditional. The forms of tombs and temples have been retained. The temple sites are now to some extent islands amongst low scale urban development but the settings of the fortresses and tombs largely retain their forested setting in a mountain landscape.

Management and protection requirements

The nominated property components are all designated as Historic Sites under the Cultural Heritage Protection Act 1962 amended 2012; the Special Act on the Preservation and Promotion of Ancient Cities 2004, amended 2013 and under local government Cultural Heritage Protection Ordinances: Chungcheongnam-do 2002 and Jeollabuk-do 1999. The buffer zones are protected under the Cultural Heritage Protection Act up to 500m from the boundaries of the property components and under the Urban Construction Controls of the Historic Cities legislation which limits the height of new buildings to 8 metres.

The property is managed by the Baekje Historic Areas Conservation and Management Foundation with input from central, provincial and local authorities as well as community associations through the Community Council, which in turn co-ordinates three Local Community Councils. The Community Councils set up under the three municipalities of Gongju, Buyeo and Iksan are responsible for conservation and management, utilization and publicity, and coordinating community participation. An overall Conservation and Management Plan for 2015-2019 was developed to integrate all the agencies responsible for the three components with the aim of ensuring maintenance of Outstanding Universal Value. This is currently being extended to include an overall tourism management strategy for the property as well as a visitor management plan for each component part.

Additional recommendations

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

- Completing the management system and plans as proposed to include an overall tourism management strategy for the nominated property as well as visitor management plans for each component part directed at retention of Outstanding Universal Value;
- Adjusting as proposed the periodicity of monitoring of the conservation status of the murals and internal environmental changes in the tombs.



Map showing the location of the nominated properties



Gongsanseong Fortress



Royal Tombs in Neungsan-ri



Jeongnimsa Temple Site



Royal Palace at Wanggung-ri

Singapore Botanic Gardens (Singapore) No 1483

Official name as proposed by the State Party

Singapore Botanic Gardens

Location

Singapore (Central Tanglin District)

Brief description

The Singapore Botanic Gardens is situated at the heart of the city of Singapore and demonstrates the evolution of a British tropical colonial botanic garden into a modern and world-class botanic garden, scientific institution and place of conservation and education. Through its well-preserved landscape design and continuity of purpose, the Singapore Botanic Gardens is an outstanding example of a British tropical botanic garden which has also played a key role in advances in scientific knowledge.

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 2013), paragraph 47, it is a *cultural landscape*.

1 Basic data

Included in the Tentative List

7 December 2012

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 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 2014. ICOMOS carefully examined this information to arrive at its final decision and its March 2015 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 22 to 24 September 2014.

Additional information received by ICOMOS

A letter was sent to the State Party on 19 September 2014 requesting additional information on boundaries, integrity, development, protection and management. A response to the letter was received on 28 October 2014. A second letter, regarding the use of the former economic garden and the comparative analysis was sent to the State Party following the ICOMOS Panel meeting in December 2014. A telephone meeting between the State party and ICOMOS was held on 30 January 2015 at the request of the State Party to clarify some points in ICOMOS' second letter. A response to this letter was received on 23 February 2015. The information has been incorporated below.

Date of ICOMOS approval of this report

12 March 2015

2 The property

Description

The nominated property forms part – 49 ha – of the larger area covered by the Singapore Botanic Gardens, an area of 74 ha that can be accessed via 16 main entrances/gates. Originally laid out in the 1860s, the Singapore Botanic Gardens is located within the centre of the city of Singapore, and demonstrates the evolution of the 1800s British tropical colonial botanic gardens into a modern and world-class botanic garden, scientific institution and place of conservation and education. The gardens also forms a component of a wider green infrastructure network across Singapore, which includes over 300 parks, four nature reserves, more than 2,000 ha of tree-lined streets and over 200km of park connectors.

The Botanic Gardens is situated on one of a series of north-south ridges that underlie the Tanglin District of the city. The highest areas of the property rise relatively steeply to over 30 metres above sea level and include Bandstand Hill (the historic core of the Botanic Gardens), a tract of primary rainforest, Burkill Hall and the National Orchid Garden, and the area now primarily occupied by NUS's Faculty of Law and associated houses. The latter were originally erected as part of the former Raffles College and today form part of the nominated property. The topography of the site, together with the tree cover and vegetation, enhance the constant sense of enclosure experienced by visitors.

Trees and plant specimens are an important component of the nominated property, contributing strongly to its character and overall structure. The site contains a wide variety of trees of varying ages, planted for scientific/botanical research, conservation and/or

horticultural/aesthetic purposes. A number of trees are over 100 years old and some pre-date the site's creation. 44 trees have been designated as Heritage Trees.

The nominated property is divided into four zones which are described below.

Tanglin Core (Historic Zone)

This zone is the approximate site of the original 'Pleasure Gardens' and includes the Tanglin Gate, the main historical entrance to the Gardens, originally a road entrance but now restricted to pedestrians. Niven's paths, ring roads, sweeping lawns and Swan Lake (1860s) still reflect his response to the topography and the influence of the English Landscape Style. Other elements located in this zone include: Display Gardens (i.e. the 1980s Vanda 'Miss Joaquim' display, 2004 Sun Garden, 2005 Bonsai Garden and 1929 Sundial Garden) and a frangipani collection on the gently sloping sides of the Bandstand Hill (Character Area 5) with its decorative white painted Bandstand (1930) at the top. Bandstand Hill, which formed part of the 1860s design of the pleasure gardens, commands the highest point in the original area of the nominated property. The layout of the Sundial Garden, Sun Garden and Bonsai collections all contrast with the more informal landscape surrounding them.

Swan Lake (Character Area 1) is located at the foot of sloping lawns with a wide variety of specimen and veteran trees. Although tropical in appearance, the lake was designed to emulate British pleasure gardens/public parks, with a wide promenade following a large water body and scattered trees set within mown grass. The Marsh Garden, laid out in 1969, is located to the south and incorporates the remnants of a rhinoceros wallow and alligator ponds from the late 19th century when the Botanic Gardens contained such zoological collections. The water supply for Swan Lake originates from the Tyersall Learning Forest, entering the site in the area known as The Dell, located near the Swan Lake's northern edge.

The Ginger Garden (Character Area 6) showcases over 550 different types of gingers and species in the related families of the *heliconias*, bird-of-paradise, bananas and arrowroot. The Halia restaurant complex, opened in April 2001, occupies the northern end of this Ginger Garden.

The Botany Centre and Green Pavilion (Character Area 3), which were built in 2006, feature Singapore's first pitched green roof and accommodate research facilities and the visitor information centre. An imposing veteran tree, *Calophyllum inophyllum*, which influenced the layout of the Botany Centre, stands at its centre. Ridley Hall (1882) is located immediately to the north of the Botany Centre. The administrative/research centre of the Botanic Gardens has been located in this part of the Botanic Gardens since the late 19th century.

The Potting Yard area (dating from the 1880s), Fernery Garden (1980), Aroid Garden (1999) and Plant House Garden (first established in 1882 and redesigned in the

1950s) are located at the foot of an east facing slope enclosed in dense vegetation, close to Cluny Road (Character Area 4).

The Plant House Garden is more symmetrical and formal in appearance/design than most of the rest of the Botanic Gardens (with the exception of the Sundial Garden). It originally contained a large rectangular 'plant/exhibition house' (completed in 1882 and roofed in 1885) erected to accommodate public flower shows and displays of potted plants and annuals (some of which were for sale). It now comprises a grass quadrangle surrounded by pergolas, with a central water lily pond (completed 1958).

North of Bandstand Hill, a raised boardwalk leads visitors through a tract of dense and tall primary rainforest. A total of 300 species have been recorded in the rainforest by the Botanic Gardens' scientists, but many of these are represented by few or solitary individuals. This element of the Botanic Gardens was carefully preserved and integrated into the landscape from the outset.

In the additional information the State Party provided at the request of ICOMOS, the State Party highlighted that the exact spot where rubber was first established in 1877, before being planted in the Economic Garden in or after 1879, is included in the heritage core of the Botanic Garden. In celebration of the 100th anniversary of its introduction, a monument was erected at the exact area in the north end of the Palm Valley.

Central Core (Tourism/administration Zone)

Once part of the Economic Gardens, this zone now includes primary tourist attractions – the Visitor Welcome Centre Plaza/Palm Court and amenity facilities, parking and drop-off zone at the Nassim Gate on Cluny Road; NParks headquarters buildings; the National Orchid Gardens and the historic Palm Valley. Most of this area was redeveloped during the 1990s following the 1980s Master Plan. Key veteran trees and heritage buildings and features were retained.

E.J.H. Corner House, a traditional black and white style bungalow completed in 1910 is set among lush tropical planting and includes a small domestic scale garden. A diverse collection of palms contiguous with those of the nearby Palm Valley is located on the south side of the house.

Palm Valley (Character Area 8), planted from 1879 on the site of the former Economic Garden developed under Murton's superintendence, stretches northwards from Orchid Plaza, sloping down to Symphony Lake. This large expanse of grass, with multiple scattered mature palms of varying sizes (c.220 species represented) and other tree species, is located in a shallow valley between the Rainforest and the National Orchid Garden whose eastern side once included part of the original extent of Palm Valley. Symphony Lake dominates the northern end of Character Area 8, with the Shaw Symphony Stage, built in 2005 to replace an earlier stage erected in 1995. The

Lake provides a focal point in views along the valley. An arrow installed in 1974-76 points towards Greenwich, London and marks the location of a temporary station for the observation of terrestrial magnetism set up in the Gardens in 1914. A series of beds located along Heliconia Walk (to the east, dated 1998) showcase the larger growing and more spectacular species of this genus.

The National Orchid Garden (Character Area 9) is the largest permanent display of orchids in the world, and was designed to showcase the products of the Botanic Gardens orchid breeding programme. It was completed in 1995 and is sited on the side of the hill where Burkill Hall (1868), a black and white plantation style bungalow, is located. The misthouse (1995), bromeliad enclosure (1995) and cool house (2004) provide further specialist tropical display gardens within the National Orchid Garden. The latter houses an artificially controlled montane tropical cloud forest display with trees and rocks draped with orchids and carnivorous plants. The Orchid Plaza at the entrance to the National Orchid Garden provides a key meeting place, overlooking Palm Valley and providing access into the National Orchid Garden to the west and the Ginger Garden to the south.

A small semi-wild remnant of freshwater swamp, the Orchid Nursery and mature trees are located to the north. The latter are mostly assumed to have been transplanted from the former Economic Gardens in the period from 1918 until the early 1920s. Transplanted trees included durian, tamarind, *Diospyros blancoi*, mahoganies (African and American), *Erythrophloeum guineense* and *Sterculia foetida*. These are now the largest examples of these species in the Botanic Gardens and will be made accessible to the public after the National Orchid Garden undergoes refurbishment during 2014-2018. The Raffles Building (Character Area 11) completed in 1958 and adjacent carpark/food and beverage facility dominate the north-east corner of this zone.

Bukit Timah Core (Education/Learning Zone)

This zone includes the redevelopment of the old Economic Gardens and later the former Raffles College Grounds. Most parts of the zone have recently been established as with themed plant areas and speciality gardens. The Botanic Gardens' plant resources centre (1995, located outside the boundary of the nominated property) for rare plant propagation and acclimatisation, staff training, conservation and education is also located on the northern boundary.

The Eco Lake and its surroundings (Character Area 15) have a gently undulating topography, with small man-made mounds topped with wooden shelters overlooking the lake. It is generally open with views across and to high-rise buildings located beyond the property boundary. The Eco Lake, a naturalistic lake with a shingle shore and swamp plants along its margins, dominates the area. A number of plant collections/display gardens (fruit trees, spices, bamboo/reflexology, trellis garden and foliage

garden) are dotted around the lake providing variety and ornamental interest.

The Jacob Ballas Children's Garden (Character Area 16) was designed and planted from 2004 to 2007 to provide a unique discovery and learning experience in a garden setting for children of up to 12 years of age. Set in woodlands it includes interactive play equipment, indoor and outdoor living classrooms, hands-on gardens, sensory garden and maze. A reception centre and a car park are located to the east of the area.

The Evolution Garden (Character Area 13) was laid out in 2005 on a small open hill, once the site of the workers' houses for the Economic Gardens. It is visually enclosed by dense tree planting. Specimens, outcrops of rocks, large boulders and fossils (some real and some artificial) border both sides of the main path spiralling to the base of the hill, giving it a distinctive character. Its south-western and eastern edges contain older plantings of timber trees.

Completed as a new speciality garden in 2011, the Healing Garden (Character Area 12) replaced college land bearing derelict university outbuildings, a few large trees (retained) and some smaller trees, shrubs and lawn. The Healing Garden is located adjacent to the old university houses and is laid out over sloping and terraced ground facing south-east. A complex of winding paths leads the visitors through generally new plantings (which includes highly floriferous herbaceous species) interspersed with tall tree specimens (including veteran trees such as *Palaquium obovatum*, planted by Ridley in the then Economic Gardens) which give it a distinctive character. 500 species of plants used for traditional medicine in Southeast Asia are laid out in the shape of the human body. This garden surrounds the former Economic Gardens historic Field Assistant's House (House 6, completed in 1919) and includes mature oil palms dating from c.1920, likely to have been planted as sources of seed for the nascent plantation industry at the time.

Five houses and their setting (Character Area 14), originally constructed between 1924 and 1928 for the former Raffles College, are located along the edge of a hilltop (set back against the Botanic Gardens' boundary), which slopes down steeply to the west. This part of the zone, unlike the younger planting to the north, contains numerous mature trees (including old tembusu trees and palms dating back to the 1920s). The Garage (built around 1924 and 1928) is located at the foot of the hill below the five houses, with old nutmeg and durian trees in between. The Fragrant Garden completed in 2013 (replacing derelict university out-buildings) wraps around House 5 and contains new plants including diverse shrubs and herbs with sweet-smelling flowers. Chinese tombs (1842-81) set within an open grass lawn with scattered shrubs and trees are located to the north-east of the zone.

Tyersall Learning Forest Core (Education/Learning Zone)

This whole zone comprises a century-old dense secondary forest overgrown with laurel, Albizia and towering tembusu trees, some of which were planted in 1862. Recently added as an extension to the Botanic Gardens, this zone will be developed into a 'learning forest'. This will involve the conservation of existing biodiversity, curation of botanical collections, establishment of better connectivity with the Rainforest, repositioning of the existing Tyersall Avenue, restructuring of visitor access to the National Orchid Garden/Ginger Garden, creation of fresh water swamp forest and extension of the National Orchid Garden nursery. It is anticipated that this project will be completed by the end of 2015.

History and development

The extent and certain components of the internal layout of the Singapore Botanic Gardens have changed over time. Several major phases of development are evident.

In 1859 an Agri-Horticultural Society was granted approximately 22 ha of land by the colonial administration to establish gardens in the Tanglin area. The land was developed into pleasure gardens for the Society's subscribers by Lawrence Niven, a Scottish-born and trained gardener and local nutmeg plantation manager. By 1870, Niven had transformed the land into an attractive landscape laid out in the English Landscape style, complete with curving paths, a lake, flower beds, a band parade area and a conserved tract of virgin rainforest. According to the State Party, the design of the Botanic Gardens had little scientific input during this first phase of its history. In 1866 it was extended by a further 12 ha to the west and north-west. A black and white bungalow (today known as Burkill Hall) and Swan Lake were established on this newly acquired land.

In 1874, due to the serious financial difficulties of the Agri-Horticultural Society, the British colonial government assumed ownership and management of the Singapore Botanic Gardens. From this time, the Gardens was transformed into a typical colonial botanical gardens, superintended by a qualified gardener-botanist, James Murton, who was appointed upon the recommendation of the Royal Botanic Gardens Kew.

During this phase, a library and herbarium were established, a wide array of new plant specimens introduced (including many trees to the south and the first Economic Garden to the north-west) and the Botanic Gardens' role in economic botany developed. The Botanic Gardens contained a significant zoological collection between 1875 and 1878, which was thereafter much reduced and eventually removed from the Botanic Gardens in 1985. Palm Valley was established in 1879 and The Dell in 1882 with the latter under the

supervision of the Botanic Gardens' new Superintendent Nathaniel Cantley.

In 1879, an area of approximately 41 ha of Military Reserve land located adjacent to the northern boundary was annexed to the Botanic Gardens and developed into an economic/experimental crops area (known as the Economic Gardens). At this time, the area of the Botanic Gardens was at its largest, encompassing 75 ha of land. Cantley and subsequent Directors continued to develop the Economic Gardens until the 1920s when much of this area was redeveloped into Singapore's first higher education college.

Extant buildings/structures constructed between 1880 and the early 1920s include: Ridley Hall (1882), E.J.H. Corner House (1910), House 6 (the Field Assistant's House, 1919) and Holttum Hall (1921). Cantley also developed the Potting Yard nursery to supply trees for city parks and forest reserves in c.1882-84.

In order to conserve some of the most valuable plants from the Economic Gardens, a number were moved to the historic core of the Gardens between 1918 and the mid-1920s. After the development of the college, the area of the Botanic Gardens was reduced in size to c. 40 ha.

Extant buildings/structures associated with the former Raffles College include: Houses 1-5 (1924-28) and Raffles Hall (now known as Raffles Building, dated 1958). Approximately 13 ha of land that had once formed part of the Economic Gardens was eventually returned to the Botanic Gardens in 1986, and a further 12 ha was added in 2004/2005.

Relatively minor landscape developments took place between the mid-1920s and 1960s. These included: the creation of an Orchid Enclosure (where the Ginger Garden now stands) and the redevelopment of a former Rose Garden in 1929 into the Sundial Garden. An active orchid hybridisation programme was started in the late 1920s and the bandstand was erected in 1930.

Between the early 1960s and late 1980s the Botanic Gardens revised its mission and focus from a research-oriented organisation to one that would feature prominently in Singapore's 'Garden City' vision. In part, the Gardens resumed its earlier roles, propagating trees for planting in Singapore's streets and parks. Taxonomic research was not a priority during this period. Parts of the Botanic Gardens were turned into nurseries and a School of Ornamental Horticulture was opened in Burkill Hall.

A number of new features, such as a Japanese Garden and miniature waterfall, were added to the Botanic Gardens during the 1970s but, with the exception of Symphony Lake, these were later removed (when the Botanic Gardens underwent a major programme of works in line with the National Parks Board's Masterplan, unveiled in 1989).

A 30-year Masterplan for the Botanic Gardens was unveiled in 1989, one year after the appointment of Dr Kiat W. Tan as its new Director. It enabled his new vision for the site to be articulated through a range of proposals grouped according to three core areas (the Bukit Timah, Central and Tanglin Cores) and delivered in three phases. Excellence in botanical research and conservation, education programmes and the protection of the heritage features of the Gardens underpinned the Masterplan. The Botanic Gardens regained its status as an institution for botanical and horticultural research, and is a tourist destination.

New elements introduced through the implementation of the Masterplan include the creation of the National Orchid Garden (1995), Visitor Centre/Park Headquarters (1998), Ginger Garden (2001), Evolution Garden (2005) and Healing Garden (2011). The scientific collections and facilities were also enhanced through the construction of the Botany Centre (2006), which houses the herbarium, library and various laboratories. More recently, works have included the creation of the Fragrant Garden (2013) and Heritage Museum (2013). The development of the Tyersall Learning Forest on approximately nine hectares of land added to the Botanic Gardens' south-western boundary in 2006, is expected to be completed by 2015.

3 Justification for inscription, integrity and authenticity

Comparative analysis

In the context of tropical colonial botanic gardens, the State Party considers that South and Southeast Asia is notable. According to the State Party, the pioneer work done in this region steered the course of history in new directions, revolutionised trade and established economies, influencing the international power balance. Against this notion, the comparative analysis provided by the State Party compared the Singapore Botanic Gardens with historic tropical colonial botanic gardens within South and Southeast Asia, namely, Bogor Botanic Gardens and its extension Kebun Raya Cibodas Botanical Gardens in Indonesia (Dutch); Royal Botanic Gardens Peradeniya and its lowland and highland sister gardens, Henarathgoda and Hakgala, Sri Lanka (Dutch); Calcutta Botanic Garden, India (British); Hong Kong Zoological and Botanical Gardens (British); Yangon Botanic Garden, Myanmar (British); Sir Seewoosagar Ramgoolam Botanical Garden Mauritius, and Penang Botanic Gardens, Penang Island, Malaysia (British).

In this comparative context, the State Party argues that the Singapore Botanic Gardens (SBG) is outstanding for its preserved landscape design and continuity of purpose since its establishment in 1859. The State Party also considers that the Singapore Botanic Gardens is an intact example of the British colonial botanic gardens as the others included in the comparison have lost some of their original features/functions. Finally, the State Party also considers that the Singapore Botanic Gardens is

relatively well-resourced compared to the other identified colonial tropical gardens in the region.

ICOMOS considers that this comparison is appropriate as only a few British tropical colonial gardens are comparable to the purpose and contribution of the Singapore Botanic Gardens, especially in relation to the pioneering work on rubber plantations.

The State Party also compared the Singapore Botanic Gardens with gardens in other regions already inscribed on the World Heritage List, namely, Orto Botanico, Padua (Italy); Royal Botanic Gardens, Kew (United Kingdom); and Jardim Botânico, Rio de Janeiro (Brazil). With the exception of the Kew Royal Botanic Gardens, which shared a mutually dependent role with the Singapore Botanic Gardens, the other two gardens were in the view of the State Party substantially different from the Singapore Botanic Gardens in terms of their values.

ICOMOS considers that the comparative analysis is adequate.

Justification of Outstanding Universal Value

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

- The nominated property's landscape today bears testimony to the history of plant transfer and research and the contributions to the economic and social development of the region;
- The Singapore Botanic Gardens is a well-defined cultural landscape which includes a rich variety of historic landscape features that clearly demonstrate the evolution of the Botanic Gardens since its establishment in 1859;
- Since 1875, the Singapore Botanic Gardens has continued to be a leading centre in plant science, research and conservation in Southeast Asia;
- The Botanic Gardens has played an integral role in the social history of Singapore, providing a backdrop for the lives of its residents, both past and present, and a continued sense of place and identity;
- The Singapore Botanic Gardens was and continues to be instrumental in the greening and transformation of Singapore into a 'Garden City/City in a Garden';
- The assemblage of historic landscape features and buildings and conserved lowland primary rainforest, in combination richly illustrate the development and mixed role of the Botanic Gardens during the period of British colonisation.

ICOMOS considers that this justification is appropriate given the ability of the Singapore Botanic Gardens to demonstrate its different phases of design and uses for scientific and social purposes, and through the diverse range of plantings, gardens, buildings and other features.

Integrity and authenticity

Integrity

The State Party states that the nominated property includes within its boundary all elements necessary to express its Outstanding Universal Value as an exceptional example of a British tropical colonial botanic garden in Southeast Asia; and to illustrate interchanges of values connected to ideas, knowledge and expertise in tropical and economic botany and horticulture. According to the State Party, the completeness of the nominated property is demonstrated by the range of landscape features, buildings and structures most closely associated with the Singapore Botanic Gardens as a British colonial botanic garden.

In the additional information provided, the State Party explains that artefacts from Ridley's experimentation with rubber are on display in the Singapore Botanic Gardens Heritage Museum in Holttum Hall. Besides rubber, the State Party asserts that many historic specimens of economic crop species are located on the land of the former Economic Garden within the nominated property. For example, this area still retains 7 very old specimens of African oil palm (*Elaeis guineensis*) planted to produce seeds to establish some of the early plantations in the region, which created a demand for seeds. Also located within the nominated property are two officially recognised Heritage Trees of white gutta percha (*Palaquium obovatum*) which were planted by Ridley in 1897 to ensure the species did not become extinct. These now represent one of the earliest examples of *ex situ* conservation.

ICOMOS considers that the nominated property contains all the attributes needed to demonstrate the proposed Outstanding Universal Value; and that the nominated property fully contains the original layout of the Botanical Gardens.

IUCN states that: "The collection of plants, including the relict small forest ecosystem is at the core of its significance. These plant collections, including herbaria (with over 8,000 type specimens) are considered definitive for the tropics."

ICOMOS concurs with IUCN's views that the integrity of the property could be further strengthened by developing policies directed to ensuring the future integrity of the property, such as a Comprehensive Living Plant Collection Policy.

ICOMOS further considers the move by the State Party to include the Bukit Timah Campus in the Buffer Zone in terms of the Master Plan 2014 as a positive step that will contribute to the maintenance of the integrity of the nominated property (see below).

Authenticity

The State Party states that the key attributes that contribute to the Outstanding Universal Value of the

nominated property – including the landscape, buildings and structures – have high levels of surviving authentic fabric; and that the spatial planning and layout of the Singapore Botanic Gardens are authentic. Many elements of the nominated property are still used in the manner in which they were originally intended, or have been adapted to new uses that are compatible with their values.

In the additional information provided, the State Party referred to the presence of many historic specimens of economic crop species in the former Economic Garden. ICOMOS considers that there are many individual elements that relate to the historical periods of the botanic gardens (as noted above).

ICOMOS notes that the authenticity of the nominated property is maintained on the basis that the site is still used as a Botanic Garden and also a place of scientific research.

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

Criteria under which inscription is proposed

The property is nominated on the basis of cultural criteria (ii) and (iv).

Criterion (ii): *exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design;*

This criterion is justified by the State Party on the grounds that the Singapore Botanic Gardens has been a prominent centre for plant research in Southeast Asia since the 19th century and continues to play a leading role in the interchange of ideas, knowledge and expertise in tropical botany, agricultural economy and horticulture.

This criterion was further justified by the fact that seedling stock from the Singapore Botanic Gardens was used to supply the rest of Southeast Asia as well as smaller plantations in British colonies in Africa and the Caribbean. When the plantation rubber boom began early in the 20th century it was the seeds and saplings supplied by the Singapore Botanic Gardens that enabled most of the expansion of plantations to occur, such that by 1920 Malaya was producing half of the world's latex harvest. Furthermore, China's current rapidly growing rubber industry in Yunnan Province has its origin in trees supplied from Singapore in 1904.

ICOMOS considers that the influences of the Singapore Botanic Gardens has been significant in the history of tropical botany and horticulture, and notes that while the Kew Botanic Gardens supplied the first few seedlings, the Singapore Botanic Gardens provided the conditions for their planting, mass-multiplication, experimentation, agro-industrial development and eventual distribution to much of Southeast Asia and elsewhere.

ICOMOS considers that this criterion has been demonstrated.

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

This criterion is justified by the State Party on the grounds that the Singapore Botanic Gardens is an outstanding example of a British tropical colonial botanic garden and the best preserved of its kind. Compared to the other British colonial botanic gardens of comparable size and function in the tropics, Singapore Botanic Gardens is outstanding for its preserved landscape design and continuity of purpose.

ICOMOS considers that the Singapore Botanic Gardens is an outstanding example of a 'British tropical colonial botanic garden'.

ICOMOS considers that this criterion has been justified.

ICOMOS considers that the nominated property meets criteria (ii) and (iv), and that the conditions of authenticity and integrity have been met.

Description of the attributes

ICOMOS considers that the attributes of Outstanding Universal Value are the numerous trees, plantings and built elements that demonstrate the original extent and layout of the original Botanic Gardens, developed during the 1860s as pleasure gardens; the historical features and gardens in the area of land annexed to the Botanic Gardens in 1866, including the Swan Lake, Burkill Hall and Palm Valley; the trees and other remnant elements of the former Economic Gardens (1879), such as the Field Assistant's house (House 6); the Chinese tombs; buildings which testify to the site's important role in the interchange of ideas, including Holttum Hall and Ridley Hall; the living, preserved, genetic, bibliographic and visual reference collections; the identified heritage trees and very old specimens such as the 7 very old specimens of the species of African oil palm (*Elaeis guineensis*); and the invaluable living and preserved plant collections, which underpin the site's scientific, conservation, educational and recreational functions.

4 Factors affecting the property

The nomination dossier mentions several factors that affect the Singapore Botanic Gardens and its setting. These include developments, infrastructure projects, environmental factors (such as termites and other pests), potential natural disasters and visitation.

ICOMOS considers that the main threats to the property are developments or changes in land use, environmental pressures and tourism.

5 Protection, conservation and management

Boundaries of the nominated property and buffer zone

The boundaries of the nominated property are clearly demarcated and all areas, buildings and features of conservation values within these borders are protected by a range of statutory and non-statutory designations. The nominated property is bounded by Holland Road to the south, Tyersall Avenue/Cluny Park Road to the west, the northern end of the Botanic Gardens to the north and the National University of Singapore's (NUS) Law Faculty/Evans Road and Cluny Road to the east.

A proposed buffer zone around the nominated property defines an area where additional planning guidance will be given to protect the immediate setting of the nominated property.

ICOMOS notes the move by the State Party to include the Bukit Timah Campus in the buffer zone as a positive move. The boundaries of the buffer zone are also clearly marked and much of the land within is designated as 'Landed Housing Areas' (including Good Class Bungalow Areas) with guidelines on the height and building form of residential developments within such areas.

In conclusion, ICOMOS considers that the boundaries of the nominated property and of its buffer zone are adequate

Ownership

All land within the nominated property is owned by the Singapore Government. The majority of the State land within the property is leased to NParks (under a 99 year lease, in force between 1990 and 2089), a statutory body of the Ministry of National Development.

With regard to the buffer zone, the State land immediately to the north and south-west of the nominated property is under the direct management of NParks as part of the Singapore Botanic Gardens. The remainder of land within the buffer zone is under a mix of private and State ownership.

Protection

Areas, buildings and features of conservation value within the nominated property are protected by a range of statutory and non-statutory designations. The principal legislation that regulates conservation and development in Singapore is the Planning Act. Under this legislation, any proposal to develop land or to carry out works in a conservation area (e.g. to erect a new building, etc.) is required to obtain planning and/or conservation permission under the Act before development or work is carried out.

The entire area of the nominated property is within the Singapore Botanic Gardens which is Conservation Area (2008). It is also a Tree Conservation Area (1991) and the

majority of the Gardens is a National Park (1990). The Rainforest Area of the Nominated Property is a Nature Area (2003). There are 44 heritage trees within the nominated property. Conserved buildings within the Nominated Property are houses 1 to 5 of the former Raffles College (2008), Raffles Hall (2006), E.J.H. Corner House (2008), Burkill Hall (2008), Holttum Hall (2008), Ridley Hall (2008), House 6 (2013) and the Garage (2013). Conserved structures within the nominated property are the Bandstand (2009) and Swan Lake Gazebo (2009).

Land within the proposed buffer zone is zoned in the Master Plan for mixed uses such as residential, education and open spaces. ICOMOS notes that much of the buffer zone is designated as 'Landed Housing Areas' (including 'Good Class Bungalow Areas') with guidelines on the height and building form of residential developments within such areas. Under these guidelines, the intention is that developments within the proposed buffer zone should generally maintain low-rise and low density character. Developments in close proximity to the Botanic Gardens are also subject to more stringent height controls under the Building Height Plan that protect the visual amenity of the Botanic Gardens. However, ICOMOS notes that the entire buffer zone is not designated as 'Landed Housing Area', meaning that there are parts of the buffer zone that do not benefit from restrictions of height related to this designation. Therefore, the parts of the buffer zone that are excluded may be exposed to developments that could adversely affect the nominated property.

In conclusion, ICOMOS notes that although Singapore has well-developed planning and development compliance systems, there is concern that the laws of the State Party do not have mandatory environmental impact assessment (EIA) for planning. If this is addressed, protection of parts of the buffer zone that are not designated Landed Housing Area could be strengthened. Generally, ICOMOS considers that the legal protection in place is adequate, with the exception of the areas within the buffer zone that are not designated as 'Landed Housing Area'.

Conservation

The living collection is part of an ongoing and evolving curation programme, which seeks to ensure that research and conservation needs are met, keynote specimens (e.g. heritage or horticultural value) are conserved, the historic character and structure of the landscape is maintained and a quality visitor experience is provided. In accordance with the Gardens' Acquisition and Retention Policy, there is an intention to replace 'low value' plants with new 'higher value' ones and, wherever appropriate, to replace plants with new more accurately documented plant material (particularly in relation to provenance).

The most recent records or inventories of the nominated property are the digital inventory of Living Collections (2013, updated on an ongoing basis); digital inventory of the Library Collection (published and archival material,

2013, updated on an ongoing basis); digital inventory of the Herbarium's Type Specimens (2013, updated on an ongoing basis); digital inventory of Conserved Buildings and Structures, held by the Urban Redevelopment Authority (2013, updated as and when necessary); digital inventory of Heritage Trees, held by the National Parks Board (2013, updated on an ongoing basis); digital inventory of all buildings within the Singapore Botanic Gardens, held by the National Parks Board's Resource Management Division (2013, updated on ongoing basis); and Biodiversity survey of the Rainforest (2009-2012).

The historic buildings in the Singapore Botanic Gardens are inspected on a quinquennial basis and subject to ongoing maintenance. ICOMOS considers inspections that are undertaken once every five years to be inadequate as a conservation measure.

In conclusion, ICOMOS considers that the conservation measures are generally adequate, but that they could be strengthened through improvements to the frequency of inspections of the historical buildings.

Management

Management structures and processes, including traditional management processes

The overall responsibility for the management of the Botanic Gardens lies with its Director who is assisted by two senior Deputy Directors and four Deputy Directors. The Singapore Botanic Gardens currently employs 125 full-time members of staff. Volunteer workers lead walks around the Gardens, including a specialist heritage walk. Garden staff are employed in the following five departments: Research and Conservation; Horticulture, Exhibitions and Events; Education, Development and Administration Support; Visitor Management, Security and Operations; and Singapore Garden Festival.

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

Land use planning in Singapore is carried out by URA, the national land use planning and conservation authority, in conjunction with other government agencies. The strategic land use plan that guides Singapore's development over a 40 to 50 year period is the Singapore Concept Plan. This plan is supported by the Master Plan (2008) which is the statutory land use plan prepared under the Planning Act. The Master Plan translates the broad long-term strategies of the Concept Plan into detailed plans to guide development, and sets out land use zoning and plot ratio/intensity policies for land in Singapore. Development control plans such as Landed Housing Area Plans and Building Height Plans referred to above are published to provide further elaboration and guidance of the planning intention of the Master Plan. The review of the Master Plan is carried out at least every five years.

The nominated property is zoned 'Park' in the Master Plan, which requires that the land be set aside for use as park or garden, for the enjoyment of the general public. The Conservation Guidelines provide the conservation principles, planning parameters and restoration guidelines for conserved shop house and bungalow typologies, as well as planning parameters and envelope control guidelines for new buildings within Conservation Areas. To safeguard the visual amenity of the nominated property, the Building Height Plan also provides for more stringent height controls on developments in close vicinity of the Singapore Botanic Gardens.

A Management Plan has been prepared for Singapore Botanic Gardens with the primary aim of ensuring effective protection, conservation, presentation and transmission of the attributes of the site's Outstanding Universal Value. The Plan provides the over-arching framework for management of the nominated property.

ICOMOS also notes the Master Plan 2014, gazetted on 6 June 2014, is Singapore's latest Master Plan and supersedes the above-mentioned 2008 document that was submitted with the Nomination Dossier.

IUCN recommends that: *"an effective management plan for the remnant primary forest within the boundaries of the nominated property be maintained and kept updated, as it is unlikely that this relatively small patch of forest will be sustained over time if left unmanaged, and that its character may adapt over time due to the process of management intervention required to sustain it."*

The Botanic Gardens are free to access, with the exception of the National Orchid Garden, and are believed to be the only botanic gardens in the world that is open until midnight every day. To facilitate presentation of the significant value of the nominated property, amongst others, educational signs are erected in the vicinity of each Heritage Tree. The Botanic Gardens contains a range of visitor facilities/infrastructure.

A user survey was recently commissioned, which will outline the site's visitor profile as well as visitor satisfaction, needs and aspirations.

Involvement of the local communities

There are currently no inhabitants within the nominated property and about 3,788 living in the buffer zone. A wide range of stakeholders were consulted and contributed to the development of the Nomination Dossier including the Management Plan. These stakeholders included the Tanglin Neighbourhood Committee.

In conclusion, ICOMOS considers that the management system for the property is adequate.

6 Monitoring

Indicators for quantitatively and qualitatively measuring the state of conservation are established in the

Management Plan for the nominated property. These include:

- Percentage of buildings/structures requiring major repair
- Observed change in the condition of the living collections
- Number of major changes to the historic layout
- Population size of key species in the Rainforest
- Observed change in the condition of the preserved collections
- Observed change in the condition of the documentary/visual reference collections
- Continuity of the site's scientific and recreational functions
- Percentage of visitors expressing satisfaction
- Number of participants in educational activities

While ICOMOS considers that these indicators 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. The State Party should also provide further information on the procedures for the monitoring of the property.

In conclusion, 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 Outstanding Universal Value of the nominated property.

7 Conclusions

ICOMOS considers that the significance of the Singapore Botanical Gardens as an exceptional example of a British tropical colonial botanic garden in Southeast Asia; and an illustration of interchanges of values connected to ideas, knowledge and expertise in tropical and economic botany and horticulture.

8 Recommendations

Recommendations with respect to inscription

ICOMOS recommends that the Singapore Botanical Gardens, Singapore, be inscribed on the World Heritage List on the basis of **criteria (ii) and (iv)**.

Recommended Statement of Outstanding Universal Value

Brief Synthesis

The Singapore Botanic Gardens is situated at the heart of the city of Singapore and demonstrates the evolution of a British tropical colonial botanic garden from a 'Pleasure Garden' in the English Landscape Style, to a colonial Economic Garden with facilities for horticultural and botanical research, to a modern and world-class botanic garden, scientific institution and place of conservation, recreation and education. The Singapore Botanic

Gardens is a well-defined cultural landscape which includes a rich variety of historic landscape features, plantings and buildings that clearly demonstrate the evolution of the Botanic Gardens since its establishment in 1859. Through its well-preserved landscape design and continuity of purpose, the Singapore Botanic Gardens is an outstanding example of a British tropical botanic garden which has also played a key role in advances in scientific knowledge, particularly in the fields of tropical botany and horticulture, including the development of plantation rubber.

Criterion (ii): The Singapore Botanic Gardens has been a centre for plant research in Southeast Asia since the 19th century, contributing significantly to the expansion of plantation rubber in the 20th century, and continues to play a leading role in the exchange of ideas, knowledge and expertise in tropical botany and horticultural sciences. While the Kew Botanic Gardens (United Kingdom) provided the initial seedlings, the Singapore Botanic Gardens provided the conditions for their planting, development and distribution throughout much of Southeast Asia and elsewhere.

Criterion (iv): The Singapore Botanic Gardens is an outstanding example of a British tropical colonial botanic garden, and is notable for its preserved landscape design and continuity of purpose since its inception.

Integrity

The Singapore Botanic Gardens contains all the attributes necessary to express its Outstanding Universal Value and fully contains the original lay-out of the Botanic Gardens. A number of specific attributes including historic trees and plantings, garden design, and historic buildings/structures combine to illustrate the significant purposes of the Singapore Botanic Gardens over its history. The integrity of the property could be further strengthened by developing additional policies directed at the replacement and retention of significant plants.

Authenticity

The authenticity of the Singapore Botanic Gardens is demonstrated by the continued use as a botanic garden and as a place of scientific research. The authenticity of material remains in the property is illustrated by the well-researched historic trees and other plantings (including historic plant specimens), historic elements of the designed spatial lay-out, and the historic buildings/structures which are being used for their original purposes or adapted to new uses that are compatible with their values.

Management and Protection Requirements

Most of the Singapore Botanic Gardens is in a National Park, and the other designations include: Conservation Area, Tree Conservation Area and Nature Area (applied to the rainforest area). There are 44 heritage trees within the nominated property, and a number of protected

buildings/structures such as houses 1 to 5 of the former Raffles College, Raffles Hall, E.J.H. Corner House, Burkill Hall, Holttum Hall, Ridley Hall, House 6, Garage, Bandstand and Swan Lake Gazebo.

The Botanic Gardens is protected primarily through the Planning Act of Singapore, which regulates conservation and development and requires permits to be obtained for new development or works. The Singapore Concept Plan guides strategic planning over a 40-50 year period and land use planning in Singapore is carried out by URA, the national land use planning and conservation authority. Land use, zoning and development policies for Singapore are established by a statutory Master Plan (2014) prepared under the Planning Act. The Master Plan is regularly reviewed and there are provisions for specific development control plans that provide guidance on the height and location of new developments as well as conservation principles for conserved buildings and their setting.

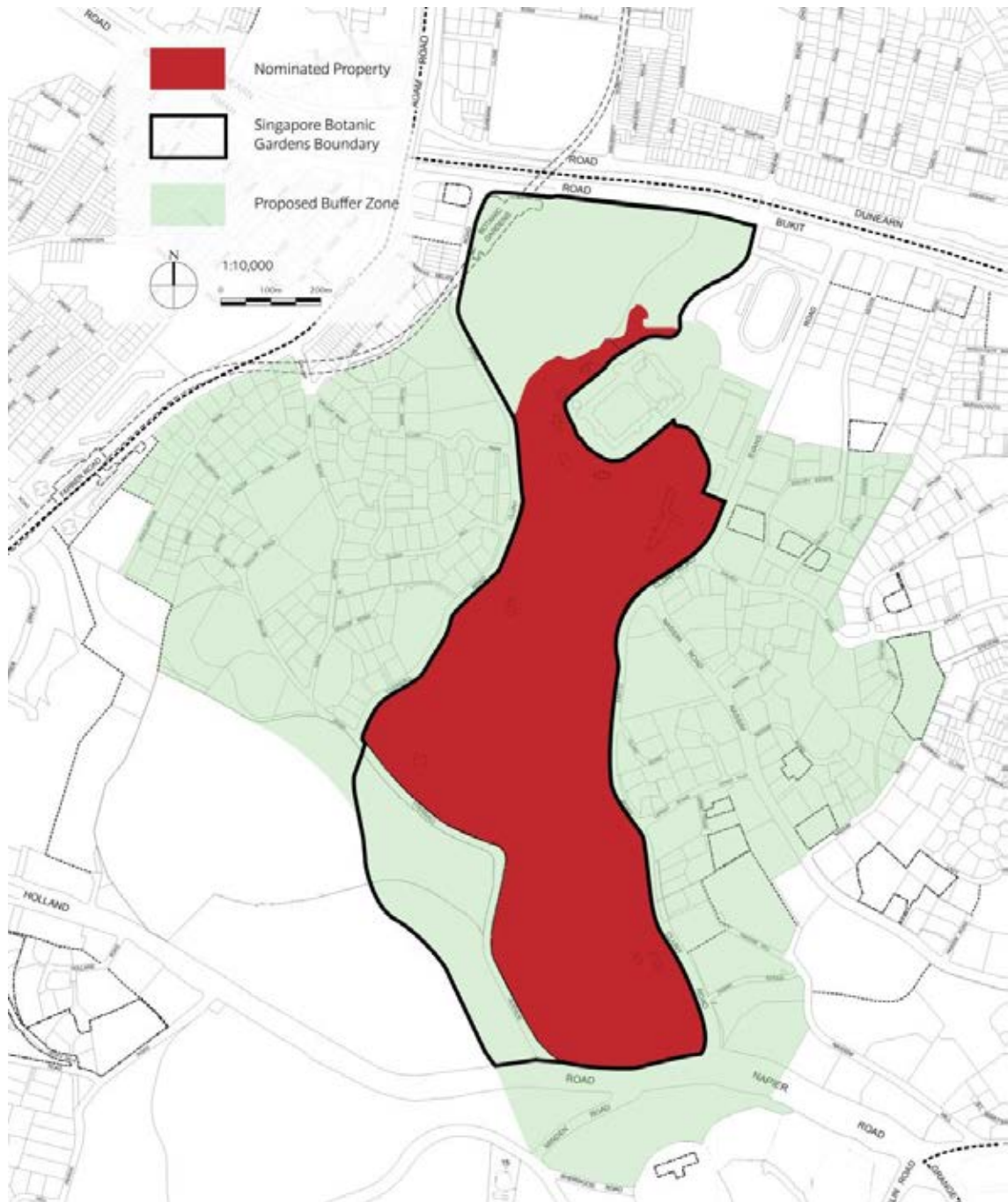
Land within the buffer zone is designated as 'Landed Housing Areas' (including 'Good Class Bungalow Areas') with guidelines on the height and building form of residential developments. Under these guidelines, developments within the proposed buffer zone should generally maintain low-rise and low density, although this could be strengthened by ensuring that the 'Landed Housing Zone' is applied to the entire buffer zone.

A Management Plan has been prepared for Singapore Botanic Gardens with the primary aim of ensuring effective protection, conservation, presentation and transmission of the attributes of the site's Outstanding Universal Value. The Plan provides the over-arching framework for management of the nominated property.

Additional recommendations

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

- Strengthening the protection of the buffer zone by applying the 'Landed Housing Zone' to its entirety, or by providing some other appropriate measure that can restrict the height of new constructions;
- Strengthening the conservation measures through improvements to the frequency of inspections of the historical buildings;
- Developing monitoring indicators for development and tourism in light of the growing impacts from these potential threats;
- Ensuring that all new proposals for development are submitted to the World Heritage Centre for examination in accordance with paragraph 172 of the *Operational Guidelines for the implementation of the World Heritage Convention*;
- Formulating a Living Plant Collections Policy and Plant Acquisition and Replacement Policy.



Map showing the boundaries of the nominated property



Swan Lake



The Bandstand



The National Orchid Garden



Tyersall Learning Forest

IV Cultural properties

A Africa

New nominations

B Arab States

New nominations

C Asia – Pacific

New nominations

D Europe – North America

New nominations

Extensions

Nominations deferred by previous sessions of the
World Heritage Committee

E Latin America and the Caribbean

New nominations

Hall in Tirol – The Mint (Austria) No 1489

Official name as proposed by the State Party

Hall in Tirol – The Mint

Location

City of Hall
Province of Tirol
Austria

Brief description

Hall in Tirol is located in the central Inn Valley some 10 km east of the state's capital Innsbruck. Its old town comprises a lower and an upper town and developed in medieval times as an economic centre through systematic extraction of rich salt deposits. The medieval Hasegg Castle in the lower town hosted the Hall Mint, initially established in the 15th century. The Mint then expanded in the 16th century and became the first coin factory producing currency in a mechanized process; a technology, which was exported from Hall to other mints in the Habsburg territories. Today, the former mint production is documented in the museum of the Hall Mint in Hasegg Castle by the reconstruction of the world's first serial minting machine at its original location.

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* (July 2013), Annex 3, this is also an *inhabited historic town*.

1 Basic data

Included in the Tentative List

1 August 1994

International Assistance from the World Heritage Fund for preparing the Nomination

None

Date received by the World Heritage Centre

30 January 2014

Background

This is a new nomination.

Consultations

ICOMOS consulted its International Scientific Committee on Historic Towns and Villages (CIVVIH), TICCIH and several independent experts.

Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the property from 22 to 25 September 2014.

Additional information received by ICOMOS

ICOMOS sent a letter to the State Party on 6 October 2014 requesting additional information with regard to the Justification of Outstanding Universal Value, the integrity of the property in terms of the physical remains of the various aspects of coinage production as well as the authenticity of the physical remains of Hasegg Castle. The State Party provided additional information on 7 November 2014 addressing all questions raised.

On 16 January 2015, ICOMOS sent a letter to the State Party informing it that the nominated property does not fulfil the requirements set out in the *Operational Guidelines for the Implementation of the World Heritage Convention*, and therefore ICOMOS will recommend to the World Heritage Committee that the nominated property not be inscribed on the World Heritage List.

Date of ICOMOS approval of this report

12 March 2015

2 The property

Description

The property encompasses 306 buildings in the old town of Hall in Tirol, located in the central Inn Valley north of the main Alpine ridge of the Tux Alps and the Glungezer Mountain. The area of the nominated property amounts to a little more than 13 hectares, which are surrounded by a buffer zone of 43 hectares. It is divided into the Upper Town, Lower Town and the Hasegg Castle.

The most prominent structure is the Mint Tower of Hasegg Castle, located south of the town's centre, between the Inn River and the Lower Town. It was built with a distinctive polygonal structure for defence purposes at the south-western corner of the town and became known as a landmark illustrating Maximilian I's claim to power over the Hall salterns. The tower is part of the Mint Museum, which is located in the south-western part of Hasegg Castle, the former location of coinage production. Two staircases lead into the tower today, a small historical spiral staircase and a more recent steel staircase of corkscrew shape. However, there is also a second staircase tower north of the Mint Tower which contains an extremely rare triple helical staircase.

The Mint Museum is located below the two castle towers, the outer bailey and the remains of a former city wall to the west of the Mint Tower. The museum is dedicated to exhibit the history of coinage and its central hall shows the

reconstruction of the world's first serial printing machine at its original location.

The urban centre of Hall which is included in the property points to the wealth of its late medieval citizens, generated predominantly through salt trade. The upper and a lower part of the town centre historically occupy different functions. While the Upper Town became the administrative centre, the Lower Town was the centre of commerce and location of the market. The market was an important economic factor since Hall had a central trade function as one of the key north-south routes across the Alps and the last shippable port of the Inn River.

The Upper Town Square accommodates the key public buildings, such as the town hall named Royal House or the St Nikolaus Parish Church. The Upper Town has an ensemble of richly decorated buildings from the medieval and early modern periods. Since a great fire destroyed the upper part of many houses in 1444, most medieval architectural structures show characteristics of the immediate reconstruction period after the fire.

The Lower Town, located between the Upper Town and the Hasegg Castle, from which it is divided by a major street – was also established in the first half of the 15th century. Unfortunately, many buildings in this part of the city experienced damage during a bomb attack on the Hall train station during World War II. However, a few prominent historic structures stand out, such as the Saviour's Church, the house locating the restaurant Goldener Engel, or the Rainegg residence.

History and development

Hall in Tirol grew from a settlement towards a town in the 13th century as a result of the systematic extraction of salt deposits in the Hall Valley. It was awarded the town charter in 1303. By then, it was fortified with a city wall and moat, the reminders of which remain visible today. The town had considerable economic resources from its salt works in late medieval and early modern times, which explains the quality and elaborate decoration of both residential and public architecture.

The salt pans in Hall required more timber than was available in the vicinity of the town. For this reason a barrier was built across the Inn River to allow for timber extraction upstream and easy transport via the river and its tributaries towards the city. As a consequence the town became the terminal station for river traffic which connected the Duchy of Bavaria and the Habsburg territories of Old Austria via the Inn and Danube rivers. Hall became a hub of traffic routes in which shipped goods had to be transferred to inland transport means.

Hasegg Castle was constructed in the 13th century to protect the saltern and the southern entrance to the city. However, explicit reference to a "castle" is only made in sources of the 16th century after the tower was added to create a fire alarm system responding to the constant fire hazard of the salt pans. Written sources also refer to an earlier extension of the Hasegg complex in the time

around 1465, likely in response to the destructions during the great fire in 1447.

The history of the mint in Tirol begins in 1477, when the city was already a well-defended wealthy centre of salt extraction and trade and the sovereign's mint was relocated from Meran to Hall. Immediately after this relocation an ambitious coin project was started in Hall, to strike a large silver coin with such a high degree of fineness, that its value would be equivalent to a guilder. This "guldiner", first produced in 1486, revolutionized coin production in that it became a model and the production of high value silver coins was embraced in other places as well. One of the coin productions after the Hall model was located in the Bohemian St Joachim's Valley and its coins were referred to as Joachimstaler or simply Taler, creating a new etymological reference from which the term dollar derives.

The Hall Mint was initially established in Sparberegg, an estate located directly at the eastern wall. In 1567 it was relocated into Hasegg Castle. The relocation became necessary because the estate was not appropriate for a new machine which had been developed and tested for serial coin production, as the required water power to operate the machine could not be delivered at its altitude. Hasegg Castle however, was in the vicinity of the river and water wheels were installed in the outer bailey area, where archaeological evidence of their supply time has been found. Work on this machine powered by water had started in 1563 and by 1566 a first prototype allowed for trial printing. Regular production only began after the machinery was assembled in Hasegg Castle the following year.

Throughout the 17th century mechanized coin production continued and the fame of Hall steadily increased with the recognition of the innovative technology which was transferred into other parts of the world. Only one such machine of the Hall model still exists and is located in the World Heritage city of Potosí in Bolivia, where the whole coin production chain from the mines to the Royal Mint has been conserved and was recognized as of Outstanding Universal Value.

Hall in Tirol's loss of significance in the 18th and 19th century was result of the decline of the mint, which became just one of many such mints in the Habsburg Empire. In 1670 Hasegg Castle was hit by an earthquake, which the Mint Tower survived without damage. Following the defeat of the Tirolean armed forces by the Bavarian allies of Napoleon, the mint machines were dismantled and moved to Munich. Hasegg Castle was converted to accommodate housing for salt work employees. In the late 20th century Hasegg Castle was subject to constant repairs. The closure of the saltern offered the opportunity to use the castle as a medieval monument and restoration began in 1969 in the eastern wing and has since continued in other parts of the complex. During the revitalization, additions built in the 19th century were dismantled in favour of medieval structures. The south-western section of the castle today

houses the Mint Museum, which exhibits a number of objects related to the Hall coinage production as well as a reconstruction of the world's first serial printing machine at its original location.

3 Justification for inscription, integrity and authenticity

Comparative analysis

The comparative analysis is presented in two separate sections. The first section compares the mechanized coin manufacturing process used at Hall in Tirol with other industrial production processes of its time. The second analyses the monument of Hasegg Castle and its Mint Tower in relation to other existing mint buildings. The first section remains purely theoretical and compares mechanical production processes rather than sites.

The comparison of mints initially analyzes the daughter mints of Hall, to which the mechanized coin production process was transferred. These are Segovia (Spain), Ensisheim (France), Kremnica (Slovakia) and Nagybanja (Romania). The mint in Kremnica is still functioning today, though none of the 16th century buildings remain. The Segovia Mint still exists and was recently restored, however, it is said to house a visitor centre for a Roman Aqueduct.

A number of other mints compared include later examples in Europe, such as Venice (Italy), Karlsruhe (Germany) or Cesky Krumlov (Czech Republic) but also examples from the Americas and as far as China. Yet, none of these are comparable as either the mechanized technology was introduced much later, such as in Mexico-City, Mexico or Potosí, Bolivia, or the technology was considerably different such as in Asia.

ICOMOS considers that the initial part of the comparative analysis remains historical and compares the importance of the process of mechanized coin production rather than the nominated property. This comparative approach can only illustrate the relevance of the theme the property represents, but does not compare the tangible expressions which illustrate this theme.

The second section considers other production sites and highlights the technical advantages of the Hall workshop and mechanized rollers. A large number of other coinage locations is mentioned but not really studied in detail in terms of their preserved architecture and testimony of coin production processes. ICOMOS considers that this section remains too superficial to support the exceptionality of the physical remains of the coinage production process in Hall in Tirol. ICOMOS notes that other sites, for example Zacatecas, Mexico, (1993, (ii) and (iv)) or in particular Potosí in Bolivia (1987, (ii), (iv) and (vi)), which was nominated as the world's largest industrial complex in the 16th century retain considerable expressions of coin production. In Potosí the whole

industrial production chain from the mines to the Royal Mint has been conserved, and that should have been given more attention in the comparative analysis, even if the mechanized coin production was introduced at a later date.

ICOMOS considers that the comparative analysis does not justify consideration of this property for the World Heritage List.

Justification of Outstanding Universal Value

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

- The Hall Mint provides testimony to an exceptional technical innovation and global technology transfer in the production of a roller press coinage;
- From Hall not only the coins were exported – produced ten times faster with half the staff needed elsewhere – but also the technology and pre-fabricated machines were exported all over Europe;
- Hall was the first and for some time the only mint which produced the roller-press coinage. This system of coins with its Taler became the dominant currency not only in Europe but also overseas.

ICOMOS considers that this justification relates to a historical technological advancement, invented in and exported from Hall in Tirol, which significantly changed the processes of coin production. However, the justification of Outstanding Universal Value relates in no way to the physical remains which provide testimony to this system and have been preserved until present.

ICOMOS considers that these physical representations are unfortunately meagre. The roller-press coinage today exhibited in the Mint Museum is a reconstruction of a machine which was dismantled in the early 19th century. The area just outside of the Mint, according to the additional information provided by the State Party at the request of ICOMOS, revealed remains of water pipes, which served with water wheels to drive the minting machines. However it is explained that these did not remain intact and a reconstruction or visualisation seemed unjustified. ICOMOS considers that it is difficult to understand how the urban centre, which reflects architecturally the Late Gothic period and was constructed before the Hall coinage innovation took place, could reflect the Outstanding Universal Value proposed.

Integrity and authenticity

Integrity

The arguments presented for integrity by the State Party rely upon general ideas with regard to the continuity of an urban centre and its plan since the 14th century. However, ICOMOS considers that the nomination misses major aspects that would allow for demonstration of integrity. The physical remains of the coinage innovation which

originated in Hall are scarce. A reconstructed machine in a museum cannot qualify as adequate reminder to this historical innovation and the architectural remains in and around Hasegg Castle do not allow to understand how the production process inside and outside the castle, including the provision of silver from the nearby mines and water from the Inn River, used to be organized.

With regard to the urban fabric, ICOMOS notes that the former link between the river and the city is no longer legible today. The separation of the Upper and Lower City into two parts by a federal road disconnects the historic urban centre and reduces its integrity. In addition Hasegg Castle is separated from the river banks by several train tracks. The coinage structures in Hasegg Castle were considerably modified in the 19th century when the location was utilized as residences for saltern workers.

Authenticity

The State Party points out that the historic town centre and Hasegg Castle have been preserved in their original patterns and have been cautiously restored and that the Mint itself is situated in its original location. ICOMOS notes that a mint does not any longer exist but that a Mint Museum is situated in the original location. The Hasegg Castle has been extensively restored, as the State Party indicated in the additional information provided at the request of ICOMOS; restored focused primarily on the Gothic parts which were considered as "Leitmotiv" dating back to the 15th century. At the same time 19th century remains were removed and 21st century museum equipment added.

ICOMOS considers that it is difficult to demonstrate authenticity with regard to the Hall Mint and its coinage innovation except for authenticity of location, which in itself does not seem sufficient to demonstrate authenticity. All physical remains of the Great Coinage Reform, which the nomination presents, are not preserved, not included or reconstructed.

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

Criteria under which inscription is proposed

The property is nominated on the basis of cultural criteria (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 town of Hall, with its mint building, presents a benchmark reference for innovation in coinage production. It is said to be the cornerstone location for not only the mechanization of industrial processes but the origin of mechanization itself.

ICOMOS considers that the history of silver coin stamping at Hall is certainly a landmark in the field of pre-industrialization and a reference for the first attempts

in mechanization of coin production in Europe. However, the creative innovation in this context is the machine, which today no longer exists. ICOMOS considers that the nominated property does not contain a sufficient set of attributes to justify this criterion, both in terms of the urban historical centre as well as the early mechanized workshops for coin stamping in Hasegg Castle.

ICOMOS considers that this criterion has not been justified.

Criterion (ii): *exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design;*

This criterion is justified by the State Party on the grounds that the Mint of Hall in Tirol is an outstanding example of the roller press coinage, a new technology which allowed for a significant transfer of complex industrial technology. Hall is the origin location of the great coinage reform which substantially changed the currency system in Europe.

ICOMOS considers that Hall in Tirol was certainly the origin of an important innovation in mechanized coin production which initiated changes of the currency system in and beyond Europe. However, the workshops which initiated this change and the roller press coinage machine, the innovation at the core of the new technology, no longer exist as physical references which could carry the historic technology transfer in terms of material remains. ICOMOS considers that while the World Heritage Convention seeks to recognize authentic locations in which such innovation occurred, this cannot be represented by a museum which relies upon documentary evidence of the historic event and a reconstruction of the technological development.

ICOMOS considers that this criterion has not been justified.

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

This criterion is justified by the State Party on the grounds that the Hall Mint represents an outstanding type of technological example which illustrates the dawn of mechanization. The Mint was a training centre where coinage technicians were instructed and became the mother mint to newly established mechanized coining factories all over the Habsburg territories and beyond.

ICOMOS considers that the proto-industrial innovation is a key example of the technology, but that this technology is no longer reflected in the physical remains at Hasegg Castle or in the Urban Centre of Hall in Tirol. ICOMOS considers it problematic to illustrate a technology such as coinage production, by a museum focused on this

topic – even if located in the rooms of the former mint – or a historic urban centre. Therefore, although the role of the “mother mint” at Hall in Tirol is certainly historically correct and important, it is not illustrated by the property and its described attributes.

ICOMOS considers that this criterion has not been justified.

In conclusion, ICOMOS does neither consider that the criteria have been justified nor that the conditions of authenticity and integrity have been met.

4 Factors affecting the property

The Inn Valley is subject to moderate development pressure, in particular in terms of further spread of residential settlements and establishment of industrial areas along the mobility axis, such as the highway A12. It is expected that the individual municipalities in the Inn Valley might link up to a continuous urban belt in the forthcoming decade. However, the municipal council of Hall in Tirol has adopted both land use plans and a spatial regulation plan in 2010, which seem sufficient to prevent negative impacts of urban development.

Flooding of the Inn River might be a possibility but is unlikely to affect the property negatively. The urban centre is safe from floods due to its elevated location with only Hasegg Castle remaining exposed at the lower level and in the vicinity of the river. However, mobile protective walls and water barriers have been constructed along the Inn River and have prevented previous major floods from reaching the castle. A flood contingency plan for the castle is in place.

Hall in Tirol is located in a moderate risk seismic zone, which implies that earthquakes may occur and potentially cause damage to historic structures. In conservation of monuments earthquake-resistant technologies have often been used. Like any other historic city or castle, the property may be affected by fire and a fire in 1986 damaged part of the old town. Since then, however, fire safety measures have been consequently improved.

Hall in Tirol is already a popular visitor destination with an estimated 1.8 million tourists per year. Only 30,000 of these find their way into Hasegg Castle and the Mint Museum, which has the capacity of receiving far larger numbers of visitors. ICOMOS does not consider that an increased number of visitors would constitute a threat to the property.

ICOMOS considers that the main threats to the property are potential flooding of the Inn River, earthquakes and fire.

5 Protection, conservation and management

Boundaries of the nominated property and buffer zone

The boundaries of the property include the historic city centre comprised of Upper and Lower Town as well as the Hasegg Castle compound. They can be said to include the historic centre of Hall in the medieval and early modern era, which includes the location of the former workshops for coin production in Hasegg Castle. ICOMOS considers that it would be desirable to extend the property to the banks of the Inn River to cover the area where water wheels would have been located and from where water channels emerge towards the Hasegg Castle.

The buffer zone includes the immediate setting of the property and attempts to protect the skyline of the town and its monuments. Its boundaries correspond largely to the boundaries of the town's planning protection zone, which already functions as a true buffer zone for the property. The property is not surrounded by a buffer zone to the south, where an extension towards the river would be considered beneficial. ICOMOS therefore recommends to also extend the buffer zone towards and perhaps across the river to protect the waterline and the opposite bank.

In conclusion, ICOMOS considers that the boundaries of the nominated property and the buffer zone are largely adequate but could be extended towards the Inn River.

Ownership

The nominated property covers a densely built historic urban centre. Of the 306 buildings included in the property, 40 (13%) are in public ownership, while 266 (87%) belong to private individuals or entities. In the buffer zone a far larger percentage (32.86 %) is publicly owned. The Hasegg Castle is owned by the City of Hall.

Protection

The old town of Hall is protected at federal level – the highest level available in Austria – through its designation in 1991 as a protected monument ensemble under the Federal Act on the Conservation of Monuments, last amended by Federal Law Gazette No. 92/2013. The property is also protected at the provincial level by the Tirolean Building Code (2011) as well as the Tirolean Act for Cityscape and Locality Protection (2003). The property and buffer zone match the protection zone established by ordinance of the municipal council of Hall in Tirol on 23 September 2008 under section 8 of the Tirolean Act for Townscape and Locality Protection (SOG 2003).

All protected monuments under the federal act may not be destroyed or modified except with the explicit permission of the Federal Office of Monuments. This process requires previous submission of an application, which specifies the rationale, type and extent of the proposed modification. The law imposes penalties of up to 50,800 Euro for acts that neglect the provisions of the federal act. The act also

foresees tax incentives for monument owners who invest in their conservation. The protection systems at both federal and provincial level seem effective.

ICOMOS considers that the legal protection in place is sufficient and that the protective measures for the property are adequate.

Conservation

The property has been researched and inventoried in the preparation of its nomination. Although the research adequately covers the urban, religious, and architectural history of the town and its remains, such as its numismatic history, there is insufficient coverage of the technological history and its material remains, both in the Mint and if applicable in the other sectors of Hall in Tirol.

The state of conservation of the property is good and conservation approaches are very systematic and comprehensive. Adequate funding seems available for the continuing conservation works, which are carried out by trained specialists. The historic buildings are predominantly residential and inhabited with the exception of five buildings currently under restoration. In some cases, however, the state of conservation is challenged by the replacement of windows in inappropriate materials, the installation of TV reception equipment in particular so-called satellite dishes, as well as loft projects.

Hall in Tirol has in the past received awards for its exemplary urban conservation, such as the Austrian State Award for Monument Preservation (1984) or the Flag of Honour of the Council of Europe (1986). ICOMOS considers that the conservation undertaken is thorough and of high quality and that future conservation programmes seem to effectively address long-term preservation and maintenance.

In conclusion, ICOMOS considers that the state of conservation of the historic urban centre is good and conservation activities sufficient.

Management

Management structures and processes, including traditional management processes

The future management is to be coordinated by a World Heritage Coordination Unit, which ensures communication between the key management stakeholders, including the mayor, the Old Town Committee, UNESCO and ICOMOS. A World Heritage Board is planned to be established, which aims to bring together those with responsibilities in the municipality and external experts who can provide management advice. The board will be convened every three months. A core team of the board will be delegated responsibility for day to day decisions.

ICOMOS considers that this management structure is participative and promising. However, it seems that this structure will only become fully operational with the anticipated World Heritage inscription. Financial means

are contributed by the federal, provincial and municipal level as well as grants from private foundations. Technical expertise for conservation and management is offered by the Federal Office of Monuments (BDA) and the Regional Conservation Office for Tirol. In terms of risk management, the competent office in the Town Hall of Hall in Tirol has prepared a comprehensive hazard prevention study, including for flooding. The risk of natural hazards has been assessed and the effects are responded to by means of a comprehensive hazard prevention scenario on all levels.

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

A management plan has been submitted with the nomination dossier. The document is divided into three sections, the so-called management plan report, which highlights the objectives, introduces guiding principles and reiterates sections from the nomination file; the so-called Implementation / Utilization Concept Hall Mint, which introduces guiding principles for Hasegg Castle and a matrix according to which projects will be developed; and thirdly the Implementation / Realization Programme – Urban Development. The latter establishes once more guiding principles, three scenarios and six topic areas towards the development of solutions. Also in this section a matrix or measure sheet has been developed to define and document future activities. The measures presented here seem more concrete than in the previous two sections.

ICOMOS considers that the management plan in its first sections appears more like a concept document towards the future development of a management plan. Only in the latter urban section, concrete objectives and activities towards their achievement have been defined, which are summarized with responsibilities, required resources and time frame. However, these measure sheets lack indicators which would allow for future quality assessment.

The City of Hall is already a popular tourism destination and is well prepared for its annual 1.8 million visitors. The city offers organised visits and guided tours to the town and its major heritage sites. The Mint Museum plays an essential role in allowing visitors to understand the importance of the Hall Mint in introducing mechanized coin production.

Involvement of the local communities

The information of citizens has been secured through a systematic campaign launched by the municipality of Hall in Tirol, which included distribution of information, questionnaires, gatherings and meetings as well as visits of the relevant bodies, etc. Local scholars participated in the preparation of the nomination. The management concept foresees special attention towards ensuring the transparency of the management actions and allow for public control.

In conclusion, ICOMOS considers that the management system for the property will be adequate once fully established but that the management plan needs to focus on all attributes of the property and include additional aspects such as risk preparedness, or visitor and conservation management.

6 Monitoring

The State Party presents five indicators which are very generic, such as the general state of the urban fabric or facades and outside appearance. ICOMOS considers that the indicators need to be far more detailed and specific to allow for meaningful monitoring exercises. ICOMOS considers that it would also be helpful to link the indicators to the bodies responsible for the implementation of the monitoring exercise.

In conclusion, ICOMOS considers that the monitoring indicators require to be augmented.

7 Conclusions

ICOMOS notes that the invention of mechanized silver coin stamping at Hall is a key reference in numismatic history as well as for pre-industrialization processes in general. ICOMOS also acknowledges that the innovations which were exported from Hall in Tirol initiated important changes of the currency system in and beyond Europe. However, in terms of the nomination presented, ICOMOS considers the links between this historical technological advancement and the physical remains which provide testimony to this innovation are very restricted. The key object in the historic appreciation, the roller-press coinage has been lost and is today exhibited in the Mint Museum as the reconstruction of a machine which was dismantled in the early 19th century. With regard to the property areas outside Hasegg Castle and the former mint location, ICOMOS considers that it is difficult to understand how the urban centre, which predominantly reflects the Late Gothic period, could testify to the era of mechanized coin production.

ICOMOS considers that none of the justifications proposed for the criteria is adequate in terms of the physical remains which could illustrate these. ICOMOS also considers that the comparative analysis remains too superficial to support the exceptionality of the tangible remains of the coinage production process in Hall in Tirol. ICOMOS notes in this context, that other sites, in particular the World Heritage property Potosí in Bolivia, have preserved the whole industrial production chain of coins, from the mines to the Royal Mint and have therefore been recognized as of Outstanding Universal Value, even though the technology was introduced later than in Hall.

ICOMOS considers that the physical remains of the coinage innovation and production, which took origin in Hall, are scarce and that hence the nomination lacks major aspects that would allow for demonstration of integrity. ICOMOS further considers that it is difficult to demonstrate authenticity with regard to the Hall Mint and its coinage innovation. However, without emphasis on the Hall Mint, it can be noted that the state of conservation of the urban fabric is very good and conservation techniques in some cases exemplary. Likewise the continuous commitment to the preservation of the historic centre as well as the financial means provided for this purpose are to be commended.

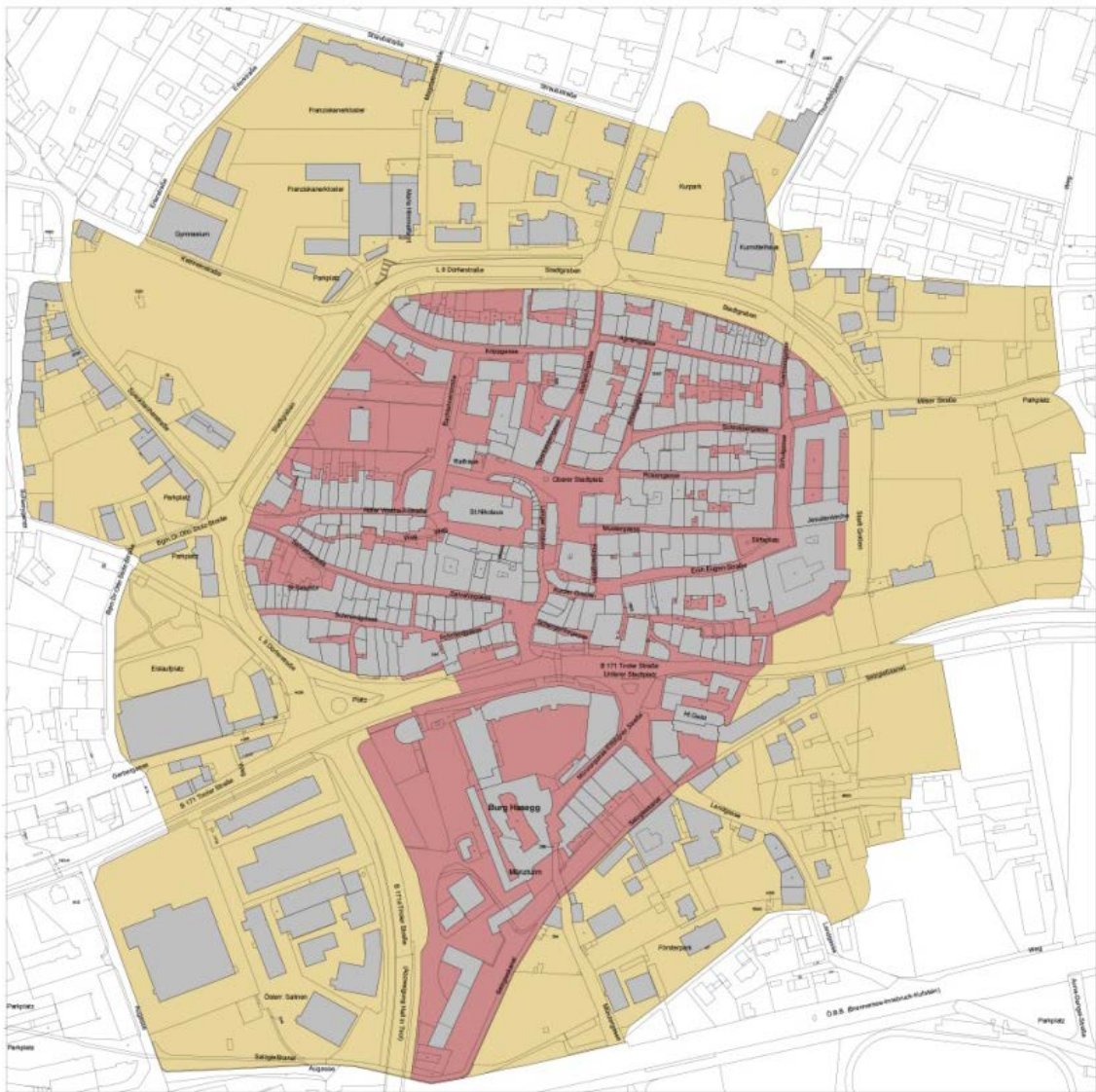
The legal protection as well as protective measures for the property are adequate. The boundaries proposed for the property and buffer zone are largely sufficient but would have benefitted from extension towards the Inn River. A management system is in the process of establishment with a World Heritage Board being established as a decision-making body. ICOMOS notes that a preliminary version of a management plan has been submitted which already includes very specific objectives and strategies for an urban conservation context. However, it does not focus with equal attention on the core element of this nomination, the location of the former Hall Mint.

ICOMOS notes, that it will always be difficult to communicate Outstanding Universal Value for historic achievements, the immediate physical evidence of which has been lost or relocated as result of war and conflict. While ICOMOS notes the enormous importance of Hall as the “Mother Mint” and origin of an essential innovation in mechanized production of coins, ICOMOS regrets that the authentic evidence of this historic achievement is too limited to qualify for the recognition of Outstanding Universal Value.

8 Recommendations

Recommendations with respect to inscription

ICOMOS recommends that Hall in Tirol – The Mint, Austria, should **not be inscribed** on the World Heritage List.



Map showing the boundaries of the nominated property



Aerial view of Hall in Tirol



Minting machine in the Mint of Hall



Mint tower in Hasegg Castle



Engraving showing the minting process

Christiansfeld (Denmark) No 1468

Official name as proposed by the State Party

Christiansfeld a Moravian Settlement

Location

Christiansfeld, Kolding Municipality
Region of Southern Denmark
Denmark

Brief description

The 18th century settlement of Christiansfeld is a planned town in Southern Jutland which reflects the Moravian Church's societal structure designed as an example of an ideal Protestant city. Founded in 1773 as a Moravian Church colony, the town was developed around a central church square and two east-west oriented tangential streets as well as a cemetery outside town. The houses present homogenous and unornamented yellow brick facades and red tile roofs in mainly one- or two-storey structures. The original colony is still inhabited by an influential Moravian Church community.

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 (July 2013), Annex 3, this is also an inhabited historic town.

1 Basic data

Included in the Tentative List

1 September 1993

International Assistance from the World Heritage Fund for preparing the Nomination

None

Date received by the World Heritage Centre

23 January 2014

Background

This is a new nomination.

Consultations

ICOMOS consulted its International Scientific Committee on Historic Towns and Villages as well as several independent experts.

Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the property from 22 to 24 September 2014.

Additional information received by ICOMOS

ICOMOS sent a letter to the State Party on 9 September 2014 requesting additional information with regard to ownership of the property, the property's protective designation, the management plan, and specifications concerning the management authority. The State Party responded on 27 October 2014, addressing all issues that ICOMOS requested.

ICOMOS addressed a second set of questions to the State Party by letter of 22 December 2014, requesting further information on disaster risk management and monitoring procedures. The State Party responded by letter of 23 February 2015 addressing these issues. All additional information received from the State Party is included in the relevant sections below.

Date of ICOMOS approval of this report

12 March 2015

2 The property

Description

The urban and architectural components included in the property, which is 21.2 hectares in size, were constructed in the period between 1773 and 1830 in a project to create a settlement entirely based on religious and social principles of the Moravian Church. The settlement centres on a church square surrounded by the Hall, the Sisters' House, the firehouse, the vicarage and the former provost's house. Its northern and southern ends tangent two east-west oriented streets, Lindegade and Nørregade, which extend throughout the property. Along these one finds shops, family residences, workshops, a hotel and a school. Towards the eastern side of the property two additional north-south directed streets extend the urban pattern; Kongensgade, which was established as the new main road after the initial construction phase in 1854, and Kirkegårds Allé, leading to God's Acre, the Moravian Church's cemetery. It is divided into eight separate spaces in which all grave plots are identical without horticulture between plots. A gate marks the entrance to God's Acre.

All residential houses, but also the communal buildings, are one- and two-storey street-sided yellow brick constructions. They are symmetrically built and often form groups. The church square and the original three key streets are planted with linden trees and the houses have large gardens behind the street-sided built structures. The town was originally divided into a sisters' and a brothers' side as unmarried women and men lived separately in so-called choir houses. Located to the north of the northern road (Nørregade) were the Sisters' and Widows' House while the industrial buildings, workshops and the Brothers' House can be found south of the southern road (Lindegade). Although the choir houses still exist, they

now have different functions from those of the 19th century.

All houses show similarities in their uniform and simple construction, which led to the creation of a distinctive settlement appearance. The Hall, the church, is the central structure in the urban space and stands out in terms of size and decorative details. Its interior is characterized by a light and calm room with white walls, delicate benches and chandeliers. Its second storey contains a gallery. Likewise the choir houses are light and of simple architecture and minimalist decoration in line with the Moravian Church's reformative philosophy and stylistic conservatism. The upper storey of the Sisters' House contains the original sleeping halls and choir hall. In the past, it also contained workshops, including sewing and spinning rooms as well as a margarine factory, part of which was lost by fire in 2003. The settlement also contains an hotel, which is still used for its original purpose, the Spielweg Retail Building with two retail units on the ground floor, and the Vicarage, which continues to be used in its original function.

A significant part of the property is still linked to or under the responsibility of the Moravian Church, led by a Board of Elders with 6 members. Many tasks related to site management are continuously undertaken as voluntary community services, such as cleaning and maintenance of buildings and public green spaces, administration of inventories and opening of the local museum. In all these tasks, the church community continues its tradition of being economically self-sustained.

History and development

The settlement of Christiansfeld was founded on 1 April 1773 by the Moravian Church. The earlier Moravian settlements of Herrnhag (1738) and Gnadau (1767) served as models for Christiansfeld's town plan, which was planned, measured and constructed on agricultural land. The oldest plan in the archives dates to 1772 and shows the urban arrangement as well as the five houses which would be constructed first, the provost's house and Vicarage, the buildings at Lindegade 17 and Nørregade 7 as well as the hotel. Only seven years later, these and the large choir houses had already been constructed and the central section of the Hall was completed.

Already by 1779, the rapidly increasing population reached 279 with 17 different crafts in operation and four factories running. According to historic documents, by then Christiansfeld had a bakery, a furrier, dye production, a tannery, glove and pottery production, a lacquer, tobacco and starch factory, saw works, a tailor, a butcher, a joiner, a watch maker and a wool and yarn spinning mill as well as several small shops. In the early 1780s the key complexes of the settlement were completed and the communal structure was fully functioning. Between 1782 and 1812 a number of family houses were added to the eastern and western ends of the town core. At the same time the choir houses and

the Hall were extended with side wings. Separate boys' and girls' schools were constructed.

The war years of 1810-1814 (Napoleonic Wars, 1804-1815) sparked a financial crisis. The Danish currency crashed and impacted on export opportunities. The state bankruptcy of 1813 had a severe affect on Christiansfeld and several of the town's businesses had to close down. Subsequently development stagnated and very few buildings were constructed between 1812 and 1920. In 1854 the small pathway (Kongensgade) was extended to accommodate passage of a main highway connecting Haderslev and Kolding through the town centre. A small number of buildings had to be demolished for this purpose.

The 1864 war between Denmark and Germany resulted in a changed borderline and altered the town's status since it then found itself located in Germany. By the time it returned to Denmark in 1920, the town's business life and organization had largely disappeared. In 1920 new plans for family house constructions commenced and about a decade later construction activities started along the western end of Nørregade. The new constructions observed the old Moravian construction principles in terms of proportions and choice of materials. Following World War II, the Moravian community in Herrnhut, Germany transferred all previously-held communal ownership to the Moravian Church in Christiansfeld, making it largely autonomous. In the period of 1954-1965 a new wave of construction took place, reducing the size of gardens in favour of a new line of residential construction in the south of the property.

Between 1964 and 1983 the size of the town multiplied and it extended considerably towards the east, north and south. Several neighbourhoods of family residences were constructed; however these are predominantly located outside the property boundaries. The town continued to grow toward the close of the 20th century and today hosts the third largest milk production in Denmark, which has left the imprint of several industrial facilities in its east and north. The Moravian community continues to be very active and a new school was built in 2012, which already had 528 students in the summer of 2013.

3 Justification for inscription, integrity and authenticity

Comparative analysis

The comparative analysis is presented in three parts. The first, referred to as external analysis, is an international comparison with inscribed World Heritage properties and properties on national Tentative Lists, which illustrate town planning principles led by religious or philosophical motives. The second part, referred to as internal comparative analysis, compares Christiansfeld with 26 other Moravian settlements, while the third part presents an explanation why the theme of Moravian

settlements was not approached as a transnational serial nomination.

The external comparative analysis is based on a five-step screening process, which was applied to 285 towns inscribed on the World Heritage List or national tentative lists. Fifteen of these reached the fifth level of screening and hence were considered most comparable. These include among others the Old Town of Lunenburg, Canada (1995, (iv) and (v)), the Kolonien van Weldadigheid, Netherlands, Saltaire, United Kingdom (2001, (ii) and (iv)), New Larnark, United Kingdom (2001, (ii), (iv) and (vi)), the White City of Tel-Aviv, Israel (2003, (ii) and (iv)), the settlement of Joden Savanne and Cassipora cemetery, Suriname and the Jesuit Missions of the Chiquitos, Bolivia (1990, (iv) and (v)).

The second, internal analysis compares 26 planned Moravian settlements, which are deemed to best qualify for potential World Heritage Listing. These include in the USA, Bethlehem, Nazareth and Lititz in Pennsylvania, Hope in New Jersey, Bethabara, Bethania and Salem in North Carolina, Ebersdorf, Gnadau, Herrnhag, Kleinwelka, Königsfeld, Neudietendorf, Neuwied, Niesky and Herrnhut in Germany, Zeist in the Netherlands, Gnadenberg, Gnadenfeld, Gnadenfrei and Neusalz in Poland, Fairfield, Fulneck, Ockbrook in the United Kingdom and Grace Hill in Northern Ireland, as well as Sarepta in the Russian Federation. These Moravian settlements are compared on the basis of their town plans, key principles implemented, state of preservation as well as the architectural details of individual key buildings.

The third section recalls the history of the Moravian Heritage Network, established in 2002 to explore the opportunities of a transnational serial nomination. The State Party concludes that while several other Moravian settlements aim to be included in their national tentative lists, none has as yet achieved an actual inclusion, while Christiansfeld seems ready and prepared for nomination to the World Heritage List. It is further concluded that, following the previous internal analysis, Christiansfeld is the best remaining example of a Moravian Settlement and proves Outstanding Universal Value regardless of the current ambition and status of the other settlements.

ICOMOS considers that, while the comparative analysis is based on thorough research and a vast quantity of materials, it falls short on a number of aspects. The initial external analysis conveys convincingly the lack of comparable Protestant settlements on the World Heritage List. However, before moving to the internal analysis, other Protestant settlements, such as the Shakers, the Amish and the Quakers, whose settlements seem to illustrate similar structural elements, should have been considered. The sober, functional-pietistic architecture of the Shakers, for example, is known to have been highly influential on Modern architecture. However, based on its internal evaluation, ICOMOS considers that Moravian settlements illustrate specific

approaches of planned urban design, which merit recognition on the World Heritage List.

ICOMOS further considers that the internal analysis does not convincingly illustrate that Christiansfeld alone among all preserved Moravian Church settlements merits recognition on the World Heritage List. ICOMOS considers that the state of preservation of Christiansfeld is indeed exceptional and that it should certainly be considered a highlight of Moravian settlements in comparative terms. While Christiansfeld as a Moravian settlement illustrates a number of representative features, a variety of aspects such as the reference to the central mother settlement of Herrnhut, which first illustrated the urban design principles or the character of other colony settlements including those with lower degrees of Moravian Church autonomy, are not yet fully illustrated and could further contribute to a full understanding of Moravian Church colonial expansion. In ICOMOS' view, following Christiansfeld, other Moravian Church settlements could be considered for recognition of Outstanding Universal Value, based on an expanded analysis of all existing colony settlements, including the so-called mission stations in South Africa, Tanzania, Nicaragua, the Danish West Indies, and Labrador, which have significant elements of Moravian urban and architectural planning.

In view of the third section of the comparative analysis as well as the shortcomings outlined above, ICOMOS considers that it would be beneficial to include the nomination of Christiansfeld, a Moravian Church settlement, in a transnational, serial nomination in the future. Difficulties to enter national tentative lists or slower paces in preparation do not seem adequate reasons to abandon a serial, transnational nomination in the long term.

Regarding the different levels of preparedness of partners for such a serial nomination, ICOMOS would like to remind that according to paragraph 139 of the *Operational Guidelines*, serial nominations, whether from one State Party or multiple States, may be submitted for evaluation over several nomination cycles, provided that the first property nominated is of Outstanding Universal Value in its own right. ICOMOS considers that, based on the comparative analysis provided in addition to its internal expert review, Christiansfeld can be said to demonstrate Outstanding Universal Value in its own right and can be inscribed as a single property, which could become integrated in such a series. ICOMOS would like to remind that when serial nominations are planned over several cycles, the State Party or State Parties submitting the initial nomination should inform the Committee about the intention of future serial extensions. ICOMOS in this context understands the third section of the comparative analysis as an indication in this direction.

ICOMOS considers that the comparative analysis indicates that Christiansfeld is an exceptional example of Moravian Church settlements and could be considered for World Heritage Listing.

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:

- Christiansfeld is the best preserved Moravian town and bears witness to the Moravian Church's ideal of Christian life in society. It therefore offers the most complete expression of Moravian culture containing all functions that are typical for a Moravian Church society;
- The settlement was built as an ideal Protestant city on the basis of a strict town plan and using simplified and homogenous architecture with yellow bricks and red-tiled roofs, providing it with a special atmosphere. Despite its simplicity, the architecture illustrates exquisite detailing and craftsmanship;

ICOMOS considers that the notion of Christiansfeld being the best example of a planned town depicting the ideal way of life and social principles of a Moravian society is problematic as the ethical and social principles of Moravian Church communities do not foresee one single ideal, which could be represented in the ideal city. Urban designs were rather developed to best facilitate a number of ethical and social principles in day-to-day life while providing an integral unity for the community of believers. It should further be noted that the Moravian Church developed different approaches and urban designs to materialize these principles and Christiansfeld provides one exceptional but specific example of several noteworthy examples in this context.

ICOMOS considers that the justification for Outstanding Universal Value for Christiansfeld is justified as an example of a Moravian Church colony settlement based on clear urban planning principles guided by ideals of the Moravian Church. It is the best preserved European colony settlement which illustrates a church square centralized urban plan with a street grid system of two tangential main roads. However, since the integration of social and ethical principles is approached and solved in different ways in different Moravian Church settlements, a future transnational serial nomination to include various approaches seems desirable.

Integrity and authenticity

Integrity

The boundaries of the property include the complete original town plan of Christiansfeld and therefore all elements that were planned as part of the Moravian Church settlement. The only exception to this may be the Tyrstrup farm, which was owned by the Moravian Church community and on the land of which the settlement was developed. However, since the values

proposed are focused on the urban settlement, it seems acceptable that the farm is protected as part of the rural buffer zone.

Approximately 90% of the original buildings have been preserved and the town plan remains widely legible, with the main exception being that about half of the garden areas to the north and south are now parcelled into private plots. The religious rituals and beliefs of the community, which are the reason for the design of physical spaces, are to a large extent continuously practiced. The visual relations between different parts of the town, including the cemetery and the landscape surrounding it, are still extant.

However, in relation to the claim that the town of Christiansfeld contains all of the primary elements associated with a complete ideal Moravian Church colony, ICOMOS notes that additional elements can be found in other Moravian Settlements and that it may be difficult to define the difference between a primary and secondary element in this context. ICOMOS considers that Christiansfeld, due to its excellent state of preservation, illustrates the highest number of elements found in any European colony settlement and therefore demonstrates integrity. However, ICOMOS also considers that the future integration of Christiansfeld in a serial transnational nomination of Moravian Church Settlements may add additional elements which are not yet represented in Christiansfeld.

Authenticity

The structure and characteristics of the original town plan have not been altered except for the gardens and one connecting street near the Widows' House and the widening of the pathway (Kongensgade) towards the main street in 1854. All buildings, especially those of the early Moravian period of 1820, retain their authenticity in material, design, substance, workmanship and some of them as well in function and use. Most of the residential units have been modernized in their interiors to be in line with contemporary living standards whilst aiming to retain their authenticity wherever possible.

The setting of the settlement has changed considerably since the settlement is now surrounded on three sides by urban fabric, mostly private villas to the north and south and light industrial structures to the east. Although it affects the original setting, the structures have a maximum of two storeys and have little impact on the visual integrity as seen from the church square. Several residential structures designed in the immediate vicinity of the Moravian Church settlement are designed with similar architectural features to prevent sudden changes in the perception of the urban fabric. The continuity of the Moravian Church community contributes to safeguarding authenticity in spirit and feeling as well as atmosphere.

The street surface has been changed at least twice and at present a new stone surface – similar to the last known stone surface before the streets were asphalted – is laid out. All trees have been replaced which seems a rather drastic intervention, justified by rot that had affected the

old trees. The new trees were planted at double the distance apart compared to the previous ones, which also limits authenticity despite assurances that the appearance has not changed considerably.

In some cases architectural renovations could have been implemented with more respect for authenticity. At times architects have aimed for modern interiors of high aesthetic standard and refinery which have unfortunately reduced traces of historic construction materials and techniques. ICOMOS recommends that future modernizations, including of interiors, should pay special attention to the preservation of historic surfaces.

In conclusion, ICOMOS considers that the condition of integrity has been met and that authenticity is still sufficient but has been affected by the replacement of street surfaces, the replanting of all trees with different spacing and several interior modernizations. ICOMOS considers that authenticity needs to be more carefully retained in architectural surfaces.

Criteria under which inscription is proposed

The property is nominated on the basis of cultural criteria (iii) and (iv).

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 town of Christiansfeld bears an exceptional testimony to the culture of the Moravian Church and its idea of how an ideal society and life should be designed. The Brethren's principles are expressed in the town's layout, architecture and craftsmanship as well as the fact that numerous buildings are still used for their original functions and the Moravian Church activities and traditions are continued.

ICOMOS considers that the idea of an ideal Moravian Church society and life in one specific settlement does not appropriately reflect the Moravian Church approach to the establishment of colonies and the continuing link between different settlements. Christiansfeld was one of many colonies, in fact the 25th established after the foundation of the mother settlement at Herrnhut, and the different settlements developed different solutions. ICOMOS considers that while Christiansfeld may not be considered the ideal Moravian Church settlement, the exceptional state of preservation of Christiansfeld allows it to be recognized as the best preserved and most complete example of European Moravian Church colony settlement based on sophisticated urban planning principles aimed at reflecting the social and ethical values of the Moravian Church community.

ICOMOS considers that this criterion has been justified.

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

This criterion is justified by the State Party on the grounds that Christiansfeld is an outstanding example of a planned ideal Protestant colony, as is illustrated in its town plan, architectural unity and functional distribution, in which the Moravian Church's vision of an ideal urban society could be realized. Planned and constructed on agricultural land, the town has an open plan without delimitation, possesses all necessary town functions and illustrates its unity through homogenous groups of buildings with shared styles, materials, proportions and a high quality of craftsmanship.

ICOMOS considers that Christiansfeld reflects new ideas introduced in the Age of Enlightenment through the strict application of an ideal city plan and its good state of preservation. The Moravian Church anticipated ideas of equality and social community that became a reality for many Europeans only with the French Revolution. The democratic organisation of the Moravian Church is expressed in its humanistic town planning, of which Christiansfeld is an example, illustrated by its open plan, established on agricultural land and representing all important buildings for the common welfare.

ICOMOS considers that this criterion has been justified.

The conditions of authenticity and integrity have been demonstrated and ICOMOS considers that Outstanding Universal Value is justified on the basis of criteria (iii) and (iv).

4 Factors affecting the property

Development pressures are well-controlled by spatial planning codes which prevent any new developments in the property and its rural buffer zone. However, development pressures apply unfortunately to the building plans and interiors. The Moravian Church community no longer has use for all buildings and alternative forms of use have had to be found. New tenants often require modification to the historic interiors which could, if not prevented, reduce the authenticity of the property.

The main challenge of tourism is the traffic which brings visitors, in particular cars and buses. Christiansfeld has responded to this challenge by providing adequate parking areas outside the nominated property and traffic restrictions inside. If visitor numbers increase drastically in the future, some of the atmospheric values of Christiansfeld, such as its quietness, might be affected.

Denmark has extremely low seismic risks but fire could pose a threat to key structures of the property. ICOMOS notes that no adequate fire response or disaster plan is in place and that the responsible fire-fighters are not

aware of the specific requirements and priorities of the site. ICOMOS recommends that a risk preparedness and disaster response plan is developed, to which the State Party has committed in the additional information submitted on 23 February 2015.

ICOMOS considers that the main threats to the property are change of use and related modernizations, massive visitor increases, and fire.

5 Protection, conservation and management

Boundaries of the nominated property and buffer zone

The boundaries of the property are appropriate and cover the complete original town within an area of 21.2 hectares. The surrounding buffer zone of 384.6 hectares is well delineated and divided into an urban and a rural zone. In the latter, developments are categorically prohibited while in the former they remain under strict control. The buffer zone is fully adequate for the extended protection of the property.

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

Ownership

The nomination highlighted that the Moravian Church remains the largest property owner in the property. At the request of ICOMOS the State Party provided further details, which indicated that the Moravian Church owns approximately 35% of the nominated area, the Kolding Municipality approximately 26% out of which 16% are public streets, and the remaining properties are in private or commercial ownership.

Protection

A large part of the buildings in Christiansfeld are protected according to the Buildings and Urban Environment Act (Act No. 685 of 9 June 2011). The entire property is protected by Local Planning Act 1311-41 which includes the entire nominated area and lays down the rules for the area's use, land development, roads, trails and parking, wiring systems, the development's size and location, the development's outward appearance, etc. Based on ICOMOS' request to further specify whether any protective heritage designation is attributed to the entire property, the State Party indicated in the additional information received that in Denmark World Heritage Sites are by definition sites of national interest and any developments approved by the municipality need to be reviewed and can then be vetoed by the Minister of the Environment.

ICOMOS considers that, at present, the property is in parts protected through planning regulations at the municipal level but is not subject to formal heritage designation. Although the protection by planning act seems sufficient and effective at present, planning acts

are agreed upon for limited timeframes and may change in the future. Even if a notion of national interest would be added after World Heritage designation, ICOMOS considers that ideally the entire property should be designated at the highest possible level in the national designation system. The Moravian Church has for the past 200 years provided traditional protection to its buildings through their requirements for use.

ICOMOS considers that the legal protection seems effective at present but should ideally cover the entire property as a designated heritage site at the national level.

Conservation

Exteriors and interiors of all listed buildings as well as other Moravian Church properties have been surveyed and inventoried during the past 10 years. The Moravian Church in Christiansfeld holds its own archives which also contain all relevant historic documents.

All historic buildings are today in good condition with the exception of a few pavilions and outhouses. The church square, cemetery and streets have recently been restored with a municipal budget while most of the restoration for residential houses was financed by the private fund, Realdania. At present conservation measures are ongoing at about five buildings and a future conservation programme is established. Whenever the National Agency for Culture is involved, the conservation techniques respect the authenticity of the structure. Maintenance plans have been established for every structure for which conservation has been completed.

The Moravian Church retains a workshop for traditional building materials in which, amongst others, exact copies of the original roofing tiles are produced for conservation projects. Street cobble stones and trees, where recently replaced, might be considered too extensive. However, the intention was to replace the previous asphalt with a more aesthetic street surface, similar to what the original must have been and to replace rotten trees. ICOMOS considers that the replacement of only every second tree to allow for better parking in-between is regrettable. ICOMOS further considers that, apart from these, conservation approaches are adequate where authenticity of historic surfaces is respected.

In conclusion, ICOMOS considers that conservation is adequate but recommends involving the National Agency for Culture on a regular basis to ensure full respect for the authenticity of historic surfaces.

Management

Management structures and processes, including traditional management processes

The management and administration of the property falls under the responsibility of several partners who are

brought together in a so-called UNESCO Management Group and a Group of Interested Parties, both coordinated by a secretariat based in the Culture Department of Kolding Municipality. This UNESCO Management Group is composed of representatives of the Kolding Municipality, the Agency for Culture, the Koldinghus Museum, the Moravian Church, landowners and Christiansfeld Centre. The group of interested parties brings together cultural and commercial institutions in and around Christiansfeld to act as ambassadors for the property. If Christiansfeld is accepted onto the UNESCO World Heritage List, the staffing of Christiansfeld Centre will consist of a manager, an architect, and one tourism employee in addition to temporary staff. However, at present this administrative support structure does not yet exist.

The municipality has allocated funds earmarked for the preservation of Christiansfeld which have been adequate for basic needs. The Moravian Church has recently established a Board of Elders for conservation, renovation and maintenance decisions with a senior craftsman in charge of follow-up and implementation. In response to ICOMOS' request, the State Party provided further details regarding the administrative arrangements for risk preparedness, in particular fire and fire-fighting responses, and has indicated that a risk preparedness and disaster response plan be developed for the nominated property.

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

The nomination referred to a management plan and outlined its objectives, which predominantly aim at the preservation and protection of Christiansfeld with regard to its town plan, historic architecture and landscape setting. The plan combines a list of specific measures divided into three areas; urban, architectural and cultural, to be undertaken in the forthcoming four years. At the request of ICOMOS, the State Party submitted in its additional information the current compiled version of these management approaches which represent a management plan in process of compilation. The current priorities and actions are intended to be implemented up until 2017, when a comprehensive evaluation and revision of the management plan is foreseen. Actions include conservation measures, the establishment of a management secretariat, as well as development of tourism and communication plans.

The management plan is not yet officially adopted or formally approved but the different actions contained in it have been endorsed by either the Kolding Municipality or the Management Group. ICOMOS recommends that the fields of activities introduced in the management plan are further elaborated in terms of general principles for implementation and quality assessment indicators.

Christiansfeld Centre and the museum are two access places for interpretation and presentation. A local tourism office is integrated in the Centre and cooperates closely

with the Management Group secretariat. Christiansfeld also utilizes to the fullest extent possible modern electronic means of communication and interpretation, most noteworthy the Christiansfelder app, which provides information on all historic structures and guides visitors through the settlement. Since no information panels exist in the property, a map highlighting the historic buildings and their functions would be a helpful tool for visitors.

Involvement of the local communities

The local stakeholders, in particular local property owners and businesses, have been systematically involved in the preparation of the nomination as well as conservation decisions. A large number of inhabitants have participated actively in the compilation of the information. The Moravian Church community remains very active in upholding its religious and social services. These also form opportunities for involvement in the social and ethical principles that underline the significance of the settlement.

ICOMOS considers that the management system for the property will likely be adequate once it is fully established. ICOMOS recommends that the proposed risk preparedness and disaster response plan is finalized and implemented as part of the management system and the management plan be augmented to include indicators for quality assessment.

6 Monitoring

The nomination provides a number of monitoring indicators divided into the thematic areas of conservation, use and function, external pressures and protection. The indicators are presented with the periodicity of their exercising, in most cases annually or every four years, the body responsible, and the information which the monitoring provides.

In the additional information provided at the request of ICOMOS, the State Party assured of its intention to further detail the monitoring procedures to ensure standardized methods of evaluation and interpretation of data over different monitoring cycles, as well as provide a manual and database of these.

ICOMOS considers that the monitoring indicators are adequate once completed.

7 Conclusions

ICOMOS considers that Christiansfeld represents an example of the social and organisational principles of the Moravian Church, characterized by the homogeneity of its architectural styles, its open but centralized urban plan established on agricultural land, as well as its representation of all important buildings for the common welfare of the community.

ICOMOS considers that the comparative analysis does provide support for the exceptionality of Christiansfeld as the best-preserved European colony settlement of the Moravian Church. However, ICOMOS also considers that other Moravian Church settlements might have the potential to make additional contributions to this Outstanding Universal Value and encourages the State Party and other States Parties concerned to further pursue the initially-envisaged transnational, serial nomination. This nomination should be conceptualized as a serial nomination of different Moravian Settlements and could integrate Christiansfeld in its first nomination phase. ICOMOS would like to remind in this context that serial nominations, whether from one State Party or multiple States, may be submitted for evaluation over several nomination cycles, provided that the first property nominated is of Outstanding Universal Value in its own right. ICOMOS in this context has opted to consider Christiansfeld of Outstanding Universal Value in its own right, and it could therefore be integrated in a future series.

ICOMOS considers that the conditions of integrity and authenticity are met. Authenticity at times seems vulnerable, where changes of use require modernizations at the expense of historic surfaces or where excessive conservation works are carried out. ICOMOS notes that involvement of the National Agency for Culture has often led to better results in conservation measures. ICOMOS recommends that future modernizations, including of interiors, should pay special attention to the preservation of historic surfaces.

The protection of the property does provide effective protection at present but should be augmented in the medium term to designate the complete property and not only individual historic buildings as a protected monument area. ICOMOS considers that stronger legal protection from the national cultural authorities, including its consideration as a historic urban centre and heritage site at national level, is desirable.

The management system envisaged will likely be sufficient, once it is fully established. ICOMOS notes the existence of a management plan guiding management activities up until 2017 and recommends that with the first evaluation and revision, further details are introduced concerning the proposed actions, in particular quality assurance indicators which provide references for the evaluation of its implementation. ICOMOS recommends that the disaster response plan envisaged is finalized and integrated into the management plan. The strategies for development of monitoring indicators and assessment procedures presented seem relevant and should be completed.

8 Recommendations

Recommendations with respect to inscription

ICOMOS recommends that Christiansfeld, a Moravian Settlement, Denmark be inscribed on the World Heritage List on the basis of **criteria (iii) and (iv)**.

Recommended Statement of Outstanding Universal Value

Brief synthesis

The 18th century settlement of Christiansfeld is an exceptional example of a Moravian Church planned colony settlement in Southern Jutland, which reflects the Moravian Church's societal and ethical ideals. Founded in 1773, it was built as a colony of the Moravian Church, a Lutheran free congregation centred in Herrnhut, Saxony. Christiansfeld is one of many exceptional settlements, which presents the best-preserved example of a northern European colony settlement constructed around a central Church Square. The town presents an intact and well-preserved collection of buildings, oriented along two tangential east-west streets surrounding a central square and integrates a cemetery placed outside of the town.

The town reflects the Moravian Church's societal structure, characterised by large communal houses for the congregation's widows and unmarried men and women. The architecture is homogenous and unornamented, with one- and two-storey buildings in yellow brick and with red tile roofs. The proportions, materials, and craftsmanship contribute to the town's special atmosphere of peace and harmony.

Criterion (iii): The Moravian Church settlement of Christiansfeld bears an exceptional testimony to the Brethren's principles, which are expressed in the town's layout, architecture and craftsmanship as well as the fact that numerous buildings are still used for their original functions and the Moravian Church activities and traditions are continued. Its exceptional state of preservation allows Christiansfeld to be recognized as the best preserved and most complete example of a European Moravian Church colony illustrating urban planning principles aimed at reflecting the social and ethical values of this community.

Criterion (iv): Christiansfeld is an outstanding example of a planned idealized Protestant colony, as is illustrated in its town plan, unity and functional distribution, in which the Moravian Church's vision of an urban society could be realized. Like other Moravian settlements, it reflects new ideas introduced in the Age of Enlightenment which anticipated ideas of equality and social community that became a reality for many Europeans only much later. The democratic organisation of the Moravian Church is expressed in its humanistic town planning, illustrated by its open plan, established on agricultural land and representing all important buildings for the common welfare. Christiansfeld possesses all necessary town functions and illustrates its unity through homogenous

groups of buildings with shared styles, materials, proportions and a high quality of craftsmanship.

Integrity

The boundaries of the property include the complete original town plan of Christiansfeld and with it all elements that were planned as part of the Moravian Church settlement. A large percentage of the original buildings have been preserved and the town plan remains widely legible. The religious rituals and beliefs of the community, which are the reason for the design of physical spaces, are to a large extent continuously practiced. The visual relations between different parts of the town, including the cemetery and the landscape surrounding it, are still extant.

Christiansfeld, due to its excellent state of preservation, illustrates the highest number of characteristic elements found in any European Moravian Church colony settlement and therefore demonstrates integrity. In terms of the overall network of Moravian settlements, further elements could contribute to Christiansfeld's integrity by means of a future serial transnational nomination of Moravian Church Settlements into which Christiansfeld could be integrated.

Authenticity

The structure and characteristics of the original town plan remain largely unaltered. All buildings, especially those of the early Moravian period of 1820, retain their authenticity in material, design, substance, workmanship, and some of them as well in function and use. The continuity of the Moravian Church community contributes to safeguarding authenticity in spirit and feeling as well as atmosphere of the property.

Most of the residential units have been modernized in their interiors to be in line with contemporary living standards whilst aiming to retain their authenticity wherever possible. In some cases architectural renovations could have been implemented with more respect for authenticity. At times architects have aimed for modern interiors of a high aesthetic standard and refinery which have unfortunately reduced traces of historic construction materials and techniques. It is recommended that future modernizations, including of interiors, should pay special attention to the preservation of historic surfaces.

Management and protection requirements

The key historic buildings in Christiansfeld are protected according to the Buildings and Urban Environment Act (Act No. 685 of 9 June 2011). The entire property is protected by Local Planning Act 1311-41 which lays down the rules for the area's use, land development, roads, trails and parking, wiring systems, the development's size and location, the development's outward appearance, etc. World Heritage Sites, according to Danish legislation, are by definition sites of national interest and any approvals granted by the municipality need to be reviewed by the Minister of the Environment. While the protection by planning act seems sufficient and effective at present,

planning acts are agreed upon for limited timeframes and may change in the future. Since a national interest has been added with the World Heritage designation, ideally the entire property should be designated as a historic monument at the highest possible level in the national designation system. The Moravian Church has for the past 200 years provided traditional protection to its buildings through their requirements for use.

The management and administration is shared by several partners in a so-called UNESCO Management Group and a Group of Interested Parties. The municipality has allocated funds earmarked for the preservation of Christiansfeld and the Moravian Church has recently established a Board of Elders for conservation, renovation and maintenance decisions, with a senior craftsman in charge of follow-up and implementation. The State Party has indicated that a risk preparedness and disaster response plan will be developed for the property by 2016.

The management plan predominantly aims at the preservation and protection of Christiansfeld with regards to its town plan, historic architecture and landscape setting. The plan combines a list of specific measures divided into three areas; urban, architectural and cultural, to be undertaken in the forthcoming four years.. The current priorities and actions are intended to be implemented up until 2017, when a comprehensive evaluation and revision of the management plan is envisaged. Quality assessment indicators for the evaluation of its implementation are yet to be finalized. The management plan is yet to be officially adopted but the different actions contained in it have been endorsed by either the Kolding Municipality or the Management Group. The Moravian Church community remains very active in upholding its religious and social services. These also form opportunities for involvement in the social and ethical principles that underline the significance of the settlement.

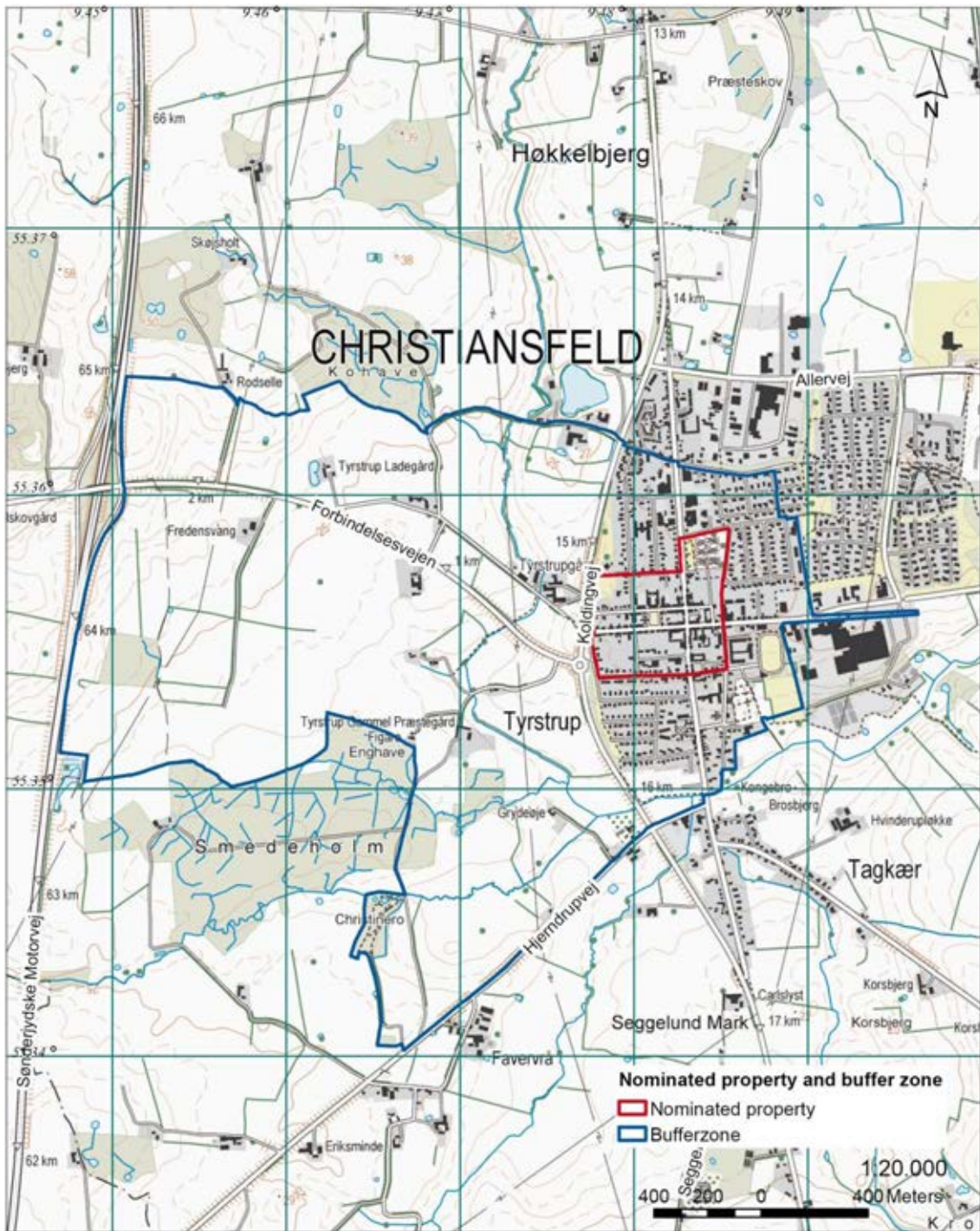
Additional recommendations

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

- Preserving historic surfaces in restoration and modernization measures and involving the National Agency for Culture in all cases where difficulties arise;
- Strengthening the level of legal protection of the complete property as an historic urban district or cultural heritage site;
- Augmenting the management plan to provide further details on the planned activities, in particular indicators which will facilitate quality assessment;
- Finalizing the proposed risk preparedness and disaster response plan;
- Completing the monitoring including specified indicator schemes, a manual and database by November 2016, as indicated by the State Party.

ICOMOS also recommends that the name of the property be changed to “Christiansfeld, a Moravian Church Settlement”.

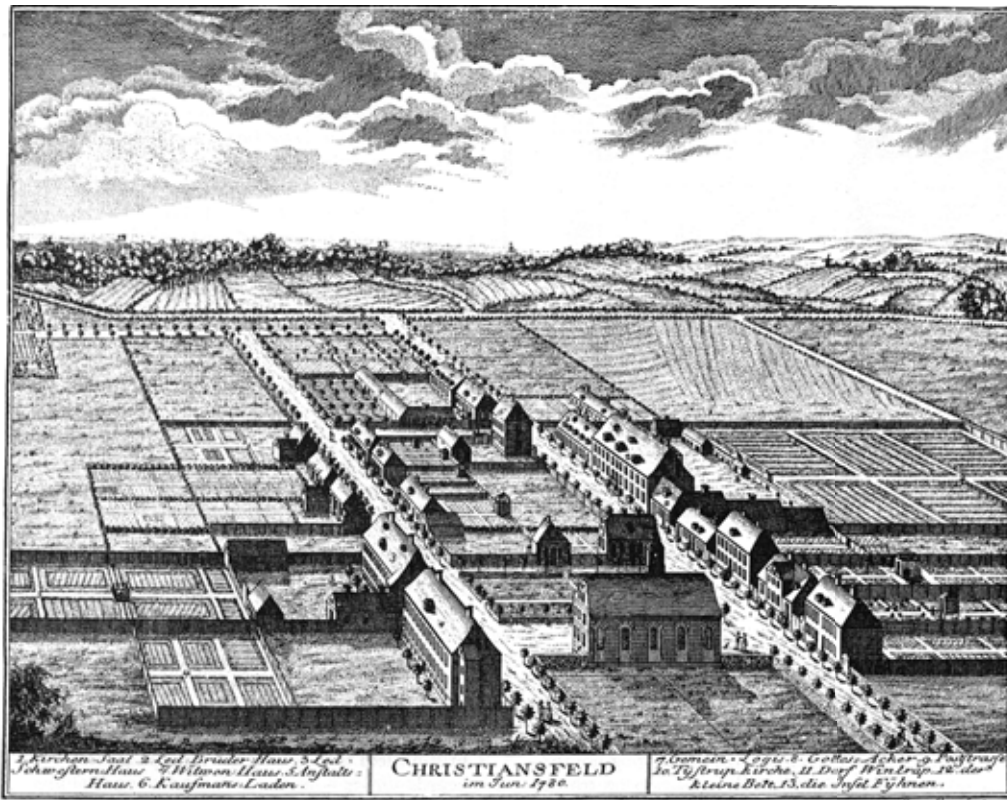
ICOMOS further recommends that the State Party, in cooperation with other States Parties which envisage participation in a larger serial nomination, develops a concept for a transnational serial nomination and prepares – with the assistance of ICOMOS in the context of upstream work if requested – an overall composition of the serial property and its nomination phases. Christiansfeld should be integrated into such a transnational serial property during its initial nomination phase.



Map showing the boundaries of the nominated property



Aerial view of Christiansfeld



Copper engraving, dated June 1780



Church Square



The facade of the Hall.

The par force hunting landscape (Denmark) No 1469

Official name as proposed by the State Party

The par force hunting landscape in North Zealand

Location

North Zealand
Capital Region of Denmark (Hovedstaden)

Brief description

The par force hunting landscape in North Zealand encompasses three distinct forests and landscapes – Store Dyrehave, Gribskov and Jægersborg Hegn/Jægersborg Dyrehave – which have been chosen among the extant portions of 'designed forests and grounds' in North Zealand to illustrate the designed setting where the Danish kings and their court used to practice the 'par force' hunt or *chasse à courre*, and displayed their ambitions and power throughout the 17th-18th centuries AD.

Category of property

In terms of categories of cultural property set out in Article I of the 1972 World Heritage Convention of 1972, this is a serial nomination of three *sites*.

In terms of the *Operational Guidelines for the Implementation of the World Heritage Convention* (July 2013) paragraph 47, it is a *cultural landscape*.

1 Basic data

Included in the Tentative List

8 January 2010

International Assistance from the World Heritage Fund for preparing the Nomination

None

Date received by the World Heritage Centre

23 January 2014

Background

This is a new nomination.

Consultations

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

Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the property from 24 to 26 September 2014.

Additional information received by ICOMOS

On 3 September 2014, ICOMOS sent a letter to the State Party requesting clarification concerning the rationale adopted to select the components of the series and to define the boundaries of the property and of its buffer zone. Additional information concerning the comparative analysis, cartographic documentation, protection and management, and resources, was also requested. The State Party responded on 21 October 2014 and the additional information provided has been incorporated into the relevant sections.

On 26 November 2014, the State Party also informed that the private owners whose properties are included within the nominated area have been informed of the nomination.

ICOMOS sent a second letter to the State Party on 22 December 2014 seeking further additional information on the following points:

- the need that further hunting rides be encompassed within the nominated property or, at least, within the buffer zone, they being crucial for the understanding of the proposed Outstanding Universal Value of the par force hunting landscape;
- the need that all rides, be they publicly or privately owned, be protected for their cultural value;
- the need to modify the buffer zone so as to encompass areas and attributes that are functionally important as a support to the property and its protection;
- provide further information useful to justify criterion (iv) which has been found relevant during the evaluation process.

The State Party responded on 28 February 2015 and the information provided has been incorporated into the relevant sections of this report.

Date of ICOMOS approval of this report

12 March 2015

2 The property

Description

The nominated serial property is located in the northern part of Zealand some 30km north north-east of Copenhagen. Its gently undulating territory was shaped during the last Ice Age (22,000–12,000 BP) and features low hills, once entirely covered with forests, small lakes, and fertile cultivated plains, rich in wildlife. This landscape offered ideal conditions to create a large hunting reserve and, since the 16th century AD, the Danish kings progressively developed a royal hunting estate extending over a large part of North Zealand known as the Gribskov (etymologically 'unclaimed forest'). This is attested to by several surviving forested areas interspersed with open fields, parks and settlements, cut through by straight roads, rides and

tracks, and many royal castles and residences that punctuate the region.

The nominated series comprises three components – Store Dyrehave, Gribskov and Jægersborg Hegn/Jægersborg Dyrehave - selected among the extant portions of 'designed forests' of the region to illustrate the designed landscape where the Danish kings and their court used to practice the 'par force' hunt or *chasse à courre*, that is, the mounted chase of a single stag with dogs. This form of courtly hunting found its formalisation between the Middle Ages and the late 16th century and reached its apogee between the 17th and the late 18th centuries, when the European absolute monarchs transformed it into a display of power.

The rules of this type of hunt and the symbolic dimensions associated with it (demonstration of power and strength) required an appropriate setting where the ritual could take place. The existence of a network of straight rides to chase the prey and coordinate its pursuit and trapping was crucial. This road system also responded to symbolic functions: giving order to the 'wild nature' of forests and transforming it into a civilized hunting landscape, thus celebrating the power of the king.

The hunting forests in North Zealand were cut through with rides in a rigid grid pattern combined with diagonals, forming 8-pointed stars. The grid comprises radiating roads – passing through the originating centre of the grid – and connecting roads which linked the radiating roads in a regular network of rides and tracks.

The composition of the forest is based on broadleaved trees (beech and oak primarily but also other broadleaved species) in different percentages in each component. However, subsequent forest management introduced non-native conifers (common spruce) in the 19th-20th centuries AD.

Store Dyrehave

Store Dyrehave (or 'large deer park') is the first component of the series: it has an irregular quadrangular shape, encompassing a smooth hilly area of glacial origins and covering 1,073.4ha. The geomorphological features of the area have been incorporated into the landscape design: the highest point of the forested area has been used as the originating point of the double orthogonal grid of roads that subdivides the forest into parcels, and shapes the hunting landscape. The orientation of the grid was determined by the NW-SE direction of the existing royal road to Copenhagen. At the centre of the road star (*Kongestjernen*) was placed a stone – the *Kongestenen* – showing a compass rose and Christian V's monogram with a royal crown, which is still in place. Eight radiating roads spring from the *Kongestjernen*: they were not named, just numbered anti-clockwise. Each road is marked by a stone with the number carved on it both at its beginning and at its end, with direction carvings to help orientate hunters. The

component encompasses different habitats: bog, meadows, fields and plains.

Gribskov

Gribskov (etymologically 'unclaimed forest') is the second component of the series and the second largest forest in Denmark, covering 2,195.7ha. The geomorphology of the area exhibits a series of low curved moraine deposits running north-south and formed by glacial recession. Once conjoined with Store Dyrehave, with which it formed one continuous hunting estate, Gribskov is now separated by the urban growth of Hillerød. However, Gribskov's hunting landscape design shares the same road network as Store Dyrehave, as some roads surviving in the same place and direction demonstrate, although it has its own originating central star (*Stjernen*). Due to its topography and its poor soils, the central part of the Gribskov was never cultivated and retains a rich wildlife.

Jægersborg Dyrehave / Jægersborg Hegn

The third component (1,490.7ha) comprises two areas – Jægersborg Dyrehave and Hegn – separated by a narrow river valley running west to east. The soft relief of the area resulted from the combination of sedimentation and glacial erosion. Jægersborg Dyrehave includes open freshwater meadows, commons and bogs, surrounded by broadleaved forest with mature trees. Before becoming the hunting park of Jægersborg Dyrehave, the area served as the fields of the village of Stokkerup, subsequently destroyed. Because of that, the road system is said to differ from the other components, being more elaborate in the wooded areas. The roads here were never numbered nor marked by stone posts. The road network of this component has suffered modifications over the centuries, but the boundary of the original park has been preserved and it is still marked by a wooden fence as in the late 17th century. The forest is one of the most popular in Denmark; deer have been reintroduced and nowadays each year the St. Hubert's Chase takes place within it, attended by the royal family and attracting hundreds of thousands of visitors.

The Eremitageslottet, the baroque royal hunting lodge that in 1734-1736 replaced a previous wooden banqueting house, stands at the highest point of the central plain, enjoying an open view across the park and towards Øresund in Sweden. The Eremitageslottet is still used by the royal family for hunting lunches and during St. Hubert's Chase.

The nomination dossier also describes further heritage elements which, despite not being included in the nominated property nor in the buffer zones, contribute to the understanding of the formation of the large hunting estate in North Zealand. They are: Frederiksborg Slot, erected in Hillerød in the late 16th century and enlarged at the beginning of the 17th, with its Lille Dyrehave (small deer park), at the western edge of the Gribskov; Fredensborg Slot, on the eastern bank of Esrum Sø, built in the 18th century as a hunting lodge and soon to become a summer royal residence; Grønholt Skov, a former

forested area now urbanised or transformed into arable land; Stutterivangene (Gribskov), an open forest area used as meadow for the horses of the royal stables at Frederiksborg Slot; Harreskovene, a forest arranged in the late 17th century for the par force hunt with a system of straight radiating and connecting roads; Geels Skov; Jaegergården and Jægersborg Allée; Charlottenlund Skov, a designed forest that was delimited as a deer park and functioned as such for almost two centuries.

Following the dialogue between the State Party and ICOMOS on the possibility of including within the serial property some former hunting rides today outside the proposed nominated forest components or of their buffer zones, the State Party proposed to include portions of six former rides situated between the Gribskov and the Store Dyrehave and towards the Grønholt Vang. These are: one Path (0.06ha), Tolvkarlevej and Højager (0.29ha), Kulsvierevej and Byskellet (0.81ha), Grønholtvängen south of Grønholt Vang (0.38ha), Riedestien in Grønholt Vang (0.23ha) and Grønholtvängen north of Grønholt Vang (0.07ha).

Store Dyrehave for its most part is surrounded by a buffer of 300m but on its north-western side this encompasses also the Forest of Praestevangen. The buffer of the Gribskov component follows the rationale of the 300m-wide strip of land; however, to the south-west, it includes the Frederiksborg Slot's park, while on its south-eastern side it widens to cover the western corner of Grønholt Vang which acts as a buffer zone for the road trace Grønholtvängen/Jagtej/Byskellet. Jægersborg Dyrehave and Jægersborg Hegn enjoy a 300m-wide buffer for the most part of their perimeter; however, to the south the boundary widens to include State-owned property. While the Path ride component enjoys the 300m-wide buffer zone encircling Store Dyrehave, the other former rides have not been given a specific buffer, as their significance resides in their direction.

The wider setting still exhibits considerable traces of the ride system marking not only the surviving forest areas but also the meadows, open land and fields, as well as the settlement structure of the suburban residences.

History and development

The vast Gribskov became by degrees the hunting grounds of the Kings of Denmark. The land owned by the monasteries was confiscated in 1536 and through exchanges Frederick II was able to consolidate his hunting grounds. He also built Frederiksborg Slot (Frederik's Castle Palace) in 1560 at Hillerød to serve as the base for week-long hunting expeditions. This palace was extended in 1602-20 to become the largest Renaissance palace in Scandinavia. The castle had its Lille Dyrehave (Small Deerpark) to the north-east, leading into the forest, which was soon to become a large designed hunting landscape. In 1618-9 a square area of over 1,000ha was enclosed from the forest to the south-east to become the Store Dyrehave (Large Deerpark). Meanwhile a smaller palace, Jægersborg Slot (Hunter's Castle Palace), was built closer to

Copenhagen from where hunting parties set off into hunting grounds nearby. One part of these grounds was enclosed in 1669 to become the Jægersborg Dyrehave (Jægersborg Deerpark), and the park was much extended after 1670 when Christian V came to the throne, reaching nearly 1,500ha.

Science was entering a golden age in Denmark, especially due to astronomer Ole Rømer, and it was in this spirit of rationalism that Christian V's forests and parks were cut through with rides in a rigid grid pattern combined with diagonals, resulting in 8-pointed stars on the ground. The whole process appears to have taken place after the peace of 1679 and over the following 15 years.

Joan Täntzer, a German hunter who came to Denmark and wrote a treatise on hunting is also said to have influenced King Christian V's hunting landscape design.

The ride system within Store Dyrehave appears to have been at an early stage, with its square area being divided into 16, and subsequently some rides were continued northwards into the rest of the Gribskov. The entire area of the par force hunting landscape in North Zealand is said to have extended to 9,700ha at one time. Subsequently another palace, Fredensborg Slot, was built at Østrup near the Gribskov in 1720-26, and a wooden banqueting house was built at the highest point of the Jægersborg Dyrehave, subsequently replaced in brick by the Eremitageslottet (Hermitage Palace) in 1734-36.

Par force hunting ceased in 1777 and a German expert, Johan Georg von Langen, was advising on conversion to forestry so the planting of conifers in North Zealand forests began. From 1781 Forestry Acts decreed that the Royal forests should be devoted to this use, and that their boundaries should be fixed. Walls and hedges were thus created to enclose most of the former hunting areas in the Gribskov. The system of rides was found to be useful in forestry terms, and most of it can still be traced today. In areas outside the park and forest boundaries, notably the area between Store Dyrehave and the remainder of the Gribskov, the land was enclosed as fields: the system of rides in these areas has mainly survived as local roads.

Jægersborg Dyrehave was opened to public access in the mid-18th century and has been managed as a recreational forest since 1843. Programmes to reintroduce deer since the early 20th century have made possible the reactivation of regulated hunting.

3 Justification for inscription, integrity and authenticity

Comparative analysis

The nomination dossier highlights the fact that no cultural landscape has been inscribed on the World Heritage List as an intentionally designed landscape for

hunting. It then develops the comparative analysis by identifying the following parameters: forest cover, chronology, absolutism, spatial plan (radiating roads with square-based connecting roads), spatial plan centring on nature, originality and exploitation of the spatial plan both functionally and emblematically, integrity and authenticity.

On the grounds of the above elements, the nomination dossier firstly compares the surviving portions of the hunting estate in order to justify the selection of the serial components, and then examines other similar hunting parks and grounds.

The components of the series illustrate three distinct phases of development of the hunting estate which once extended over almost the whole of North Zealand. The type of network of intersecting straight rides is held to be the main defining feature of this type of designed landscape, along with the forest cover and the use of star-shaped radiating roads. A matrix of seven requisites has been used to carry out the comparative analysis, which has also been extended to the conditions of authenticity and integrity, assessed on the basis of separate matrices of requisites. On this basis the three components have been selected.

ICOMOS asked the State Party for clarification concerning the rationale adopted to select the components, particularly Jægersborg Dyrehave/Jægersborg Hegn and for further information on the dimensions of the overall system of hunting grounds in North Zealand.

In its response, the State Party provided additional maps that clarify the size of the overall hunting system and explained that the components were selected on the basis of the proposed justification of criterion (ii), the landscape being an outstanding example of the interchange of Baroque values in Europe on the developments in landscape design in the 17th-18th centuries. Since Gribskov and Store Dyrehave were planned in one process, they would not by themselves illustrate the development in landscape design. On the other hand, Jægersborg Dyrehave/Jægersborg Hegn depicts different stages of the development of the hunting landscape and therefore only all three components together would make apparent the development of the landscape design.

ICOMOS considers that the selection of the components of the series appears based on an excessively complicated matrix of decontextualised formal features of the landscape design only. This approach does not do justice to the nominated property and its components, the selection of which appears nevertheless justified.

The State Party's proposal, submitted in February 2015 upon ICOMOS' request, to add to the nominated series former hunting rides that survive outside the forests and clarify the extension of the hunting grounds in the 17th -

18th centuries, has strengthened the rationale of the component selection and the serial approach.

The comparison with other similar properties focuses on the geometry of the spatial plan, the centrality of nature in the design, originality, integrity and authenticity of the landscape. The use of 'Cartesian' geometry, forest cover and design centred on nature are seen as distinctive factors, therefore only landscapes bearing these features have been considered among the several examined.

ICOMOS has asked for additional maps and clarification on the parameters used for the comparative analysis with other properties. The State Party clarified that it used a tree-structure to organise the analysis to select progressively the hunting landscapes displaying the highest number of similar design elements with the nominated one.

The clarifications provided by the State Party, however do not eliminate the weaknesses of the comparative analysis's approach, which in fact tends to fragment excessively and artificially the topic into sub-typologies which are not acknowledged by current research as relevant to the study of this type of designed landscape and, on the contrary, need to be verified. For instance, considering hunting landscapes as a prerogative of absolute monarchs is not grounded in the evidence attested to by the comparative analysis itself (e.g., the Bois de Tillet was owned by and designed for the Dukes of Orléans, the Forêt de Chantilly was designed for hunting under the Prince of Condé, and the hunting park of Gatchina was created for Count Orlov, long before the property passed to Grand Duke Paul's ownership).

Even the association of landscape design with function, that is, a specific type of hunt, cannot be considered a strict rule and therefore a determining factor, as the State Party itself admits in its additional information.

ICOMOS considers that, although the identification of comparable examples appears comprehensive, the rationale and the comparative parameters seem excessively tailored to the nominated property: the tight combination of design parameters is at odds with the aim of identifying examples that can illustrate 'developments in landscape design'. For instance, it dismisses hunting landscapes, the design of which centres on architecture (e.g. hunting lodges), despite the fact that these do illustrate the development of landscapes designed for hunting. Also the use of the notion of 'Cartesian' in this specific context raises doubts in ICOMOS' view (see Justification for Inscription). The forest cover is said to be crucial but not the forest species' composition, which, in fact, represents an important aspect in landscape design.

Despite the several weaknesses mentioned above, ICOMOS recognises the commendable efforts made by the State Party to develop an extensive comparative analysis on a subject for which a methodology for

comparison has not yet been developed, and firm comparative parameters have yet to be set up.

ICOMOS also recognises that designed landscapes are still under-represented on the World Heritage List and, particularly, intentionally-designed hunting landscapes.

ICOMOS considers that, despite many weaknesses, the comparative analysis justifies consideration of this serial property for the World Heritage List.

Justification of Outstanding Universal Value

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

- The par force hunting landscape of North Zealand outstandingly exemplifies the interchange of important Baroque values within Europe on the development in landscape design in the 17th-18th centuries.
- It represents in an exceptional manner the use of Cartesian geometry in landscape design to achieve both functional – facilitating the hunt - and symbolic reasons – demonstrating the power of an absolute monarch to control and give order to nature.
- Being a design based on 'Cartesian' geometry and on nature rather than on buildings, it stands apart from similar contemporary examples.

The serial approach is justified in the nomination dossier on the grounds that the selected components encompass all attributes deemed indispensable to depict the development of this Baroque hunting landscape as an emblematic and functional spatial entity.

ICOMOS firstly notes that the justification for inscription elaborated in the nomination dossier refers to concepts that appear problematic rather than self-evident, i.e. Baroque values – which cannot be understood as a fixed and shared corpus of thought – or 'Cartesian' geometry, and their application to landscape design.

In particular, the reference to 'Cartesian' geometry as the originating principle for baroque landscape design is not grounded in a wide corpus of baseline research, nor on Cartesius' treatises, and it appears to be a later interpretation rather than a rule applied and shared at the time these landscapes were designed. In fact, the Cartesian coordinates system was not used in garden and landscape design, which was, rather, based on traditional Euclidian geometry, linear perspective and optics. Some weight should have been given to the fact that subdivision of woods and forests into squares and triangles started in the 16th century for measuring purposes.

In fact, the geometric pattern of the rides that criss-cross Store Dyrehave and Gribskov is reminiscent of the quincunx composition which was commonplace in 17th

century gardens and which was extended to hunting parks.

In ICOMOS' view therefore, the nominated property does bear witness to exchanges in garden and landscape design principles and particularly to the influence exerted by French and German hunting parks in the development of designed royal hunting landscapes belonging to the Danish Crown.

ICOMOS considers however that the geometry devised for par force hunting in the North Zealand hunting forests was an improvement on the octagon or circle-based star network derived from French or German examples. The orthogonal grid, being infinitely expandable, gave equal access to all parts of the forest, whilst its diagonals created intermittent star points suitable for the rendez-vous. The origin of this concept and layout may be related to the rise of scientific thought within the context of absolutist ambitions in 17th century Denmark.

Integrity and authenticity

Integrity

The nomination dossier holds that the components of the series have been selected to ensure the complete representation of the three major phases of development of the North Zealand hunting landscape and grounds. Each of them exhibits a density of relevant attributes, none of which are suffering from adverse effects of neglect or development and altogether the series encompasses all the attributes necessary to express the proposed Outstanding Universal Value.

ICOMOS considers that each selected component shows a high degree of integrity in terms of retention of the ride system, although some former rides have been upgraded to become vehicular roads, but less integrity with regard to the forest composition, due to the 19th century afforestation strategy. The design of all components has been undermined to a certain degree by urban development, railways, modern roads or energy infrastructure.

ICOMOS considers that the strict focus of the nomination on the design of the ride system has overlooked the historical and functional interrelation between the hunting landscape and grounds with other important elements (e.g. Lille Dyrehave near Frederiksborg or the network of hunting rides outside the forested areas) and other minor surviving features (boundary walls, ditches, edges, etc.) that would contribute to the complete depiction of the former hunting landscapes of North Zealand as territorial symbols of power.

In this regard, ICOMOS wrote a second letter to the State Party on 22 December 2014 explaining that the ICOMOS World Heritage Panel considered it important that further rides that were part of the riding system be included within the nominated property, and asking the State Party's view in this regard and in relation to their protection.

The State Party responded on 28 February 2015 by proposing the addition of six ride components that were part of the hunting ride system when all the area was used as a hunting park/ground. Additionally, the State Party proposes to expand the Gribskov component to the north so as to include one further star, as suggested by ICOMOS.

Finally, the State Party has proposed to include within the buffer zones of the three components forested areas that were historically or functionally linked to the nominated components or that provide a visual buffer.

ICOMOS considers that the integrity of the whole series is justified; the integrity of the individual components is demonstrated, despite the existence of intrusive infrastructures, particularly in the Store Dyrehave.

Authenticity

According to the nomination dossier, the royal estates of North Zealand and the nominated series are thoroughly documented and the sources of information exhibit high credibility. Cartographic analysis demonstrates that crucial attributes, i.e. the road system and forest cover, have been retained to a high degree, as well as other relevant features.

ICOMOS requested from the State Party additional cartographic documentation, which was made available on 21 and 22 October 2014: this proved to be very useful to understand better the degree of continuity and permanence of the relevant attributes.

ICOMOS considers that the form and design of the hunting landscapes, particularly of the ride system, have retained their authenticity; on the other hand, the forest cover composition has changed due to later reforestation with non-native conifers, impacting on the character of the landscape.

Additionally, the transformations caused by urban development in the close vicinity of the nominated components and the infrastructures built within Store Dyrehave and Gribskov undermine the authenticity of the setting and the sense of place.

ICOMOS considers that the authenticity of the whole series has been justified when it is considered that the ride network is the focus of the nomination; and that the authenticity of the individual sites that comprise the series has been demonstrated, although it has been diminished by transformations which have occurred over the past decades.

In conclusion, ICOMOS considers that the conditions of integrity and authenticity of the whole series are justified; for individual sites, the conditions of integrity and authenticity have been demonstrated, despite changes that have impacted on each component.

Criteria under which inscription is proposed

The property is nominated on the basis of cultural 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;*

This criterion is justified by the State Party on the grounds that the nominated property is an outstanding example of the interchange of absolute Baroque values in Europe on developments in landscape design in the 17th–18th centuries. The property illustrates the design developments through the nominated series according to its changing function and increasing symbolic role in the Danish Kingdom. The selected components exemplify different phases of hunting landscape formation.

ICOMOS notes that, whilst the nominated property does bear witness to an interchange of values in European landscape design in the 17th–18th centuries, this exchange cannot be seen as an exceptional phenomenon among hunting parks of the period, which are rather commonplace. ICOMOS however observes that the nominated property bears witness to the influence exerted by French and German designed hunting landscapes on the development of the *par force* hunting landscape of North Zealand. On the other hand, ICOMOS believes that the adaptation of the star-based ride system to an orthogonal grid to give rise to an improved layout may better justify criterion (iv).

ICOMOS considers that this criterion is justified for the whole series.

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 has not been proposed by the State Party, however the ICOMOS World Heritage Panel has found during its evaluation process that it may also be relevant and could be justified by the nominated property.

Therefore, ICOMOS in its second letter to the State Party asked the State Party if it could provide additional information useful to justify this criterion.

The State Party responded on 28 February 2015 providing a justification for this criterion which focuses on the role of the orthogonal ride system as an expression of absolute power and its ambition of imposing one social and 'natural' order. The three components illustrate the emblematic development of landscape design.

ICOMOS considers that the orthogonal geometry conceived for *par force* hunting in the North Zealand forests was an improvement on the octagon or circle-based star network used in French or German examples.

In its infinite expandability, the orthogonal grid could give equal access to all parts of the forest; differently from radial examples, its diagonals created more than one star point suitable for the rendez-vous. The origin of this concept and layout may be associated with the rise of scientific thought within the context of absolutist ambitions in 17th century Denmark.

ICOMOS considers that this criterion has been justified for the whole series.

ICOMOS considers that the serial approach is justified and that the selection of sites is appropriate.

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

Description of the attributes

The spatial organisation of the hunting forests comprised in the nominated components with their hunting rides and the surviving rides outside the wooded areas, organised according to an orthogonal grid, the emblematic markers, numbered stone posts, stone fences, and numerical road names, as well as the hunting lodges and hunting-related buildings comprised within, altogether materialise the application of baroque landscape design principles to forested areas. Straight hunting rides provided orientation during the hunting but also symbolised the absolute rule of the king who could give order to nature and make it accessible and intelligible. The wider setting of the property with surviving built complexes and micro elements that were part of this system contribute to an enriched understanding of the significance of the 17th century designed hunting landscapes and of their evolution.

4 Factors affecting the property

According to the nomination dossier, the only relevant factor affecting the property is the pressure of ongoing urban sprawl in its surroundings: environmental pressures and risk of natural disasters are low, while climate change may potentially cause concerns in the future. Tourism does not represent a threat at the moment.

ICOMOS concurs with the State Party that building development in the surroundings of the nominated series represents the major cause of concern for the retention over time of its values. On the other hand, development of infrastructures has already caused negative impacts on the property, its values and 'ambience'. In this regard, ICOMOS observes that consideration should be given to the removal of the energy infrastructure that passes through the southern part of the Store Dyrehave.

ICOMOS considers that the main threats to the property are represented by urban development pressures and energy and communication infrastructure.

5 Protection, conservation and management

Boundaries of the nominated property and buffer zone

The boundaries of the nominated components of the series have been determined using existing fences in the case of Store Dyrehave, where the limits of the nominated area coincide with the old stone walls from about 1620 AD, and in the case of Jægersborg Dyrehave with Jægersborg Hegn, where the boundary follows the park fence established in 1670 AD, apart from minor changes which occurred in the early 20th century on the south east edge. The boundaries of the Gribskov have been established by taking into account the historic layout of the ride system, its integrity and that of the landscape.

ICOMOS notes that in the additional information provided, the State Party highlights that the boundaries of the Gribskov component have been erroneously drawn and this mistake needs to be amended.

ICOMOS, on the other hand, notes that the delimitation of the boundaries of the individual components excludes hunting rides extending outside the state-owned forests. ICOMOS considers that, since the rides are the focus of the nomination, the still-surviving ones must be included within the nominated serial property as they are the major attribute that support the proposed justification for inscription. This is particularly evident between the Store Dyrehave and the Gribskov, on the outskirts of Hillerød, where the continuation of the rides makes it evident that both components were once one and the same.

The buffer zone for the nominated series was initially defined as a 300m buffer encircling each component, where the national legislation for forest protection applies and prevents development on open land.

In this regard, ICOMOS has requested additional information from the State Party, who explained that the current legal framework does not guarantee the protection of the hunting roads outside the state-owned property or the 300m buffer zone; therefore it has been decided to limit the proposed buffer zone to the 300m of buffer foreseen by the national legislation.

ICOMOS notes that the buffer zones so designated exclude areas that are functionally related to the nominated serial property and can support its understanding and its protection (i.e., the Lille Dyrehave as well as fragments of rides outside the nominated components).

Additionally, further areas adjacent to the boundaries of the nominated property are owned by the State and fall under the national legislation for forest protection, therefore the rationale of the 300m protection zone appears unclear and, above all, not adequate to ensure the protection of those areas containing surviving attributes contributing to sustaining the proposed Outstanding Universal Value, the integrity/authenticity of

which, however, would not justify their inclusion in the nominated area.

ICOMOS considers that solutions to achieve legal protection of surviving fragments of the historic ride network outside the nominated series and its buffer zone should be pursued, in that they represent an important defining element of the wider setting of the nominated property which bear witness to the size of the former royal hunting estate in North Zealand.

In this regard, with the aim of further clarifying this point, ICOMOS sent a second letter to the State Party on 22 December 2014 requesting its views on feasible ways to protect the rides extending into land which is not in state-ownership with a view to achieving their protection as cultural properties.

The State Party responded on 28 February 2015 explaining that public roads and paths fall under the Public Roads Act which contains measures suitable for the protection of the former rides that have become public roads. Private common roads fall under the Private Common Roads Act which allows owners to close or divert their roads, if they wish. Municipalities have the right to change the status of roads from private common to public municipal but this requires negotiation with owners. Also the classification as items of cultural interest needs negotiation.

ICOMOS observes that Danish legislation envisages some possibilities for the protection of former rides and notes also that nominated rides are covered by the Public Roads Act; additionally steps have already been taken to achieve the protection of a higher number of surviving traces of former hunting rides which are not currently being nominated. This strategy may lead in the future to the inclusion within the nominated property or its buffer zones of further former rides.

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

Ownership

Most of the nominated property is owned by the State and managed by state agencies. Public roads belong to the municipalities which also manage them; whilst Gribskov also includes 15ha of private land. Common private roads are owned and managed by individuals.

Protection

The nominated serial property is protected under several legal instruments and an articulated planning framework.

State-owned forests have been preserved since 1805, when the first Forest Preservation Act was issued. In North Zealand preservation regulations came into force even earlier, in 1781. Currently the relevant legal instruments include: the Danish Forest Act (LBK 945/2009), which also includes concerns for landscape and cultural history, and establishes the 300m 'forest

protection zone', which covers unbuilt areas encircling forests; the Nature Protection Act (LBK 933/ 2009), protecting natural habitats and ensuring that development sustains man-made and natural environments and allowing consideration of cultural elements of the landscape, and defining a 300m 'forest construction line' which prevents building construction within; the Building Preservation Act (LBK 685/2011) protecting historic buildings and their immediate surroundings; the Museum Act (LBK 1505/2006), which protects in-situ antiquities older than 100 years (i.e. the Kongestenen); the Planning Act (LBK 937/2009), which provides the legal framework for the elaboration of municipal and local plans.

The municipal and local plans of the six municipalities participating in the nomination process (Allerød, Hillerød, Fredensborg, Lyngby-Taarbæk, Gentofte, Rudersdal) include policies for the protection of cultural landscapes encompassing the nominated and adjacent areas. Provisions detail the control of location, type and height of new developments and the use of existing buildings.

ICOMOS requested additional information from the State Party on the implementation of legal protection measures and on the existence of legal or planning tools for the protection of elements related to the hunting landscape not comprised in the nominated property.

The State Party explained that the responsibilities of national Agencies and municipalities overlap according to the legal and institutional framework in place. In compliance with the Planning Act, the Minister of the Environment establishes a comprehensive planning framework which takes into account national interests and verifies that municipal planning complies with them (e.g., World Heritage properties are sites of national interest and on this basis, municipalities are bound to ensure protection of the nominated property).

Additionally, the State Party in this regard clarified that the municipal plans set out guidelines and land use targets for both urban areas and open land, and serve as a basis for local plans. In the municipal plans, guidelines will be outlined to secure the values of the nominated property and its buffer zone.

Local plans specify the allowed uses of the territory and volumes/areas of buildings. They are legally-binding documents for owners and users and through them values of the nominated property will be safeguarded. Additionally, the envisaged restrictions for buffer zones will be included in new and revised local plans.

ICOMOS has noted that, if this is the case, then it would be possible to draw a wider buffer zone and to make sure that municipalities guarantee the protection of the nominated property and its attributes through guidelines and regulations inserted in the municipal and local plans within the buffer zones.

ICOMOS considers that the overlapping system of legal and planning instruments has protected the nominated

series only in part; e.g., it has not been able to avoid the construction of the high voltage line through Store Dyrehave. Additionally, former rides which are now common/private roads, if located in the buffer zone or outside, are not protected, falling under the provisions of a law on roads that apparently do not include consideration of their possible historic nature.

ICOMOS has noted that the protection of rides in the open countryside rests solely on the goodwill of municipalities which, within their planning instruments, may designate them as valuable elements of the cultural landscape to be covered by specific planning provisions and, on this basis, sensitize private owners towards their conservation. Some municipalities have undertaken this process (e.g. Fredensborg); however, former rides remain quite vulnerable.

In the additional information provided in February 2015, the State Party clarifies that public roads and paths fall under the Public Roads Act which grants forms of protection, while this is not the case for private common roads. Municipalities have the possibility of ensuring the protection of private common roads, but this requires negotiation with the owners.

In conclusion, ICOMOS considers that the legal protection in place is adequate. ICOMOS considers that the protective measures for the property are adequate. However, strengthening the protection of the historic wider setting would be desirable.

Conservation

Much research has been carried out on the par force hunting landscape; however no detailed survey of the remaining rides or recording of the recently discovered earthworks or marker stones has been elaborated.

The par force hunting landscape and its ride system under the Nature Agency's care have been largely retained because they are useful in forestry terms. Outside the nominated property, it has survived because it has become part of the public road network or of the private common roads. The forest and parkland are well maintained with a large quantity of older trees.

A range of past intrusions have been or are being enhanced or removed. Sections of the ride system are still being discovered and recovered by opening up vistas so as to allow walking and visual reconnection, but no attempt is being made to recreate them.

In the nominated property, active conservation measures are concerned with the tree cover and composition and the deer population, as well as the maintenance of the existing rides. An effort is being made to progressively restore the original forest composition, by replacing conifers with endemic broadleaved species.

ICOMOS considers that there is a need to develop an overall survey that records the ride system, its known surviving elements and those being discovered, as well as

other elements attesting to the arrangements of the territory as a hunting landscape, including their condition and threats, which would help in the conservation and management of the property.

In conclusion, ICOMOS considers that current conservation measures in the nominated property seem effective; however an overall recording of all surviving rides and other elements associated with the hunting landscape, their conservation condition and threats, would be useful for conservation purposes.

Management

Management structures and processes, including traditional management processes

Almost all of the nominated property is owned and managed by the State through the Danish Nature Agency and the Agency for the Palaces and Cultural Properties (Eremitageslottet). Responsibilities concerning the buffer zones fall on the Municipalities on the basis of the existing legal and institutional framework and tasks derived therefrom. A very limited area included in the nominated property is privately owned.

A Steering Committee was established in 2010 to coordinate the nomination process. The committee includes representatives from the Danish Nature Agency, the Agency for the Palaces and Cultural Properties, the Danish Museum of Hunting and Forestry and the municipalities of Hillerød, Fredensborg, Rudersdal, Lyngby-Taarbæk, Gentofte, Allerød.

ICOMOS has asked the State Party for clarification on the formal establishment of the Steering Committee, its mandate and tasks, and on the existence of an overall management framework for the entire nominated series as well as additional information on financial resources.

With regard to the inclusion of the University of Copenhagen within the Steering Committee, the State Party informed that originally the University was part of it, but later the University preferred to act as a consultant.

As for the formal setup of the Committee, the State Party also informed that, since almost all the nominated area is in state ownership and the task of the Steering Committee was to secure political support and resources for the nomination process, a formalisation of the Steering Committee was not felt to be urgent.

The State Party equally informed that, in the event of inscription, a formal agreement will be finalised: the Museum of Hunting and Forestry will act as site manager for the entire series while the Steering Committee will coordinate involved stakeholders and work to secure political and financial support. The expected time frame for the finalisation of the agreement is May 2015.

Concerning financial resources, the State Party has provided in addition a detailed table illustrating the overall

budget for the triennium 2013–2015 of the two main administrative Danish Nature Agencies (North Zealand and Capital), explaining that 20% of the overall budget could be considered as devoted to the nominated property.

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

The nomination dossier informs that forests have been managed for more than 200 years in North Zealand: early management plans have been preserved and are displayed in the Museum of Hunting and Forestry.

Current management plans have a 15-year performance contract validity: the objectives of the plans determine also the reference for the annual grants. Continuous amendments and additions are integrated in the plan. Before the end of their validity, an assessment is carried out to verify whether objectives have been met and which new ones are to be set.

ICOMOS requested from the State Party additional information on the management plans, their structures and measures, as well as on visitor management strategies and facilities.

The State Party provided a synthetic description of each plan, their objectives and measures. Current management plans for Gribskov and Store Dyrehave have been completed in 2014 and await ratification. Sub-plans articulating the management plans are reviewed every six years. They recognise the multiple uses of the forests and include guidelines and strategies for biodiversity and storm damage recovery. Former rides have been classified as cultural tracks and are protected from damage that may derive from forest management activities. Selective felling is planned to be promoted so as to guide forest composition to shift from conifers towards beech woodlands.

With regard to carrying capacity, the State Party explained that visitor surveys have been carried out regularly since 1974 and that frequent monitoring carried out within the nominated areas demonstrates that they can bear the actual number of visitors. Strategies to distribute visitors within the whole area of the nominated forests are nevertheless being implemented.

ICOMOS considers that current management is proving to be effective; however interpretation and presentation of the par force hunting landscape are still to be developed, as current initiatives are not specifically focused on these values and features.

ICOMOS further observes that a comprehensive vision for interpretation and related facilities should be envisaged, and careful attention should be devoted to design, size and materials of any future facility or infrastructure.

Involvement of the local communities

The Danish Nature Agency set up a User Council several years ago. It meets twice a year with the aim of helping to resolve conflicts and problems and apparently it is rather effective.

ICOMOS requested clarification on the level of involvement of the private owners of the land included in the nominated property.

The State Party responded that the privately-owned land represents an insignificant fraction of the overall nominated property, therefore their owners have not been involved in the Steering Committee. However, it was admitted that timely information was not provided to them with regard to the nomination.

On 26 November 2014, the State Party wrote that the Municipality of Hillerød informed the owners of private land included within the nominated property about the nomination and that their reaction was positive.

ICOMOS notes that interpretation and presentation is already developed within the nominated property; however, these are mainly focused on other sets of the property's value, therefore it is recommended that interpretation programmes on the par force hunting landscape value and narrative be elaborated and implemented.

In conclusion, ICOMOS considers that the management system for the overall serial property is adequate; however it would be advisable that the envisaged agreement for the steering committee be formalised. The management system and plans could be extended to include an interpretation/presentation strategy. Careful attention to design, size and materials of interpretation facilities and infrastructure is also important.

6 Monitoring

The monitoring of the attributes within the nominated property is integrated into the management work of the Danish Nature Agency, with regard to the forests; whilst the monitoring of the Eremitageslottet is a responsibility of the Agency for Palaces and Cultural Properties.

Monitoring indicators are based on the relevant attributes of the nominated property, that is, forests, ride system, associated buildings and visitors. Responsible agencies for each monitoring task and periodicity have been identified.

ICOMOS considers that the monitoring system in place is adequate, however it recommends that specific performance indicators be developed for all management tasks (e.g., in relation to interpretation/presentation).

In conclusion, ICOMOS considers that the monitoring system could be extended to all management tasks.

7 Conclusions

The par force hunting landscape of North Zealand comprises important forests and parks that were provided with a network of straight rides designed for courtly hunts during the 17th-18th centuries, reflecting the ambitions and power of the Danish kings in a period when absolute monarchies flourished throughout Europe.

The nomination dossier has the merit to draw attention to this type of designed landscape, which is an understudied area compared to the history of Baroque gardens and their role in reflecting value interchanges in 17th-18th century Europe. Additionally, designed landscapes appear under-represented in the World Heritage List and, in this category, landscapes intentionally arranged for hunting are not represented.

With the elaboration of this nomination dossier, much work has been initiated to compile research publications on 17th-18th century European hunting landscapes and to establish first comparative criteria. This commendable effort by the State Party has highlighted the complexity of courtly hunting rituals and of the spaces necessary and created for this particular form of demonstration of absolute power. It has also made it evident that several hunting parks still survive in different states of integrity throughout Europe.

ICOMOS asked the State Party for clarification concerning the possibility of including further former hunting rides within the nominated property and to modify the buffer zone so as to encompass identified areas and attributes that are functionally important as a support to the property and its protection.

The State Party welcomed the possibility to also encompass the surviving traces of some hunting rides outside the forested areas and also considered it feasible to expand the buffer zones on the grounds of functional and visual reasons and proposed some amendments to the boundaries of the Gribskov nominated component and the addition to the series of six individual components, essentially portions of former rides, and the adjustment of the buffer zones to encompass forests and areas that could provide a functional and visual support to the nominated property.

In this regard, ICOMOS underlines that the protection and preservation of the surviving rides is crucial for the full appreciation of the original extension of the hunting grounds in North Zealand as well as for the understanding that a great part of North Zealand is in fact an historic environment, relevant features of which deserve to be safeguarded.

The components of the nominated serial property have been preserved and managed thanks to a 150-year-long tradition of management practice attested to by the complete series of historic management plans deposited in the archives. Recent management tasks have been addressing the restoration of the forest cover by selective felling and replanting.

However, protection and management tradition have not been able to completely prevent modifications wrought by modernity: the Gribskov was cut through by the railway in a south–north direction; the southern part of the Store Dyrehave has been impaired by the high voltage electric line, passing through in an east-west direction; the immediate setting of the protected forests has been undermined by urban development.

These issues have already been identified by the State Party and measures to improve the situation have been undertaken in some case, e.g., the acquisition and demolition of houses built along the eastern boundary of the Jægersborg Hegn/Dyrehave in the vicinity of the Eremitageslottet, to recover the vistas from the castle towards the sea.

8 Recommendations

Recommendations with respect to inscription

ICOMOS recommends that the par force hunting landscape of North Zealand, Denmark, be inscribed on the World Heritage List on the basis of **criteria (ii) and (iv)**.

Recommended Statement of Outstanding Universal Value

Brief synthesis

The par force hunting landscape in North Zealand series covers the former royal hunting forests of Store Dyrehave and Gribskov, traces of connecting roads between them, and the former royal hunting park of Jægersborg Dyrehave/Jægersborg Hegn. The entire former royal forest landscape covered a much larger area with a number of royal castles. The components have been selected as they encompass a completeness of attributes illustrating the development of the Baroque par force hunting landscape as an emblematic and functional spatial entity. Designed and created intentionally by Man, the par force hunting landscape exemplifies a 17th-18th-century landscape created to perform courtly hunts. Its layout results from the combination of French and German design models based on a central-star grid system, combined with an orthogonal grid subdivision, which optimised its function during the hunt, and makes it emblematic of an absolute European monarch, his role in society, and his reason and power to control nature. The Outstanding Universal Value of the landscape lies in the spatial organisation of the hunting forests, hunting roads, buildings, emblematic markers, numbered stone posts, stone fences, and

numerical road names conveying an understanding of the practical application of the design as a means of orientation.

Criterion (ii): The par force hunting landscape in North Zealand exceptionally exemplifies how the interchange of Baroque values in Europe influenced developments in landscape design in the 17th-18th centuries, and particularly bears witness to the influence exerted by French and German designed hunting landscapes. These models were adapted to the specific situation of the Danish terrain and to the Danish kings' aspirations. The series illustrates a development in design that evolved alongside the landscape function during par force hunts also in terms of its increasing symbolic significance.

Criterion (iv): As a landscape of power created by an absolute monarch in the late 17th century, the par force hunting landscape in North Zealand exemplifies a significant stage in European landscape design applied to hunting grounds when the rise of scientific thought took place within the context of absolutist ambitions. The orthogonal geometry conceived for its design improved the octagon or circle-based star network used in French or German examples. In its infinite expandability, the orthogonal grid could give equal access to all parts of the forest; differently from radial examples, its diagonals created more than one star point suitable for the rendez-vous.

Integrity

The series comprising the two hunting forests Store Dyrehave and Gribskov, the six partially preserved road traces between them, and the hunting park of Jægersborg Dyrehave and Jægersborg Hegn exhibits all attributes necessary to express the Outstanding Universal Value of the par force hunting landscape in North Zealand. The preserved forest cover, despite interventions of reforestation, the hunting roads and their mutual situation, the numbered stones, the fences and the emblematic markers altogether give a clear understanding of a spatial plan that focused on nature and developed in line with changes in the practical and emblematic demands of the absolute monarch. Visual and functional integrity of some components has suffered from the effects of development; however the property currently does not suffer from development or neglect and urban pressure in the wider setting is under control. The character of the wider setting facilitates the understanding of the nominated property.

Authenticity

The history of North Zealand as a royal estate, later to become state-owned, is thoroughly documented in sources of high credibility. Historical maps confirm that the forest cover and the road systems realised according to the original spatial plan have survived to a large extent. In Store Dyrehave most secondary rides have disappeared, as has the forest cover, which has been changed due to later reforestation, and parts of the roads connecting Gribskov and Store Dyrehave. All original road dams and the stone fence around Store Dyrehave are authentic,

while wooden bridges and fences have been replaced several times. Stone posts in Store Dyrehave reflect their original positions. The king's monogram, crown and initials document the authenticity of Kongestenen, but the mound it was placed on has been disturbed. The series gives a clear sense of the spatial development of the par force hunting landscape. The character of the wider setting contributes to the understanding of the nominated series as the best-preserved elements of a wider historic designed hunting landscape.

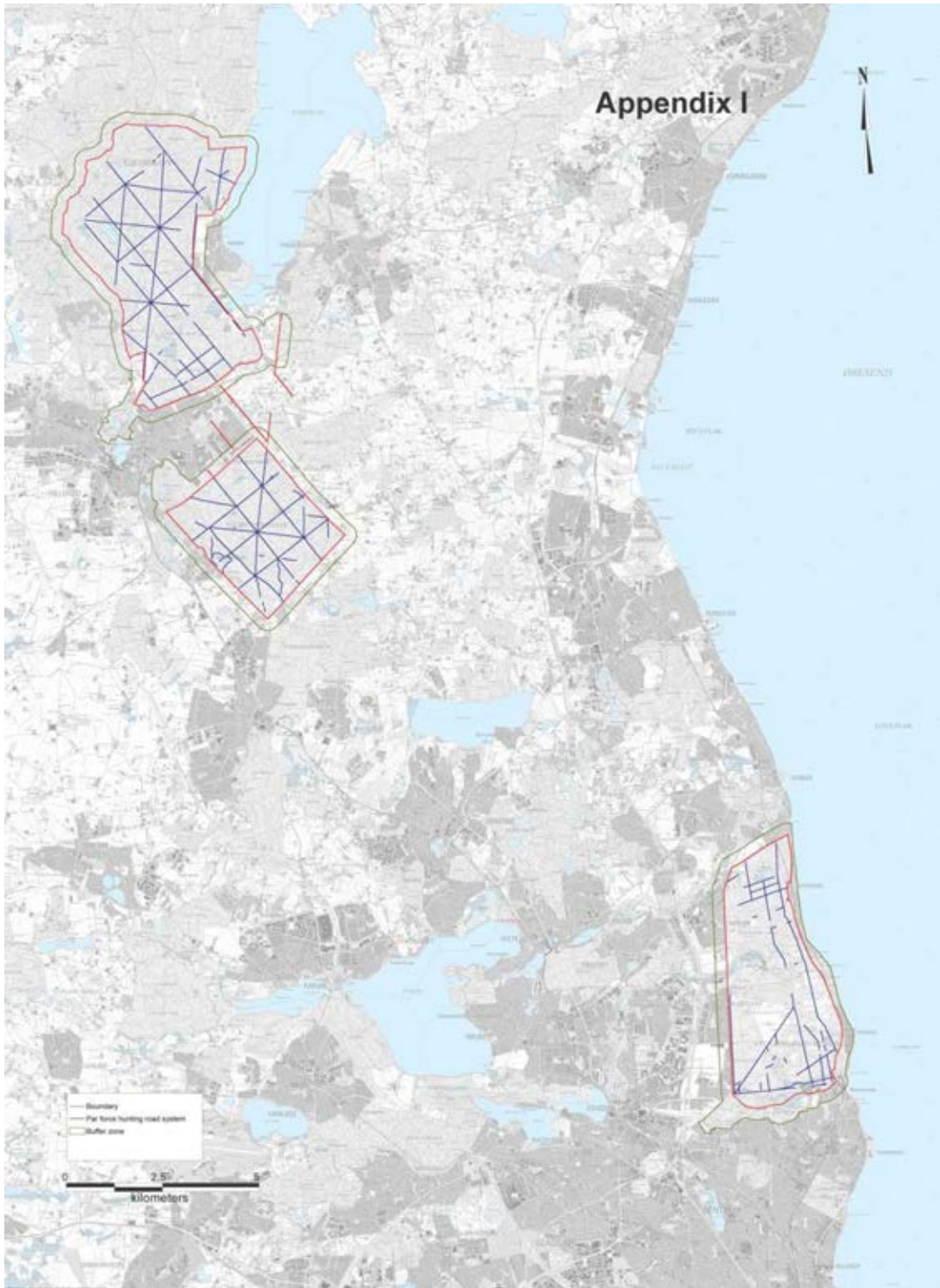
Management and protection requirements

The nominated property is almost entirely state- or municipality-owned and is protected by national acts and enactments, regional plans and agreements, and municipal and local plans. Almost all activities are determined by the budget. Responsibility for the forest management rests with the Nature Agency. Fifteen-year management plans also stipulate how this protected cultural heritage should be managed. The Agency for Palaces and Cultural Properties manages Eremitageslottet and operates 10-year plans. The municipalities have 4-year municipal plans providing frameworks for local plans and guidelines to protect cultural heritage, including road traces in private ownership. The cooperation and coordination among all institutions and bodies with responsibilities in the nominated property and buffer zones ensures the long-term effectiveness of protection and management and is granted by a Steering Committee representing state agencies, municipalities, and museums. As the public's awareness of the cultural heritage of the area, and their desire to return to it time and again, are vital to the successful long-term protection of the par force hunting landscape of North Zealand, the nominated property is well equipped with public facilities, and the dissemination of knowledge should be based on a comprehensive strategy and focussed on the Outstanding Universal Value.

Additional recommendations

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

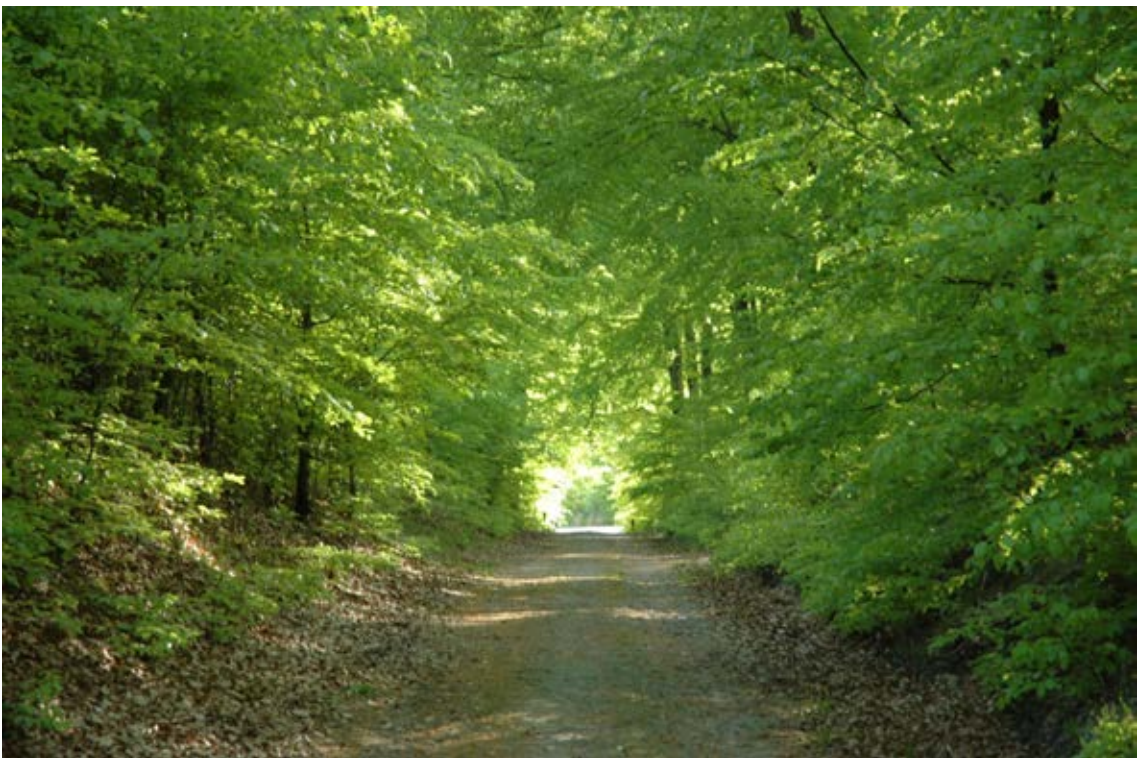
- Carrying out a survey and recording of the ride system, both those parts remaining and those rediscovered, and other elements and arrangements which bear witness to the hunting landscape formation;
- Extending the monitoring system to all management tasks and identifying appropriate indicators;
- Developing an overall interpretation and presentation programme specifically for the par force hunting landscape;
- Considering for the future the removal from the southern part of the Store Dyrehave of the infrastructure that currently cuts through the forest, and restoration of the vegetation cover.



Map showing the boundaries of the nominated properties



Kongestjernen in Store Dyrehave



Tovej in Store Dyrehave



Road system



Forest trace in Jægersborg Dyrehave

The Burgundy Climats (France) No 1425

Official name as proposed by the State Party

The Climats, terroirs of Burgundy

Location

Department of the Côte-d'Or
Department of Saône-et-Loire
France

Brief description

The Climats are precisely delimited vineyard parcels located on the slopes of the Côte de Nuits and the Côte de Beaune, extending south of Dijon up to Maranges. The nominated area encompasses the elements that made possible the development and differentiation of the Climats and comprises two separated components: the first covers 1,247 viticultural parcels, each identified by its own name and cadastral data, the associated productive units, the rural villages and the town of Beaune, which represents the commercial dimension of the Burgundy vine/wine production system; the second includes the historic core of Dijon, which materializes the political-regulatory impetus to the formation of the Climats system.

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*.

It has not been nominated as a cultural landscape, although ICOMOS considers that, in terms of the *Operational Guidelines for the Implementation of the World Heritage Convention* (July 2013) paragraph 47, it is a *cultural landscape*.

1 Basic data

Included in the Tentative List

1 February 2002

International Assistance from the World Heritage Fund for preparing the Nomination

None

Date received by the World Heritage Centre

14 March 2013

Background

This is a new nomination.

Consultations

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

Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the property from 24 to 30 September 2014.

Additional information received by ICOMOS

On 26 September 2014 ICOMOS requested additional information from the State Party on the following aspects:

- the reasons why the property has not been nominated also as a cultural landscape;
- the rationale for the boundaries of the Dijon component;
- an expanded comparative analysis;
- details on measures and mechanisms for the conservation of rural built heritage;
- additional maps.

The State Party responded on 5 November 2014. The additional information provided has been included in the relevant sections of this report. On 17 November 2014 the State Party also provided an English version of the additional information report.

On 22 December 2014, ICOMOS sent a second letter to the State Party asking for additional information on the following points:

- further justify the selected criteria for the towns of Dijon and Beaune;
- consider reducing the boundaries of the Dijon component;
- strengthen the protection of the nominated property (especially Beaune) and its buffer zone;
- provide updated information on the provisions of the Burgundy regional wind plan;
- the enforcement of the landscape plan for the enhancement of the quarry district at Comblanchien.

The State Party responded on 28 February 2015 and the additional information provided has been incorporated into the relevant sections of the present report.

Date of ICOMOS approval of this report

12 March 2015

2 The property

Description

The nominated serial property encompasses a series of small hills known as Côte de Nuits and Côte de Beaune – extending in a north-south direction some 60km south of Dijon up to Maranges and in a west-east direction no more than 6km.

The area is marked by micro-differences in soil, basically constituted of calcareous and clay formations. This diversity finds its origins in 30 million-year old tectonic phenomena and in more recent depositional layers of glacial, wind and alluvial origins.

The latitude grants a temperate climate, while the longitude protects from the excesses of continental and of oceanic climates. The orography, on the other hand, favours the mitigating influences of the Mediterranean.

The current territorial layout of the nominated property has been influenced by the disposition of the cadastral parcels and of the municipal territories as well as by the north-south communication routes that border the area and that have long since connected the region to important centres on the Mediterranean and Northern Europe.

Three factors are held as essential and reciprocally complementary in the progressive construction, recognition and differentiation of the Climats: a productive dimension, materialised by the Climats themselves, a political and regulatory aspect, represented by the city of Dijon, and a commercial/ distribution factor, embodied by the town of Beaune.

This is reflected in the selection of the components of the series.

Part 1 – The Climats, the landscape and the villages

The Climats – there are 1,247 in total occupying some 8000ha – constitute a mosaic of precisely delimited vineyard parcels, small in size, inscribed in the cadastral limits, identified by specific names and defined by enclosures, walls, hedgerows, and paths still legible in the landscape.

They are distinct from one another due to their specific natural conditions (geology, soil, slope, exposure, meteorological conditions, vine type, etc) that have been shaped by human work and progressively identified in relation to the characteristics of the wine they produce.

The word 'climat' derives from the Greek *klima*, which designates the slope of the ground. In Roman times the word *clima* came to indicate a measurement unit of about 324m² used to measure the land to be farmed. The evolution of the word into the Climat thus embodies two crucial aspects for the definition of this entity.

Overall, the nominated area exhibits an open and homogenous character, with distant views towards the plain on the east and the gentle, protective relief of the plateau on the western side. Micro features, e.g., the geometric parcels, the vine-rows, the paths, the dry-stone walls, the terraces, the stone piles (*meurgers*), huts, etc. enrich the landscape mosaic. Four distinct geographical units may however be identified: the Côte de Beaune, the Côte de Nuits, the Hautes-Côtes and the plain.

The Côte de Beaune features smooth slopes extending towards the plain of the Saone River; the east-facing sides are covered by vineyards where the vines are mainly laid out perpendicular to the slopes, the ridge is covered by meadows and wooded areas, and parallel ravines separate the slopes. Wide and deep views towards the plain and inter-visibility between villages and vineyards characterise this landscape unit.

The Côte de Nuits exhibits a steeper slope and frequent calcareous outcrops; the vineyards occupy the lower part of the slopes and part of the plain. Sheer wooded ravines cut the hillsides and create visual and ecological links with the Hautes-Côtes. The Comblanchien quarry has left a visible mark on the landscape of the Côte.

The Hautes-Côtes and the plateau contrast with the vineyard mosaic of the hillsides: cut by ravines and mainly covered with woods, they exhibit a wilder character, although in some areas, meadows and cereal cultivation may be found.

The plain extends at the foot of the Côtes. Here the distribution and density of the vineyards vary considerably: in certain areas they appear omnipresent as a monoculture (Corgoloin, Vougeot, Vosne-Romanée, Gevrey-Chambertin, etc.); in other areas vineyards are intermingled with pasture, woods or other crops, e.g., east of the RD974. Here the micro scale of the landscape mosaic is more evident and better preserved.

The villages have grown on the lowest part of the alluvial fans at the mouth of the ravines; whilst in general they exhibit a rural aspect, Beaune and Nuits-Saint-Georges show a more urban character. The villages preserve their historic fabric and their street network with a varied urban organisation including linear or radial layouts, that reflect the topography of the site.

Beaune

The town of Beaune is encompassed within the Climat component; however the nomination dossier deals with it as a specific urban element of the Climats system related to commercial activities.

The urban fabric of Beaune developed around a Roman fortification – a *castrum* – and still exhibits a radial organisation coupled with urban districts grown up along the main communication axes. The town built up around three main poles – the Market Place, the Carnot Square and the Notre-Dame collegiate district, witnessing the successive developments of the city. Former abbeys and convents have marked the urban structure of Beaune while the outer districts feature the architecture associated with the specialised professions of wine (cellars, wineries, trading houses, etc.)

Part 2 - Dijon

Dijon is located immediately north of the Côtes. It developed from the 5th century AD onwards when the

bishops of Langres decided to reside within the existing Gallo-Roman *castrum*.

The radial form of the city demonstrates its progressive growth around the ancient core. The streets are narrow, the urban fabric is compact although its texture is not homogeneous, following the different cadastral subdivision of the ancient urban articulation.

The nominated component preserves several edifices and complexes associated with the role played by Dijon in sustaining and promoting viticulture and wine-making on the Côtes, e.g., the Palace of the Dukes and of the States of Burgundy, the Parliament building (Palace of Justice), the Municipal Archives and Library, the Abbey Church of Saint-Bénigne, the Monastery of the Cistercian Nuns (*Monastère des Bernardines*), the numerous private residences and the *maisons de négoce* (trading houses).

History and development

Vine cultivation is attested to in the area since the 1st – 2nd centuries AD. However, findings show that vineyards were rather located in the plain and not on the hillsides. The shift of vineyards onto the slopes of the Côtes probably occurred in the Early Middle Ages, since the 5th - 6th centuries AD, with the spread of Christianity and the establishment of monasteries and bishoprics which pursued the colonisation of the territory and the reinstatement of agricultural activities, particularly vine-growing.

The establishment of the Cistercian order further contributed to the diffusion of viticulture. The Cistercian self-sufficient mode of production is materialised in a specific production unit – the *clos* - where the vineyard, the *cuvée*, equipped with the winepress, the cellar, the residential area and the chapel and even the quarry for the building stones were all enclosed within one single precinct. The *clos* spread throughout the Côtes and imprinted itself on the structure of the region and of the *Climats*.

Also, the laws of Burgundy contributed to the diffusion of vineyards onto the slopes, by allowing the occupation of abandoned plots to reinstate the vineyards.

During the 12th – 13th centuries, while large estates still belonged to religious orders and to the nobility, members of the bourgeoisie and of the professions also started owning vineyards. This fragmentation determined the fine subdivision of parcels, which has been transmitted as the cadastral base for the successive formation of the *Climats*.

The wine from Beaune was already famed in the 13th - 14th centuries but the action of the Valois Dukes of Burgundy, enhanced its quality even further: an order issued in 1395 prohibited growing vine-types of lower quality, e.g., *Gamay*, which had to be removed and replaced by *pineau* (pinot), recommended since 1375.

This regulation along with the knowledge of vine-farming techniques and of the adaptation of vine-types to specific

soil conditions disclosed the potential and diversity of expression of the finer vine-types in relation to each parcel. It was only after this order that the good places for vine-growing began to be identified and distinguished from those yielding grapes and wines with lesser quality.

However, at the beginning, the distinction among wines of better quality was not made with specific reference to places or parcels, but was rather associated with the vicinity of their origin to major towns: in 1446 an order was issued limiting entry into Dijon and Beaune only to wines from certain areas close to these two towns. The place names of wine provenance – Dijon or Beaune – were marked on the barrels, based on the judgement of appointed experts. It was specifically in the 15th century that the process of diversification of separate *cuvées* commenced.

In the 16th century the fragmentation of the large monastic estates and of ducal properties, which had entered into the Royal domain, led to the acquisition of land plots by Burgundy parliament representatives or by the Dijon bourgeoisie. This process facilitated the progressive identification of specific places – the *Climats*. Their identification is witnessed by the appearance of the word in juridical acts and by their early cartographic representation.

The first appellation distinct from those of Dijon or Beaune dates back to the 17th century; it identifies the Climat de Beze and Chambertin, and marks the end of the proximity of the vineyard to Beaune or Dijon as an indicator of wine quality.

While the system of *Climats* had been consolidating during the 18th century, the commercialisation of wine also changed: from the system of appointed 'courtiers-gourmets' to expert sellers with their trading houses (*maisons de négoce*) through the commissioners, independent intermediaries able to recognise the specific provenance of the wines. An order issued in 1766 marked the official beginning of the recognition and distinction of wines on a micro-geographic basis.

During the 18th century the description and classification of the *Climats* and of their qualities in relation to the characteristics of the wines produced there began, to be systematized in the 19th century.

The devastation caused by phylloxera at the end of the 19th, early 20th centuries prompted a new impetus to viticulture and the construction of an updated body of knowledge as traditional practices were no longer useful or sufficient: technical schools were then established in Beaune and Dijon.

After this crisis, the model of the *Climats* system was consciously chosen and re-established as the way to regain the level of excellence and reputation of the Burgundy wines.

In the 20th century, the trade unions played a central role in guarding against the temptation of monopolies and to protect the differentiation of wines, eventually by promoting and participating in the preparation of the first law for the Appellation of Origin (1919) and then for the appellation of Controlled Origin (1935), in which the linkage between the Appellation of a wine type and the *Climats* fell into place.

3 Justification for inscription, integrity and authenticity

Comparative analysis

The comparative analysis presented in the nomination dossier first examines the possible areas of comparison to be considered, concluding that three macro categories are relevant in this case: vineyards and viticultural properties, where the formation of parcels has been relevant to define wine specificity, and areas where the interaction between geo-morphological and pedological features of a given territory with a specific crop give rise to a product recognised for its specificities, that is to say, with areas corresponding to denominations of controlled origin (DOC).

The comparative analysis is then developed by examining properties already inscribed on the World Heritage List, properties on the Tentative Lists and finally with other properties. For the purpose of the comparison 23 benchmarks have been identified for the vineyards, 10 for the comparison with parcelled sites and 13 for the comparison with DOC areas. Overall the properties examined encompass 35 properties of which 11 are inscribed on the World Heritage List and 6 on the Tentative Lists of State Parties.

ICOMOS nevertheless requested the State Party to expand the comparative analysis by including three further properties. The State Party provided the additional comparison which strengthens the conclusions presented in the nomination dossier.

While the ancientness and role of land parcelling is not unique to the *Climats* (e.g., Douro Wine Region, Portugal) ICOMOS considers that the comparative analysis with its addendum meets its objectives and provides an extensive examination of the *Climats* vis-à-vis other properties, both at the national and international levels and highlighting their specificity.

ICOMOS considers that the serial approach is justified by the arguments presented in the nomination dossier and particularly in the additional information.

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 1,247 *Climats* outstandingly materialise a vine/wine production model which has been developed since the early middle ages thanks to the actions of the Benedictine monasteries of Cluny and Cîteaux as well as to the informed rule of the Dukes of Burgundy;
- The *Climats* exceptionally illustrate the profound knowledge and expert use of the specific soil micro-conditions and the viticultural know-how built up in a continuing tradition passed on, in most cases, within the same families of farmers and wine-makers;
- The site of the *Climats* is the outstanding result of a centuries-long work that has marked the territory with a clearly readable imprint made up of paths, boundary walls, *clos* (enclosed plots) and *lieux-dits* (named places);
- The *Climats*, with the organisation of settlements, the production places/buildings, the architecture of power that made this territory thrive, bear witness in a unique manner to the construction of a culture rooted in the territory;
- The *Climats* constitute a unique and living repository of technical know-how which has been continuously transmitted and enriched and to which the contemporary homologation may pose a threat.

The State Party considers that the "geo-system" encompassing the *Climats* has been modelled in a long-term historic process by different inextricable geographic, historic, institutional, technical and cultural factors which are embodied by three complementary elements: the *Climats*, as the productive component; Dijon, as the element representing the political impulse; and Beaune, materialising the commercial component.

Whilst considering the justification appropriate, ICOMOS nevertheless notes that, if the Dukes of Burgundy's role is clearly explained, the action of the monastic community in Cîteaux appears only marginally in the nomination dossier: the abbey of Cîteaux disseminated agricultural practices, winemaking techniques and land management methods, which were fundamental for the development of vine-growing and wine-making in Burgundy and throughout Europe, thanks to monastic networks.

The serial approach is justified by the State Party on the ground that the geo-system of the *Climats* site results from different interacting factors among which the role of the Dukes of Burgundy, and of Dijon as their capital, through their political, regulatory and personal support, greatly contributed to the development of the region as an important wine-making hub.

ICOMOS considers that the proposed Outstanding Universal Value is well sustained by a specific *terroir*, combined with a system of classified agricultural parcels (the *climats*), which have progressively come to express the characteristics of the wines therein produced since the 15th century AD.

The approach of the nomination dossier sets the ground for ICOMOS to recognise that the nominated property could also be understood as a vineyard cultural landscape, the basic matrix element of which are the *Climats*.

While this dimension may not necessarily be reflected in the category under which the property is proposed, ICOMOS considers anyway that the landscape nature of the *Climats* needs to be reflected in the scope and objectives of the management.

Integrity and authenticity

Integrity

Overall, in ICOMOS' view the nominated property is of an adequate size to ensure the complete representation of the features and the processes that convey the property's significance.

The area does not suffer from major adverse effects of neglect; the energy and commitment of the vineyard owners ensure the maintenance of the *Climats*, as this is their primary interest. The great economic importance of the vineyards has also contributed to the containment of urban sprawl and to maintaining most of the original features of the villages and the rural landscape.

ICOMOS however observes that, since the 19th century, the structure of the land use has undergone some changes, namely the afforestation with conifers of areas no longer cultivated, and the reduction of the fine-grained structure of the landscape with the disappearance of small features caused by mechanisation in farming practices. These changes have not occurred to such an extent to undermine the integrity of structure of the *Climats*, but require careful monitoring.

ICOMOS also notes that large existing active quarries may negatively affect the landscape values of the nominated property as they impact on its visual integrity, due to their numerousness and concentration.

While ICOMOS recognises that the most relevant aspect of the integrity of the property concerns the retention of the functional linkages and processes that made possible the formation of the *Climats* system and continue to sustain their existence, visual integrity is also an important aspect of the *Climats*.

Finally, in some specific areas, e.g., near Beaune and Chagny or Nuits-Saint-Georges and Gevrey-Chambertin, urban growth and industrial infrastructure require careful attention through adequate urban planning regulations.

Some tall buildings in Dijon cause visual disturbance: stringent monitoring of planning provisions as well as of new building permissions appears necessary.

ICOMOS considers that the integrity of the whole series has been justified. Overall the property does not suffer from neglect, although changes that have occurred to the landscape mosaic need to be monitored and their reversal is advisable. As for the visual integrity, the major issue is represented by some large quarries. Urban development has also caused some impact in some specific areas and requires control.

Authenticity

ICOMOS considers that authenticity has been assessed in a comprehensive way by the State Party. This particularly relies on the continuity of the vine-growing and wine-making business over several centuries, which is visible in the structure of the territory and especially in the *Climats*. Their delimitations are clearly recorded in the cadastre, which is the document attesting to the formal evidence of the *Climats*' localization, extension and ownership, as well as in the AOC (*Appellations d'Origine Contrôlée* – controlled denomination of origin). These reflect in a credible manner the historical process of formation of the *Climats* and the persistence of tradition and ancestral techniques, as well as models of land management associated with agricultural activity.

ICOMOS, however, also believes that the historical process of formation of the *Climats* is evidenced by the several and diverse features scattered throughout the cultivated territory, which have witnessed some loss due to modern farming practices: their conservation, particularly of those elements that make clear the distinction of one climat from the other, is of crucial importance to retain the specificity and micro-diversity of this site.

There is still an alliance between old and modern knowledge, upheld by the persistence of the local vine-growers/wine-makers, who transmit traditional knowledge from one generation to another: this activity still constitutes the basic socio-economic fabric of the region.

In ICOMOS' view, the socio-economic profile represents an element of utmost importance for the sustenance of the values and specificity of the Property.

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, despite the reduction in variety of the landscape mosaic in certain areas.

In conclusion, ICOMOS considers that the conditions of integrity and authenticity of the whole series have been justified. As for individual sites, the conditions of integrity and authenticity are met, despite some reduction in the landscape mosaic variety and the presence of some still-

active quarries. Further issues affecting integrity relate to urban development and tall buildings impacting on some areas.

Criteria under which inscription is proposed

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

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

This criterion is justified by the State Party on the grounds that the geo-system of the viticultural parcels with the villages that have grown up on the Côtés and the towns of Dijon and Beaune is a remarkable example of a historical vineyard site. Vine-growing and wine-making have been continued throughout several centuries thanks to the uninterrupted transmission of tried and tested farming practices as well as to the two-centuries-long scientific and technical knowledge of viticultural practice. The differentiation of the cultivated parcels and of the corresponding *crus* has been accompanied by the progressive formation of a corpus of regulations the outcome of which coincides with the constitution, in France, of the denominations of controlled origin (AOC - *Appellations d'Origine Controlée*) in the first half of the 20th century.

ICOMOS considers that the Burgundy Climats witness an exceptional living tradition which is reflected by the *Climats'* land parcelling, associated with the classification of wines and by the associated productive units and territorial structure. This intimate linkage has been developed along the centuries to be crystallized in the AOCs.

In its second letter, ICOMOS asked the State Party to provide a justification for this criterion that also covers the urban components of the nominated series.

The State Party responded on 28 February 2015 by providing an extended justification for this criterion where it is clarified that the differentiation of the cultivated parcels and of the wines could be achieved thanks to the impetus of Dijon and Beaune, which still play an active role in knowledge building, education, trade and as institutional centres.

ICOMOS concurs with the expanded justification provided by the State Party.

ICOMOS considers that this criterion has been justified for the whole series.

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 Burgundy *Climats* in their historic construction constitute the exceptional materialisation of a centuries-long culture which has grown in the interaction with its environment and the progressively more refined exploitation of the eco-geo-pedological potential and diversity of the territory to achieve a high quality and differentiated product.

The recognition and the progressive establishment of the *Climats* have been made visible through different forms of boundaries that are often still in place (enclosures, hedges, walls, etc.) or paths, which fix the soil specificities of each *Climat*. More than two millennia of human perseverance coupled with the unique natural conditions have transformed this site into the veritable wine-growing region of *terroirs*.

ICOMOS considers that the way the land has been used over several centuries to achieve the specific land parcelling of the *Climats* is an exceptional example of a property justifying this criterion.

In its second letter, ICOMOS requested the State Party to expand the justification of this criterion to also encompass Dijon and Beaune.

The State Party responded on 28 February 2015 providing an expanded justification for this criterion which clarifies that the *Climats* were able to develop under the political, technical and commercial impetus of Dijon and Beaune. Their urban and architectural heritage, associated with the power and the institutions that managed the territory and the production, bears outstanding witness to this cultural construction.

ICOMOS concurs with the proposed expanded justification.

ICOMOS considers that this criterion has been justified for the whole series.

ICOMOS considers that the nominated property meets criteria (iii) and (v) and conditions of authenticity and integrity.

Description of the attributes

The nomination dossier provides a detailed description of the attributes considered relevant to make manifest and understandable the proposed Outstanding Universal Value of the nominated series. Their description should be considered the baseline reference for the protection, conservation, sustenance and monitoring of the property.

In the present report, therefore, only a summary is provided, based on the detailed analysis carried out by the State Party.

Attributes have been grouped according to their functions, i.e., those structuring the organisation of the

site, comprising the layout and distribution of the viticultural villages within the vineyards, the vineyard parcels (the *climats*) with their specific plantation rationale and orientations, the stone walls, and the urban morphologies; the monuments exemplifying the emergence of the *Climats*, e.g., the abbeys and monasteries, the Palace of the Dukes of Burgundy, the Hospitals in Beaune, the Parliament of Burgundy, the State Archives, etc.; the attributes materialising the productive exploitation, e.g., the vineyard settlements, the production units, the cellars and wineries, the stone huts, the stone piles, the trading houses, the quarries; the attributes revealing a scientific culture related to wine, e.g., the oenological institutions; the attributes illustrating a culture of socialisation linked to the *Climats*, e.g., the wine auction, the guild of wine-tasters.

However, ICOMOS does not consider that each and every quarry could be listed as an attribute of the nominated property, particularly as far as those still active and larger quarries (e.g., in Comblanchien) or the continuation of their exploitation are concerned.

4 Factors affecting the property

ICOMOS observes that the urban developments that have occurred in the southern part of Dijon and in Beaune and Chagny, as well as the growth of infrastructures (industries, transportation etc.) in smaller communities, need to be controlled, reducing the risk of further expansion of built areas. Some tall buildings in the southern part of Dijon create a visual disturbance, while in the rest of the nominated property some individual buildings, especially in industrial areas, appear to be not in line with the visual quality of the site.

While the conservation of the *Climats* is not threatened, the internal structure of the landscape mosaic and the single elements scattered in the area (walls, stone piles, trees, etc.) may be subject to degradation or removal in those areas not included in the restricted area (site classé).

Due to the uphill cultivation techniques applied in most of the *Climats*, soil erosion is a frequent occurrence. In certain areas a wider variety of cultivation methods and the smaller size of the cultivated patches alleviate the problem. Traditional techniques, e.g., bringing back up the soil accumulated at the bottom of the slopes can help, as well as allowing the grass to grow between the rows.

Erosion is a natural phenomenon, but climate change and past catastrophic events suggest the need for additional measures, e.g., ensuring maintenance of traditional water drainage systems, stone terraces and stone walls. This would combine well climate change adaptation and conservation of the local traditional knowledge.

While small or abandoned quarries, some of which have been turned into vineyards, may well be considered links between the use of the area and its natural resources,

larger quarries cause visual disturbance to the nominated property.

Upon ICOMOS' request the State Party has provided additional information and a map with the location of all quarries, which are all sited in the buffer zone, in the close vicinity of the boundary of the nominated property.

ICOMOS notes that the density and extension of quarrying areas in the buffer zone and particularly near Comblanchien may negatively affect views towards the nominated property; in addition, the long-term horizons of their exploitation (2040-2050's) suggest that their impacts are likely to last for a long time.

In this respect, it is important that the announced plan for the quarries (*schéma départemental des carrières*) be completed and enforced as soon as possible; limits to the expansion of the quarries, and mitigation/reintegration measures should also be clearly indicated. Finally, consideration should be given by the relevant authorities to the opportunity to not renew expiring extraction concessions.

Tourism is also one of the possible threats to the *Climats*. The number of French visitors appears constant all the year round, while foreign travellers are mostly concentrated during the summer and in the towns (e.g., Beaune). Promoting tourism in the plateau area could be useful in order to reduce excessive tourism pressure on the *Climats*.

Despite the existence of the highway following almost the same line as the regional route RD 974, this is prone to intense traffic, caused by different factors, tourism being one of the most significant.

The dossier recognizes these problems and describes all the tools developed to control them. However, a specific plan for traffic should also be considered by the concerned authorities.

The nomination dossier mentions a project for building 27 wind turbines in the vicinity of the property.

ICOMOS requested additional information in its first letter and the State Party responded by providing a map excerpted from the Burgundy regional wind plan and by specifying that the territory of the municipalities within the nominated property and buffer zone have been identified in the plan as exclusion zones. Additionally, areas located at a distance less than 10km from the buffer zone are also not eligible for wind turbine construction.

In its second letter, ICOMOS requested further updated information on the wind farm Plan for the Burgundy region and the State Party responded explaining that the Plan was adopted in 2012, and the territory of the municipalities included in the nominated property and in the buffer zone has been assessed as areas of exclusion. In the past, 8 turbines were authorised in the buffer zone (Bessey-en-

Chaume) but now this municipality has been excluded from the area of possible development.

ICOMOS considers that the main threats to the property are urban development, disappearance of the micro elements of the landscape mosaic, traffic and tourism pressures, energy infrastructure development, and quarrying activity. While establishing regulatory protection may improve the situation for all other threats, traffic and tourism would require specific management strategies that need to be integrated into the enforced planning framework.

5 Protection, conservation and management

Boundaries of the nominated property and buffer zone

The boundaries of the nominated components have been determined by means of geo-morphological, physical and cultural criteria. The boundaries are said to reflect: the size of the geo-system of *Climats*, including the parcels, the urban centres and villages directly linked to the development of the vineyards and the major communication routes which structured the region; the area with the highest concentration of identified attributes expressing the development and exploitation of the parcelled territory; and the limits of this cultural heritage at its most developed stage, that is, the end of the 19th century, beginning of the 20th century.

The boundaries of the nominated property are shown clearly on the series of maps contained in the nomination dossier. They include the area resulting from the historical evolution of the *Climats*, as can be seen by the series of historical maps presented in the dossier.

In its first letter, ICOMOS requested additional explanation and cartographic documentation concerning the Dijon component. The State Party responded on 5 November 2014, providing the required material.

In its second letter, ICOMOS suggested that the State Party consider reducing the boundaries of the Dijon component to include only the area encompassed by the *secteur sauvegardé*, as the majority of the attributes related to the justification for inscription are concentrated in this area.

The State Party responded on 28 February 2015 concurring with ICOMOS' view on the opportunity to reduce the boundary of the Dijon component to the *secteur sauvegardé*, where the majority of the attributes are located, and providing revised cartographic documentation with the boundaries modified accordingly. The State Party also informed that the late 19th – early 20th century expansions of Dijon will be included in an AVAP (*Aire de Valorisation de l'Architecture et du Patrimoine*), officially decided in June 2014 by the Municipality of Dijon.

ICOMOS considers that the components of the series reflect the proposed Outstanding Universal Value. The *Climats* component can be considered of adequate size to illustrate the processes and their tangible and intangible evidence that supports the proposed Outstanding Universal Value.

In conclusion, ICOMOS considers that the boundaries of the nominated component encompassing the *Climats* are adequate and justified and, following the modifications of the boundaries of the Dijon component, the boundaries of the nominated serial property also are adequate and justified. The boundaries of the buffer zone are adequate.

Ownership

The nominated property and particularly the *Climats* are for the most part privately owned, public buildings and land are in the ownership of the Department of Côte-d'Or or of the State.

Protection

The State protection relates to the Heritage Code, the Urban Code, Environmental Code, the Rural Code and the Forest Code. Several items and areas within the nominated property and its buffer zone are already covered by specific measures according to the laws incorporated into the above-mentioned codes and are listed in the nomination dossier.

The State Party has underlined the role of the Appellations of Controlled Origin and the associated *cahiers des charges* as effective forms of protection for the *Climats*, in that they establish in detail standards for vine farming, wine-making and for the characteristics of the soil.

However, a comprehensive map illustrating protection areas was necessary, therefore ICOMOS asked for additional documentation from the State Party, who responded on 5 November 2014 providing additional maps and explanations.

On the basis of the additional information, ICOMOS observes that a large part of the nominated property is not covered yet by specific regulatory protection measures. The same consideration applies to the buffer zone, as only part of its territory is included in protected areas, which were established mainly for their natural values.

The *cahiers des charges* for the denomination of origin certainly represent a crucial instrument for the protection and the perpetuation of the *Climats*. However, ICOMOS notes that they do not define all necessary measures to protect all the attributes of the nominated property, e.g., stone walls, stone piles, stone huts, water channels, hedgerows, isolated trees, etc., therefore, the protection they grant does not appear currently adequate or complete to ensure effective protection to all relevant attributes of the proposed Outstanding Universal Value.

The urban and built heritage in Beaune is protected by mechanisms set up for the buffer zones of classified monuments (*abords des monuments*). ICOMOS considers that it would be important that the historic urban and built fabric of the town be protected through appropriate measures in their entirety.

With regard to the planning framework, the Schéma de Cohérence Territoriale – SCOT (plan for territorial coherence) is considered the most important instrument that should ensure coordination of the planning system to the area to which it applies.

As explained in the additional information provided by the State Party in November 2014 upon ICOMOS' request, planning provisions and provisions of municipal master plans (PLU) should be compatible with the objectives pursued by the SCOT. One year is allowed to Municipalities for this process, while adaptation of the land-use plans (POS) is immediate upon approval of the SCOT; if this is not enforced by 1st January 2016, POS validity ceases and they are replaced by the National Regulations for Urban Planning until a new PLU is approved.

Two SCOT's are said to apply to the nominated property – the SCOT of Dijon region (in force since 2010), the SCOT of the Agglomerations of Beaune and Nuits-Saint-Georges (in force since April 2014); however, small parts of the nominated property and of the buffer zone fall under the SCOT for the Châlonnais and the one for Autunois-Morvan.

It would be equally desirable that the objectives of the various SCOT's covering the nominated property and its buffer zone be consistent with those of the protection and sustenance of the proposed Outstanding Universal Value.

ICOMOS also observes that not all villages are covered by local plans (PLU): some have POS or even municipal charters. It would be desirable that all municipalities within the nominated property and the buffer zone develop a PLU, also in association with other municipalities.

The additional information provided by the State Party explains that mechanisms to strengthen the protection of the buffer zone on its eastern side have been studied and municipalities within a distance less than 10km from the buffer zone have been earmarked as areas of exclusion for wind turbine construction.

ICOMOS considers that this measure is very helpful and should be enforced as soon as possible; nevertheless, careful assessment of the impact of wind turbines planned in farther areas need anyway to be undertaken, due to the open character of the territory towards the east of the nominated property.

In its second letter to the State Party, ICOMOS requested updated information on the advancements made in the protection strengthening process.

The State Party responded on 28 February 2015 informing that Beaune and 9 further municipalities of the agglomeration communities of Beaune, Côte et Sud and of Pays de Nuits-Saint-Georges have initiated the procedures for the establishment of an AVAP, which is planned to be completed by the end of 2017. Additionally, the State Party underlines that currently the protection of the urban fabric of Beaune is granted by multiple tools: buffer zones of 32 protected monuments, 10ha protected as *sites classés* and 45,95ha protected as *sites inscrits*. Additionally the planning provisions aim at improving the architectural, urban and landscape quality of the city and they are accompanied by a local by-law to regulate advertising signs.

ICOMOS considers that the AVAP being established for Beaune and the other municipalities represents a very important instrument for the control of urban development and its quality. During the period of the development of the AVAP, it is however important that safeguarding measures ensure that the historic urban landscape of Beaune is retained.

As for the Climats, the State Party informs that the southern Côte de Beaune was registered as a *site classé* in 1992 and explains in detail the protective mechanisms in force. Additionally, the procedure to set up two further *sites classés* – the extension (8 municipalities concerned, 4,000ha covered) to the north of the existing *site classé* of Côte de Beaune and an area covering the Côte de Nuits (12 municipalities involved, 4,900ha covered) – has been initiated and their finalisation is expected by 2016/2017 and 2017/2018 respectively.

The State Party also informs that 14 municipalities have formally committed themselves to initiating the studies to establish AVAPs, and their regulations (*cahiers des charges*) will foresee the inventory and specific preservation measures of the small elements that delimit the vineyard parcels.

ICOMOS acknowledges the effort made by the concerned authorities at all levels to grant an adequate protection for the nominated property and its buffer zone; the establishment of two additional *sites classés* covering large parts of the Climats and sensitive areas in the buffer zone and of several AVAPs is an important sign of commitment.

However, ICOMOS observes that the area south of Beaune enclosed between the road D974 and the railway is not protected nor is it included in any special project area (as it is the case for a landscape rehabilitation project for the quarry area north of Beaune). The perimeters of the planned AVAPs for the 14 municipalities are not known, so it is not clear whether they will cover the entirety of the municipal territory encompassed within the nominated property, or only concern the built up areas.

ICOMOS also notes that no implementation timeframe is provided for the above mentioned AVAPs.

ICOMOS therefore considers that a process to extend the *site classé* of the Côte de Beaune to also encompass this area should be initiated, so as to achieve the same level of stable protection for the whole of the nominated property.

With regard to the wind farm plan for the Burgundy region, the State Party informs that it was approved in 2012 already with an indication of areas of exclusion for the nominated property and its buffer zone, as well as an area of 'reinforced vigilance' in municipalities located at less than 10km from the area of exclusion. In this area, wind farm projects will be subject to strict control of their possible impacts.

ICOMOS observes that, to the east of the property, 10km as the limit of attention may not suffice, due to the open character of the landscape, with wide views towards the Saône plain, therefore any proposed installation of wind turbines that may impact on the nominated property will require a Heritage Impact Assessment to be submitted to the World Heritage Committee via the World Heritage Centre.

In conclusion, ICOMOS considers that the legal protection in place will be fully adequate when the entire nominated property is covered by regulatory protection measures. This applies specifically to the areas not included in the existing or planned *sites classés*. ICOMOS considers that the planning framework, particularly the SCOTs and their landscape quality objectives, is adequate, although adaptation of local plans to the SCOT's objectives and rationale is of utmost importance. It is equally desirable that all municipalities progressively upgrade their planning instruments to the PLU level. ICOMOS considers that the 10km-wide area of reinforced vigilance for wind turbines may not be sufficient in areas to the east of the nominated property, due to the open character of the landscape, therefore a Heritage Impact Assessment for any wind turbine project is necessary.

Conservation

Guidelines have been developed for the maintenance of the stone walls and other dry-stone features; however, in some cases techniques adopted in the maintenance or reconstruction of these features do not appear appropriate for the preservation of their specificity.

Inventories and recording have been undertaken on a systematic basis within the nominated property and have already provided considerable results; however the micro elements of the rural territory would need a specific systematic mapping. An updated map of the Climats indicating their physical limits and specific land use would also be useful for monitoring purposes.

With regard to the built heritage, programmes at the municipal level for its rehabilitation are in place in some municipalities following national initiatives.

In this regard, ICOMOS requested additional information from the State Party.

The State Party responded on 5 November 2014 providing detailed information on a variety of conservation programmes, strategies and supporting mechanisms carried out or active within the nominated property.

ICOMOS nevertheless considers that strategies to integrate the conservation of the micro attributes of the landscape mosaic into the programmes of rural policies should be envisaged and extended to the nominated property in its entirety, as currently these elements appear to be effectively cared for only within the *sites classés*. In particular, more attention to the reconstruction methods of the dry-stone walls would be beneficial.

In the additional information provided by the State Party, it is also mentioned that a landscape plan covering 10 municipalities concerned with the quarrying district is envisaged.

ICOMOS considers that its elaboration and implementation is of utmost importance to mitigate the impact of existing quarries and in its second letter, sent in December 2014, ICOMOS requested additional updated information on the advancement of this project and its implementation.

The State Party responded on 28 February 2015, informing that the Landscape Plan for the quarrying area has been developed in agreement with local stakeholders, i.e., the quarrying enterprises, who will also be the co-funders to implement the project. It is structured around three topics – analysis, definition of objectives and of actions – and may include the signing of a 'landscape contract' which engages all actors to carry out identified actions. It is planned to begin in January 2016.

Additionally, the State Party explains that the municipalities of Chenôve, Dijon and Marsannay-la-Côte have begun a rehabilitation project in 2015, with a view to improving the landscape character of the area between Dijon and the Climats.

The objectives of the two SCOTs have been explained and they demonstrate a due consideration for the values of the nominated property, the role of the buffer zone and of its wider setting, particularly towards the east.

ICOMOS considers that the additional information provided by the State Party clarifies important aspects for the overall conservation and maintenance of the nominated property and of its buffer zone.

In conclusion, ICOMOS considers that the elaboration and implementation of the Landscape Plan for the quarrying district is crucial for protection of the value of the nominated property. Equally, a Heritage Impact Assessment should be carried out for the Landscape Plan along with the elaboration of the project, and

submitted to the World Heritage Centre. Additionally, elements related to traditional farming would need comprehensive recording and mapping.

Management

Management structures and processes, including traditional management processes

The overall management system is based on the responsibilities and competences of the different authorities and bodies established by the institutional framework in force in the State Party and include: the peripheral branches of the State, the municipalities, four inter-municipal cooperation bodies, the Agencies for the implementation of the two SCOT's (Dijonnais and Beaune Nuits-Saint-Georges), and representatives of the vine-wine professions.

In order to achieve coordination amongst all actors responsible for the nominated property and its buffer zone, a Territorial Charter was signed in 2011. This defines common objectives and orientations and represents the core document engaging all signatories in the protection and sustenance of the nominated property within its wider territory.

To ensure the effective management of the property and of its buffer zone, an articulated structure was established in 2013 named *Mission Climats de Bourgogne*, which includes a decisional coordinating body (the territorial conference), an operational body (the permanent technical commission), advised by a scientific committee, and a participation forum of citizens and civil society. The expertise of the commission relies on the technical competences of the permanent staff of existing offices.

Financial resources for the functioning of the Mission are allocated by each body and organisation involved within their ordinary budgets. Human resources also come from the respective permanent staff. On the other hand, the resources needed to carry out envisaged management actions come from the multi-annual operational programmes of territorial bodies.

ICOMOS has requested additional information on financial resources from the State Party, who provided an overview of the available programmes and a list of projects carried out or underway within the property and its buffer zone.

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

The management system is grounded in the existing legal and planning instruments to ensure the safeguarding of the nominated property and its attributes.

A management document has been elaborated (latest version August 2014) describing the management structure and the strategic action plan. The envisaged actions are accompanied by cards illustrating syntheses of goals, deliverables, implementation timeframe,

responsible institution, and human and financial resources.

Both protection and management, particularly of the buffer zone, relies mainly on protected areas established for natural values. However, ICOMOS observes that the vegetation composition of the buffer zone results from centuries-long human management practices, therefore it would be worthwhile that management embraces the notion of bio-cultural diversity (CBD – UNESCO declaration).

The experiments undertaken by the Forest National Office in the forest of Cîteaux to re-establish the links between woods and the vineyards should be further developed so as to integrate forest management with farming activities.

ICOMOS further notes that, since a minor part of the nominated property and of its buffer zone falls outside the department of Côte-d'Or (Department of Saône-et-Loire), it would be important that steps be undertaken to ensure coordination and harmonisation of regulation and planning provisions between the two departments, to avoid possible negative impacts deriving from activities carried out in or authorised by the Department of Saône-et-Loire.

As for risk management, upon ICOMOS' request the State Party provided additional information, which clarifies that a risk prevention plan does exist and it is the responsibility of the State and that specific flood prevention plans and mappings are under elaboration.

Involvement of the local communities

The management structure set up for the nominated property shows also the level and maturity of engagement of the local communities in their ability to respond to such an undertaking.

In ICOMOS' view, the management architecture that has been set up seems to ensure both dialogue and effective synergy and operational coordination among the actors, including local communities.

In conclusion, ICOMOS considers that the management system for the property is adequate, although it could be extended to take into account the notion of bio-cultural diversity according to the CBD – UNESCO declaration. ICOMOS also underlines that steps undertaken to grant coordination of the planning instruments between of the Departments of Côte-d'Or and Saône-et-Loire should be continued.

6 Monitoring

ICOMOS considers that, besides the indicators already proposed in the dossier, a monitoring system capable of taking note of the changes occurring in the landscape mosaics should be developed as a basis for appropriate management strategies.

ICOMOS considers that the monitoring system should be extended to all the elements forming the landscape mosaic.

7 Conclusions

The 1,247 Climats of Burgundy materialise in an outstanding manner the long-lasting relationship of the local human communities with their territory and their ability to identify, exploit and distinguish their differences and potential already centuries ago.

The process of construction and of differentiation of the Climats in relation to the characteristics and qualities of the wine produced has been long and complex, resulting from the action of several actors: the monastic communities stemming from the abbeys of Cluny and Cîteaux, the Dukes of Burgundy, the bourgeoisie, the commissioners and the *maisons de négoce*, the independent vine-growers and wine-makers.

These many factors are convincingly and outstandingly illustrated by the components of the series and the functional role played by the rural areas, with the vineyards, villages and production units, and by the urban elements (Dijon and Beaune). These include attributes illustrating the regulatory and commercial factors that contributed to the growth of the wine-making tradition of the region and to shape progressively the differentiation of the Climats in relation to their features (soil composition, exposure, slope, etc.) and to the peculiarities of the wines obtained from grapes produced therein.

The State Party has decided not to nominate the Climats of Burgundy as a cultural landscape but as a cultural site in that the landscape expression of the Climats would not convey in an adequate manner the specificity of this vineyard model which has been modelled throughout the centuries as a functional and coherent geo-system.

ICOMOS notes that this decision seems to underlie an understanding of cultural landscapes that only refers to aesthetic and visual dimensions, overlooking the importance that this notion assigns to historical processes and to the continued human interactions with a specific territory.

ICOMOS recognises that the major attribute of the *Climats* resides in the permanence and sustenance of the specificity and delimitation of each *Climat* in association with the peculiarities and features of the wine types, a linkage rooted in the continuity of the know-how in vine-growing and wine-making. However, the nomination dossier itself also identifies micro elements that contribute to physically define the *Climats* and their rural territory as a cultural landscape, and includes them among the attributes that make manifest the Outstanding Universal Value.

In ICOMOS' view, these features need particular attention as changes in farming methods may continue to cause their loss, as has already occurred in the past; therefore systematic inventories of these features and of programmes for their maintenance and rehabilitation where needed should be put in place.

In this regards, it is important that the landscape nature of the Climats is reflected in the scope and objectives of the management, even if the property has not been nominated as a cultural landscape.

ICOMOS asked for additional information in two different phases of the evaluation process and the State Party's responses helped clarify a number of aspects. In particular, ICOMOS underlines the exceptional quality and detail of the maps of the nominated property and of its buffer zone prepared by the State Party. However, the legal protection, although being reinforced for some parts of the nominated property, does not cover, at present, its entirety, as the area south of Beaune is not covered by specific designations (e.g., *site classé*, *site inscrit*, etc.).

The planning and management system shows a high level of interconnectedness and articulation that, if well coordinated in relation to the values of the nominated property, constitute the appropriate framework for the compatible and sustainable development of the property within its wider region and for the rehabilitation of areas, the integrity of which has been undermined.

The management structure has been conceived to be representative and inclusive, and represents an important platform for the reinforcement of the political and community vision for the property and for the assumption of clear responsibilities in relation to factors currently affecting the property, namely the quarrying activity, the appropriate location of new energy infrastructures, the protection and reinforcement of the landscape qualities of the *Climats* vis à vis the exigencies of vine-growers and wine-makers, the wise management of tourism and the reduction of traffic.

8 Recommendations

Recommendations with respect to inscription

ICOMOS recommends that the nomination of the Climats, terroirs of Burgundy, France, be **referred back** to the State Party in order to allow it to:

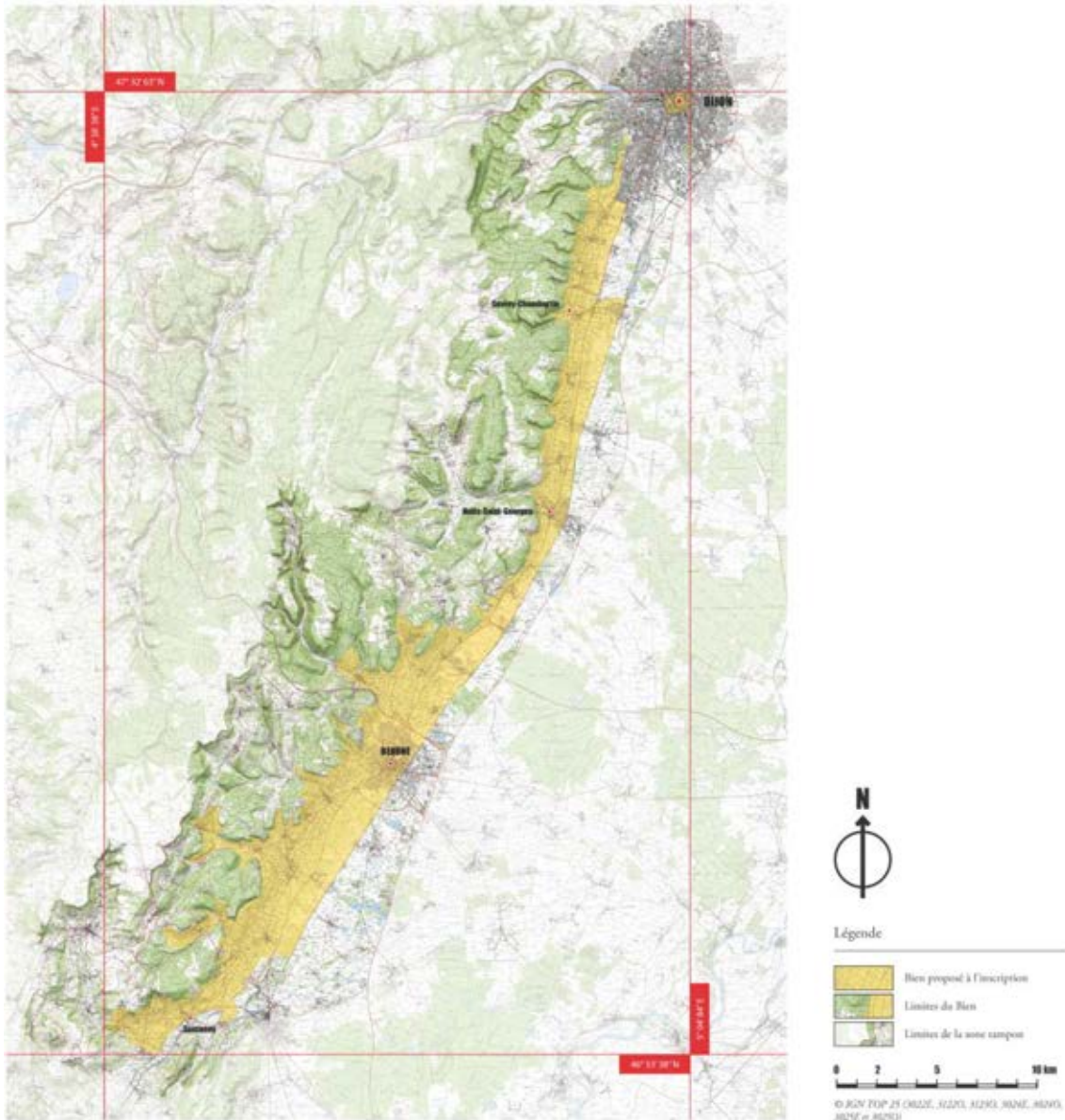
- Extend the protection through regulatory instruments (e.g., sites classés, sites inscrits, AVAPs, etc.) to the entire nominated property, particularly to those areas south of Beaune, between the RD974 and the railway, which do not appear to be included in any existing or planned site classé nor covered by the Landscape Plan of the central zone of the nominated property, so that all attributes that materialise the historical development of the Climats be protected;

- Finalise the landscape plan and related cahiers des charges for the quarry district within the nominated property and prepare a Heritage Impact Assessment for the plan in accordance with ICOMOS Guidance on Heritage Impact Assessments for Cultural World Heritage Properties.

Additional recommendations

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

- Developing traffic and tourism-specific management strategies to be integrated into the enforced planning framework;
- Continuing the process of coordination and harmonisation of goals with the Department of Saône-et-Loire for planning provisions and projects to avoid negative impacts on the attributes of the nominated property;
- Ensuring the prompt adaptation of local plans to SCOT objectives and rationale, and sensitizing municipalities to upgrade progressively their planning instruments to the PLU level;
- Including the notion of bio-cultural diversity according to the CBD – UNESCO declaration within management ;
- Operationalising the management system so as to manage the property as one entity and as a cultural landscape, paying special attention to the landscape's man-made elements;
- Extending the monitoring system to the elements of the landscape mosaic and map these elements at an adequate scale of representation for conservation planning and monitoring;
- Considering not renewing expiring quarrying concessions, particularly for quarries impacting, visually or geo-hydrologically, on the nominated property.



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 MODIFIÉE LE 14/02/2015

Map showing the boundaries of the nominated property



Coteau de Beaune and Pommard



Walls and portals of the Montrachet vineyard



Meurger in Chassagne-Montrachet vineyard



Drouhin cellars

Champagne Hillsides, Houses and Cellars (France) No 1465

Official name as proposed by the State Party

Champagne Hillsides, Houses and Cellars

Location

Champagne-Ardenne, Marne
France

Brief description

The Champagne hillsides, houses and cellars encompass the areas and places where the method of production of sparkling wines was developed from its beginnings in the 17th century until its early industrialisation in the 19th century. The components of the serial nomination, clustered into three distinct groups – the historic vineyards of Hautvillers, Aÿ and Mareuil-sur-Aÿ, the Saint-Nicaise Hill in Reims, and the Avenue of Champagne and Fort Chabrol in Epernay - reflect the key processes of this agro-industrial system as well as the milestones of its evolution from a refined artisanal craft to a capitalist, site-based enterprise.

Category of property

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

In terms of the *Operational Guidelines for the Implementation of the World Heritage Convention* (July 2013) paragraph 47, it is a *cultural landscape*.

1 Basic data

Included in the Tentative List

1 February 2002

International Assistance from the World Heritage Fund for preparing the Nomination

None

Date received by the World Heritage Centre

16 January 2014

Background

This is a new nomination.

Consultations

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

Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the property from 6 to 10 October 2014.

Additional information received by ICOMOS

On 23 September 2014, ICOMOS sent a letter to the State Party requesting additional information on the following aspects:

- the rationale adopted to select the components of the nomination and to define the boundaries of the nominated components;
- the expansion of the comparative analysis so as to include a few further relevant examples;
- safety and accessibility measures and requirements for underground spaces;
- current or planned projects within the nominated areas and their buffer zones;
- finalisation and approval of the prevention plan for the nominated property;
- the protection measures in place or planned for the nominated property and the buffer zones,
- the structure and stage of development of the management system and of the management plan and the monitoring system.

The State Party responded on 28 October 2014 and the additional information provided has been incorporated into the relevant sections of this report. On 3 November 2014 the State Party also provided an English version of the additional information report.

On 22 December 2014, ICOMOS sent a second letter to the State Party seeking further additional information on the following points:

- the need to extend the boundaries of the buffer zone of the Epernay component to encompass the underground cellars and to provide it with specific protection measures for the cellars;
- the need to finalise and enforce the regulatory protection of the nominated series;
- the need to formalise a commitment for a heritage impact assessment on the wind farm projects of Thibie and of Pocancy-Champigneul.

The State Party responded on 24 February 2015 and the additional information provided has been incorporated into the relevant sections of this report.

Date of ICOMOS approval of this report

12 March 2015

2 The property

Description

The Champagne hillsides, houses and cellars encompass the areas and places where the method of production of sparkling wines was developed from its beginnings in the 17th century until its early industrialisation in the 19th

century. The serial nominated property occupies a small part of the much larger current AOC vineyard region and includes fourteen elements that have been grouped into three clusters – vineyard hillsides, houses and cellars – and selected on the grounds of geomorphological, functional and historical criteria. These are located in three different places: the Saint-Nicaise Hill in Reims, the Avenue of Champagne in Epernay, and the villages of Hautvillers, Aÿ and Mareuil-sur-Aÿ. Epernay and the nominated vineyards lie in the Marne Valley and form a single territorial unit; Reims, with the Saint-Nicaise Hill, rises up to the north of the other clusters from which it is separated by a forested plateau and by the northern side of the Montagne de Reims.

The nominated components reflect the key processes of the agro-industrial system for the production of sparkling wine developed over the centuries from a refined wine-making craft.

The Champagne wine region is the northernmost area for vine-growing and the variability of its climate has a considerable influence on grape productivity; on the other hand the milder summer sun exposure and temperature allow for long maturation of the grapes and for the refinement of flavours.

The geomorphology of the region, characterised by sedimentary chalk formations belonging to the Paris basin, is the other key factor in the development of champagne. The limestone substrate acts as a water reservoir: rain and surface waters are rapidly absorbed and later released according to the rock porosity and the above-ground environmental parameters, thus allowing the vine plants to receive an adequate amount of water throughout the growing season. On the other hand, the poverty of nutrients in the limestone substrate has been compensated for by cultivation and reworking of the soil over the centuries.

The soft limestone and its early exploitation as a building material have left an important legacy that was revealed to be crucial for the development of large scale champagne production: former underground quarries were converted into cellars to exploit their stable micro-climate, which was found to be favourable for re-fermentation and champagne maturation. The softness of the stone substrate also facilitated the extension of underground cellars.

The production method of champagne involves a sequence of key passages: the rapid pressing of the grapes (mainly chardonnay, pinot noir, and meunier) that has to be carried out as early as possible after the harvest; the cleaning of the must; the re-fermentation in bottles, which produces, under stable climatic conditions, the CO₂ responsible for the effervescence. Re-fermentation causes the degradation of the yeast, forming a sediment which needs to be removed: this has been achieved by progressively turning the bottles so as to move the yeast residue into the bottle neck from which it is removed (nowadays, after localised freezing).

This complex process has affected the entire production sequence, its organisation and its spaces: e.g., the re-fermentation in bottles requires extremely extended cellars with very stable climatic conditions, and, in the absence of the limestone quarries, it would not have been possible to obtain these conditions without major technical and financial investment.

The territorial structure of the region and particularly of the nominated serial property has been marked by the entire economy of Champagne in its rural, urban and industrial dimensions: human settlement is still concentrated in compact villages that grew up in areas not suited for vine-growing, champagne-related industries also flourished to support this agro-industrial district (e.g., bottle and cork production), and the existing long-distance communication network was further developed through the construction of the railway, facilitating the distribution of champagne.

The description of the components is organised according to the three clusters in which they have been grouped: the historic hillsides of Hautvillers, Aÿ and Mareuil-sur-Aÿ, where champagne was pioneered; the Saint-Nicaise Hill in Reims and the Avenue of Champagne in Epernay, where specific districts developed for its production and commercialisation. From a functional perspective, the clusters comprise elements reflecting different aspects of the production chain: the supply source of the grapes - the vineyards; the places for the production of champagne – the cellars; and those for its commercialisation – the marketing houses. Although the clusters include elements belonging to different production phases, each of them exhibits a different concentration of functional elements, so that each cluster preferentially reflects one of the identified key phases.

Part 1 – the historic hillsides of Hautvillers, Aÿ and Mareuil-sur-Aÿ

The cluster includes seven components, reflecting mainly the phase of vine cultivation and grape-growing, with the three vineyard hill areas of Hautvillers, Aÿ and Mareuil-sur-Aÿ, which are complemented by four underground elements representing the earlier system of cellars. The selected vineyard areas correspond to the most ancient vine-cultivated hillsides to be documented.

The historic vineyards include the first areas of vine cultivation, the villages of Hautvillers, Aÿ and de Mareuil-sur-Aÿ and the grounds and the vestiges of Hautvillers Abbey, the Chateau of Montebello, as well as the viticultural infrastructure, such as the harvest huts and the presses which allowed grape processing in the immediate proximity of the vineyards, thus limiting as much as possible its transportation after the harvest. The underground heritage encompasses several cellars, among which is worth mentioning the Thomas cellar, which is the most ancient among the ones dug specifically to stock champagne (1673 AD), and the cellar of the Chateau Montebello (1770-1780 AD). In Aÿ and Mareuil-sur-Aÿ the cellars extend upstream from the villages below the vineyard sides.

The buffer zone extends into the rest of the vineyard region and to the villages of the hillsides including the communities of Cumières, Champillon and Mutigny, and one part of the forests delimiting the upper part of the hillsides. For visual and functional reasons, it encompasses the visible landscape unit as well as the forest on the upper part of the hillsides, as it was the forest that served the vineyards for their management.

Part 2 – Saint-Nicaise Hill in Reims

The component has been chosen to illustrate the integration of the champagne production process into the landscape and the effect upon the urban structure of the Champagne Houses. Saint-Nicaise Hill includes four components, three of which are below ground - the Charles Heidsieck, Ruinart, Pommery and Veuve Clicquot cellars, the Taittinger cellars (inside the medieval enclosure, under Saint-Nicaise Abbey) and the Martel cellars (old quarries reused since the 18th century) – and the above-ground part of the Hill.

This comprises enclosures with urban vineyards, public spaces and parks (Parc de Champagne, Chemin Vert, Saint-Nicaise Church), illustrating the patronage and social initiatives by the Champagne Houses, complemented by industrial buildings and grand residences belonging to the heads of the Houses, (e.g., Chateau des Crayeres and Villa Demoiselle).

The most extensive network of underground galleries can be found here: former chalk quarries have been reused as cellars and connected via galleries to maximise their use. Their existence is revealed on the surface by vent structures emerging in vineyards and parks.

The buffer zone includes two distinct areas historically and morphologically connected to the component: the collective residential district situated between Saint Remi Cathedral and the Aisne Canal, the glass-making district and the university campus of Moulin de la Housse, thus ensuring the visual protection of the nominated component.

Part 3 – the Avenue of Champagne in Epernay

This cluster encompasses both above-ground and underground components: the Avenue of Champagne with the champagne showcasing facilities and the cellars, and Fort Chabrol as well as vineyards.

From the 18th century onwards, the champagne merchants erected along this road – an important transport route from France to Germany - their headquarters, with production and reception facilities, cellars, as well as their dwellings. By virtue of the elegance and richness of the buildings, courtyards and gardens constructed by the Champagne Houses, the Avenue reflects the key role of trade in the development of champagne and its associated territory.

Fort Chabrol houses a research centre which was crucial for the recovery of vine cultivation after the spread of

phylloxera and bears witness to the know-how developed to preserve vine-growing and to the solidarity amongst the champagne stakeholders. The buffer zone includes a large part of Epernay, almost corresponding to the ZPPAUP protection zone (*Zone de protection du patrimoine, architectural, urbain et paysager*).

History and development

Vine cultivation in the region was introduced in the Gallo–Roman era (2nd century AD) but it was only with the spread of monastic orders in the 6th -7th centuries that the territory was colonised by abbeys (e.g., Saint Pierre d'Hautvillers), after which vineyards expanded and wine-making started being systematically practiced. Although much less diffused and documented, vine cultivation was not restricted to monasteries but was also an activity pursued by the gentry and the middle classes, interested in the revenues that wine-making yielded. On the other hand, the grape growing was carried out by tenants, a fact which is reflected in the small size of the plots.

The first wines produced were mostly red and still and had already been commercialised, since the 12th-13th centuries, when the need for financial resources by the monasteries encouraged the improvement of their wine production. This impulse drove the expansion of both demand and production: champagne wines found their way to Paris and to northern Europe, preparing the ground for the champagne revolution which took place in the 17th century in the vineyard area around Epernay and Hautvillers.

The first recognised protagonist of this revolution was the monk and wine-maker Dom Perignon who set the foundations of modern viticulture and wine-making.

The movement from still to sparkling wines owed a debt to England, where the passion for effervescence encouraged in the late 17th century the search for a stabilised production process, which could be helped by scientific advancements of the 18th century. It was once again in religious complexes that further achievements were reached in defining the methodology for sparkling wine production.

The real change, however, happened when new investors entered the wine sector. They brought into this thus-far traditional activity their industrial and commercial experience developed in the textile sector as well as significant financial resources, paving the way for the swift progress towards the industrial production of champagne in the 19th century. Within one century the production increased tenfold, mainly to be exported abroad: an internationalisation which has to be regarded as a founding element of the fortunes of champagne. Initially involved in the commercialisation and distribution, the new investors became, over time, wine producers themselves, whilst grape growing remained in the hands of local vine-growers.

The development of champagne production accompanied the progress of France from a traditional to a capitalist society, giving rise to a precocious agro-industrial system at the dawn of French industrialisation.

These changes in production and marketing attitudes also had a significant impact on the social and manufacturing structure. Reims was an important centre for wool textile production and commerce and, at the beginning, wine commercialisation was seen as a complementary activity to increase revenue but, with the growing fame of champagne and the decline of the textile sector, merchants turned strongly towards this enterprise.

The scale change in production caused the expansion of vineyards which extended over most of the hillsides around Epernay and Reims, and also brought substantial modification to the urban structure, the architectural language and the industrial profile of these towns.

Facilities required more and more space, therefore the Champagne Houses moved bit by bit outside the centre of Reims to occupy the Saint-Nicaise Hill, where numerous underground limestone quarries, exploited to build Reims, were located. These spaces enjoyed the most suitable indoor climate for the maturing of champagne and so were then turned into cellars, further expanded and connected with additional galleries. A similar process occurred in Epernay, where the Champagne Houses settled along the old trade road, built their production and showcasing facilities, and hollowed out an extensive network of cellars where modern equipment helped the improvement and stabilisation of the product.

The modernisation and expansion of wine production was accompanied by the improvement of long-distance communication routes through the opening of the man-made canal of the Marne river (1855) and the construction of the railway (1854). The Saint-Nicaise Hill proved to be a strategic location and several Champagne Houses placed their headquarters there.

The spread of phylloxera marked the beginning of a difficult period for champagne that ended only after World War II, when the remedial actions undertaken during the previous decades (e.g., the Champagne AOC recognition in 1935), coupled with the second industrial revolution and years of peace, could come to fruition and further expand internationally the potential of champagne.

3 Justification for inscription, integrity and authenticity

Comparative analysis

The nomination dossier has identified for each selected criterion a number of 'indicators' corresponding to the values identified for the nominated property; thirteen in

total have been singled out. Each indicator has been explained and contextualised so as to clarify the scope of its use in the comparative analysis and the rationale for the selection of examples and typologies of property, namely vineyards, agro-industrial product-related properties, properties related to industry and to the territory.

Fifty-three properties have been examined, out of which fourteen are related to viticulture, five to distillation, five relate to agro-industry in general, sixteen are related to resource extraction and fourteen to industry and infrastructure.

ICOMOS considers that the comparative analysis has been extended much beyond its relevant scope, by including thirty properties not associated with alimentary products. However, the overall architecture of the comparative analysis, although obviously built to demonstrate the specificity of the nominated property, contains elements of general validity, namely the clarification of the basic factors influencing production-related facilities and urban/territorial transformation and social phenomena, in relation to the natural resources exploited and to history.

Nonetheless, in October 2014 ICOMOS asked the State Party to expand the comparative analysis to include other areas where sparkling wines are produced, (e.g., the Prosecco Hills of Conegliano and Valdobbiadene on the tentative list of Italy), which were not mentioned in the first comparison.

The State Party submitted a supplement to the comparative analysis, examining the Prosecco Hills and the Vineyard Landscape of Piedmont: Langhe-Roero and Monferrato (Italy (2014), (iii), (v)), demonstrating the historical, technological and representational relevance of the nominated property also compared to these additional properties.

Upon ICOMOS' request, the State Party further clarified that the components of the series had been selected on the grounds of geography, historicity and representativity criteria. The identified selective factors are: the presence of the chalk formations on the surface, the historic grape supply basin, and the most relevant industrial heritage.

ICOMOS considers that the additional explanation provided has clarified the selective approach, which appears fully justified.

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:

- Overall the serial property illustrates in an exceptional manner how the evolution of champagne production from a highly specialised artisanal activity to an agro-industrial enterprise has left its mark on the territorial, landscape and urban structures, through the establishment of Champagne Houses with their showcasing and productive units, and through the adaptation of former quarries as cellars;
- The historic hillsides along with Hautvillers Abbey bear witness to the first experiments carried out from the 17th century onwards to set up a stable and reproducible methodology to obtain sparkling wines; the villages, the first champagne houses and related cellars illustrate the specific relationship between the supply basin – the hillsides – from where the grapes were taken, the chain of production and the commercialisation of champagne;
- The Saint-Nicaise Hill in Reims outstandingly illustrates the role played by the production facilities and infrastructures in defining the urban structure and fabric of Reims; the former quarries now used as cellars attest to the importance of the peculiar geomorphology of the region in the rise of champagne as an industrial production as well as to the ingeniousness of wine-makers in taking advantage of this resource;
- The Avenue of Champagne in Epernay, with the commerce houses, the production facilities, the showcasing spaces and the underground cellars, illustrate exceptionally the close interrelations between production, distribution and marketing of champagne, as well as the importance of communication and trade routes in facilitating the spread of this product and in the definition of the urban structure of Epernay and the territorial organisation of the entire area.

The three clusters encompassing fourteen components reflect the entire agro-industrial process forming the basis of champagne production and also express the strong relationship with the territory and its geomorphological and climatic characteristics.

ICOMOS considers that this justification is appropriate because the key elements and factors of champagne production from its early stages until the affirmation of industrialised processes marked by the search for excellence are well and originally presented in the nomination dossier, which offers an accurate selection of the most relevant aspects and tangible testimonies of the story of champagne.

Integrity and authenticity

Integrity

The delimitation of the vineyard component of the nomination is grounded on a detailed historical and landscape analysis. It only encompasses a small part of the current viticultural champagne AOC region, comprising the original core area where the champagne elaboration process was developed and where relevant

elements illustrating this process still survive in an adequate state of integrity.

The built elements – vineyard villages, huts and grape vats, presses, etc. are closely connected to viticulture and allow a coherent readability of the vineyard landscape. These elements, which are part of the viticultural infrastructure, are almost all still in use, with the exception of a few huts and vineyard workshops.

The buffer zone covers the visible landscape unit as well as the forest, both for visual and functional reasons as the forest provided the wood necessary for the vineyards. The territory of the Municipality of Dizy is excluded in that it is not visible and exhibits a built heritage of lower quality.

The structure of the urban built fabric of Epernay, particularly the Avenue of Champagne, reflects clearly how the need for space and vicinity to communication routes of the industrial activity has oriented urbanisation.

In the Avenue of Champagne, the town-hall, located at the beginning of the Avenue, and some champagne houses, have recently been restored, improving the overall appearance of the Avenue. However, the homogeneity of its built fabric has been interrupted by two recent buildings. Some grounds located within the Mercier House estate at the south of the Place de la République are planned to be enhanced.

In this regard ICOMOS recalls the requirements of paragraph 172 of the *Operational Guidelines* concerning new projects.

On the Saint-Nicaise Hill in Reims, the cluster comprises the Champagne Houses, their underground cellars and the workers' garden-city of Chemin Vert. The location of the Houses outside of the town centre clearly reveals the development of champagne along with industrialisation. The buildings, erected in the second half of the 19th century, suffered major destruction during World War I but were rebuilt as exact copies. Some changes have occurred recently within the cellars to allow modern installations. The ambience of the hill has been or is being enhanced with the creation of parks in place of parking lots. The cellars retain their overall integrity in terms of the network and aspect; due to flooding vulnerability, some of them have been closed and in various areas the limestone has stability problems; different consolidation methods have been used, so far with unsatisfactory visual results. Improvements in this regard would be advisable.

In summary, ICOMOS considers that overall the rationale for the component selection is clear and well-grounded, in that each element of the three clusters contributes to depicting the key geographical, technological and socio-historic factors that made possible the establishment and development of this remarkable agro-industrial landscape.

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.

Authenticity

Centuries-long practices of vine cultivation in the nominated vineyards is robustly documented and the only relevant period of discontinuity relates to the spread of phylloxera, which however brought many changes in farming practices throughout all of Europe: autochthonous vine types had to be grafted onto American root-stock, the distribution of vines changed from randomly ordered to being aligned in rows; however, no alteration of vineyard plots have been undertaken. This can be ascertained on the ground but also in the cadastral documents which still show a fragmented parcelling, and only minor-scale parcel reorganisation has taken place. The farming practices have only partially changed and the most important ones must still be done by hand, e.g., harvesting the grapes.

World War I caused great loss of built fabric, due to the prolonged bombardments which Reims was exposed to; on the other hand, the Avenue of Champagne did not suffer any war damage. The champagne commerce houses were soon restored or reconstructed respecting the original design and architectural language, only the later erection of the Moët & Chandon house at the beginning of the Avenue represents a dissonant element. However, overall, comparison with historic photographs confirms the authenticity of setting and urban and architectural design. Inside, the adaptation of the showcase spaces to current tastes indicates that more changes have occurred to the internal décor.

The villages, on the other hand, underwent insensitive modifications concerning architectural details (e.g., window frames or façade detailing) or urban spaces to facilitate vehicular traffic, but these alterations are currently being remedied. The garden-city of Chemin Vert is well preserved but the rehabilitation programme needs to be strengthened by adopting a heritage approach.

Cellars are in a good state of conservation and intensively used for champagne production, particularly the superior qualities, which are traditionally manufactured by hand.

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.

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

Criteria under which inscription is proposed

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

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

This criterion is justified by the State Party on the grounds that the nominated property, through the selected components, bears witness to the development of traditional knowledge and know-how through which the people of Champagne were able to overcome and exploit the limits imposed by the environment on vine-growing and mastered the art of wine-making, developing the technique for sparkling wines through re-fermentation in the bottle. Technological innovation has always been at the heart of champagne-making which was also able to profit from outside investment. Britain impelled the evolution of taste and the first experiments to obtain sparkling wines, and contributed with its technological expertise (glass making and railways). Merchants and bankers from Germany, Lorraine and Alsace turned to champagne commerce and production and contributed substantially, with their business acumen, networks of contacts and capital, in the advancement of the enterprise, making possible the swift transition from a well-organised artisanal activity towards a large, site-based agro-industrial system. Champagne Houses and vine-growers were able to come to terms with their respective constraints and an early framework of vine/wine professions could develop.

ICOMOS concurs with this justification, although notes that the role of inter-professional organisations does not seem unique to the Champagne wine region, nor can glass-making and railways be considered British technological advancements peculiar to this specific area, having spread all over Europe.

ICOMOS considers that this criterion has been justified for the whole series.

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 serial property represents an exceptional example of a production system which has its supply basin in the vineyards, the production units in the cellars and the marketing side in the champagne houses. This agro-industrial system has given rise to specific territorial and urban organisations, as well as functional and representative architecture. It was also able to exploit previous infrastructure – an extensive network of former quarries – for the production and maturation of the wine. The early fame of the product pushed technological innovation and commercialisation which are embodied in a peculiar urban development, in the production and commercial facilities (champagne

houses, cellar network) and in the communication infrastructure that was developed over the centuries (the canal, the railway) to allow rapid distribution of the product.

ICOMOS considers that this criterion has been justified: the ensemble of the three clusters of components bears witness in different ways to the key factors that made possible the development of champagne and illustrate the functional and representational dimension of this early agro-industrial production landscape.

ICOMOS considers that this criterion has been justified for the whole series.

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 champagne conveys a symbolic image which is unique to this wine. It enjoyed an early recognition by the European elites and courts from the 18th century onwards and had already become associated with the idea of the art of living well by the 19th century, becoming the symbol of celebration and reconciliation.

ICOMOS considers that while the arguments put forth by the State Party are well grounded, they refer to the product that is the outcome of the agro-industrial system of which the nominated serial property represents the tangible materialisation that make comprehensible and appreciable that system and its associated territorial and urban organisation.

ICOMOS notes that the World Heritage Convention is a property-based Convention and therefore it is properties that are evaluated and inscribed as unique, exceptional or representative examples illustrating human endeavours, achievements and values, and not the products that result from manufacturing or farming processes, although their quality and recognition may contribute to the understanding of the scope of certain aspects of human development and therefore reinforce other criteria.

ICOMOS however considers that the nominated serial property and particularly the Saint-Nicaise Hill, with the monumental quarry-cellars and the early Champagne Houses, and the Avenue of Champagne, with the showcasing spaces of the commerce houses, convey the world-renowned image of champagne as a symbol of the art of living and celebration.

ICOMOS considers that this criterion has been justified for the whole series.

ICOMOS considers that the serial approach is justified and that the selection of sites is appropriate.

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

Description of the attributes

The nomination dossier provides a detailed account of the attributes of the nominated serial property and therefore it represents a reference for a comprehensive inventory of important features and characteristics that make explicit and understandable the Outstanding Universal Value. Here only a synthesis of that account is presented.

The natural amphitheatre of the historical chalk hillsides of Hautvillers, with the village at the top, and its landscape and vernacular heritage, Hautvillers Abbey and the underground cellars dug into the hillsides (the Thomas cellar and the cooperative cellars), illustrate how the geomorphology of the region was exploited for wine-making and the system of grape supply and wine production, and bear testimony to vine-growing and wine-making's historic heritage.

The hillsides of Aÿ, facing the Marne valley, have been almost exclusively devoted to the culture of vine-growing for more than four centuries. At the foot of the hill, there lies the town of Aÿ, with its tightly-packed houses running along its main streets; once surrounded by a perimeter wall, it is now replaced by a belt of boulevards. The Boulevard du Nord links the town to the vineyards, and is now home to several Champagne Houses, with their underground cellars that were dug under the hillsides and connect the built up areas to the vineyards.

The hillsides of Mareuil-sur-Aÿ offer an expansive view over Épernay, the Marne valley, and far eastward over the plain, and exhibit a very diverse range of features due to their varying exposure. Located at the foot of the hill, the village of Mareuil is associated with the Château de Montebello which is a fine neoclassical building and a production estate with outbuildings housing the grape press and fermentation vessels and a tower containing offices, as well as a network of underground wide-vaulted galleries.

The Saint-Nicaise Hill in Reims is a fine illustration of how the champagne production process has been integrated into the landscape and how the Champagne Houses have affected the urban structure. The above-ground section of Saint-Nicaise Hill is located on the edge of the city and is home to enclosed urban vineyards, large public spaces and several grand residences owned by the heads of the Champagne Houses. The hill is also marked by evidence of corporate patronage and social initiatives, with the Parc de Champagne and the garden city of Chemin Vert and its remarkable Saint-Nicaise church.

The underground part of Saint-Nicaise Hill encompasses an extensive set of underground chalk quarries and the galleries linking them together. They illustrate the genius of the Champagne region: long-abandoned, former chalk

quarries were given second lives as cellars still in use today for wine-making and storage.

The Avenue of Champagne in Épernay is a particularly remarkable example of the creation of a production site. It comprises vineyards, industrial buildings, cellars, reception buildings and other prestigious constructions, and associated gardens and parks. They illustrate the history of the birth, expansion and current situation of the Champagne Houses, recounting the development of the production tool and transport infrastructure — linking first to Paris and then to the European capitals before finally establishing connections with the rest of the world — and the construction of showcase buildings. Located in the immediate vicinity of the Avenue of Champagne is the final element, Fort Chabrol, a wine-making research centre which has a very special place in the history of champagne wine-making.

4 Factors affecting the property

On the historic hillsides component, no urban development is allowed in the forest, the vineyards and the floodplain areas. Development can only occur in areas already built-up, which causes some pressure on the historic structure of the built environment.

At the moment it is very difficult to envisage scenarios which may cause the unequivocal decline of champagne and affect the economic base of the region. Climate change may certainly influence production rates or quality; to date, these changes have only had a positive impact, reducing winter frosts. However, in this regard, research has been initiated by the Inter-professional Committee of Champagne.

The transfer of agricultural activity may also be detrimental but this has not occurred within the nominated property: while service areas have been created outside it, this has not caused the abandonment of facilities located on the historic hillsides.

On the other hand, ICOMOS notes that agricultural practices have already caused water pollution and a substantial reduction of biodiversity, due to the use of pesticides. Some measures are envisaged, e.g., ecological or green corridors, to promote the safeguarding of important landscape elements; however no programme for the protection of threatened species is in place.

Due to the specific geological stratigraphy, landslides threaten the upper area of the historic hillsides, in particular the villages of Hautvillers and Ay. Erosion and run off also represent a constant threat that is being counteracted by allowing grass to be grown in the vineyards, an effective measure that needs to be extended. Flooding risks concern the Marne river plains (in the buffer zone).

The Avenue of Champagne could experience some development pressure, in relation to the search for new

forms of showcasing by the Champagne Houses and in fact, some new buildings, not completely in line with the overall character of the Avenue, can be found on its eastern side. ICOMOS notes that no significant regulations exist to avoid these trends which need, however, to be regulated to avoid further dissonant elements in the Avenue.

The Avenue underground is fragile due to the vast network of cellars. However, the latest significant subsidence event dates back to ~100 years ago.

Tourism may also become a threat: currently the Avenue is visited each year by ~450,000 people and great efforts are required to manage these numbers.

The use, modernisation and development needs of the large Champagne Houses may affect particularly the nominated components concentrated on Saint-Nicaise Hill: a number of activities are being moved to other sites for rentability or rationalisation reasons and therefore real estate is also being sold. Apparently, however, so far this trend has not affected the nominated property.

Due to the presence of underground cellars and galleries, certain areas of the Saint-Nicaise Hill are prone to subsidence and some cellars have had to be abandoned due to instability. These threats, on the other hand, reduce the urban pressure, as new construction possibilities are very limited.

In its first letter, ICOMOS asked for additional information from the State Party on this aspect.

The regional scheme for wind turbines foresees the development of wind farms in the region so as to raise the installed power to 3000 MW by 2020. The direct setting of the nominated serial property is not classified as a favourable area but, according to the additional information provided by the State Party upon ICOMOS' request, a new wind farm is already approved in the municipality of Thibie, some 20km from the historic hillside component, counting nine further turbines to be added to thirty already existing, and a further one, not yet approved, counting presumably thirteen turbines in a location much closer to the nominated property, between Pocancy and Champigneul.

ICOMOS considers that the high concentration of wind-farms in the same area and in the same sight direction may have a negative visual impact on the nominated property. Particular attention should be given to the second proposal, as this is much closer to the nominated property and therefore much more visible from it.

In December 2014, ICOMOS sent a second letter to the State Party requesting additional information on the need to develop an Heritage Impact Assessment for the planned wind farms before work for their erection begins.

The State Party responded that it is its intention to maintain the proposed Outstanding Universal Value of the

nominated property, particularly through official examination procedures, and to keep the World Heritage Committee informed, via the World Heritage Centre, on any further project that could affect its value.

The State Party further explained the legislation and procedures to which wind turbine projects are subject, clarifying that they can be refused by the Prefect if the works to be carried out are found to be detrimental to the character of the landscape or of the monument's perspective.

The project of the Thibie wind farm has been assessed within the State's statutory procedures as not challenging the proposed Outstanding Universal Value of the nominated property: the 9 turbines to be added to the existing 30 turbines are planned to be laid down at the same distance, with the same geometry and alignment, therefore overall they will only slightly increase the visual impact of the existing wind farm, which is held to not be particularly significant due to the distance and position in the open panorama of the Champagne plains. For these reasons the authorization for the extension project was issued in October 2014. Construction works will begin in 2015 and the wind farm will be operational in 2016.

With regard to the Champigneul-Pocancy wind farm, the State Party informs that its planned location lies at a distance of 10km from the nominated property and its buffer zone, and is expected to be perceivable only from the same points of view as the Thibie wind farm. Additional information is required from the project contractor and this is expected to be made available by May 2015, with a decision expected by the end of 2015.

With regard to the Thibie wind farm addition, ICOMOS considers that the additional information provided by the State Party may be considered acceptable. On the other hand, ICOMOS considers that the results of the assessments currently being carried out within the State's statutory procedures for the Champigneul-Pocancy wind farm projects should be submitted to the World Heritage Centre by 1 December 2015 and before any commitment to construction is made.

ICOMOS welcomes the information concerning the State Party's intention to launch an impact study on co-visibility aspects of wind farms and World Heritage Properties or those eligible for World Heritage status. This study may result in the revision of the wind farm map with identification of exclusion and vigilance zones. ICOMOS considers that it would be useful that the State Party submits the results of this study, when completed.

Finally ICOMOS considers that measures to protect or reintroduce biodiversity within the nominated property should be sought and implemented.

ICOMOS considers that the main threats to the property are development pressure in urban areas and larger villages, landslides and soil instability on the hillsides, and structural instability for the underground cellars and

their corresponding above-ground areas. Overall the plans for increasing energy production from renewable resources may negatively impact on the property, therefore the results of the impact assessment being prepared for the Champigneul-Pocancy wind farm should be submitted to the World Heritage Centre by 1 December 2015 before any commitment is made.

5 Protection, conservation and management

Boundaries of the nominated property and buffer zone

The boundaries of the components are clearly defined and comprehensible on the ground. In the historic vineyards the distinction between those included in the nominated property and those which are part of the buffer zone are not visibly discernible but understandable on the basis of the historic analysis. All elements needed to allow understanding of the coherence of the agro-industrial production chain as well as its industrialisation and its orientation towards a more and more globalised market are included within.

In Reims and Epernay a large part of the nominated property is covered by the protection zones that encircle the protected historic monuments: in the vineyard component this concerns the major part of each built area, while the vineyards are only included for a minor part in the listed site ('site inscrit') of "Hautvillers – Berceau du Champagne". However, the whole of the hillside components and their buffer zone are encompassed within the Regional Natural Park of the Montagne de Reims. In Epernay the perimeters of the nominated property and of the buffer zone coincide with the existing landscape, urban and architectural protection zone (ZPPAUP).

ICOMOS has requested additional information from the State Party concerning the rationale adopted to delimit the nominated components and their buffer zones. The State Party provided an augmented explanation of the delineation of the boundaries for all components that overall justifies the proposal advanced by the State Party.

Buffer zones have been conceived for all components, although none has been specifically foreseen for the underground cellars, despite the instability problems they face.

ICOMOS considers that the problems of instability of the cellars cannot be underestimated and should be addressed through specific studies so as to understand the possible scope of an effective buffer zone for this particular type of heritage. The additional information provided by the State Party on the underground heritage focuses on safety requirements, however, structural problems apparently have been addressed on a case-by-case basis.

In line with paragraph 104 of the *Operational Guidelines*, the role of a buffer zone is to provide an additional layer of protection to the nominated property and this should be pursued through appropriate mechanisms.

Therefore buffer zones should be established taking into account the specific characteristics and weaknesses of the property to be protected.

At the moment, the only area where no surface buffer zone covers the underground heritage is part of the cellars located below the Avenue of Champagne in Epernay, where subsidence problems have occurred in the past.

In its second letter dated 22 December 2014, ICOMOS asked for additional information on the possibility of extending the buffer zone of the Epernay components to cover also the above-ground areas corresponding to the cellars and to provide it with protection measures in the framework of the modification of the ZPPAUP into an AVAP.

The State Party responded on 24 February 2015, informing that modifying the perimeter of the ZPPAUP in the process of establishing an AVAP is an opportunity to strengthen the protection of the underground heritage, by including ad hoc measures that regulate above-ground works. Additionally, the State Party informs that the boundaries of the buffer zone in Epernay have been extended to encompass the underground heritage. This has been incorporated into the official maps and in the nomination dossier. The area included in the buffer zone has also been recalculated.

Following the additional information received by the State Party, ICOMOS considers that the boundaries of the nominated property and of the buffer zone are adequate. ICOMOS recommends that updated information on progress in the finalisation of protection reinforcement be submitted to the World Heritage Centre by 1 December 2015.

ICOMOS however considers it useful that the State Party undertakes a comprehensive study of the structural behaviour of the quarries in Saint-Nicaise Hill in relation to their geomorphology and previously-reported instability problems, and submit to the World Heritage Centre preliminary outcomes by 1 December 2016 with a view to defining specific protection measures.

In conclusion, ICOMOS considers that the boundaries of all components of the nominated serial property and of their buffer zones are adequate.

ICOMOS also considers it advisable that the State Party undertakes a study on the structural behaviour of the quarries, particularly in the Saint-Nicaise Hill component, in relation to their geomorphology, and submit to the World Heritage Centre preliminary outcomes by 1 December 2016 with a view to defining specific protection measures.

Ownership

The ownership profile of the nominated property is complex and includes privately-owned land and buildings as well as wide areas belonging to the public domain.

Protection

The clusters of components in Reims and Epernay are covered by the protection areas (500m radius) of protected historic monuments (*abords des monuments historiques*). In Epernay a Protection Zone for the architectural, urban and landscape heritage (ZPPAUP) also exists. However, amendments made to the Code of Environment introduced a revised mechanism to protect built up areas – the Areas for Architectural and Landscape Valorisation (AVAP). The legislation establishes that all ZPPAUP's must be transformed into AVAP's by the end of 2015, as ZPPAUP's will expire and the areas so protected will fall again under the protection regime for the setting of protected monuments.

The historic hillsides are included in the Natural Park of the Montagne de Reims but only part of the vineyards are protected as listed (*site inscrit*), although a study to establish a listing according to the Environment Code has been approved by the concerned municipalities and is in an advanced state of development; however, no deadline has been revealed by the State Party. The vineyard villages are almost completely covered by the protection granted for the setting of protected historic monuments; however an inter-municipal AVAP is under preparation for the urban built-up areas of the vineyard villages. Only two of the Champagne Houses have been protected as historic monuments; for other ones formal protection was requested but the request was rejected due to the existence of the ZPPAUP. The inscription of Fort Chabrol as a historic monument is completed but its protection measures are being finalised.

In the additional information provided in October 2014 upon ICOMOS' request, the State Party informed that an AVAP for the Saint-Nicaise Hill is being developed in coordination with the Local Urban Plan (PLU) of Reims (its finalisation is expected by June 2015), the creation of the AVAP of Epernay is expected by the end of 2015, the AVAP of Hautvillers, Aÿ and Mareuil sur Aÿ is awaited within the early months of 2015, while the enforcement of the listing of the historic vineyards is planned to be completed by the beginning of 2016.

ICOMOS considers that overall the protection regime of the nominated property and of its buffer zone is set up, although its effectiveness will be completely achieved only when all the protection designations being developed are finalised, approved and enforced.

In its second letter sent in December 2014, ICOMOS requested updated information on the progress made in regard to the establishment of protection measures.

The State Party has responded that the AVAP for the Saint-Nicaise Hill is scheduled for 2015 - a protected sector is under development and its finalisation is

expected within the 1st quarter of 2017; and in Epernay the AVAP will be finalised by July 2016 in conjunction with the revision of the PLU.

ICOMOS observes that, in comparison with the schedule submitted in October 2014, the finalisation of protection reinforcement is being slightly delayed: while this is understandable due to the complexity of the instruments being developed, ICOMOS considers it would be useful that the State Party submits updated information to the World Heritage Centre on the progressive finalisation of protection instruments, starting on 1 December 2016.

ICOMOS notes that only the former quarries annexed to the cellars of the Maison Ruinart are protected as *site classé* (1931), while other cellars do not seem to enjoy any specific protection status or mechanisms. Although their use represents an effective form of protection for cellars, ICOMOS considers it advisable that ad hoc measures be set up for their protection and sensible adaptation to evolving production requirements.

In the additional information provided, the State Party clarifies that some individual buildings or building complexes were not granted specific protection because the ZPPAUP or the AVAP were considered sufficient; in other cases however, specific heritage classification procedures have been completed or initiated.

The additional information provided by the State Party on the modification of the buffer zone in Epernay to cover the underground cellars, and the process being commenced to set up and extended the AVAP to coincide with the entirety of the buffer zone, clarify that the process to strengthen protection is well established.

ICOMOS also considers that specific protection mechanisms that take into account the detected instability of the underground cellar network should be established on the basis of an on-purpose scientific study and included in the AVAP or in planning provisions.

In conclusion, ICOMOS considers that the legal protection framework is adequate and the process for its reinforcement is well established and in progressive implementation. ICOMOS recommends that updated information on the progressive implementation of protection measures be periodically submitted by the State Party to the World Heritage Centre, starting on 1 December 2016, completed by a final report when the protection process is finalised for review by ICOMOS.

Conservation

The nomination dossier provides a detailed account of the state of conservation of the different elements comprised in the serial nomination as well as of their respective buffer zones, accompanied by a short account of already carried out or planned projects to overcome the encountered problems.

Complete and methodologically-coherent inventories of landscape, buildings and cellars do exist for both the nominated serial property and the buffer zones, which are collected in several reports and also document the state of conservation of these elements.

The minute landscape elements are recognised as vulnerable to farming modernisation processes. Hillside villages are much better preserved compared to those at the bottom of the valleys and along the river, which experienced contrasting development that affected their overall character. These trends are being reversed thanks to specific rehabilitation programmes for public spaces or to support private owners.

Interventions in public spaces and Champagne Houses have been carried out following adequate methods. The municipalities as well as the Champagne Houses have committed themselves to ensuring that the built heritage is adequately conserved. Municipal programmes for financial support have contributed to improving the conditions of the urban built heritage. The most extensive maintenance work falls on the Champagne Houses, which, however, carried on the wave of the nomination, have revived historical studies as well as conservation of their built and cultural heritage.

In conclusion, ICOMOS considers that the conservation of the nominated property is overall adequate, taking into account that a number of buildings have an eminently functional use. The conservation of the rural built heritage should be sustained. Appropriate and effective structural conservation interventions for the quarries/cellars should be studied and experiments carried out. Measures to protect or to restore the biodiversity of the landscape should be established and implemented.

Management

Management structures and processes, including traditional management processes

At the national level, to ensure coordination between the State and local entities, the State Party has conceived a Charter for the engagement in the management of World Heritage properties, which has been signed by the Ministries of Ecology, of Culture and by the Association of French World Heritage properties. This charter envisages forms of shared management and implies the supervision of a local commission chaired by the prefect of the region and including the state services, the representatives of the communities and the managers of the property. It will enter into force as soon as the property achieves World Heritage status.

The *Association Paysages du Champagne* has been established to be responsible for the nomination and it is planned to become the management structure. The first territorial conference has already taken place, in October 2014.

In the preparation of the nomination, a Territorial Charter for the Landscapes of Champagne, engaging all signatories to respect goals of sustainable development, heritage protection, and consideration of the value of the nominated property within the planning tools, has been shared with the 320 municipalities included in the AOC appellation region, the relevant regional council of Champagne–Ardennes, and the general councils of Aube, Aisne, Marne, as well as other institutions. The Charter already had several accessions among municipalities and other institutions.

The management structure implies a territorial conference which acts as a platform for dialogue: it includes the tourism and economic stakeholders, as well as representatives of the territorial planning system, the protection of cultural heritage, and the environment, open to the territory covered by the AOC appellation.

The decision-making body of the management structure is the executive board, where viticultural professionals (through the Inter-professional Committee for Champagne - CIVC) and the collectives are represented. A scientific and a consultative committee assist the board in decision-making.

Upon ICOMOS' first request, the State Party submitted updated information concerning the progress made with the management system and further clarification on the functioning of the overall management structure: several activities have been carried out since the nomination dossier was submitted and these are clearly illustrated. It is envisaged that the juridical status of the management structure will be approved by the end of 2015 and the operational body Mission Coteaux, Maisons et Caves will be composed of a paid staff (three posts will be created).

Financial support of the management structure falls on the municipalities and collectives as well as on the professional organisations. Municipalities will contribute proportionally to their number of inhabitants. Actions to ensure sponsorship have also been undertaken.

ICOMOS considers that this step is very important for the effective management and coordination of activities and provisions in the area concerned.

ICOMOS also confirms that the envisaged management framework is a single one for the serial property, its buffer zone as well as its wider reference territory, that is, the entire AOC appellation. The territorial conference and the executive board appear to be the appropriate bodies through which verifying the coordination or promoting the harmonisation among existing planning instruments so as to ensure that their provisions respect the value of the nominated property.

Upon ICOMOS' request, the State Party has submitted additional information on the existing risk management tools: different plans have been developed to address specific threats, e.g., the flooding areas plan for the Marne river between Aÿ and Courthiezy (PSS 1976), the plan of

flooding risk for Epernay (Plan R111-3, 1992) covering 8 municipalities, the prevention of flooding risk plan Marne–Epernay Sector (PPRi, under elaboration, finalisation end 2015–beginning 2016, approval 2017-018), the Prevention Risk plan for landslides for the Marne Valley (PPRn GT, 2014). Prevention plans include limitations in land-use for vulnerable areas.

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

The overall policy framework for the nominated property, its buffer zone and its wider territory rests upon the planning system and particularly on the Scheme for Territorial Coherence (SCOT) which defines the lines of development and the objectives to be pursued through other planning instruments at the municipal level. The serial property is covered by two different SCOT: the one for the Reims Region (SCOT2R) and the one for Epernay and its region (SCOTER). The first includes among its goals the valorisation of urban diversity and the protection of the architectural built heritage. The SCOTER on the other hand focuses on the management of the built-up areas and on the preservation of landscapes and nature.

Municipalities have to adapt their planning provisions to the goals set by the SCOTs in their PLU (local urban plans - *plans locaux d'Urbanisme*). All the municipalities included in the nominated property are covered by PLU's, which ensure goal-based planning and urban projects.

The additional information provided in October 2014 by the State Party upon ICOMOS' request on the management plan clarified that it is adequately detailed and acts also as an action plan. It contains already detailed objectives to be achieved for each area, it identifies the responsibilities and establishes priorities and a time-frame for implementation.

The management plan is the operational side of the territorial charter that has been signed by all participants. It is articulated in three parts: the first contains the orientation document setting the framework of the long-term guidelines for the property, the result of participatory workshops and linked to the diagnostic phase documenting the state of conservation and the factors affecting the property; the second part articulates in detail the short term action plan, which contains phased and detailed actions, identified partners, assessment indicators and defined financial resources; the third part concerns the voluntary engagement of the AOC region stakeholders, within the framework of their competences, to preserve and enhance the agro-industrial landscape of champagne.

Involvement of the local communities

The Association has made significant and successful efforts to favour the participation of society in the nomination process. The territorial charter is the result of a participation and dialogue process among different stakeholders.

Several activities have already been carried out to present and communicate the values of the nominated property; in particular, publications and leaflets in different languages about the property have been prepared to spread the knowledge of its values. Photographic competitions have been set up as well as didactic activities with the schools.

ICOMOS considers that the overall system that has been set up both at the State and the local level, although complex and multilayered, appears adequate as it is grounded in the multi-annual experience matured through the nomination process. The only worry concerns the small number of staff (3 posts) envisaged for the operational mission: unless it relies also on the staff of existing administrative structures, it seems very unlikely that this small number of people could accomplish the tasks assigned.

In conclusion, ICOMOS considers that the management system for the overall serial property appears adequate although there is a need to reinforce the envisaged mission staff at least through cooperation with relevant administrations and staff-sharing formulas.

6 Monitoring

The monitoring system includes two different types of indicators: those necessary to assess the state of conservation of the property and those to assess the performance and management results. The first set lists several indicators already in use and in the responsibility of identified agencies, while the second type of monitoring concerns the achievement of management objectives at the three different levels in which the management plan has been organised: management orientation, focussing on the management framework; the action plan, focussing on specific activities to be carried out; and the monitoring of the subscription of the territorial charter.

ICOMOS has requested additional information on the periodicity of monitoring and the State Party has informed that the monitoring of the management objectives is carried out annually; however a mid-term assessment of the entire 5-year cycle is foreseen for each area of management.

In conclusion, ICOMOS considers that the monitoring system has been well conceived and structured, although there is a need to identify the most relevant indicators for the assessment of the state of conservation, relate them to the current issues of the property, and define an appropriate periodicity of measurement.

7 Conclusions

The nominated property Hillsides, Houses and Cellars of Champagne is the original centre of the French region of Champagne-Ardenne, where the process of sparkling

wine-making was developed from the 17th century until rapid industrialisation occurred in the 19th century.

The fourteen components of the series represent a remarkable and coherent example of the territorial, urban and technological materialisation of a site-based agro-industrial system and contain the essential representative elements of the production of champagne and of the history of this production, which has enjoyed almost since the beginning international recognition. The three clusters of components include the supply basin that is the historic hillsides, the production units, that is the underground cellars, and the marketing spaces, that is the commerce houses.

The nomination dossier illustrates comprehensively the relevant aspects of the entire system from a geographical, technological and historical perspective. The role of each component is explained in relation to the whole production process and its historical development, highlighting its most important phases and the impact that the champagne enterprise had on this territory.

The components of the series exhibit appropriate boundaries that encompass the elements necessary to convey the significance of the property. The same can be said for the buffer zones as far as above-ground components are concerned; the additional information provided by the State Party in February 2015 on the extension of the buffer zone to cover also the underground cellars demonstrates the commitment of the State Party to the protection of the nominated property and confirms that all relevant attributes of the nominated property are adequately protected.

The components exhibit a good state of conservation and programmes to improve weaker situations are being implemented.

Considering the complexity, diversity and size of the nominated components, the legal protection is still uneven, with some components not covered yet by specific designations or protection measures. However, this aspect is currently being addressed, as confirmed by the additional information provided by the State Party in February 2015 and it is expected that protection of the nominated components and their buffer zone will be finalised throughout 2015, 2016 until early 2017 (*Reims secteur sauvegardé*).

The conceived management system appears well-developed and realistic in integrating different actions within one single vision. The Territorial Charter engaging the entire AOC region appears also to be an interesting solution to achieve a territorial cooperation with a view to sharing the advantages of World Heritage recognition in the wider champagne area, and to strengthen solidarity and resilience.

8 Recommendations

Recommendations with respect to inscription

ICOMOS recommends that the Champagne Hillsides, Houses and Cellars, France, be inscribed on the World Heritage List on the basis of **criteria (iii), (iv) and (vi)**.

Recommended Statement of Outstanding Universal Value

Brief synthesis

In north-east France, on cool, chalky land, the Champagne Hillsides, Houses and Cellars form a very specific agro-industrial landscape, with the vineyards as the supply basin and villages and urban districts concentrating the production and trading functions. The imperatives of Champagne wine production have resulted in an original, three-pronged organisation, based on functional town planning, prestigious architecture and an underground heritage. This agro-industrial system, which has structured not only the landscape but also the local economy and daily life, is the outcome of a long process of development, technical and social innovations, and industrial and commercial transformations, which speeded up the transition from an artisanal crop to mass production of a product sold around the world.

Women and the Franco-German heirs of the old Champagne fairs played a special role in this evolution, which has its roots in Hautvillers, among the hills of Aÿ, the heart of the wine-growing sector. In the 18th and 19th centuries, it then spread to the two nearest towns, to Saint-Nicaise Hill in Reims and to Avenue de Champagne in Épernay, which were entirely built on the wine-growing activity of Champagne. The three ensembles that make up the property embody the Champagne *terroir* and serve as a living and a working environment and a showcase for traditional know-how. Patronage has also been a source of social innovation, the greatest emblem of which is the Chemin Vert garden city in Reims. This is the place where the benchmark method of producing sparkling wine was born, a method that would spread and be copied across the world from the 19th century up to the present day. Champagne is a product of excellence, renowned as the universal symbol of festiveness, celebration and reconciliation.

Criterion (iii): The Champagne Hillsides, Houses and Cellars are the outcome of expertise perfected over the generations, of exemplary inter-professional organisation and of the protection of the *appellation*, as well as the development of inter-cultural relations and social innovations over a long period of time, which women also took part in. Through the development of traditional know-how, the people of Champagne have overcome a number of obstacles, both in the vineyards (a harsh climate and rather infertile chalky soils), and in the wine-making process, through their mastery of sparkling wine production techniques, and in assembly and bottling. Champagne enterprise was able to gain from the technological and entrepreneurial contributions of the

British and Germans. The equilibrium between wine-growers and the Champagne Houses led to the development of a pioneering inter-professional structure that is still active today.

Criterion (iv): As the legacy of wine-growing and wine-making practices perfected over the centuries, production in Champagne is founded on its supply basin (the vineyards), its processing sites (the *vendangeoirs*, where grapes are pressed, and the cellars) and its sales and distribution centres (the headquarters of the Houses). They are functionally intertwined and intrinsically linked to the chalky substratum where the vines grow, which is easy to hollow out and which is also found in the architecture. The production process specific to Champagne, based on secondary fermentation in the bottle, required a vast network of cellars. In Reims, the use of the former Gallo-Roman and medieval chalk quarries, and the digging of suitable cellars in Épernay or on the hillsides, led to the formation of an exceptional underground landscape – the hidden side of Champagne. As Champagne has been exported around the world since the 18th century, trade development resulted in a special kind of town planning, which integrated functional and showcasing goals: new districts were built around production and sale centres, linked to the vineyards and to transport routes.

Criterion (vi): The Champagne, Hillsides, Houses and Cellars, and particularly the Saint-Nicaise Hill, with its monumental quarry-cellars and its early Champagne Houses, and the Avenue of Champagne, with the showcasing spaces of the commerce houses, convey in an outstanding manner the unique and world-renowned image of Champagne as a symbol of the French art of living, of festiveness and celebration, of reconciliation and victory (particularly in sport). Literature, painting, caricatures, posters, music, cinema, photography and even comics all testify to the influence and the constancy of this unique wine's image.

Integrity

The Property includes the most representative and best preserved elements, testifying to the birth, production and spread of Champagne, through symbiotic functional and territorial organisation. The entire Property has recovered from wars, the phylloxera crisis and the wine-growers' revolts. The hillside villages, limited by the topography and high value of the vineyards, remain well preserved within their original limits. Landscape and plots have changed very little and the built heritage is still in good condition. Although it was bombarded during the First World War, Saint-Nicaise Hill was restored and has maintained its function. The chalk quarries are still used in Champagne production and the network of cellars is well preserved and still perfectly operational. Long-term safeguarding of the visual integrity of the property requires monitoring of large energy installations; whilst functional integrity may benefit from a program to restore bio-diversity, which may also contribute to Champagne specificity.

Authenticity

Extensive archival, written and iconographic documentation attests to the history and development of the Champagne story in the area, and to the minor changes to the visual qualities of the landscape. As was the case across the whole of Europe, phylloxera decimated the vines: the replanting of grafted, trellised vines, to replace ungrafted, bulk vines, did not lead to much visible change, although it does bear witness to this major crisis in wine-growing history. The hillsides of Hautvillers, Ay and Mareuil sur-Ay have exported their wine continuously for at least four centuries and testify to the vine-growing monoculture based on the oldest form of external trade in Champagne. The Champagne Houses have ensured the safeguarding of their architectural heritage, including the original decor and furniture, to a large extent, and they are still used for activities related to the Champagne enterprise.

Management and protection requirements

The property benefits from a comprehensive protection scheme, applying the tools provided by regulations, contracts, land management and heritage-listing, and backed by French and European legislation.

Other tools strengthen this scheme ; for example, designated *Aires de mise en Valeur de l'Architecture et du Patrimoine* (AVAP) areas, or zones protected as *secteur sauvegardé*. The boundaries of the official Champagne *appellation*, comprising over 300 towns and villages, has been defined as a "commitment zone" within the management system. Here, the local communities, the wine growing profession and other stakeholders undertake, on a voluntary basis, to conserve and enhance their landscape and heritage. This commitment zone constitutes the setting and surroundings of the property, and is also a coherent historical and geographical ensemble, embodied by the property and without which its value cannot be understood. It allows for the implementation of extended management and ensures actions taken to enhance the landscape, heritage and the environmental are consistent with one another.

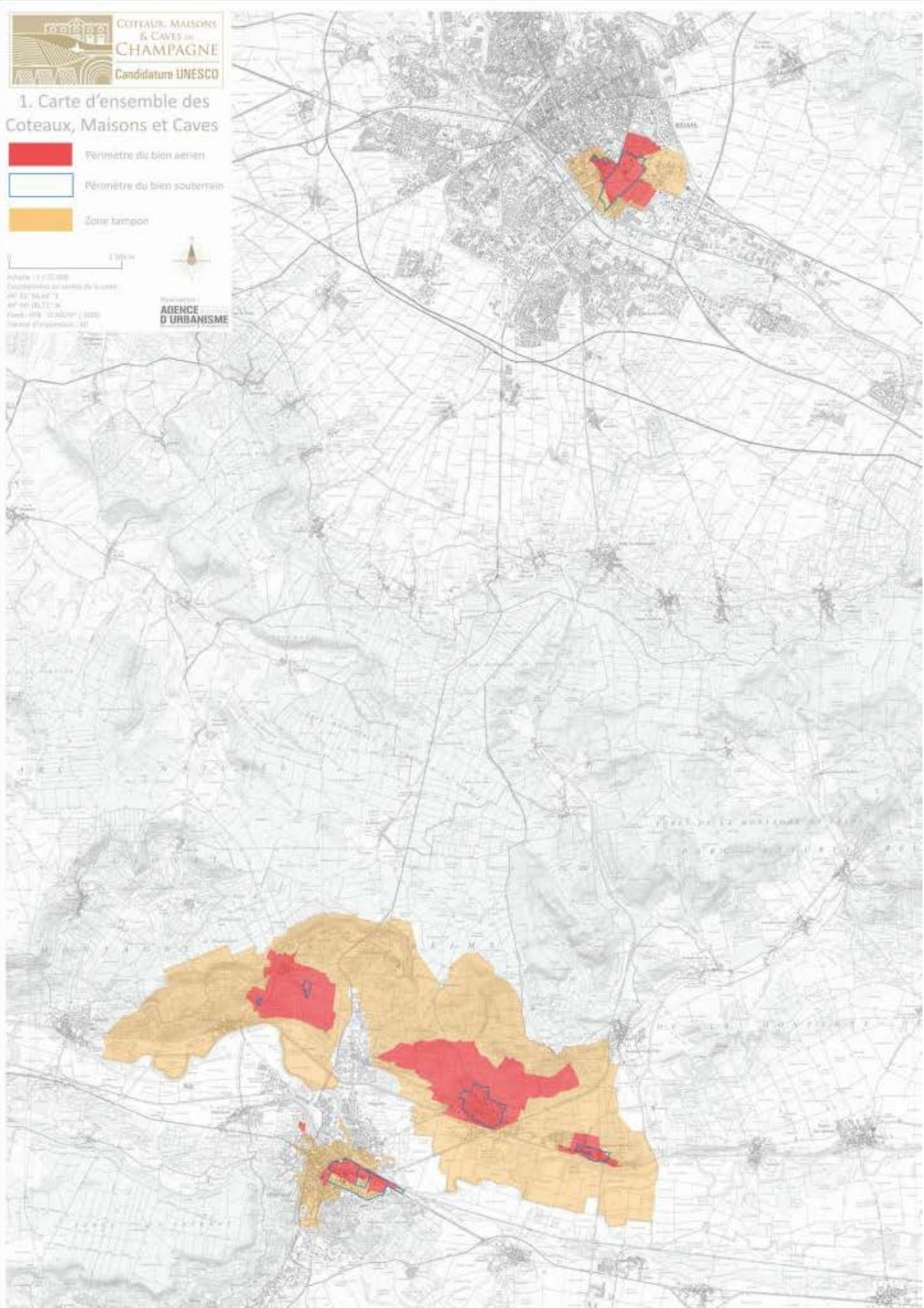
To ensure effective conservation of the Outstanding Universal Value, a management structure has been set up, bringing together public and private stakeholders, project managers and representative bodies. The management plan for the Champagne Hillsides, Houses and Cellars is a tool for regional development as well as for protection. It incorporates the overall framework associated with the history of the Property and its territory as it is both conceived and experienced.

Additional recommendations

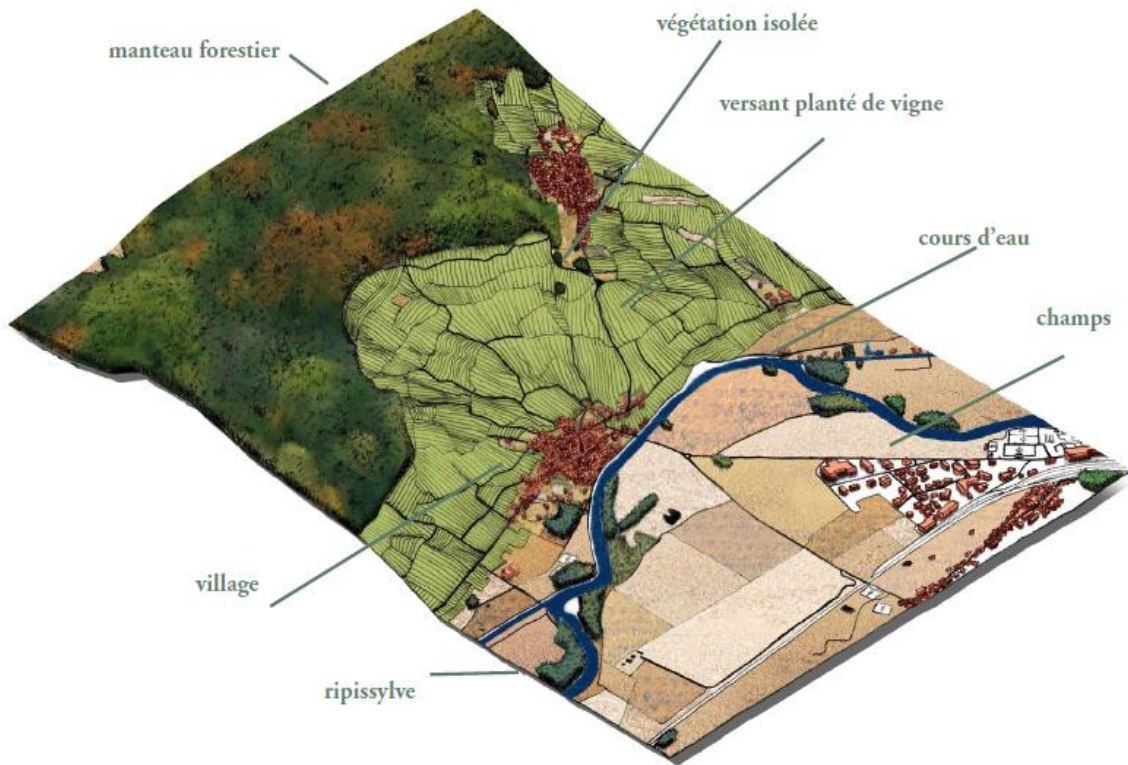
ICOMOS recommends that the State Party give consideration to the following:

- Providing an updated calendar for the finalisation of the protection designations currently being established;

- Developing an Heritage Impact Assessment for the wind farm projects of Pocancy-Champigneul;
- Undertaking a comprehensive study on the structural behaviour of the quarries in the Saint-Nicaise Hill with a view to defining specific protection/preservation measures, including an appropriate buffer zone related to their specificity, an adequate and effective structural conservation strategy, and appropriate interventions;
- Selecting the most relevant indicators for the assessment of the state of conservation in relation to the state of conservation of the property and of its value, and define an appropriate periodicity of measurement for each of them;
- Establishing and implementing measures to protect or to restore the biodiversity of the landscape;
- Submitting to the World Heritage Centre by 1 December 2015 and 1 December 2016, a progress report on the implementation of the above-mentioned recommendations ;
- Submitting to the World Heritage Centre by 1 December 2017, a report on the implementation of the above-mentioned recommendations for examination by the World Heritage Committee at its 42nd session in 2018.
- Submitting all new projects located within the Mercier House estate at the south of the Place de la République to the World Heritage Committee for examination, in accordance with paragraph 172 of the *Operational Guidelines for the Implementation of the World Heritage Convention*.



Map showing the boundaries of the nominated property



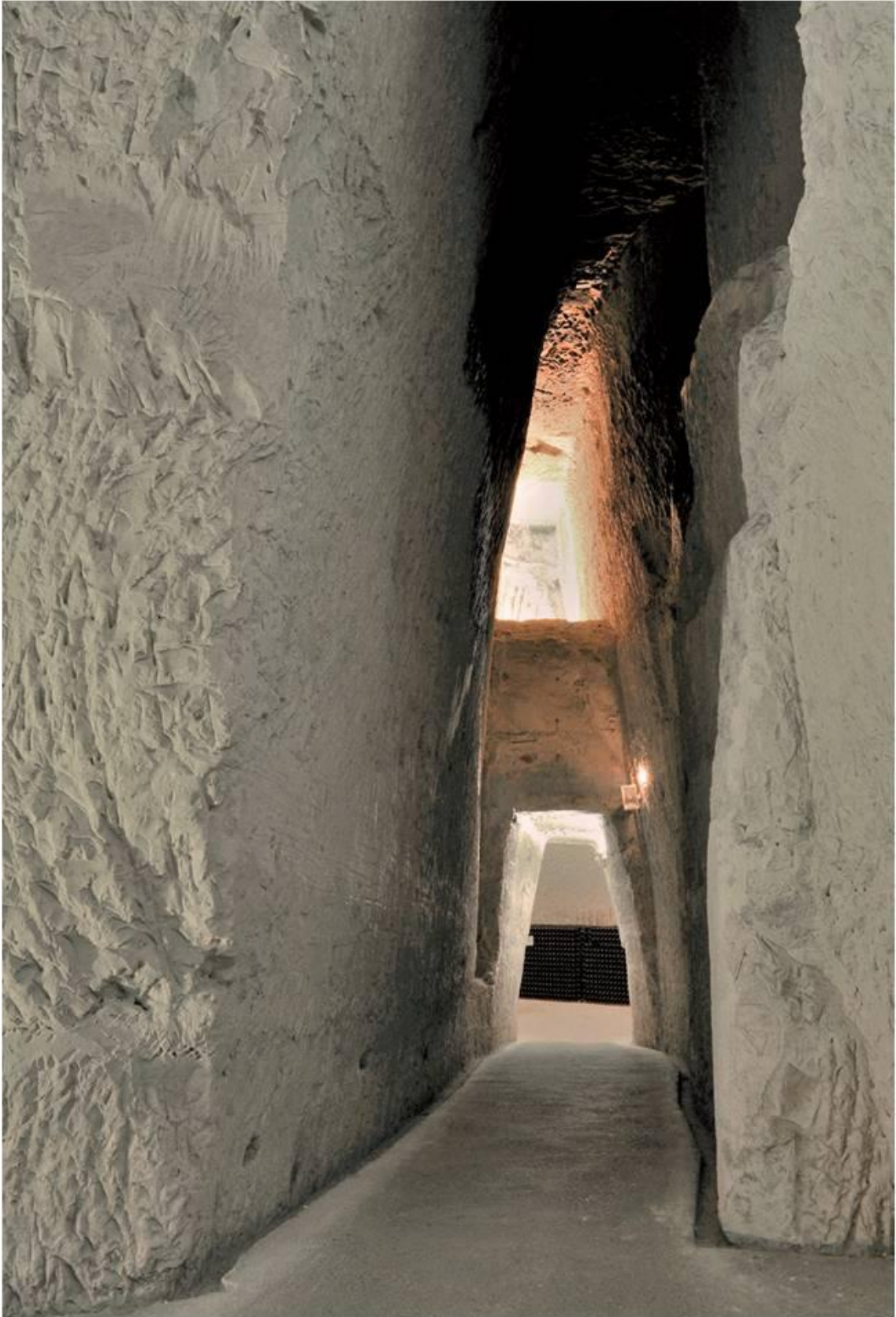
Plan representing the hillsides of Hautvilliers and Cumières



Panoramic view of the vineyard under the snow



Chalk quarry of Veuve-Clicquot House



Chalk quarry of Ruinarth house

Speicherstadt and Kontorhaus District with Chilehaus (Germany) No 1467

Official name as proposed by the State Party

Speicherstadt and Kontorhaus District with Chilehaus

Location

Free and Hanseatic City of Hamburg
Germany

Brief description

Speicherstadt and the adjacent Kontorhaus district are two densely built commercial areas in the German port city of Hamburg. Speicherstadt's 300,000 m² of floor space make it one of the largest unified historic port warehouse complexes in the world. Originally developed between 1885 and 1927 (partly rebuilt 1949-1967), it includes 15 very large warehouse blocks and six ancillary buildings on a network of short canals. The neighbouring Kontorhaus district includes a number of massive office complexes built between the 1920s and the 1940s to house businesses engaged in port-related activities. Anchored by the Modernist Chilehaus office complex, the Kontorhaus district attests to architectural and city-planning concepts that emerged in the early 20th 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 *group of buildings*.

1 Basic data

Included in the Tentative List

20 September 1999 (Chilehaus)

1 February 2007 (extended to include Speicherstadt and the Kontorhaus district)

International Assistance from the World Heritage Fund for preparing the Nomination

None

Date received by the World Heritage Centre

23 January 2014

Background

This is a new nomination.

Consultations

ICOMOS consulted its International Scientific Committee on 20th century Heritage and several independent experts.

Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the property from 22 to 26 September 2014.

Additional information requested and received from the State Party

A letter was sent by ICOMOS to the State Party on 10 September 2014 to request further information about the selection of the proposed boundaries for the nominated property and buffer zone, and the amount of the Speicherstadt that has been reconstructed; the comparison of Speicherstadt to other warehouse districts, and the geo-cultural area selected for the Kontorhaus district; the visual impact of the Hanseatic Trade Center and the Elbphilharmonie on the setting; and the current management of the nominated property, proposed changes, and the long-term challenges for its protection and management.

The State Party replied on 16 October 2014, sending additional documentation which has been taken into account in this evaluation.

Additional letters were sent to the State Party on 22 December 2014 and 12 January 2015, asking it to consider the possibility of including additional Kontorhaus district buildings in the nominated property, as proposed in the Tentative List; to extend the buffer zone as a support to the property and its protection; to implement the proposed Management Plan at the earliest opportunity; and to reconsider the name of the property.

The State Party replied on 12 and 30 January 2015, sending additional documentation. A meeting between ICOMOS and the State Party was subsequently held on 30 January 2015, following which revisions to the nomination were submitted on 9 and 10 February 2015, which have been taken into account in this evaluation.

Date of ICOMOS approval of this report

12 March 2015

2 The property

Description

The nominated property comprises most of Hamburg's historic Speicherstadt (warehouse district), located on a 1.1-km-long group of narrow islands in the Elbe River, and part of the adjacent Kontorhaus office district. The 20.95-ha Speicherstadt features 15 large 5- to 7-storey warehouse complexes, six ancillary buildings, and a connecting network of canals and bridges, all originally erected between 1885 and 1927. More than 50 percent of the Speicherstadt was damaged or destroyed during the Second World War, but was substantially reconstructed. The nominated portion of the adjacent Kontorhaus district is a cohesive, densely built 5.13-ha area featuring six very large office complexes begun in the 1920s – Chilehaus, Messberghof, Sprinkenhof, Mohlenhof, Montanhof, and Miramar-Haus – that stand out for their unity of function and their Modernist brick-clad architecture.

Speicherstadt

Speicherstadt, the “city of warehouses,” is the historic warehousing district for goods imported through the port of Hamburg. Its warehouse complexes are subdivided into several identically designed fire sections which together form warehouse “blocks.” Despite variations in architectural style, the blocks are generally cohesive in overall appearance, due in part to their similar volumes and to the widespread use of red brick as the main exterior material, regardless of construction date. They are also characterized by their inventive architectural design and construction elements combined with advanced technical installations and equipment.

Most of the warehouse blocks were built to a standard depth of between 25 and 30 m, subdivided into sections by fire walls. Beneath their richly historicist façades are modern skeleton frames that allow for large, non-compartmentalized floor spaces and flexibility of use. The orientation of the warehouse blocks is consistently parallel to a canal on one side and to a street on the other. On both the canal and street sides of each multi-storey block are loading doors arranged one above the other and topped by winch dormers that pierce the rooflines, forming one of Speicherstadt’s characteristic architectural motifs.

Networks of short canals and bridges also contribute significantly to the character of the Speicherstadt, which is separated from the city centre by the 45-m-wide Customs Canal, its continuation to the west, the Binnenhafen, and the adjoining upper harbour to the east. Access by water is via two canals that run from west to east and then converge to connect with the upper harbour. Perpendicular to them are three minor canals. Numerous short bridges and elevated walkways span the waterways and interconnect the warehouse blocks with each other and with the city. Most are riveted steel latticework arches with beam ties and low-lying carriageways. Nearly all of the nine streets have retained their original profiles, including granite or porphyry cobblestones.

The Speicherstadt portion of the nominated property also includes six ancillary buildings: the former Boiler House, former Central Power House, former Coffee Exchange, former Manned Fire Alarm Station, former Winch Operators’ House (Wasserschlosschen, or Little Water Castle), and former Customs Buildings. Prominently sited, most are picturesquely designed in historicist styles.

Kontorhaus district

The Kontorhaus district’s streets define a number of irregularly shaped and obliquely angled plots. Fritz Höger, the designer of the large 36,000 m² Chilehaus office complex that anchors the district, responded to this design challenge by terminating the building’s eastern tip at a very acute angle, recalling the prow of a ship. At 10 storeys tall, Chilehaus was one of the first high-rise buildings in Germany. Combining a reinforced concrete skeleton with a traditional but simplified clinker-brick cladding, it presaged a Modernist style of office building

architecture. Its sinuous monumental façades feature closely spaced brick pilasters.

In contrast to the Chilehaus, the neighbouring 10-storey, 18,200 m² Messberghof has relatively smooth façades, largely without decoration. The focus is on the workmanship in the technically demanding clinker brickwork: the interplay between the slightly varying bricks and joints lends the building its particular quality. The massive 8- to 9-storey, 52,000 m² Sprinkenhof office complex has largely unarticulated facades (so as to not compete visually with the Chilehaus) decorated with purely ornamental clinker-brick courses in a subtle Expressionist diamond pattern that frames each window as well as the small, rounded terracotta reliefs that are evenly distributed over the entire exterior surface. The 8-storey, 7,800 m² Mohlenhof has sober, unadorned brick and stone façades punctuated by a grid of narrow windows. Decorative elements are limited to simple strips at the base and cornice levels of the building.

In order to more fully represent the Kontorhaus district, the State Party, by means of documents submitted to ICOMOS on 9 and 10 February 2015, extended the nominated property to include three additional buildings, the Polizeikommissariat, Miramar-Haus, and Montanhof. The Polizeikommissariat, built in 1906-08, is located within the same urban block as the Chilehaus. The nearby 7-storey Miramar-Haus was erected in 1921-22 as the first building in the new office district. Its rounded corner and classically inspired tripartite composition recall an earlier stylistic era. Across the street and built three years later, the 9-storey Montanhof features a clinker-brick façade with a highly articulated crystalline corner that is thoroughly modern in its Expressionist design.

History and development

Speicherstadt and the Kontorhaus district were begun in the late 19th and early 20th centuries, respectively, to replace two of Hamburg’s existing inner-city quarters. Hamburg had become an important continental European port in by the end of the 19th century. The establishment of a “free port” for the customs-free handling of foreign goods, and the city’s incorporation into the German Customs Union, underpinned a move to modernize its port facilities. It was in this context that the Speicherstadt (and later the complementary Kontorhaus office district) were redeveloped. Hamburg grew to become one of the world’s busiest ports. Within the time span of a few decades, Hamburg’s city centre changed from a pre-industrial town to a modern city with commercial districts dedicated to serving the economic needs of a metropolis, and more particularly those of global trade and the international port.

Speicherstadt

Speicherstadt was built by the Hamburg Free Port Warehouse Association, mostly under the aegis of civil engineer Franz Andreas Meyer. It was developed in three construction phases between 1885 and 1927, and served as the main warehouse and storage centre of the Hamburg port for more than 100 years. It originally

consisted of 17 large warehouse blocks, primarily used for storage, as well as ancillary buildings such as a central power house and customs buildings.

A technical master plan had been drawn up by 1882 and the first construction phase was completed by 15 October 1888, when the free port officially opened. This phase covered two thirds of the Speicherstadt area and consisted of blocks A through O. The second phase, from 1891 to 1896, encompassed blocks P and Q/R. The third phase, which included blocks S through X, lasted from 1899 to 1927, but most of the construction was completed by 1912. A network of small canals and 19 short bridges was also part of the redevelopment.

The warehouses were given historicist red brick façades with decorative details. Nevertheless, they were modern constructions supported by skeleton frames (the materials of which changed over time as better fire protection became available), and were equipped with innovative technical systems such as electrical lighting and hydraulically operated drives for winches and platform lifts. The warehouse blocks also had large, efficiently planned open floor plans.

About half of the Speicherstadt was damaged or destroyed during the Second World War. Warehouse blocks A, B, C, J, K, M, and the eastern part of block O were almost completely destroyed. No attempt was made to rebuild blocks A, B, C, and J (in their place, outside the nominated property, is the modern Hanseatic Trade Center). Only the façade of block M was saved. The damage to blocks D, E, and L was less extensive. Architect Werner Kallmorgen oversaw reconstruction of Speicherstadt in the 1950s and 1960s. Some damaged buildings were rebuilt – with varying empathy for the original designs – while others were replaced with modern buildings. The most recent construction (2003-2004) was a multi-storey car park that has the same general dimensions as block O, on whose site it stands.

With the global post-war move away from general cargo to containerized transport, Speicherstadt largely lost its original function as an area for the handling and transshipment of goods; it ceased to be a free port in 2003. At the same time, it increasingly became the focus of efforts to introduce office, cultural, and leisure activities. A little less than one-third of its 300,000 m² of usable space is now used for storage or as showrooms. About 81,000 m² is occupied by offices and 25,000 m² by cafés, restaurants, and other venues for cultural and leisure activities. About 10,000 m² will be made available in the future for artists' studios. Adapting the warehouses to new uses has required some changes. Residential conversion, though, is problematic, due to area flooding, fire safety, and other issues, but is being investigated.

Kontorhaus district

The Kontorhaus district was begun in the 1920s adjacent to Speicherstadt, in the southeast part of the Altstadt (old town). It originally consisted nearly exclusively of a small

number of large office building complexes occupied by businesses associated with the port and shipping.

In the wake of a devastating cholera epidemic in 1892, the Senate decided to rehabilitate large areas of the old city of Hamburg and its new urban district (Neustadt). The second of these areas to be rebuilt was the present Kontorhaus district. Distel and Grubitz submitted the prize-winning entry in a 1914 urban design competition for the Kontorhaus district. The Miramar-Haus, Chilehaus, and Messberghof buildings (1922-24), among others, were built in its core area during the period of high inflation that followed the war. Buildings erected after the end of the inflation period included the Montanhof (1924-25), the Mohlenhof (1927-28), and the first two sections of the Sprinkenhof (1927-30). The third section of the Sprinkenhof (1939-43) was constructed during the Nazi period. The district was used primarily by companies involved in trade and shipping, which benefitted from its proximity to the eastern part of the free port. Its favourable location was a decisive factor in its success.

The nominated area of the Kontorhaus district escaped serious damage during the Second World War. More recently, a modernization of the entire Chilehaus complex was undertaken in 1990-1993, during which its shop windows were replaced with a free interpretation of the originals. The portion of the roof area of the Messberghof that had been destroyed during the war was restored in 1995-1996, with a conscious decision to use modern structures and materials such as titanium zinc sheeting. Lost sculptures were replaced by abstract bronze statues in 1997. The first and second sections of the Sprinkenhof were rehabilitated and modernized in 2000-2003, in line with heritage protection guidelines. Work on the south side of the Mohlenhof was completed in 2012, and it now closely resembles its historic appearance.

3 Justification for inscription, integrity and authenticity

Comparative analysis

The State Party implies that there is scope in the World Heritage List for the inclusion of the nominated property. The State Party compares the nominated property to other properties within a region it defines as global rather than geo-cultural, given the globalization of trade and business in the late 19th and early 20th centuries.

ICOMOS observes that the comparative analysis has been divided into two entirely separate parts, with one analysis for late 19th-century maritime warehouse districts and the other for early 20th-century “mono-functional” office districts. No comparisons were drawn with interdependent, functionally complimentary warehouse-office ensembles.

One property on the World Heritage List is compared: Liverpool (Liverpool – Maritime Mercantile City, United Kingdom, 2004, (ii), (iii), (iv)). No similar properties on the Tentative Lists are referenced. Additional port

warehouse districts chosen by the State Party include 11 European examples: Bremen, London, Dublin, Amsterdam (though not the analogous Nieuw-Entrepot), Rotterdam–Entrepothaven, Helsinki, Trieste–Porto Vecchio, Genoa, Rijeka (Fiume), Barcelona, and Marseille. European warehouse districts in ports such as Bergen, Antwerp, Porto, Gdansk, and Saint Petersburg are not included. The comparisons also include maritime warehouse districts in Mumbai, Yokohama, and Sydney in the Asia-Pacific region; Boston and New York in North America; and Buenos Aires and Rio de Janeiro in South America. Important historic inland warehouse districts, such as the 26.5-ha Exchange District in Winnipeg, Canada and the 17.4-ha Warehouse District in Cleveland, United States of America, are not compared.

The Kontorhaus district is subjected to an international comparison of interwar “mono-functional” (as versus multi-functional) office districts. Comparatives in Europe selected by the State Party are in Berlin, London, and Madrid – even though none of these had a central mono-functional office district, according to the State Party. The comparatives also include Chicago and New York in North America; Buenos Aires and São Paulo in South America; and Shanghai and Sydney in the Asia-Pacific region. Most of the office architecture around the world was still dominated by historicist forms when the Kontorhaus district’s office complexes were built, according to the State Party. ICOMOS believes this somewhat over-generalized analysis does not fully recognize global trends that were emerging in the 1920s.

ICOMOS considers that the rationale for choosing comparable warehouse districts for Speicherstadt has not been clearly articulated. The resulting set of comparative properties therefore appears Euro-centric and somewhat arbitrary, despite a sincere endeavour to present a comprehensive, worldwide picture. The values associated with Speicherstadt’s post-war layer of reconstructions have not been addressed. Liverpool, as an inscribed World Heritage property, could have been compared in greater detail to highlight both similarities and differences.

The selection of comparative office complexes for the Kontorhaus district excludes a number of historically important proto- or early Modern examples, such as the Technical Administration Building of Hoechst AG in Frankfurt, Germany and the Rockefeller Center in New York City, United States of America (not compared on the grounds it was designed as a multi-functional office and entertainment complex). While the buildings in the Kontorhaus district are constructed around open inner courtyards and therefore differ from the skyscraper typology, the latter is historically far more significant worldwide. ICOMOS, while recognizing the importance of the Hamburg examples, considers that it would have been useful to have described more fully the reasons why the courtyard typology of the large office building genre warrants recognition, and to have undertaken comparisons with a wider range of the world’s iconic examples early Modernist office building complexes.

In general, the comparative analysis does not spell out the values to be compared, and the authenticity and integrity of each of the compared properties are not addressed uniformly. ICOMOS considers that a more systematic approach would have been appropriate, particularly concerning the claimed values: the comparative analysis is inconsistent and is therefore not entirely definitive in the conclusions it draws. In spite of these weaknesses, however, the analysis strongly suggests that the Speicherstadt portion of the nominated property stands out in an international context, and that these two neighbouring districts together represent an outstanding example of a combined warehouse-office district associated with a port city.

ICOMOS considers that the comparative analysis, despite certain weaknesses and inconsistencies, justifies consideration of the nominated 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 Chilehaus office complex is widely recognized as an iconic work of 20th century expressionist architecture. Its combination of a reinforced concrete skeleton with traditional brickwork executed with virtuoso design and craftsmanship created a modern style of office building architecture previously unseen.
- The nominated property, particularly the core area of the Kontorhaus district, documents the changes in urban development, architecture, technology, and function that resulted from the rapid expansion of international trade in the second half of the 19th century. The two mono-functional, functionally complementary districts present a globally unique microcosm, on a unique scale, of the ideal of a modern city with functional zones, and document the concept of city formation.
- The scale and the quality of the design, materials, and architectural forms of the nominated property, particularly the core area of the Kontorhaus district, bear exceptional testimony to the building tradition in the Hanseatic port city Hamburg, to the self-image of its business people, and to their own adaptability, which ensured their success.
- The nominated property contains outstanding examples of the types of buildings and ensembles that epitomize the consequences of the rapid growth in international trade in the late 19th and early 20th centuries. On the basis of their uniform design and high-quality, functional construction, in the guise of Historicism and Modernism, these two ensembles of maritime warehouses and modern office buildings of the 1920s are unique.

ICOMOS considers that the applicability of this justification to the nominated property as a whole – that

is, to Speicherstadt and Kontorhaus district collectively – is questionable. The unevenness in the valuation and justification for inscription makes it difficult to conclude that the nominated property as a whole can meet all four criteria proposed, and especially criterion (i), whose justification is proposed only in relation to the Chilehaus. ICOMOS further considers that this justification does not reveal an important interchange of values, or a unique or exceptional testimony to a cultural tradition at a global level. It does, however, allude to a distinctive architectural ensemble that illustrates an important stage in history, and this part of the justification can be considered appropriate.

Integrity and authenticity

Integrity

ICOMOS considers that the nominated property, as revised by the State Party on 9 and 10 February 2015, includes all the elements necessary to express the proposed Outstanding Universal Value and is of adequate size to ensure the complete representation of the features and processes that convey its significance. A logical and scientific basis for the selection of the revised nominated area appears to have been applied.

The attributes are well conserved and in good condition, and the nominated property does not suffer from the adverse effects of development – though some key features and attributes of the Speicherstadt portion may be threatened by future changes in use and function.

ICOMOS considers that the condition of integrity of the nominated property has been met, but the Speicherstadt portion is vulnerable in the context of planned and potential redevelopment. ICOMOS therefore recommends that heritage impact assessments be carried out before any alterations are approved and implemented, in accordance with its *Guidance on Heritage Impact Assessments for Cultural World Heritage Properties*.

Authenticity

Some of the original characteristics of the Speicherstadt portion of the nominated property were altered during and after the Second World War, when large areas were damaged or destroyed. The post-war restorations and reconstructions were carried out in accordance with the Charter of Venice: minor damage was repaired in traditional forms; major damage was resolved in a distinguishable manner; and total losses were replaced with contemporary new buildings. The changes that resulted have not reduced the ability to understand the values of the property (even if the layer of post-war reconstruction has not been proposed as contributing to the potential Outstanding Universal Value). The maritime location is unchanged, though considerable changes have been made to the adjacent urban setting. The form and design of the nominated property as a whole, as well as its materials and substances, have largely been maintained. The function of the Kontorhaus district portion has also

been maintained, though Speicherstadt's historical function is in the process of disappearing.

ICOMOS considers that the cultural value of the nominated property, as recognized in the nomination criteria proposed, has been compromised to an extent, but is nevertheless adequately expressed in a truthful and credible manner through its attributes.

In conclusion, ICOMOS considers that the conditions of integrity and authenticity have been met for the nominated property (as revised by the State Party in February 2015), though the authenticity of Speicherstadt may be threatened by future changes in use.

Criteria under which inscription is proposed

The property is nominated on the basis of cultural criteria (i), (ii), (iii), and (iv).

Criterion (i): represent a masterpiece of human creative genius;

This criterion is justified by the State Party on the grounds that Fritz Höger's Chilehaus, with its eastern tip recalling the prow of a ship and the characteristic detail of its facades, is regarded as an iconic work of expressionist architecture, which no standard work of reference on 20th century architecture fails to mention. By combining a reinforced concrete skeleton with traditional brickwork, executed with barely surpassable virtuoso design and craftsmanship, Höger created a modern style of office building architecture, the like of which the world had never seen.

ICOMOS considers that the applicability of this criterion to the nominated property as a whole has not been justified, but its applicability to the Chilehaus alone might be possible with further analysis. The Chilehaus is indeed included in a number of standard reference works on 20th century architecture for its expressionist aesthetics, but the other office complexes in the Kontorhaus district (and the Speicherstadt warehouses) are not widely cited as exceptional creative achievements. The plans and interior qualities of the Chilehaus, beyond stairwells and the entrance hall, are not fully addressed, nor does the dossier fully explain why the Modernist tendencies of this office building could be considered of universal value. Other early 20th century office buildings, such as the Larkin Building in Buffalo, United States of America (1904-1906, dem. 1950), are widely recognized for their groundbreaking designs; and the skyscraper typology for office buildings has been far more influential and is technologically more innovative and advanced.

ICOMOS considers that this criterion has not been justified for the nominated property as a whole.

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 cultural-historical significance of Speicherstadt and the Kontorhaus district, particularly the area consisting of the Chilehaus, Messberghof, Sprinkenhof, Mohlenhof, Montanhof, and Miramar-Haus, lies in the fact that they document the changes in urban development, architecture, and technology, as well as the functional changes, which resulted from the rapid expansion of international trade in the second half of the 19th century. The two mono-functional, functionally complementary districts present a globally unique microcosm, on a unique scale, of the ideal of a modern city with functional zones, and document the concept of city formation.

ICOMOS considers that an important interchange of human values on developments in architecture, technology or town planning has not been demonstrated in the nominated property. The changes in urban development, architecture, and technology that resulted from the rapid expansion of international trade in the second half of the 19th century were endemic, and can be documented in many locations beyond Speicherstadt and the Kontorhaus district. Compelling reasons to categorize these two districts of Hamburg as a globally unique example of the ideal of a modern city with functional zones have not been put forward. Tendencies toward functional concentration characterize many cities. Some of these tendencies were unplanned consequences of market forces (central city land prices, for example) and others were planned, such as the ideal of the Functional City championed by the CIAM group of architects and town planners in the early 1930s and most extensively embodied in the Brazilian capital of Brasilia (Brasilia, Brazil, 1987, (i), (iv)).

ICOMOS considers that this criterion has not been justified.

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

This criterion is justified by the State Party on the grounds that, thanks to their scale, the quality of their design, their materials, and their architectural forms, both Speicherstadt and the Kontorhaus district, in particular the area consisting of the Chilehaus, Messberghof, Sprinkenhof, Mohlenhof, Montanhof, and Miramar-Haus, bear exceptional testimony to the building tradition in Hamburg, as a Hanseatic port city, and to the self-image of its business people, as well as to their own adaptability, which ensured their success.

ICOMOS considers that this justification focuses on a testimony whose articulation – which is marked by building scale, quality, materials, and architectural forms – has been restricted to the Hanseatic port city of Hamburg, and which is expressed by the self-image and adaptability of a very small group – Hamburg's business people – rather than of a civilization (or a cultural tradition) per se.

ICOMOS considers that this criterion has not been justified.

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

This criterion is justified by the State Party on the grounds that the two neighbouring mono-functional but functionally complementary districts both contain outstanding examples of the types of buildings and ensembles which epitomize the consequences of the rapid growth in international trade in the late 19th and early 20th centuries, respectively. Their uniform design and high-quality, functional construction, in the guise of historicism and Modernism, respectively, make them unique examples, the world over, of ensembles of maritime warehouses and modern office buildings of the 1920s.

ICOMOS considers that this criterion can be applied to the nominated property as a whole. Regrettably, no other combined warehouse-office ensembles have been compared, other than in Liverpool. Moreover, the two Hamburg districts are linked conceptually in the nomination dossier as being functionally complementary, but in practical terms the two districts are described, analyzed, and justified independently.

In spite of these shortcomings in the nomination dossier, ICOMOS considers that the nominated property, as revised by the State Party in February 2015, represents an outstanding example of a combined warehouse-office district associated with a port city. One of the largest surviving districts of this type in the world, despite significant losses in the Second World War, this ensemble of warehouse blocks and ancillary buildings interlaced with a network of canals and bridges, along with its associated office district, remains an exceptional testimony to the rapid growth of international trade in the late 19th and early 20th centuries.

ICOMOS considers that this criterion has been justified for the nominated property as revised by the State Party in February 2015.

In conclusion, ICOMOS considers that the nominated property meets criterion (iv) and the conditions of authenticity and integrity.

Description of the attributes

The Outstanding Universal Value of Speicherstadt and Kontorhaus District with Chilehaus is expressed in 15 large warehouse complexes, six ancillary port buildings, and a connecting network of canals and bridges originally erected between 1885 and 1927; and six massive office complexes built between the 1920s and the 1940s to house businesses engaged in port-related activities.

Most of Speicherstadt's warehouses feature richly historicist façades covering modern skeleton frames. The six ancillary buildings – the former Boiler House, former Central Power House, former Coffee Exchange, former Manned Fire Alarm Station, former Winch Operators' House, and former Customs Buildings – are prominently sited, and most are picturesquely designed in historicist styles. The ensemble of short bridges and elevated walkways span the waterways and interconnect the warehouse blocks with each other and with the city. The neighbouring Kontorhaus district features the Chilehaus, Messberghof, Sprinkenhof, Mohlenhof, Montanhof, and Miramar-Haus, six very large office complexes begun in the 1920s, plus the Polizeikommissariat, all located on irregularly shaped and obliquely angled plots in a densely built area adjacent to the warehouse district. Most of these large office complexes presaged a Modernist style of architecture, and are clad in a distinctive clinker brick.

4 Factors affecting the property

The State Party has identified a number of development and environmental pressures in the nominated property. In the Kontorhaus district, there are plans to consider allowing the use of the stepped-back upper storeys as apartments but, generally speaking, no substantial interventions to the fabric of the buildings are envisaged.

Speicherstadt, however, has witnessed a significant transformation in recent decades, with the port system evolving from general cargo to containerized transport, and with the development of the neighbouring HafenCity to the south. Speicherstadt is now much in demand by new urban users, who bring with them pressures for new uses such as cultural and leisure activities and restaurants. These pressures have also led to additional demands being made on Speicherstadt's streets and infrastructure. As a result, Speicherstadt was taken out of the remit of the Port Area Development Act in 2012. This move aims at promoting redevelopment of Speicherstadt to become an attractive urban nexus between the city centre and the HafenCity (of which the Speicherstadt is now administratively a part).

Environmental pressures include high water levels and flooding, since Speicherstadt lies outside the main dyke system. This is not an issue for the traditional uses of the buildings, but a comprehensive system of flood defences and appropriate flood-safe escape routes would have to be established before larger-scale residential uses could be realized. Such a system of defences could have

negative impacts on the nominated property's value, integrity, and authenticity. The State Party does not believe tourist activities pose a threat to the nominated property, though ICOMOS considers that a number of existing and envisioned activities are aimed, at least in part, at serving the tourist market.

ICOMOS considers that the main threats to the property are development pressures, particularly conversions to new uses and potential interventions aimed at eliminating the threat of flooding in Speicherstadt.

5 Protection, conservation and management

Boundaries of the nominated property and buffer zone

The nominated property, as revised by the State Party in February 2015, has a total area of 26.08 ha, comprised of the 20.95-ha Speicherstadt and the 5.13-ha Kontorhaus district. The State Party contends that the nominated property includes all the necessary elements to express the proposed Outstanding Universal Value. The proposed boundaries include all of the historic Speicherstadt except its west end, excluded from the nominated property because the historic warehouses there were destroyed during the Second World War and not replaced. The proposed boundaries for the Kontorhaus district, as revised by the State Party in February 2015, include a selection of six of the large office complexes built between the 1920s and the 1940s to house businesses engaged in port-related activities.

ICOMOS considers that the boundaries, while very tightly drawn, are adequate.

The 56.17-ha buffer zone, as revised by the State Party in February 2015, comprises the area immediately surrounding the nominated property. According to the State Party, it was defined using either spatial or physical boundaries, guided by the legal provisions of the Hamburg Heritage Protection Act. Its boundaries are intended to ensure that the visual experience offered by the nominated property remains intact. Sightlines to and from the nominated property have been taken into account. Areas severely damaged in the Second World War but with a historical connection to the nominated property (such as the western end of Speicherstadt) have been included in the buffer zone, as has the entire Kontorhaus district, including high-rise buildings of the post-war period.

ICOMOS considers that the buffer zone has also been very tightly defined, to the degree that development near the nominated property but outside the buffer zone could have a negative impact on important vistas, views, and viewpoints. This is the case along in the Cremon-Insell area immediately north of Speicherstadt, where the proposed buffer zone, which is limited to the Bei den Mühren roadway paralleling the Zollkanal, excludes the adjacent built environment that forms a very prominent

backdrop to the nominated property. Where a setting such as this assists in the appreciation of the Outstanding Universal Value, but does not contribute to the Outstanding Universal Value, ICOMOS considers it desirable that it be incorporated in the buffer zone, or otherwise protected. While planning and development regulations are in place for the Cremon-Insel area, buffer zone boundaries are formally registered at the time of inscription of a property. The buffer zone thereby becomes an integral component of the State Party's commitment to the protection, conservation, and management of the property, and officially becomes part of the property's overall management system.

ICOMOS observes that a number of recent interventions in the adjacent urban landscape do not fully reflect the qualities highlighted in the nomination dossier. For example, the 105-m tall Hanseatic Trade Center (1994-2002) is in the buffer zone, and the 110-m tall Elbphilharmonie concert hall (under construction) is just outside it. Since 2000, the construction of the Hafencity south of the Speicherstadt has limited the view from the harbour side. The Design Ordinances referred to in the nomination dossier, one existing and the other proposed, should be important tools to help address this issue.

In conclusion, ICOMOS considers that the boundaries of the nominated property as revised by the State Party in February 2015, though very tightly drawn, are adequate, as is the proposed buffer zone as revised by the State Party in February 2015. ICOMOS recommends that in the future the State Party give consideration to the extension of the boundaries of the buffer zone in the Cremon-Insel area to become an integral component of the State Party's commitment to ensure the protection, conservation, and management of the property, and to officially become part of the property's overall management system.

Ownership

In Speicherstadt, the built-on plots of land, streets, squares, bridges, parking areas, waterways and water expanses, and quay walls are owned by the Free and Hanseatic City of Hamburg. Customs Buildings 2, 3, and 4 and the Wasserschlösschen are owned by the Free and Hanseatic City of Hamburg (LIG-Real Estate Management). All other properties in Speicherstadt are owned by Hamburg Port and Logistics, a partially privatized public limited company whose stocks are wholly owned by the Hamburg Capital and Holdings Management Company, which in turn is wholly owned by the Free and Hanseatic City of Hamburg. In the Kontorhaus district, the streets, squares, and parking areas are owned by the Free and Hanseatic City of Hamburg. The Chilehaus, Messberghof, Sprinkenhof, Mohlenhof, Montanhof, and Miramar-Haus office complexes are each privately owned.

Protection

The entire nominated property lies within the slightly wider boundaries of an area listed in the Hamburg Conservation Registry. Speicherstadt was listed in 1991 under the

Hamburg Heritage Protection Act (which by means of a 2012 amendment includes a duty to comply with the World Heritage Convention). The buildings and open spaces in the nominated area of the Kontorhaus district were listed under the Act in 1983 with the exception of the Mohlenhof, which was listed in 2003. The competent authority for compliance with the Act is the Department for Heritage Preservation at the Regional Ministry of Culture (Kulturbehörde), which is advised by a Heritage Council of experts, citizens, and institutions. The Act includes the obligation to make reasonable efforts to preserve the heritage asset, protect it from danger, and maintain it in good repair. Unreasonable efforts include but are not limited to cases in which the cost of maintenance and operation cannot be offset by the revenues or the utility value of the heritage asset on a sustained basis.

Areas adjacent to the nominated property are protected by Section 8 of the Act, to the extent they are classified as being "*of formative significance for [the heritage asset's] appearance or continued existence.*" A permit from the competent authority is required before these areas may be changed by the erection, alteration or elimination of structural elements, by the development of un-built public or private spaces, or by any other means if such change significantly detracts from the character and appearance of the heritage asset.

ICOMOS considers that the legal protection in place is adequate.

Conservation

The nominated property appears to have been fully inventoried, described, and documented during the course of preparing the nomination dossier. The State Party reports that the condition of the buildings in the Kontorhaus district portion of the nominated property can be described as very good, and those in Speicherstadt as in a good state of structural repair. Maintenance and rehabilitation efforts are undertaken by the owners in consultation with the city's Department for Heritage Preservation. The quay walls of the Speicherstadt on the water side and underneath the warehouse blocks require attention; there are plans to draw up an integrated plan concerning their repair and maintenance.

ICOMOS considers that the state of conservation of the nominated property is adequate.

Management

Management structures and processes, including traditional management processes

The nominated property is currently managed by the Free and Hanseatic City of Hamburg under the Hamburg Heritage Protection Act, which regulates the appropriate maintenance, repair, and replacement of protected heritage assets, building permissions for changing the heritage, and protection of the surroundings. Also relevant are the Hamburg Building Code (2005, amended 2009)

and 1997 zoning and land-use plan (which still defines the nominated property incorrectly as a "port area").

The State Party advises that, should the nomination be successful, the Regional Ministry of Culture intends to appoint a World Heritage Coordinator who will be responsible within the Department for Heritage Preservation for coordinating the management of the nominated property (the required funding has already been secured), and will be affiliated a department from the Ministry of Culture. The future World Heritage Coordinator will also be responsible for carrying out regular monitoring and quality assurance activities, and will be encouraged to cooperate with the German ICOMOS committee's World Heritage sites monitoring group. Under the Heritage Protection Act, interventions are subject to approval by the Department for Heritage Preservation.

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

A Management Plan aimed at safeguarding the potential Outstanding Universal Value of the Speicherstadt and Kontorhaus District with Chilehaus, its authenticity, and its integrity, and protecting its proposed buffer zone, entered into force on 28 May 2013, according to information provided by the State Party on 12 January 2015.

The Plan manages the property under market economy conditions, *"as this is vital for the preservation of the large number of buildings,"* according to the nomination dossier. The objective of the Plan is therefore *"to reconcile safeguarding the 'outstanding universal value' of the future World Heritage site on the one hand, with taking the necessary measures to provide for its sustainable further development, on the other."* The Plan is a strategic document that defines objectives for preservation and sustainable development, assesses the work that needs to be done, identifies areas of conflict and potential synergies, and establishes priority measures and projects.

Speicherstadt currently has its own Design Ordinance, and a Development Concept has also been prepared. The city intends to draft a Design Ordinance for the Kontorhaus district as well. In addition, a local development plan is currently being produced for Speicherstadt. The current zoning and land-use plan (1997) has not yet been revised to reference and mark the nominated property and its buffer zone in order to ensure maximum transparency for all stakeholders and decision-makers involved in the planning processes.

The State Party has not identified a risk preparedness plan or a visitor/tourism plan. There is currently no comprehensive system of flood defence for the entire Speicherstadt; the State Party contends that flooding does not present a real danger to the structural integrity of the buildings. According to the State Party, there are no indications that visitor/tourist activities in Speicherstadt, one of Hamburg's main tourist destinations, could pose a

threat to or devalue the nominated property. ICOMOS regards risk preparedness and visitor/tourism plans as important tools in the management, presentation, and conservation of a property.

While staffing levels have not been provided, the State Party notes that the Department for Heritage Preservation has at its disposal architecture, landscaping, art history, and construction engineering graduates who will be assigned certain (unspecified) responsibilities and decision-making competences. Funding has been earmarked for the future post of World Heritage Coordinator. Maintenance and preservation of the buildings are the responsibility of the owners; funds to maintain public streets and spaces are made available in the Free and Hanseatic City of Hamburg's annual budget.

Involvement of the local communities

The nomination dossier does not document the involvement of local communities in the development of the draft Management Plan or the nomination dossier. It notes that the local population and property owners feel they have a special obligation to preserve Speicherstadt and the buildings of the Kontorhaus district, and that the future World Heritage Coordinator will liaise with representatives of various local and regional interest groups as well as the general public.

In conclusion, ICOMOS considers that the management system should be extended to include risk preparedness and visitor/tourism plans that ensure the attributes that support the proposed Outstanding Universal Value, authenticity, and integrity are sustained.

6 Monitoring

The State Party does not describe a monitoring program currently in place for the nominated property. The nomination dossier states that the future World Heritage Coordinator would be responsible for carrying out regular, reactive, and preventative monitoring and quality assurance activities in the nominated property. Seven key indicators have been proposed as the measures of the state of conservation. All indicate the periodicity of the review as either "on-going" or "annually." The indicators are vague ("public spaces"; "uses and changes of use"; "development of tourism"; etc.); none relate particularly closely to the proposed Statement of Outstanding Universal Value; and none express a benchmark that indicates a desired state of conservation.

ICOMOS considers that the key indicators chosen as the measures of the property's state of conservation should be revised to better relate to the attributes that convey potential Outstanding Universal Value; and that a monitoring system be developed and implemented to determine whether the goals set for protection, conservation, and management are being achieved.

7 Conclusions

The State Party has made great efforts to compile the nomination dossier for Speicherstadt and Kontorhaus District with Chilehaus in a comprehensive and clear manner. ICOMOS considers that the dossier deals with Speicherstadt and the Kontorhaus district as largely separate entities when describing, comparing, and justifying the nominated property. As a result, the essence of the nomination and the nominated property as a whole is not as clear as would be desired. Nevertheless, ICOMOS considers that the nominated property, as revised by the State Party in February 2015, meets criterion (iv) and the conditions of authenticity and integrity.

ICOMOS considers that the comparative analysis justifies consideration of the nominated property for the World Heritage List, despite weaknesses and inconsistencies in its methodology. The proposed boundaries of the nominated property and its buffer zone, as revised in February 2015, are adequate, though extension of the buffer zone is recommended in the future. Legal protection is also adequate, as is the state of conservation. Risk preparedness and visitor/tourism plans should be added to the management system, the key indicators for the property's state of conservation should be revised, and a monitoring system should be developed, and all should be related directly to the attributes that convey Outstanding Universal Value.

ICOMOS further considers that the name of the property should be simplified as "Speicherstadt and Kontorhaus District."

8 Recommendations

Recommendations with respect to inscription

ICOMOS recommends that Speicherstadt and Kontorhaus District with Chilehaus, Germany, be inscribed on the World Heritage List on the basis of **criterion (iv)**.

Recommended Statement of Outstanding Universal Value

Brief synthesis

Speicherstadt and the adjacent Kontorhaus district are two densely built central urban areas in the German port city of Hamburg. Speicherstadt, originally developed on a 1.1-km-long group of narrow islands in the Elbe River between 1885 and 1927 (and partly rebuilt from 1949 to 1967), is one of the largest unified historic port warehouse complexes in the world. The adjacent Kontorhaus district is a cohesive, densely built area featuring six very large office complexes that were built from the 1920s to the 1940s to house businesses engaged in port-related activities. Together, these neighbouring districts represent an outstanding example

of a combined warehouse-office district associated with a port city.

Speicherstadt, the "city of warehouses," includes 15 very large warehouse blocks that are inventively historicist in appearance but advanced in their technical installations and equipment, as well as six ancillary buildings and a connecting network of canals and bridges. Anchored by the iconic Chilehaus, the Kontorhaus district's massive office buildings stand out for their early Modernist brick-clad architecture and their unity of function. The Chilehaus, Messberghof, Sprinkenhof, Mohlenhof, Montanhof, and Miramar-Haus attest to architectural and city-planning concepts that were emerging in the early 20th century. The effects engendered by the rapid growth of international trade at the end of the 19th century and the first decades of the 20th century are illustrated by the outstanding examples of buildings and ensembles that are found in these two functionally complementary districts.

Criterion (iv): Speicherstadt and Kontorhaus District with Chilehaus contains outstanding examples of the types of buildings and ensembles that epitomize the consequences of the rapid growth in international trade in the late 19th and early 20th centuries. Their high-quality designs and functional construction, in the guise of historicism and Modernism, respectively, make this an exceptional ensemble of maritime warehouses and Modernist office buildings.

Integrity

Speicherstadt and the Kontorhaus district contain all the elements necessary to express the Outstanding Universal Value of the property, including the buildings, spaces, structures, and waterways that epitomize the consequences of the rapid growth in international trade in the late 19th and early 20th centuries and that illustrate the property's high-quality designs and functional construction. The 26.08-ha property is of adequate size to ensure the complete representation of the features and processes that convey the property's significance, and it does not suffer from adverse effects of development or neglect.

Authenticity

Speicherstadt and Kontorhaus district is substantially authentic in its location and setting, its forms and designs, and its materials and substances. The maritime location is unchanged, though considerable changes have been made to the adjacent urban setting. Speicherstadt was significantly damaged during the Second World War, but this has not reduced the ability to understand the value of the property. The forms and designs of the property as a whole, as well as its materials and substances, have largely been maintained. The function of the Kontorhaus district has also been maintained. The links between the Outstanding Universal Value of the property and its attributes are therefore truthfully expressed, and the attributes fully convey the value of the property.

Management and protection requirements

The property, which is owned by a combination of public and private interests, is within an area listed in the Hamburg Conservation Registry. Speicherstadt was listed under the Hamburg Heritage Protection Act in 1991 and the Kontorhaus district was listed under the Act in 1983 and 2003. The Act, by means of a 2012 amendment, includes a duty to comply with the World Heritage Convention. The competent authority for compliance with the Act is the Department for Heritage Preservation at the Regional Ministry of Culture in Hamburg, which is advised by a Heritage Council of experts, citizens, and institutions. A Management Plan aimed at safeguarding the Outstanding Universal Value, authenticity, and integrity of the property, and protecting its buffer zone, entered into force in 2013.

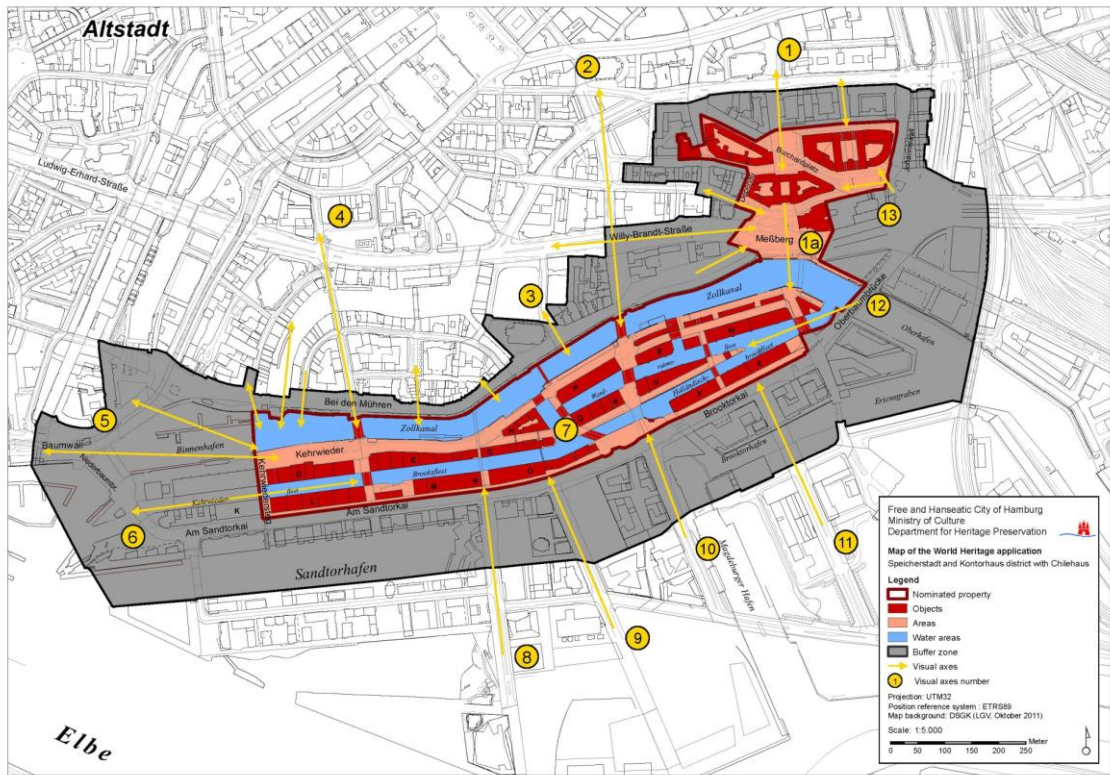
The long-term and sustainable safeguarding of Speicherstadt and the Kontorhaus district will require preserving the historic buildings, the characteristic overall impact of the Speicherstadt and Kontorhaus ensembles, and their typical appearance within the townscape; maintaining or improving the quality of life of the residents of Hamburg by safeguarding a unique testimony to Hamburg's cultural and historical development, which played a key role in establishing its identity; and raising awareness and disseminating information.

Additional Recommendations

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

- Extending in the future the boundaries of the buffer zone in the Cremon-Insel area to become an integral component of the State Party's commitment to ensure the protection, conservation, and management of the property, and to be officially included in the property's overall management system;
- Expanding the management system to include risk preparedness and visitor/tourism plans that ensure the attributes that support the Outstanding Universal Value, authenticity, and integrity are sustained;
- Revising the key indicators of the state of conservation to better relate to the attributes that convey Outstanding Universal Value, and developing and implementing a monitoring system to determine whether the goals set are being achieved;
- Carrying out heritage impact assessments in Speicherstadt before any alterations are approved and implemented, in accordance with the ICOMOS *Guidance on Heritage Impact Assessments for Cultural World Heritage Properties*;

ICOMOS also recommends that the name of the property be simplified as "Speicherstadt and Kontorhaus District."



Revised map showing the boundaries of the nominated property and the buffer zone



Aerial view of Speicherstadt (left) and the Kontorhaus district (right)



Speicherstadt



The Chilehaus in the Kontorhaus district



The Messberghof in the Kontorhaus district

The Naumburg Cathedral and the Landscape of the Rivers Saale and Unstrut

(Federal Republic of Germany)

No 1470

Official name as proposed by the State Party

The Naumburg Cathedral and the Landscape of the Rivers Saale and Unstrut – Territories of Power in the High Middle Ages

Location

State of Saxony – Anhalt, Burgenland District
Federal Republic of Germany

Brief description

Located in the eastern part of the Thuringian Basin, the Naumburg Cathedral and the Landscape of the Rivers Saale and Unstrut revolves around the confluence of the Unstrut with the Saale rivers and around the towns of Naumburg and Freyburg. The area today exhibits a tranquil contemporary country character, partially touched by modernity in the form of energy and communication infrastructure, new residential or productive areas. Evidence of the medieval past of the region survive in religious and defensive structures, relict stretches of ancient routes, remains of hydraulic arrangements, buried traces of agrarian land organization and land use forms, toponyms.

Category of property

In terms of categories of cultural property set out in Article 1 of the 1972 World Heritage Convention of 1972, this is a *site*.

In terms of the *Operational Guidelines for the Implementation of the World Heritage Convention* (July 2013) paragraph 47, it has also been nominated as a *cultural landscape*.

1 Basic data

Included in the Tentative List

20 September 1999

International Assistance from the World Heritage Fund for preparing the Nomination

None

Date received by the World Heritage Centre

23 January 2014

Background

This is a new nomination.

Consultations

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

Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the property from 18 to 21 September 2014.

Additional information received by ICOMOS

ICOMOS has received a variety of additional information concerning the property.

On 28 July 2014, ICOMOS received from the World Heritage Centre a letter sent by a German NGO (Verein Rettet das Saaletal e.V.) concerning the planned construction of a bypass road crossing the Saale River and its probable impact on the values of the nominated property. On 10 October 2014, ICOMOS received a clarification letter from the State of Saxony–Anhalt on these issues.

A letter was sent to the State Party on 8 September 2014 requesting additional information on the rationale for the boundaries of the nominated property and of the buffer zone as well as on the concept of 'processing boundary'; the state of conservation of the heritage features related to the historic period relevant to the nomination; expansion of the comparative analysis; details on specific factors affecting the property (i.e. industrial plants and flood prone areas); the structure and finalisation of the Cultural Landscape Framework plan; the organisation of the additional mapping; the Fördverein Welterbe an Saale und Unstrut e.V.; details on ownership; details on the Saale valley bridge project and on its possible impacts; as well as additional thematic mapping. The State Party responded on 27 October 2014 providing the requested additional information.

The information received from these exchanges has been incorporated into the relevant sections of this evaluation report.

On 16 January 2015, ICOMOS has sent a letter to the State Party informing that that the property does not fulfil the requirements set out in the *Operational Guidelines for the implementation of the World Heritage Convention*, and therefore ICOMOS will recommend to the World Heritage Committee that the property be not inscribed on the World Heritage List.

Upon State Party's proposal, and in the spirit of reinforcing the dialogue between ICOMOS and States Parties, a video conference was organised on 4 February 2015 in which ICOMOS' and State Party's representatives participate, with the aim of further explaining the motivations that led the World Heritage ICOMOS Panel to formulate the ICOMOS negative recommendation.

On 18 February 2015 the Fördverein Welterbe an Saale und Unstrut e.V. sent a letter to ICOMOS in which the nomination arguments were reiterated.

Date of ICOMOS approval of this report

12 March 2015

2 The property

Description

The nominated property is located in the eastern part of the Thuringian Basin, and encompasses the area surrounding the confluence of the Unstrut river with the Saale. The changing courses of these two rivers have shaped the rolling plateau and the soft valleys of glacial origins of the area, mainly constituted of mottled sandstone and shell limestone, further covered by thick deposits of loess on the plateau and alluvial clay in the valleys.

The nominated landscape exhibits a tranquil contemporary rural character comprised of cultivated fields interspersed with woods and forests concentrated in areas less suitable for agriculture, with a number of villages and hamlets; some terraced vineyards survive on the steeper slopes along the River Saale. The area also includes industrial and modern residential areas in larger villages and towns, still active quarries, fast roads, railways and communication and energy distribution infrastructure.

The area was crossed by important routes of communication: the main ones are the Via Regia, connecting western to Eastern Europe, and the route linking northern Italy to the Elbe Region via Regensburg and known alternatively as Regensburger, Nürnberger or Franken Strasse. Traces of these trade routes can still be detected within the nominated property in the form of raised or sunken road stretches (e.g. near Flemmingen) or in the persistence of certain routes (e.g. along the Saale River), and written records or topographic evidences of fords, river crossings or, more rarely, of bridges controlled by monasteries (e.g. Wenzendorfer Brücke).

Most of the high-medieval layout of the landscape, former land uses and features (such as fords, fortifications, walls, enclosures, farmland parcels, pasturelands, water management systems/structures, quarries and stone pits) is represented by toponyms that are documented in detail in the nomination dossier; while others have been traced through field or laser-scan surveys. In only a relatively few cases their remains persist as tangible and visible evidence, i.e., in settlement layouts, terraced fields, bridges (usually of later periods): i.e., terraced systems survive at Igelsberg Hill near Goseck, while field plot structures have been detected through laser scanning in the forests in the Rödel area and south of Schulpforte. Ancient evidence of terraced vineyards can still be well recognised in limited areas, as the Schweigenberge vineyard, or at Klöppelberg. Other vineyards persist from these periods, however, their current configuration dates to the early modern age or late 19th century. In most cases, following the plagues that hit European vines in the 19th and 20th centuries, former farming patterns were largely replaced by wider plots where new vines were

planted. Enlargement of cultivated plots also occurred for other crops and today the size of the fields has been mainly adapted to mechanised farming.

Hydraulic arrangements and water supply systems established since the 11th century AD are documented through written records and toponyms but also, in limited cases, by material traces, such as the village ponds in Grosswilsdorf (in the nominated property) and in Punschrau (in the buffer zone). The Kleine Saale River, a 10km-long artificial channel built in the 13th century to supply water to the Cistercian monastery of Schulpforte, is perhaps one of the most important features related to water management and is documented to have driven eight mills. Many mills still exist in the area and some may have historical links with medieval structures in terms of location or names.

The pattern of the settlements in the area is shaped by geographic conditions, including the presence and confluence of the Saale and Unstrut Rivers, or the limestone plateau. Settlement distribution was also determined by communication routes, in particular the intersection of the Via Regia and the Regensburger Strasse, with its important market place, around which Naumburg developed and thrived.

Only four castles, built in the period relevant to the nomination, still contain structures from the 12th-13th centuries: Neuenburg Castle in Freyburg, built on the eastern bank of the Unstrut River, was expanded and modified in subsequent phases and forms today a rather large complex; Saaleck Castle contains two towers and portions of ring and curtain walls from the 13th century; and, Rudelsburg Castle, built on a limestone cliff facing the Saaleck Castle and overlooking the Saale Valley, was later enlarged and modified; Schönburg Castle, built along the Saale River not far from Naumburg, retains its original layout and some elements, such as the keep from the 13th century.

Goseck Castle, on the other hand, was substantially remodelled into a monastery very early and further again into a castle, so that no structure from the High Middle Age survives.

Monastic complexes were also numerous and a few still survive, although they have been modified through the centuries. One of the most relevant is the Cistercian Monastery of Pforta, where only a few structures dating back to the High Middle Ages persist in their materiality, including the impressive minster, erected between 1251 and 1268 AD using the Naumburg Cathedral as a reference model. Another monastic ensemble is the Benedictine nun convent in Zscheiplitz, with its 13th century minster, architectural details of which parallel those in Naumburg Cathedral.

Naumburg and Freyburg are the two major towns within the nominated property. Although founded within the same period, they exhibit differences in urban layout and spatial organisation, Naumburg being an example of

Ottonian bishopric and Freyburg an imperial commercial centre of new foundation.

Naumburg is the major centre within the nominated property. The town grew at the intersection between the Via Regia and the Regensburger Strasse, a strategic point for commerce and exchanges. Initially the religious, military and trade-related settlements were separate fortified entities. This layout would be still legible in the street network, despite the subsequent modifications to the urban fabric. However, not much survives from the High Middle Ages beyond the cathedral and the religious architecture: only the Haus zu Hohen Lilien preserves, under the layers of subsequent modifications, the walls of a romanesque tower and portions of the town fortifications and gates date back to the 14th-15th century.

Freyburg was a newly founded fortified town, with a regular layout and grid-based road network with the market place at its centre, dating back to the Romanesque period. Later in the Middle Ages, Freyburg was subdivided into four quarters. Evidence of the building layout can be gained from the analysis of building cellars. Expansion of the town outside its walls started as early as the beginning of the 15th century. Remains of buildings from the 11th-13th centuries are very limited and consist mainly of vestiges incorporated in cellar walls. The town walls and gates mainly date to the 14th-15th centuries.

Some surviving examples of typical blind alley settlement forms are said to date to prior to the High Middle Ages; these are complemented by linear and radial settlement forms (Grosswilsdorf, Punshrau is in the buffer zone), apparently evolved from blind alley layouts.

Several churches survive within the area and the most important is the Naumburg Cathedral. It is a double-choir church erected in late Romanesque-Gothic period. From the relevant period for the nomination it conserves the crypt, the choir, the three-bay transept with its portal, the choir screens and, more importantly, the 13th century glass paintings and the sculptures of the founders, associated with the workshop known as Naumburg Master, which operated in Northern France, Iberian Peninsula (Burgos) and in Mainz, Meissen and Naumburg. The Cathedral complex included two enclosures, only the southern of which still survives, St. Mary Church and the chapels of St. Nicholas and of the Three Kings; the former immunity precinct can only be reconstructed through historical records and the structure of cadastral parcels, although the bishop's and the capitular curiae still exist.

Other important churches are the minster of the Benedictines in Goseck, and the minster of St. Maurice's monastery of the Augustinian canons, which was remodelled into gothic forms in the 15th century. These bear witness to the influence of the Naumburg Cathedral and also of the role played by convents in the area.

The buffer zone is formed by six separate areas exhibiting similar landscape and settlement features as the nominated property.

History and development

Advantageous climatic conditions – with mild winters and warm summers – favoured permanent human occupation since the Stone Age, which continued through the Neolithic and Bronze Ages. Geographic location and geomorphologic features made this region a crossroads through central Europe, thus strengthening its permanent settlement and attracting populations from different areas.

In the early Middle Ages (5th century AD) the expansion policy of the Merovingians succeeded in subduing the Thuringian kingdom. The local population was forcibly resettled elsewhere in the Frankish empire and substituted by Frisians, Angles and Hessians.

In this period, fluxes of populations from the east – Avars, but also Slav Sorbs – prevented the Merovingians from expanding further eastwards. The area was a border land between the Franks, the Sorbs and the Saxons.

In the following centuries, Sorbs and Saxons were both subdued by the Franks, and integration through Christianisation occurred by means of the policy of the imperial monasteries of Fulda and Hersfeld.

The town of Naumburg developed by the Saale River, not far from the Unstrut River confluence. It became a bishop's seat after this was moved from Zeitz as early as 1030 due to the conjoined Ekkehardines' and Emperor Konrad II's efforts, and an important market place, thanks to the bishops' active policy. Naumburg already had the status of *civitas* at that time and was granted free trade privileges which encouraged settlement from nearby villages and towns. The family or kinship ties of the bishops with kings and emperors from the Salian and Hohenstaufen dynasties contributed to Naumburg thriving as a centre of commerce and an imperial outpost for Christian civilisation of eastern European regions.

Freyburg was founded by the Unstrut River as an 'Einlager' place where residence was compulsory until debts were paid. The appellation of *civitas* was used for Freyburg in a deed dating back to 1261 AD and its legal unity with the Naumburger Castle was stated since 1292 AD.

In the early 12th century, the region, as well as the rest of Europe, experienced the flourishing of agriculture and settlement. Due to an active policy undertaken by the Bishop of Naumburg, who wished to spread the presence of the Cistercian order in the region, Flemish peasants were encouraged through privilege offers to resettle in the Saale-Unstrut region. The peculiar structure of the village of Flemmingen is related to this period.

The foundation of the Cistercian monastery of Pforte in 1137-1138 was also an important turning point for the colonisation and shaping of the territory. The monastery pursued a policy of land acquisition and control by establishing granges and boosted the economy of the area. It is in this context that the artificial canal to be named Kleine Saale was built.

To stabilise their control over the region, Naumburg bishops erected Schönburg and Rudelsburg castles to be permanently occupied by castellans.

The 12th and 13th centuries saw alternating control over the region by the Counts Palatine of Saxony, and the Ludowingers, whose increasingly important status was reflected by castle construction, patronage of the arts and church foundations.

The region then came under the control of the Wettin family, where it remained until 1815. It was with the Wettins that the Naumburg Cathedral was founded and that lost its condition as a frontier land, as this dynasty provided long-lasting stability in the wider central German region.

The advent of the Reformation brought major changes in the region: the Catholic convents and monasteries were suppressed and their possessions came into the hands of private tenants. Only the Naumburg Cathedral chapter saw its property rights substantially untouched. The city of Naumburg grew in importance until the 17th century, when the thirty-year war devastated the region.

In the 18th century Naumburg and its region experienced local economic revitalisation, due to vine-growing and salt extraction in Kösen.

With the Edict of 1807, Prussia freed peasants as a first step to modernise the country and, following the Congress of Vienna (1814 - 1815), Saxony was forced to cede territories to the Prussian King and the area became part of Prussia. The Pforte monastery which had already been converted to a school after the Reformation, was again turned back into a high school. The opening of the railway lines Frankfurt-Dresden and Munich-Berlin confirmed the vocation of the area as a crossroads.

Naumburg became an administrative centre of regional importance and, despite the efforts to attract industries, it developed an image of an ideal place for retreat, which is also demonstrated by some built areas of the modern town.

The area was spared by war destruction in the 20th century, as well as by the transformations that occurred under the socialist regime. However, land reform and collectivisation of farmers brought major changes in the landscape mosaic, land plots were enlarged and agricultural production was organised on the base of large-scale units.

The reunification of Germany brought considerable administrative and social changes, along with systematic restoration of monuments, infrastructure modernisation and economic development, including tourism.

3 Justification for inscription, integrity and authenticity

Comparative analysis

The comparative analysis developed in the nomination dossier has identified as guiding elements the typology of property, that is evolving cultural landscapes, and the dynamics of its formation based on competing powers and/ or cultural differences, along with the surviving material traces of these dynamics. The State Party considers that the most appropriate geo-cultural context would be Western and Central Europe, however it also examines some properties outside Europe.

The analysis identifies a selection of properties articulated in four groups: the first group contains some cultural landscapes inscribed on the World Heritage List presenting similar features and analogies in historic development, the second group includes properties related to the 'theme' of power and its visible territorial influence, the third encompasses properties bearing witness of cultural exchange with border regions, while the fourth refers to 'vine landscapes'. Overall the number of properties considered is 26, out of which 5 are from Asia.

The nomination dossier concludes its analysis recognising that a number of properties already inscribed on the World Heritage List attest to power dynamics along border lands through their civil and religious buildings or complexes and their territorial organisation and arrangements. The nominated property however would be unique because it is a cultural landscape and because of the high concentration of features from the High Middle Ages compared to other properties where these traces have been superseded by later developments.

ICOMOS requested the State Party to expand the comparative analysis to include properties not inscribed on the World Heritage List that could be relevant for the present nomination. The State Party responded by summarizing the rationale and findings of the comparative analysis contained in the nomination dossier but the analysis was not extended to include additional landscapes.

ICOMOS also notes that, while the name of the nominated property include the Naumburg Cathedral, the comparative analysis has not dealt with this monument either in its own right or in relation to its possible role in influencing the development of the region and how this may have occurred in comparable cases.

ICOMOS considers that the group of 'vine landscapes' (6 properties) is not particularly relevant to the present nomination, as the proposed justification for Outstanding Universal Value does not focus on this aspect of human development, even though there are some limited areas within the nominated property are dedicated to vine terrace farming. ICOMOS also considers that some compared properties may not be relevant to this nomination in terms of the socio-political and historical developments, i.e., *Portovenere, Cinque Terre and the Islands* (Italy, 1997 (ii) (iv) (v)), or the *Serra de Tramuntana* (Spain, 2011 (ii) (iv) (v)).

ICOMOS further observes that it is appropriate that the comparative analysis has not been restricted to cultural landscapes alone, and could therefore have included consideration of the *Old town of Regensburg with Stadthof* (Federal Republic of Germany, 2006 (ii), (iii) (iv)) because its cultural and historical context corresponds to that of the nominated property, and it exhibits important religious and civil architecture from the 11th to the 13th centuries AD.

ICOMOS notes that the transboundary *Fertő/Neusiedlersee Cultural Landscape* (Austria and Hungary, 2001 (v)) has not been considered in the analysis, despite similarities in terms of evolution pattern based on control over settlement, cultural exchange and population migration within the same span of time (11th-13th centuries), although architectural manifestations of this development differ substantially.

Among World Heritage properties, one further significant point of comparison is missing: Durham Castle and Cathedral (UK, 1986 and 2008, (ii), (iv) and (vi)), which was inscribed (as a cathedral) in 1986 and extended in 2008 to embrace the castle and the cathedral within their setting. There are several points of comparison with Naumburg, most notably the important and visually striking interrelationship between secular fortification and a major cathedral, and also the architecturally experimental character of elements of the cathedral.

As noted by T. Gunzelmann's expertise, included in the nomination dossier, ICOMOS observes that, taking into account the cultural diversity of the European continent, several areas within Europe exhibit similar patterns of historical, political and settlement development, where communication/trade interests, political and religious powers cooperated and/or competed in maintaining and expanding territorial control in strategic regions.

Other European territories, from England to France and Italy, exhibit a similar concentration in small enough areas, of towns, monasteries, castles with seigneurial functions. The same observation can be made for the density and authenticity of medieval trans-European roads, ravines and fords testifying to the mobility of people and goods". The Via Regia and the other roads were important, but not the only ones, for importance, in Europe. Consider, for example, the net of roads linked to

the road of France (Via Romea or Via Francigena) or to the Camino de Santiago.

ICOMOS considers that the comparative analysis should have identified those frontier areas in the relevant geo-cultural region, that, in the same span of time (11th-13th centuries AD) underwent similar historical/political patterns of territorial control as in the nominated property, and should have compared the tangible effects on the respective territories. ICOMOS notes that several other areas of this type could be identified throughout Europe, i.e. in northern Italy and in Tyrol between the Adige and the Inn valleys, the first crossed by the roman road Via Claudia Augusta, which connected northern Italy to Augsburg, and continued to be used in the Early and High Middle Ages and was equally characterised in the relevant centuries for the purpose of this comparison by unstable boundaries, imperial concessions, episcopal control, etc. Similarly, important historical events took place in this area (i.e., in Brixen in 1080 AD a synod was held, at the presence of the emperor Henry IV, during which pope Clement III was elected), and strategic establishment of bishoprics under the aegis of the imperial power granted territorial control and its reorganisation. Physically, these similarities emerge in the abundance of new market towns (Bozen, Meran, Glurns), or episcopal cities (Brixen) with their churches and cathedrals and nearby abbeys, villages founded or granted particular privileges by bishops to achieve control and territorial reorganisation(i.e., Egna – Neumarkt, Chiusa - Klausen, Brunico – Bruneck), castles, etc. Further comparable areas in Italy could be found in north western Italy, in the Susa valley, which was passed through by one of the branches of the Via Francigena and still exhibits villages, abbeys, castles, fortifications linked to the need for territorial control, in Piedmont, with the territorial organisation achieved through the foundation of the 'borghi nuovi' (new boroughs), which were granted market privileges, as a mean to acquire territorial control and attract population.

Similar pattern of territorial occupation and colonisation may be found in France, i.e., in the Aude region, near Narbonne and Carcassonne, again a frontier zone in the same relevant period, which still exhibits a high density of villages, towns, castles, abbeys and cathedrals; or in the Maconnais, in eastern France, a region of seigneurial castles, churches and monasteries (i.e. the Benedictine abbey of Cluny) as well as villages surrounded by an agrarian territory devoted to vineyards.

Also in the United Kingdom the Kent region, particularly near Canterbury and Rochester, exhibits the physical features of a 'territory of competing powers', where abundance of castles, abbeys, priories, manors, historical roads from the High Middle Ages still witness this history; or in Surrey,

All these areas share remarkable similarities with the nominated property in terms of historic, socio-economic, geographic and political dynamics and related tangible witnesses.

ICOMOS observes that the nominated property – as much as other comparable examples – has also undergone subsequent transformations that are documented in detail in the dossier, therefore it does not differ from many other similar properties that thrived in the High Middle Ages but were then modified along the centuries by conflicts, historical upheavals, abandonment, socio-economic transformations.

ICOMOS further considers that, the World Heritage properties Upper Middle Rhine Valley, which also exhibits strong similarities in terms of historic dynamics and of physical witnesses of these dynamics (vineyards, villages, castles), the *Old Town of Regensburg with Stadtamhof* and the *Town of Bamberg* (this particularly with regard to the integration of slaves and other populations in the 12th-13th centuries) well represent already the tangible expressions of the High Middle Age political, economic and artistic dynamics along important communication and trade routes in Germany.

ICOMOS also considers that Early and High Middle Ages and related historic themes are already well represented on the World Heritage List by other German properties, including *Aachen Cathedral*, *Speyer Cathedral*, *St Mary's Cathedral and St Michael's Church at Hildesheim*, *Abbey and Altenmünster of Lorsch*, *Maulbronn Monastery Complex*, *Collegiate Church, Castle and Old Town of Quedlinburg*, *Monastic Island of Reichenau*.

In the case of this nominated property, the comparative analysis itself demonstrates that the power and borderland exchange dynamics and their tangible manifestations in the Middle Ages were commonplace throughout Europe and are already represented on the World Heritage List through a variety of properties, particularly from Germany, and including cultural landscapes.

ICOMOS considers that the comparative analysis does not justify consideration of this property for the World Heritage List.

Justification of Outstanding Universal Value

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

- The area is a cultural landscape originated from structures dating back to the High Middle Ages that still exhibits an outstanding density of monuments and landscape features of high quality, bearing witness in an extraordinary manner to the social, economic, urban and agricultural development of the region in the 11th-13th centuries;
- The pattern of cultivated fields, terraces, orchards and forests demonstrates the medieval structure of the rural landscape;
- Important communication and trade routes from the High Middle Ages and earlier that shaped the

fortunes of this region survive in stretches of ravines bearing outstanding witness to high medieval infrastructure;

- Basic elements of the town and country pattern of settlement and organisation bear outstanding witness to High Middle Ages settlement development and territorial organisation, and this is still legible in the layout of small villages as well as of the major towns of Naumburg and Freyburg;
- The territorial distribution of monasteries and castles connected also by visual links makes clear the role they played in shaping the nominated area;
- Monumental buildings, and particularly the Naumburg Cathedral, bear unique and outstanding witness to the ambitions and vision of the aristocratic and religious rulers of the region, as well as the economic, cultural and artistic network that they were able to develop due to the strategic location and the available resources.

ICOMOS observes that several areas within Europe exhibit in their territorial organisation and built heritage similar patterns of historic, political and settlement development, where communication/trade interests and political and religious powers cooperated or competed in maintaining and expanding territorial control in strategic regions. Therefore what is purported to be unique in the nominated area instead appears commonplace within Europe, giving rise to cultural landscapes comparable in terms of territorial structure/organisation and of monumental relics.

ICOMOS further notes that the justification provided by the State Party focuses in each case on specific built or urban elements and features and not on the landscape overall. These features, particularly the landscape or territorial elements, could not be considered exceptional in their own right; and the surviving tangible evidences from the High Middle Ages are restricted to individual monumental architectures and some limited examples of urban layout, whilst the majority of them date to later periods than the relevant one. It is the view of ICOMOS that the tangible evidence of the role played by this landscape in the High Middle Ages is scanty, relying heavily on written records, toponyms and buried archaeological features revealed through recent remote sensing (laser scanning).

ICOMOS therefore considers that the justification for inscription could apply to several European territories and landscapes and is not substantiated by sufficient specific material evidence or robust historical and scientific references to demonstrate that the nominated property stands out in respect to other similar ones inscribed or not in the World Heritage List.

ICOMOS additionally observes that the individual monumental buildings, mainly of religious nature, that still exist in the nominated area from the 11th-13th centuries cannot alone support the justification for a landscape nomination.

ICOMOS finally observes that the wording “territories of power”, which in the nomination dossier has been highlighted not having been used before in a nomination dossier, has never been used until now probably because it is not sufficiently distinctive of a cultural world heritage site, as there is no European territory which can be identified as immune, in its historical construction, from the influence of different and even competing powers changing in nature, importance and influence over time and space. Hence, the definition of this site as a “territory of powers” has not enough strength to legitimate it as a unique and original one. Unique and original is only the definition chosen but not the property to which it is associated.

For the reasons explained above, ICOMOS considers that the justification proposed by the State Party does not support consideration of the nominated property for the World Heritage List. However, considering the focus of the nomination, the property could find recognition in frameworks other than the 1972 World Heritage Convention, at the European level (i.e. within the network of European cultural routes).

Integrity and authenticity

Integrity

The nomination dossier states that the Saale and Unstrut River dominion encompasses all elements that are necessary to convey its proposed Outstanding Universal Value, and that its area is of adequate size to ensure the representation of the territorial and urban organisation of the area from the High Middle Ages.

ICOMOS requested additional information concerning the extent to which the identified historic landscape features exhibit evidence or conserved fabric dating to the periods related to the proposed Outstanding Universal Value of the nominated property. The State Party responded by underlining the systematic nature of the inventory conducted within the nominated property that identified more than 3000 heritage features, around one thousand of which have been said to be related to the High Middle Age and provided an additional table listing 56 heritage items (15 of which are villages) with a short description, location and state of conservation given for each item.

ICOMOS considers that the State Party has undertaken commendably systematic mapping and inventorying of heritage elements dating back to the relevant period for the nomination. However, ICOMOS observes that, based on the additional information provided by the State Party, most of the inventoried elements are not visible, because they survive as buried traces or terrain irregularities/ discontinuities, or because they have disappeared or largely transformed. Most of the landscape features have been revealed by laser scanning, a technology which allows for identification of hidden land traces but does not help date what has been discovered. Neither the nomination nor the additional information clarifies which direct surveys and dating

methods have been used for the absolute dating of the landscape features (be they buried or not).

Additionally, the ancient road network has been disrupted by modern roads or routes; the urban layout and its relation with the rural landscape have been distorted by modern residential extensions or industrial facilities; landscape patterns mostly date to recent decades; almost all medieval enclosures or bocage have disappeared; and land plots have been substantially enlarged to allow mechanised farming.

Therefore the elements that altogether would make up the High Middle Age landscape do exhibit a fragmentary conditions of integrity.

With regard to the visual integrity of the property, which is particularly emphasised in the nomination dossier, ICOMOS notes that existing modern energy supply infrastructure disturbs these links and impairs the visual coherence of the nominated landscape and therefore the possibility to understand and to appreciate the past functions of visual links; additionally, further energy and communication infrastructure projects (i.e. a wind farm in the buffer zone near Markröhlitz or the B87 by pass of Bad Kösen and the B87 bypass of Naumburg) are planned and will worsen the situation.

Authenticity

The State Party considers that the most important attributes of the nominated property (i.e., the vineyards, forests, river courses, quarries and old roads) exhibit a high degree of authenticity and the same can be said for castles, churches, monasteries as well as urban skylines. In the State Party's view, the tangible outcomes of the dynamics which took place within the area in the High Middle Ages have been preserved.

ICOMOS considers that, while the conditions of authenticity may be considered fulfilled for much of the architectural heritage, although the surviving architectural evidence dating back to the exact period of relevance for this nomination is limited and some exceptions exist such as Neuenburg Castle, almost rebuilt a few decades ago, the same cannot be said for the landscape features, which may survive in buried traces, for which no adequate information on the absolute dating methods and results has been provided, but which no longer characterize the articulation and use of the landscape today: field parcels have seen changed their size, their use, therefore the visible landscape has been remodelled, modified or reconstructed in later centuries.

While the results of remote sensing prospections in the area are certainly important to improve the understanding of its evolution, dynamics and transformations, the detected medieval landscape features cannot be deemed exceptionally preserved in comparison with other similar areas.

In Naumburg, the restructuring of a large part of the old town and the renewal of empty buildings have changed the built fabric, which now does not match with the historic character of the area. This building and urban renovation has been carried out also in Freyburg and other villages within the nominated area, detrimentally affecting the authenticity of the historic built fabric.

ICOMOS also notes that the historical visual connections between the historic features of the landscape have been impaired by intrusions of modern infrastructure. As a result, the landscape does not easily communicate the sense of place that could sustain the understanding of the nominated property as a landscape shaped in the High Middle Ages and still strongly marked in its structure by a high medieval territorial imprint and features.

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

Criteria under which inscription is proposed

The property is nominated on the basis of cultural criteria (iv) and (v).

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

This criterion is justified by the State Party on the grounds that the nominated property is an outstanding example of a cultural landscape shaped in a border area during the High Middle Ages by the competing interests of the aristocracy and religious rulers, which resulted in the construction of castles and monasteries and in the organisation of the territory and of the settlements. The sacred topography constructed through village churches, cathedrals and monasteries attest to the establishment of Christianity in the area. Naumburg Cathedral in particular, symbolises in an outstanding manner the spiritual power of the church and the ambitions of the local rulers as well as the diffusion of cathedral type plans from western to Eastern Europe. Landscape features outstandingly demonstrate the development of farming, forestry, water management and viticulture. Village and town layouts as well as town buildings along with toponyms exceptionally attest to the process of integration between local and immigrated groups with different cultural or ethnic background.

ICOMOS considers that the attributes to support the arguments put forth to justify this criterion for the overall cultural landscape do not retain sufficient integrity or authenticity, as most of them have disappeared or have been remodelled and transformed. Additionally, several cultural historic landscapes throughout Europe witnessed analogous historical and political patterns of development and exhibit similar features in similar fragmented conditions.

In general, and in this specific case, ICOMOS considers that individual monuments alone are not sufficient

attributes that can justify the proposed criterion at the territorial and/or landscape level.

ICOMOS considers that this criterion has not been justified.

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

This criterion is justified by the State Party on the grounds that the nominated property is an outstanding example of settlement and land use of Central Europe in the High Middle Ages. This is demonstrated by several attributes: the Kleine Saale artificial channel, the mix of cultivated fields, terraces, orchards with bordered forests and woods. The plans of Naumburg and Freyburg attest to the medieval forms of founding towns and of social hierarchies, whilst the layout of minor villages bear witness to new settlement patterns and cohabitation processes. The distribution of cultivated fields and geometry of plots demonstrate new achievements in farming technology.

ICOMOS considers that the attributes identified to justify this criterion refer to inter-related patterns of human activities that have not been adequately documented and explained; no sufficient description is given on socio-historic factors, i.e., the world of rights, customs, agrarian laws, that contributed to shape the physical structure of the territory. Additionally, relevant tangible landscape attributes survive as archaeological deposits and only in a fragmentary state so that they cannot convey a comprehensive system of features and relations that reflects in a legible and outstanding manner a landscape of the High Middle Ages. ICOMOS considers that only individual elements, which cannot be considered exceptional in themselves, bear witness to some aspects of land-use or settlement. These are partial and have undergone significant subsequent transformations.

ICOMOS considers that this criterion has not been justified.

In conclusion, ICOMOS does not consider that the criteria have been justified.

4 Factors affecting the property

The nomination dossier mentions several factors that affect the nominated property, and related remedial measures. For example, while traffic load is seen as one of the major problems, in the State Party's view, road development would only need impact minimisation through design and intelligent localisation to address the issues; impacts associated with the new energy efficiency policy are thought to be reduced through

selecting the less impacting technical solutions; demographic decline with subsequent vacant housing stock may be counteracted through integrated planning; changes to the landscape caused by farmers which could be addressed through programmes for environmentally friendly agriculture; air pollution caused by traffic has been addressed through structural improvement, new surfaces to reduce vibrations and noise, speed reduction and construction of bypasses to keep traffic outside the urban centres (i.e. in Freyburg).

With regard to risk preparedness, the State Party considers that flooding, lightning and fire are the most probable disasters that may hit the area but the property is well equipped with prevention measures.

In relation to demographic and urban development pressures, ICOMOS notes that within the nominated property urban growth has resulted in changes to the historic medieval forms of the rural landscape, residential units have expanded outside the traditional boundaries of the towns, and the smaller villages have experienced abandonment resulting in several semi-deserted nuclei.

Industrial areas or large facilities for agriculture, communication and energy infrastructure disturb and fragment the landscape mosaic and the surviving elements from the High Middle Ages.

Present day population changes are being addressed by the authorities through "Area Utilisations Plans" which pursue the reclamation of peripheral built up and of inner areas in order to redirect urban sprawl and improve the ambience of the outer parts of larger towns, i.e. in Naumburg.

ICOMOS observes that complex socio-economic processes such as the population decline may not be easily addressed through planning measures, as they characterise many municipalities within the nominated property but also in the wider region. Moreover, future plans contain provisions for new areas of construction, commercial expansion (i.e. south of Naumburg) and infrastructure (e.g., roads, wind farms) that may negatively affect the significance of the nominated area.

ICOMOS observes that industrial agriculture has already included the modification and widening of the farming plots, which have mainly lost the historic fine grain of the medieval rural landscape.

Historically an important crossroads, the area continues to be cut through by modern long distance and local traffic routes. New planned roads and bypasses include the already approved Bad Kösen bypass bridge; Naumburg bypass for road B87, running through the buffer zone but also affecting the nominated property; extension of the B87, B180 and L200 crossroads at Wethau, with planning approval binding since 22 January 2013 will run through the buffer zone and will affect also the nominated property; and a route change

for road B87 between Schulpforte and Almrich that will run through the nominated property and is likely to have an impact on its values. With regard to railroads, an important building project concerns the development of the railway trunk route Halle- Weissenfels -Naumburg-Erfurt.

ICOMOS considers that in addition to the impacts of these individual road and transport projects, the cumulative effects will be substantial, due to their number and concentration.

The approved scheme for the bypass bridge of the B87 road near Bad Kösen is of immediate concern. Although located in an area immediately outside the nominated property, it is considered that if built, this bridge will disrupt the view from the Saaleck and the Rudelsburg Castles. ICOMOS requested additional information on this development from the State Party and the State Party sent two different letters. In September 2014 the State of Saxony-Anhalt, responded to the letter sent via UNESCO by the NGO "Rettet das Saaletal" concerning the bypass bridge; and in October 2014, the association "Saale Unstrut auf dem weg zum Welterbe" wrote to respond to the requests for additional information by ICOMOS.

In the first letter it is explained that a planning decision concerning the bypass bridge was passed on 30 November 2010 despite the negative opinion of the state authority for the protection of cultural heritage (LDA – LSA), because the planning process found the plan for the bridge environmentally compatible and the bridge essential for the area. Following the consultations undertaken in the planning process, the position of the bridge is not negotiable, however, the body that finances the project will undertake necessary measures to mitigate the impact of the bridge and optimize its design.

In the second letter of 27 October, the association "Saale Unstrut auf dem weg zum Welterbe" clarified that the impact of the planned bypass bridge at Bad Kösen will not occur until the Naumburg bypass is constructed. However, no building approval has yet been issued for the Naumburg bypass. Planning procedures started on 24 June 2010 and the approval notice is expected by the end of 2014. It also explains why the construction of the Bad Kösen bypass has not yet started, because the federal authorities have made it dependent on the approval of both Bad Kösen and Naumburg bypasses. When this is approved, the funding will be budgeted at the federal level. The plans for the Naumburg bypass show that part of it will pass close to the buffer zone.

As for energy infrastructure, two plans are in force – the 2010 Regional development plan for the Halle region and the 2010 Model project for urban renewal and energy for Naumburg – the implementation of which may result in additional visual intrusion of windmills in the nominated area as they already do at present (e.g. in Molau), and in the diffusion of domestic solar energy installations within the town, although not in the historic

district, so some visual intrusion and disruption of integrity of the historic landscape may be expected.

Quarrying also appears to be a problematic factor: seven quarries or quarrying sites were detected during the mission within or immediately outside the nominated property (six inside and one outside). Only two of them could be visited during the ICOMOS mission and these appear only slightly intrusive, although appropriate measures to minimise their impact need to be taken.

Additional information concerning industrial developments in the area was requested by ICOMOS. The State Party provided a list of 17 industrial production plants planned for the area along with some details on location and type, although no information on the volume of production and size of the plants has been received. These include two quarries and one related processing plant, three plants for energy production (biogas), four plants for waste storage and treatment, one pig and one poultry farm, and two shooting ranges.

ICOMOS notes with concern the number of plants foreseen and the absence of information on their size.

Due to its hydro-geomorphology, the region is prone to flooding. The nomination dossier states that flood protection dikes exist, but prevention or flood management plans have not been provided. In its letter of 27 October 2014, the State Party (Association Saale - Unstrut auf dem weg zum Welterbe) informed that due to topographic location there is no danger for the protection of the property by flooding.

ICOMOS considers that due to climate change, recurrent exceptionally abundant rainfalls and storms have increased in recent decades, therefore it will be necessary to develop a flood prevention strategy and a risk mitigation plan for the property and the most flood prone areas.

ICOMOS considers that the main imminent threats to the property are infrastructure and industrial development and building expansion; and further medium-term threats are represented by population decline and the possible impacts of tourism on traditional rural activities and the landscape. Flooding also represents a threat for some areas of the property.

5 Protection, conservation and management

Boundaries of the nominated property and buffer zone

The nominated property (10.401ha) revolves around the meeting point of the Rivers Saale and Unstrut. The boundaries include the city of Naumburg to the south and Freyburg to the north, as well as the main areas lying close to the two towns and to Schönburg and Goseck to the east, and Bad Kösen and Flemmingen to the southwest. The determination of the boundaries of

the nominated property is based on a complex methodology which relies on the four towns or settlements mentioned above and on the visual relations between and around castles, churches, or other main elements of the landscape and areas with high diversity, density and quality of cultural elements (forests, agriculture, vineyards, road links, etc.).

ICOMOS requested additional information about the rationale for the establishment of the boundary and buffer zones. The State Party responded explaining that the boundaries were determined on the basis of a complex methodology of cartographic interpolation that takes into account the geographic scope of the historic dominion, the density of historic heritage features dating back to the 11th-13th centuries AD inventoried within a pre-determined area (termed the 'processing boundary'), the horizon line of distant views, the boundaries of existing protected areas and other administrative limits.

With regard to the buffer zone, the six buffer areas were identified only where they appeared necessary to protect visual relationships of different relevant features, or to extend the protection of individual monuments or historical/ archaeological features.

While in principle the approach of the State Party to determine the boundaries of the nominated property is acceptable, ICOMOS notes that only the nominated area has been documented in detail and no comparison with other areas in the vicinity has been made, so as to define the boundaries of the area to be nominated. ICOMOS also notes that subsequent transformations to the landscape and to the High Middle Ages elements have not been taken into account; and that despite the refined methodology developed, only a few of the villages exhibiting the peculiar layout that survives in the area are included within the nominated property or in the buffer zone (for example, Bauersroda, Ebersroda, Schleberoda and Müncheroda lie outside the nominated property and the buffer zone).

ICOMOS considers that current administrative limits have heavily oriented the selection of the property boundaries, i.e., only land belonging to the State of Saxony-Anhalt has been included in the nomination, whilst the territorial scope of historical and political phenomena was much larger than the nominated area.

The proposed buffer zone comprises a total of 6.232ha; it does not encompass the whole nominated property as it is formed by discontinuous patches of land adjoining the nominated area. The nomination dossier states that the buffer zone includes areas with a lesser density of cultural elements as well as adhering to administrative limits.

ICOMOS notes that the fragmentation of the buffer zone into separate areas does not appear justified given the territorial scope of the nomination; nor is it justified in relation to needed visual or functional protection, since the nominated property does not appear adequately

protected and is already detrimentally affected by development. ICOMOS considers that the proposed buffer zone does not include the immediate setting of the nominated property, important views and other areas or attributes that are functionally important as a support to the property and its protection, as stated in paragraph 104 of the Operational Guidelines, and therefore it does not contribute to provide an added layer of protection to the nominated property.

In conclusion, ICOMOS considers that the boundaries of the nominated property are not adequate to ensure the representation of the proposed Outstanding Universal Value and that the buffer zone is not adequate to provide the needed additional layer of protection for the nominated property as requested by the Operational Guidelines.

Ownership

The nominated property is mostly in private ownership, although there are parts of it owned by public bodies or under the responsibilities of public-law foundations.

ICOMOS requested additional information concerning ownership and the State Party responded by providing a graph showing the following percentages: 95% private ownership, 2% municipal ownership, 2% church ownership, 1% other owners.

Protection

An array of legislative instruments provides protection to the nominated area and the buffer zones.

One of the most important is the federal law on Regional Planning (ROG), which lays down the principles, tasks and provisions for regional planning to be implemented by the States through state laws and plans. The federal law prescribes that historical cultural landscapes must be preserved. The State of Saxony-Anhalt has approved the Land Planning Law (LPIG – LSA) to implement the ROG.

Another important federal law is the one on Environmental Compatibility Investigation, supplemented by the state law of Saxony-Anhalt (UVPG LSA). This law ensures that for certain plans, programmes and projects, an earlier assessment of their effects on the environment is undertaken and alternatives explored. Aspects to be taken into account include: human beings and health, fauna and flora, cultural heritage, landscape and biological diversity. The law descends from a set of European directives on the topic.

The Woodland Law for the State of Saxony-Anhalt (WaldG LSA) was adopted on the basis of the Federal Woodland Law. Forestry master plans are being drawn up for the State as a whole or for individual woodland areas.

In the Water Law of the State of Saxony-Anhalt (WG LSA), a classification is set out for bodies of water above ground. The 'Saale' and the 'Unstrut', with their respective tributaries, are Grade 1 bodies of water, and are owned by

the State. Development and maintenance of flood-banks to provide protection against flooding on the Saale and Unstrut are tasks falling on the State.

The entire nominated property lies in the 'Saale-Unstrut-Triasland Nature Park' which extends over the Burgenland district and the Saale region in Saxony-Anhalt, as well as over the municipalities in the Free State of Thuringia (103,737ha). This Nature Park is protected under the Federal Nature Protection Law - BNatSchG which provides measures for the protection of nature and care of the landscape from a nature conservation point of view. The nominated property includes also some Natura 2000 areas.

For the cultural landscape to be appropriately protected, the property should be declared under the Monument Protection Law of the State of Saxony-Anhalt (DenkmSchG LSA), as the right to protect monuments is a sovereign task of the State. The Monument Agency of this State has established the entire proposed area as a monument, but this protection will only come into being if the property is inscribed on the World Heritage List. This will only apply to the nominated area, leaving the buffer zone unprotected from a cultural landscape perspective.

Besides this general protection for the cultural landscape, which is not in place yet, the nominated property includes many other items (abbeys, castles, churches, monasteries, villages, historic city centres, bridges, orchards and vegetable gardens, pathways and roadways, wells, water features, etc.) and some of these are protected as isolated monuments, archaeological sites or historic urban centres.

ICOMOS requested additional information about the protection measures and the State Party responded on 27 October 2014 by providing a detailed description of the structure and role of the Cultural Landscape Framework Plan, which could in fact form the core of the management system. This can come into force only if the entire area is declared a protected monument under the existing legal provisions and this may happen only if the nominated area is inscribed on the World Heritage List, according to the DenkmSchG LSA. The State Party also provided a series of maps illustrating the location and boundaries of protected cultural heritage items and protected areas.

Based on the additional information provided by the State Party, ICOMOS considers that, despite the several layers of legal protection already in place, these concern only natural heritage and isolated monuments, archaeological areas and historic city centres, but not the overall landscape with its many elements and features on which the nomination relies to express the proposed Outstanding Universal Value, since the declaration as protected monument for the entire area is not yet in place.

In conclusion, ICOMOS considers that the current legal protection ensures the protection of individual monuments and of the natural dimensions of the nominated property but is not adequate to protect the

overall cultural landscape and its relevant features. ICOMOS further considers that the protective measures in place for the property have not prevented the transformations of the landscape that have already occurred and the approval of projects impacting on the values of the nominated property.

Conservation

A detailed multi-disciplinary inventory has been compiled on the territory of the nominated property which has resulted in the identification of more than 3000 features and items. In the nomination dossier an overview is provided of the existence and state of conservation of features related to the 11th-13th centuries. However, this exercise was limited to architectural features. ICOMOS requested additional information and the State Party has provided details on the state of conservation of 56 landscape features dating or related to the High Middle Ages, accompanied by cartographic documentation.

ICOMOS considers that as far as the state of conservation of the cultural heritage components is concerned, such as military and religious architecture, this seems to be adequate. Though documentation is an ongoing task, most individual monuments are well documented and present a good overall state of conservation. Furthermore, in the last years great efforts have been made to recuperate these sites, and to transform them into, or include in them, museums or exhibitions explaining their history. This has been done in the major towns (Naumburg), but also in smaller sites on the basis of commendably rigorous conservation work and research (i.e. Goseck Castle or Neuenburg Castle).

With regard to the cultural landscape elements, inventorying has started after many changes have already occurred. Since comprehensive legal protection specifically addressing the cultural landscape dimensions is not yet in place, more changes may happen that could further impair the integrity and authenticity of the property.

In conclusion, ICOMOS considers that the conservation and inventorying of architectural and archaeological individual components is moving in the right direction; but for the cultural landscape elements, conservation efforts have commenced after the integrity or authenticity of many of them has diminished. Nevertheless the surviving historic landscape features, land arrangements and relict patterns deserve to be documented, protected, conserved and communicated.

Management

Management structures and processes, including traditional management processes

The management structure for the nominated property is grounded on the institutional and administrative organisation of the State Party, from the federal to the state, district and municipal levels, including non-territorial juridical persons, i.e. public-law foundations.

In order to ensure coordination and internal monitoring of the actions carried out by the competent bodies within the nominated property, a Working Group World Heritage Saale and Unstrut has been set up, where the public administrations with responsibilities within the nominated property are represented. The Working Group is an official forum for mutual deliberation and agreement and is supported by an Advisory Committee.

In addition, the Förderverein Welterbe an Saale und Unstrut e.V., a registered association made up of various participants, including the State of Saxony-Anhalt, will perform promotion and coordination tasks for the management of the nominated property. It includes civil society, individuals, private entities, supporters and owners of historic cultural properties.

ICOMOS requested additional information on the above mentioned association (Förderverein Welterbe an Saale und Unstrut e.V.) and the State Party responded on 27 October 2014 providing details on the structure of the association. This includes permanent staff whose salary is covered by the District Administration of Burgenland, the city of Naumburg and the United Chapter Foundation of Naumburg. Different working groups have been established and a Scientific Advisory Board advises the Association.

The Working Group World Heritage Saale and Unstrut will come into being when the nominated property is inscribed on the World heritage List.

As regards personnel in other administrations, ICOMOS notes that most of the staff listed are involved with the Cathedral and churches. There are 28 employees in charge of landscape preservation in Naumburg municipality but none in Freyburg, whilst in the Nature Park there is only one technical employee. None of the landscape architects that worked on the inventory and mapping of the cultural elements appears to be involved in the follow up of the management, nor is any profile similar to theirs proposed in the managerial structure.

The nomination dossier provides information on financial resources available until 2013, but little is included about the future or possible available funding streams.

Additional information was requested by ICOMOS, and the State Party responded by providing some additional details of the allocated budget in the past 20 years as well as for the future. It also explains that several fund programmes may be accessed, namely the Leader structural programme.

ICOMOS notes that no programme with defined projects with a provisional budget to substantiate future measures seems to exist or at least has not been presented.

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

The management of the nominated property relies on existing protection designations as well as spatial and sectorial plans. These range from European to municipal scales, covering from natural to cultural values. All these provide sectorial guidelines or management plans for the site.

The LPIG LSA sets the basis of the Land Development Plan 2010 for the State of Saxony-Anhalt. This contains the aims and principles, as well as the spatial concept for the future development of the State. It deals with everything from energy sources, to agricultural systems, woodlands, tourism, nature parks, wine, culture, historical centres, towns and villages. At a lower scale, the Regional Development Plan for the region of Halle, where the nominated property is located, was also approved in 2010 by the Regional Assembly and approved by the Executive State Planning Authority.

On the basis of the Building Code, the municipalities produce, as required, building plans for part areas of their municipal regions, which contain legally-binding requirements for the proper ordering of town planning procedures. In terms of content, among other things, the nature and scale of the utilization of buildings can be specified, as well as the permissible height of structural installations. Several examples of these regulations exist for towns within the nominated property, i.e. for Naumburg or Freyburg.

The only plan which considers the property as a whole and not from sectorial points of view is the management plan annexed to the nomination dossier. However, as stated by the State Party during the mission, this plan will only be used for the nomination, and has no legal status for the nominated property. On the other hand, the Cultural Landscape Framework Plan would be legally binding, but it will come into force only if the nominated property is inscribed on the World Heritage List.

The Management Plan for the nominated property contains the synthetic description of the property and of its proposed Outstanding Universal Value, the detailed description of the legal and planning framework in place and of their provisions which orient development, conservation and rehabilitation within the towns and villages and in the unbuilt areas.

The Management Plan also mentions future actions for planning coordination however no timeline is provided for the implementation of these activities, while the enforcement of the Cultural Landscape Framework Plan is dependent on the inscription of the nominated property on the World Heritage List.

ICOMOS notes that the Management Plan submitted is merely a description, which largely summarizes the contents of the other nomination documents. The plan relies essentially on protection and planning measures

already in place while other possible actions are mentioned in the management plan to be carried out in the future, without any indication of the timing.

ICOMOS considers that the layering of these many tools does not provide for a cohesive managerial structure for the property, as future projects like the bridge in the Saale Valley proves. At this stage, legal instruments for the landscape as a whole are not in place, and those existing have not succeeded to produce adequate management arrangements for both the natural and the cultural values or the social issues.

The Management Plan does not contain any site specific proposals for active conservation at any locations, nor does it detail how all the actions outlined will be put into action. No schedule is proposed, apart from activities concerning the communications and tourism sectors.

ICOMOS considers that the Management Plan cannot be currently considered as satisfactory. From all the documentation provided by the State Party, it appears to be a roadmap for the nomination, rather than a draft or a preparatory document for developing a management tool. In ICOMOS' view, the requirement of paragraph 108 of the Operational Guidelines stating that "any nominated property should have an appropriate management plan or other documented management system which must specify how the Outstanding Universal Value of a property should be preserved" has not been fulfilled, and the lack of a budget or financial estimate leaves many uncertainties as to when it will be put in place.

With regard to interpretation and presentation, an overall strategy that includes in-depth scientific works dealing with the site values, has been set up. The three existing tourist offices promote these activities and distribute other promotion brochures. There is a long tradition in the region for tourism, which is an important economic asset, and therefore there seems to be a well-developed tourism infrastructure. Major destinations are the cities of Naumburg (Saale) and Freyburg (Unstrut) as well as the spa resort of Bad Kösen.

ICOMOS considers that the numbers of visitors provided by the State Party suggest the need both for a carrying capacity assessment and a more structured tourism strategy that cannot rely upon the existing capacity. In ICOMOS' view, the impacts of tourism have not been assessed adequately given that there is a high potential for future growth in tourism numbers. Furthermore, ICOMOS notes that the Management Plan is extremely vague on these issues, without clear objectives or actions with timeframes.

The Management Plan includes an interpretation strategy, but does so in a generic way. Therefore information and visualization, internet or even the World Heritage information centre, are simply ongoing tasks with no real timeline (at the most within 1 to 3 years).

Involvement of the local communities

Local communities appear very much involved and engaged in the nomination. This is clearly demonstrated by the nomination coordinating body Förderverein Welterbe an Saale und Unstrut e.V. which is an association made up of various participants including the State of Saxony-Anhalt, which has provided the funds for its creation and maintenance. Civil society individuals, private entities, supporters and owners of historic cultural properties are included.

Although internal procedures for approval of the development of new projects seem to be well established by the existing authorities, and the array of specialized entities involved presently in the conservation of the property seems noteworthy, the lack of a specific and effective management tool or system is a source of concern.

ICOMOS observes that the current management system has not been able to avoid the approval of the Bad Kösen bypass, despite the negative advice of the State authority for cultural heritage and monument protection of Saxony-Anhalt, and that further infrastructure, energy and production facilities are planned within the area, which are likely to have negative impacts on the property.

In conclusion, ICOMOS considers that special attention is needed for the coordination of all existing plans as well as an effective assessment of the impacts of planning goals, measures and projects.

6 Monitoring

A system of internal monitoring articulated in three distinct branches based on the means of monitoring and related coordinating body has been set up through a civic advisory and agreement forum (coordinated by the Förderverein Welterbe an Saale und Unstrut e.V.), an official management and mutual deliberation forum (coordinated by the World Heritage Working Group for Saale and Unstrut) and by specialists and delegates (coordinated by approving authorities).

These monitoring procedures include a variety of actions aimed at increasing reciprocal information and coordination, reducing conflicts, providing early advice on possible impacts of any planned activity, etc. Periodic inspections to protected monuments are carried out by responsible agencies. Additionally, a set of indicators has been elaborated to monitor the state of conservation and of changes to relevant elements.

ICOMOS considers that the formula set up for internal monitoring is very interesting, although it is not very clear how it will work and help to avoid future conflicts deriving from proposed development projects.

In conclusion, ICOMOS considers that the monitoring system set up appears interesting however its effectiveness is yet to be established, and its implementation requires much good will from all those involved.

7 Conclusions

The nominated property is appropriately conceptualised as a landscape and the State Party has developed commendable in-depth and interdisciplinary research of the area. In many ways this research approach can be regarded as exemplary, and further applications to other cultural landscapes may provide equally rewarding results.

However ICOMOS wishes to underline that the World Heritage Convention is a property-based instrument, and consequently, the inscribed properties must demonstrate Outstanding Universal Value through their tangible and intangible attributes (as defined in paragraph 49 of the Operational Guidelines).

In this case, the property to which this interesting research methodology has been applied shares many commonalities with other territories throughout Europe in terms of both its historic patterns of development and the outcomes of these dynamics, including the fragmented conditions of the attributes that would convey its significance as a High Middle Age cultural landscape and of its integrity and authenticity.

ICOMOS also observes that the nomination proposal is grounded on an excessively intellectual argument: the idea of "territories of power" associated to the nominated area. This wording, which the nomination dossier highlights not having been used before in a nomination, has probably never been used until now because it is not sufficiently distinctive of a cultural World Heritage site, as there is no European territory which can be identified as immune, in its historical construction, from the influence of different and even competing powers changing in nature, importance and influence over time and space. Hence, the definition of this site as a "territory of powers" has not enough strength to legitimate it as a unique and original one. As the comparative analysis has demonstrated, several territories in Europe share similarities with the nominated property in terms of socio- political dynamics and of related physical traces and it does not appear clear how the nominated property would stand out in respect to other similar areas.

The arguments put forward to justify the proposed Outstanding Universal Value of this nominated property have not been substantiated by either sufficient specific material evidence or robust historical and scientific references, which is concentrated on the nominated property and fail to show at least the European breath that would sustain scientifically the comparative analysis. Most of the cultural elements and features which comprise the landscape have lost the integrity, legibility or authenticity

necessary to convey the proposed Outstanding Universal Value. The additional information provided by the State Party concerning the historic landscape features and their state of conservation is not sufficient, in ICOMOS' view, to support the proposals made in this nomination.

Additionally, the European Early and High Middle Ages are already well represented on the World Heritage List through several properties, many of which are also located in Germany (see comparative analysis section). In this regard, ICOMOS recalls the aim, objectives and commitments set up by the World Heritage Committee through the Global Strategy for a Representative, Balanced and Credible World Heritage List launched in 1994, the outcomes of the independent evaluation of UNESCO's External Auditor and the related subsequent Committee decisions.

ICOMOS also notes the unsatisfactory results of the application of the methodology to delimit the boundaries of the nominated property and its buffer zones, since several relevant features (such as villages with particular historical layouts) have not been included in the nominated property or in the buffer zones. ICOMOS considers that the nomination does not provide an adequate description of a number of key aspects of this property or their inter-relations, and that the proposed Outstanding Universal Value is not adequately demonstrated.

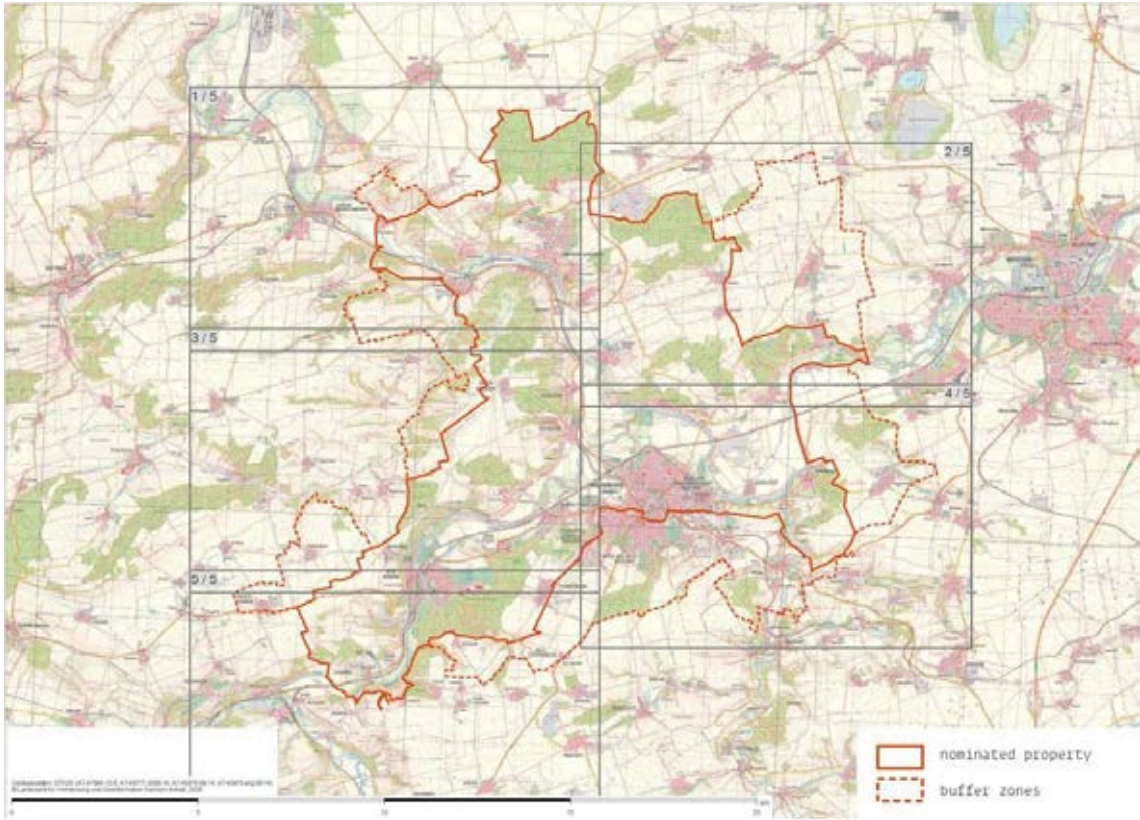
Additionally, ICOMOS observes that existing infrastructure has undermined the integrity and authenticity of the nominated property, and that further infrastructure projects with the ability to impact negatively on the values of the nominated property are about to be realised, approved or have been inserted into the planning instruments in force.

Finally, there is no overall protection for the cultural landscape values and features, as this will come into force only if the property is inscribed on the World Heritage List. ICOMOS, in this regard, considers that the reliance on World Heritage listing before comprehensive legal protection can be provided is inconsistent with the requirements of the *Operational Guidelines*.

8 Recommendations

Recommendations with respect to inscription

ICOMOS recommends that The Naumburg Cathedral and the Landscape of the Rivers Saale and Unstrut – Territories of Power in the High Middle Ages, Federal Republic of Germany, should **not be inscribed** on the World Heritage List.



Map showing the boundaries of the nominated property



Aerial view of Freyburg



Neuenburg Castle



Naumburg Cathedral



Schönburg Castle with view into the Saale valley

Viking Age Sites in Northern Europe (Iceland/Denmark/Germany/Latvia/ Norway) No 1476

Official name as proposed by the State Party

Viking Age Sites in Northern Europe

Location

Iceland: Bláskógabyggð Municipality

Denmark: Vejle Municipality, Vesthimmerland Municipality, Mariagerfjord Municipality and Slagelse Municipality

Germany: Schleswig-Flensburg and Rendsburg-Eckernförde Administrative Regions, State of Schleswig-Holstein

Latvia: Grobiņa Municipality

Norway: Horten, Tønsberg and Sandefjord Municipalities in Vestfold County, Hyllestad Municipality in Sogn og Fjordane County

Brief description

The seven sites from five countries are seen as representative examples of the various types of monuments left by the Norse people in their Scandinavian homelands and abroad, as a result of raids, trade and migration between the 9th and 11th centuries, in what is now known as the Viking Age.

The series includes one already inscribed site, Jelling, Denmark, and part of a second, Þingvellir, Iceland.

Together, the mainly archaeological sites of the trading town of Hedeby, the settlement of Grobiņa, the assembly site and seat of governance at Þingvellir, the church, rune stones and burials of Jelling, the quern production site at Hyllestadt, the defensive systems of Trelleborg and Danevirke, and the burials sites of Grobiņa and Vestfold, are intended to demonstrate how the phenomenon of Viking trade, raiding and settlement was instrumental in the development of Northern Europe.

Category of property

In terms of categories of cultural property set out in Article I of the 1972 World Heritage Convention, this is a serial nomination of seven *sites*.

1 Basic data

Included in the Tentative List

7 February 2011 (Iceland)

7 February 2011 (Denmark)

27 January 2011 (Germany)

18 April 2011 (Latvia)

10 January 2011 (Norway)

International Assistance from the World Heritage Fund for preparing the Nomination

None

Date received by the World Heritage Centre

28 January 2014

Background

This is a new nomination.

Consultations

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

Technical Evaluation Mission

Two ICOMOS Technical Evaluation missions visited the property: from 23 to 30 September 2014 to Germany, Denmark and Iceland and from 16 to 23 October to Latvia and Norway.

Additional information received by ICOMOS

On 1 October 2014, ICOMOS requested the State Parties to clarify certain aspects of the serial nomination relating to the definition of the name Viking, possible future extensions, the scope of the serial property, definition of Outstanding Universal Value, and comparative analysis. A reply was received from the States Parties on 10 November 2014 and the supplementary information received is reflected in this text.

On 18 December 2014, ICOMOS wrote to the States Parties to suggest a dialogue between appropriate professionals and ICOMOS Panel members and Advisers in order to try and elucidate more clearly the rationale for some aspects of the nomination and to discuss whether modifications might be possible. ICOMOS was not convinced that the nominated sites could be seen as exemplars of State formation in north-western Europe, as proposed in the nomination dossier.

The States Parties responded positively. An initial meeting was held in Paris on 7 January 2015 with representatives of Permanent delegations. Following on from this, ICOMOS representatives were invited to attend a meeting of the Serial Nomination Steering Group in Copenhagen on 5 February 2015.

Subsequently, on 27 February 2015, a revised Statement of Outstanding Universal Value was submitted by the States Parties. This changes the basis of the nominated series away from reflections of State formation to the idea of the series reflecting more generally the way Viking trade, raids and settlement was instrumental in the development of Northern Europe. This new material is reflected in ICOMOS' evaluation.

However, as a revised nomination dossier has not been submitted to reflect the new approach, this evaluation can only partly reflect what has been suggested in the revised Statement of Outstanding Universal Value.

Date of ICOMOS approval of this report

12 March 2015

2 The property

Description

The sites in the series have been chosen to reflect Viking raids and trade during what is called the Viking Age between the 9th and 11th centuries AD, when Norse people, as Vikings, travelled from their homelands in Scandinavia to the west and to the east for the purposes of trade, raiding, exploration and the search for new lands to settle. Where they settled, they interacted with local populations and this interaction with power structures in other parts of Europe is seen to have changed the Scandinavian societies from whence they had travelled.

The Viking homelands in the context of the nomination are said to comprise present-day Denmark, Schleswig-Holstein in North Germany, Norway and Sweden together with the previously uninhabited islands in the North Atlantic (Iceland and the Faroe Islands), which were occupied by settlers from Scandinavia. And the term Northern Europe is said to encompass this homeland area which is almost exclusively populated by peoples with a Norse cultural background.

The seven mainly archaeological sites, dating between 8th and 11th century AD, are seen to reflect the transition in Scandinavia to what is known as the Mediaeval Age – that is to Christianised communities which developed long lasting institutions of power and governance. Each of the sites reflects an aspect of that process such as traditional burials, conversion to Christianity, trade settlements and associated defence structures, production sites, and governance institutions.

The seven sites are spread widely across five countries of north-west Europe and the island of Iceland. Although the impact of these Viking excursions is one of the justifications for the series, five of the sites are from the core region (or homeland) of Scandinavia and the North Atlantic Islands, and only two from the area of expansion and interaction with other cultural groups.

The series includes part of one inscribed property, Þingvellir National Park, Iceland, and the whole of another, Jelling, Denmark. The justification for the inclusion of these two sites in the serial nomination is not the same as their original justification for inscription as individual properties, as will be set out.

The term Viking is used in the nomination dossier to refer to piracy in general and to Norse activities of warfare or trade in particular. This use of the term is

recorded in Northern Europe between the Iron Age and medieval times by 'indigenous' people – the Norse, from Scandinavia, who spoke one of the Nordic languages and shared a common culture that included art in the so-called Viking style.

Although Viking is not used to refer to an ethnic group of people, the association between the term Viking and the peoples of Scandinavia has come into common use over the past 200 years. It is also acknowledged in the nomination dossier that the Viking Age has been crucially important in defining the national heritage of Denmark, Iceland, Norway and Sweden, although no sites have been nominated from Sweden.

The nomination differentiates between the homeland area and the "area of interaction" from raids and trade. The supplementary information stresses that the area of interaction stretches from Bulgar (Russia) in the east to Spain and Vinland (Canada) in the west, and Brattahlíð (Greenland) in the north to Byzantium (Turkey) in the south – including Great Britain, Ireland, the Baltic Sea area and Eastern Europe. It therefore encompasses most of Europe and even reaches beyond the continent.

The date range for the Viking Age is said to reflect a variety of parameters including archaeological (the presence of distinctive oval brooches worn by Scandinavian women), written documentation of raids (such as on Lindisfarne, UK), and the use of monumental architecture. Thus although raids started before the 8th century as did settlements, the Viking Age is seen to be those centuries for which cumulative evidence exists.

The sites are made up of a number of components as follows:

- Þingvellir – one
- Jelling – one
- The Trelleborg Fortresses – three
- Hedeby and Danevirke – twenty-two
- Grobyga burials and settlements – six
- Vestfold ship burials – three
- Hyllestad quernstone quarries - three

The individual sites are described separately:

Þingvellir, Iceland

The nominated part of the inscribed Þingvellir National Park, is the area immediately surrounding the assembly area where Norse Assemblies or open air parliaments were held annually between 930 AD and 1798 AD. The site is included as a prominent testimony to the establishment of a Norse society on the islands of the North Atlantic and to the adoption of Christianity through a decision at the Althing in 1000AD.

Jelling, Denmark

The nominated Jelling site is larger than the inscribed property and includes, as well as the Jelling mounds, rune stones, and church, all the area within the rhombic

palisade structure. The large rune stone at Jelling, dated to around AD 965, proclaims the conversion of King Harald 'Bluetooth' Gormsson of the Danes to Christianity. This is seen as the earliest source relating to the establishment of a Christian kingdom in Northern Europe. King Harald is credited with extending royal (centralised) power over Denmark and surrounding areas in the 10th century.

The ship as recurring symbol of power can also be seen at Jelling, where the first monument at the site was a huge stone setting in the form of a ship. Jelling style of ornamental metalwork from the mid-9th to late 10th century AD takes its name from the site.

The Trelleborg Fortresses, Denmark, and Danevirke, Germany

These sites include the remains of the Aggersborg, Fyrkat, Trelleborg the Danevirke fortresses. These are seen to represent the most prominent archaeological evidence for the Viking period's monumental and military building works. They are all similar in layout and construction. The Aggersborg, Fyrkat and Trelleborg fortresses were built at the same time around 980 AD but only remained functional for around 20 years until 1000AD. Little remains above ground but the sites are marked out. The Danevirke fortress was rebuilt in 980 AD on top of an earlier fortress constructed in 680 AD and probably remained in use until the late 12th century. Parts were re-used in the 19th and 20th centuries.

It is suggested that the construction of these fortresses reflects a centralised system of governance.

Hedeby, Germany

This coastal site in the southern part of the Jutland Peninsula is a testimony to the wide-ranging trade network established by the Norse of the Viking Age on the border with the Frankish Empire and Slav and Saxon tribes. On the basis of trade and also craft production, from the 9th to the 11th century AD, Hedeby grew to become one of the most important merchant towns of Northern Europe. The site includes the remains of a royal burial within a mound-covered ship that was excavated in the early 20th century.

Grobiņa burials and settlements, Latvia

This site consists of the remains of Grobiņa Castle, hill fort and settlement together with associated burial mounds at Porāni and Priediens, and flat burials at Smukumi and Atkalni. The settlements flourished between 650 and 1130 AD but there is evidence that the cultural occupation of the hill fort extended from the 5th to the 13th century AD.

The sites are seen to reflect a Norse overseas trading and craft settlement in an already populated area when Scandinavian expansion was in its initial stages.

The settlement is now partly covered by modern development. Agricultural activities have contributed to a levelling of the surface of the burial grounds of Priediens

and Atkalni and those of Pūrāni and Priediens are partly covered by trees and scrub.

Vestfold ship burials, Norway

The three burial mounds of Borre, Oseberg and Gokstad, constructed between 834 and 920 AD were where the first Viking ships were excavated in the 19th and early 20th centuries. Since then other Viking ships have been revealed in the harbour areas of urban settlements such as Roskilde (not part of this nomination) and Hedeby. The Borre site also contains the remains of a harbour and hall buildings.

Viking Age ship or boat burials in barrows are found across large areas of the Norse sphere of influence, reflecting the significance of ships not only a means of transport but also symbols of power. Vestfold ship burials are seen to be connected not to royalty but rather to what are referred to as 'petty kings', associated with the establishment of the Norwegian royal dynasty. Ships from the burial mounds are removed from the sites and are currently displayed in the Viking Ship Museum in Oslo.

Two of the three sites have given their names to Viking decorative arts styles: the Oseberg style (late 8th to late 9th century AD), and the Borre style (mid 9th to mid-10th century AD),

Hyllestad quernstone quarries, Norway

The area around the edge of the Sognefjord produced querns in large quantities from some 400 known quarry sites of which three, Myklebust, Sæsol and Rønset, are nominated. The sites are seen as examples of the emergence around 730 AD of specialised economies and large-scale production which began in the Viking Age in Scandinavia as a consequence of stable trading routes. Quern stones from Hyllestad have been found in large quantities in Sweden, Denmark, and around the Baltic, including in the archaeological record of Hedeby.

History and development

With the fall of the Western Roman Empire at the end of the 5th century AD, there was a collapse in infrastructure and organised trading structures. Western Europe disintegrated into numerous successor states. The Longobards, Franks, Goths, Angles and Saxons in the centre and west of Europe forged their own realms with the Christianised Franks emerging as one of the strongest states. There was an economic and political revival by around 800 AD that culminated in Charlemagne creating the Frankish empire (or Holy Roman Empire) as an attempt to reinstate the power of Rome. In the east, the Byzantine Empire was the successor to the Eastern Roman Empire.

In northern Europe, outside the influence of the Frankish or Byzantine Empires, the process of consolidation and growth was slower. The numerous chieftains and local rulers who had existed under Roman rule, remained. The role of the king was largely limited to leading the people in times of war. Gradually rulers began to enlarge

their spheres of influence and Norse seafarers became active in the east of the Baltic Sea. The first fortifications of Danevirke were probably built at the end of the 7th century.

The beginning of the Viking Age is seen as being in the latter half of the 8th century AD, when chroniclers reported the first attacks on England by Northmen (Norsemen) from Scandinavia. The key event was the sacking of the monastery of Lindisfarne on the east coast of Northern England in 793 AD. After Lindisfarne, the attacks became far more frequent and spread to monasteries in Scotland and Ireland.

The raids that benefitted the Norse peoples and ultimately had an impact on the growth of mediaeval states in northern Europe had at the same time an initial devastating impact on the growth of other communities in Western Europe.

The expansion of Norse power was accompanied by the development of fortifications such as Denevirke which by 740AD had become the largest such structure in northern Europe. The fort marked the division between the newly enlarged Danish power and Frankish power.

By the first decades of the 9th century AD, the full force of Viking raids and expeditions were being felt by the powerful Frankish Empire that suffered heavily from coastal invasions from AD 830s onwards. Along rivers such as the Loire, Seine, Maas and Rhine, seafarers from Scandinavia ravaged monasteries and towns. Large amounts of silver and other valuables made their way back to Scandinavia. Many warriors also stayed and established trading settlements.

In the 9th century, probably to escape royal taxes in Norway, many other people left Scandinavia to settle on the North Atlantic islands of Orkney, Shetland, the Faroe Islands and, eventually, Iceland – a migration traced through recent DNA surveys.

In the 9th century the Norse expansion also moved eastwards to Latvia where Grobiņa was established and in 859 AD attacked the city of Constantinople. A warrior elite reached Novgorod and the surrounding area, now part of the Russian Federation, and established their rule that persisted for the next four hundred years.

The vast geographic region which reaches from North America across almost the whole of northern European has areas the Norse colonised or conquered. These need to be distinguished from those where they went for only shorter periods of time and in smaller numbers such as most of the coasts and river areas of Western and Eastern Europe and the Mediterranean.

The area of interaction thus encompasses places such as York, Dublin, Limerick and Wexford on mainland Britain and Ireland and sites on the Isle of Man, the Orkneys and the Shetland Islands, as well as places like Brattahlíð in Greenland and L'Anse aux Meadows in

Newfoundland. In Central and Eastern Europe in addition to Grobiņa, numerous sites such as Starigard, Reric, Ralswiek, Wollin, Wiskiauten, Staraja Ladoga, Rjurikovo Gorodišče or Gnezdova bear archaeological evidence of the Viking Age. Further afield, mainly written accounts but also finds like the runic inscription in Istanbul's Hagia Sophia bear witness to at least temporary Norse presence.

The Viking overseas expansion and trade brought wealth back to their homeland and influenced the development of economic, political and social processes in Scandinavia, especially enlarge trading centres, enhancement of royal power, the formation of stable states, and the adoption of Christianity. This appears to have led to a reduction in Viking raids in the 10th century and the consolidation or integration of new Norse settlements outside their homelands.

By the 11th century, Scandinavian kingdoms had evolved into Medieval Christian states. However this consolidated power manifest itself in a new period of raids, especially in England. These ended when the Danish King Knud (Canute) took over the English Crown. Knud governed as a Christian ruler over an empire which embraced extensive lands around the North Sea.

The Norwegian King Harald Hardrada (AD 1046-66) is regarded as "the last Viking king" of Scandinavia. He had been a military commander and mercenary in Kievan Rus and unsuccessfully claimed the Danish throne. In 1066, he was killed in his attempt to take the English throne. He may have been responsible for the destruction of Hedeby around 1050 AD.

3 Justification for inscription, integrity and authenticity

Comparative analysis

The detailed comparative analysis considers comparisons with inscribed sites, with Tentative list sites, and with other sites within the geo-cultural-chronological region of Medieval Northern Europe, and in the context of sites associated with state formation.

The following text comments on the original nomination dossier which is not wholly appropriate for the revised approach to Outstanding Universal Value that has now been submitted. No revised comparative analysis has been submitted.

Comparisons are made with inscribed serial properties in Europe such as the Frontiers of the Roman Empire, Prehistoric Rock Art Sites in the Côa Valley and Siega Verde, and Prehistoric Pile Dwellings around the Alps for which no similarities are found.

Further comparisons are made within the category of Vikings and Norman sites in Western and Northern

Medieval Europe for both inscribed and Tentative List sites. The most relevant purely Viking sites are Birka in Sweden (inscribed 1993), with a North Atlantic extension to L'Anse aux Meadows in Canada (inscribed 1978) and the tentative group listing of Norse sites in Greenland. In terms of sites that reflect both the Viking Age and later developments are Novgorod and Bolgar in Russia (inscribed 1992 and 2014 respectively), and Urnes and Bryggen in Norway (both inscribed 1979). More limited related aspects of Viking culture can also be found in Kiev (inscribed 1990) and Istanbul (inscribed 1985).

The conclusion drawn is that although some sites, such as in Ireland, have many similarities, none of these sites illustrate the process of Medieval state formation via a broad range of highly significant sites, but focus instead on either one large site (Great Pskov), or one site type (The Royal Sites of Ireland, Cultural Landscape of "Cave Towns" of the Crimean Gothia).

Comparisons are also made with other sites such as those associated with the Merovingian and Carolingian Empires and Anglo-Saxon England as well as the early Slav states, the Kievan Rus and Russia in Eastern Europe. Although it is acknowledged that a comparison with archaeological heritage sites from all of these regions and chronological phases would be beyond the scope of the analysis, it is suggested that most lack the strong maritime component that characterises the development in the Viking Age.

Overall the conclusion drawn is that none of these compared sites is more representative than the chosen component parts. However sites such as the Gamla Uppsala / Valsgärde / Vendel complex in Sweden as an example of the roots of Viking-Age power and ritual is not mentioned.

A collective nomination of 'Viking Sites' might reasonably be expected to include the ones already inscribed on the WH List in addition to new localities. Although two inscribed sites are included, the absence of others, such as Birka, is not totally explained.

In terms of addressing why sites outside Northern Europe are not part of the nomination, the conclusion drawn is that Viking Age evidence outside Scandinavia and the North Atlantic islands is very complex and difficult to understand with regard to Norse presence and interaction, adaption and exchange relative to local populations, and even more difficult to interpret in relation to the transition to medieval societies in the Viking homelands. Nonetheless in terms of the wider 'Viking world', Grobiņa alone (important though it is) hardly seems representative of the Viking diaspora in all its very varied forms. Staraja Ladoga and/or Gnezdova could have been explored more fully.

ICOMOS considers that the comparative analysis might justifies consideration of a property relating to the formation of state building in Northern Europe or to other aspects of the Viking Age for the World Heritage List but not the series nominated.

Justification of Outstanding Universal Value

The nomination dossier originally stated that the nominated property was considered by the States Parties to be of Outstanding Universal Value in relation to the making and development of Viking Age societies from a network of politically unstable chiefdoms and petty kingdoms in the 8th century AD, to a region dominated by the formation of medieval states by the 11th century AD.

The revised Statement of Outstanding Universal Value submitted by the States Parties moves away from the main idea of state formation and instead places emphasis more broadly on the series reflecting the migrations of Vikings from Scandinavia between the 8th to 11th centuries, when Viking expansion strongly influenced the history of Northern Europe and the North Atlantic, as follows:

The series:

- Reflects what is known today as the "Viking Age", an outstanding example of human migration of peoples from the 8th – 11th centuries AD, when Norse people, held together by a common language, traditions and culture, travelled from their homelands in Scandinavia – as Vikings – for the purposes of trade, raiding, exploration and the search for new lands to settle;
- Demonstrates the interaction of the Norse people with pre-existing local populations during the course of their sea voyages eastwards and westwards, exerted substantial influence on areas outside Scandinavia;
- Testifies to the diversity of remarkable material evidence available from the Viking Age;
- Provides valuable information on the changing societal, economic, religious and political conditions of the time supported by contemporary written sources;
- Specifically demonstrates:
 - Development of power bases within Scandinavia, at Hedeby, and the Danevirke and Trelleborg fortresses,
 - Growth of power at Jelling and Pingvellir,
 - Development of mass production at Hyllestad quarries,
 - Support of trade through towns Hedeby,
 - Assembly places at Pingvellir,
 - Settlements overseas at Grobiņa,

- Wealth, derived from expansion and trade exemplified by the ship burials of Vestfold as well as Jelling,
- Shift from the Asagods towards Christianity at Jelling.

The revised justification is based on the premise that each of the sites represents a different facet of this overall proposed Outstanding Universal Value. At Þingvellir evidence of a parliamentary site; at Jelling evidence for conversion to Christianity and symbols of power; at Hedeby a trading settlement; at Trelleborg and Danevirke fortresses to protect incursions into other territories; and at Grobiņa and Vestfold elaborate burials of royals and petty royals, and, overlaying these specifics, the idea that Grobiņa and Þingvellir reflect settlements outside the Norse homelands, while the remaining sites reflect transformation within the homelands of North West Europe. ICOMOS considers that this cumulative approach for a series has limitations in terms of each of the elements being able to fully demonstrate their contribution to Outstanding Universal Value.

The nomination tends to focus on the Viking Age as an essentially homogenous, sequential and linear process (as set out in tables in the nomination dossier), which is linked to the identification of relevant types of sites and monuments that supposedly illustrate this process. Many scholars suggest that the actual history is more complex, less organised and less consistent than the dossier suggests. They now see the Viking Age as an intensely diverse and far from consistent period, with many different parallel processes emerging (including reversals of them) and considerable variation over both time and space.

In terms of defining the terms that underpin this nomination, there remains conceptual vagueness. Although the nomination starts with the premise that there was a 'Norse people' and that they travelled as 'Vikings' from their homelands in Scandinavia for the purposes of trading, raiding, exploration and the settlement of new lands, the text quickly changes to use the terms 'Viking Age sites' and the locational description 'northern Europe' such as in the series constitutes an 'important testimony to the 'cultural-historical period of the Viking Age in the geo-cultural region of northern Europe'.

This confused use of ethnic terms followed by the temporal/chronological term 'Viking Age' causes problems of interpretation. It is not clear whether there was an ethnically and culturally definable 'Viking identity' across the sites selected, or whether there were some common traits in terms of the use of material culture, ideology and language across the group of sites between the 8th and 11th centuries.

The statements that 'these types of archaeological sites are distinctive for the Viking Age in their specific form, architecture and layout, use and function and material

expression', and that 'the archaeological sites in this nomination belong to the same cultural-historic group' certainly gives the impression that the term 'Viking Age' is being used as an ethnic/cultural marker hidden behind the chronological use of the term. These sites certainly are typical of Viking-Age sites in Scandinavia, the Baltic and the North Atlantic but they are not typical of 8th- to 11th-century sites also influenced by Scandinavians in other parts of northern Europe (Britain, Ireland, Normandy etc.), if using the term Northern Europe as more normally applied.

There is also a lack of clarity over how to incorporate and represent sites and zones reflecting interaction between Scandinavians and other northern European societies, between the 8th and 11th centuries, with impacts both on Scandinavia and other regions visited/influenced by Scandinavians. It is becoming increasingly evident from the archaeological evidence that interaction between Scandinavia (especially western Scandinavia) and north-western Europe (the British Isles, Frisia, France) was not only a phenomenon of the Viking Age as 7th-century coinage has been found at Kaupang, Norway, and Jelling, Denmark, and 7th-century female brooches from Jutland, Denmark, have been found in the Netherlands (such as at Wijaldum). This interaction was not just a feature of the Viking Age, although the scale and nature of the interaction changed.

There is a further issue with the geographical scope in relation to influence. The omission of sites in England, Ireland and also Russia hampers the ability of the series to demonstrate the impact of interaction between Scandinavia and other parts of northern Europe. It excludes sites in England (e.g. York) or Russia (Staraja Ladoga, Novgorod) that also illustrate two-way influences – especially as the Kingdoms of England and Denmark were united as one imperial entity under Cnut of Denmark and his sons, between 1016 and 1042.

Overall these concerns highlight the difficulties of a series trying to reflect an historic period that has been defined on the basis of historical perspective and can only be defined from the certain specific, and at times limited, physical remains that have survived. For instance the distribution of diagnostic oval brooches as indicators of western contacts in eastern Normandy reflects only two brooches in a single grave.

The nomination dossier states that it covers all the required types of sites which are functionally linked, cover all significant processes involved in the transformation to medieval states, and have periods of use which extend through the whole or parts of the Viking Age, for which cultural and social links can be established through written sources and portable objects. However it is difficult to support the idea that the seven sites, of which one is a quarry, can adequately represent an entire civilisation, and especially one that made such a massively transformative impact on the early medieval world.

In the light of the above concerns, ICOMOS does not consider that the justification of Outstanding Universal Value in the nomination dossier or the amended statement can be supported. ICOMOS also does not consider that the current serial approach is fully justified.

This does not mean however, that individual sites are not of value in terms of the way they reflect particular aspects of the Viking Age, such as Pingvellir and Jelling, already inscribed on the List, and some of the others, or that other series might not be supported. Further serial nomination possibilities are discussed under Conclusion below.

Integrity and authenticity

Integrity

In terms of the integrity of the overall series, this is difficult to assess without a supported justification for Outstanding Universal Value.

In terms of the integrity of individual components, there are no issues as the proposed boundaries adequately reflect the attributes related to their suggested value. None of the component parts is vulnerable or under threat to a degree that might impact on their integrity.

Authenticity

In terms of authenticity, there is an issue as to whether the seven sites can together reflect the suggested Outstanding Universal Value as discussed above.

In terms of the way each of the individual sites is able to reflect its stated value there is no concern.

Although the conditions of integrity and authenticity for individual sites have been met, ICOMOS considers that the conditions of integrity and authenticity for the overall series need to relate to the proposed Outstanding Universal Value and neither the original or the amended Statement of Outstanding Universal Value is currently supported.

Criteria under which inscription is proposed

The property is nominated on the basis of cultural criteria (iii) and (iv). The following justifications reflect the revised Statement of Outstanding Universal Value.

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

This criterion is justified by the States Parties on the grounds that the expansion of the Vikings across Northern Europe and the North Atlantic is an outstanding example of human migration and settlement which maintains aspects of the Viking character across wide areas.

The seven components are an outstanding example of those aspects of the Vikings which can be expressed

through the archaeological record, and which bear exceptional testimony to the nature of Viking culture that shaped much of Northern Europe and has strongly influenced subsequent developments.

ICOMOS considers that the justification for the nominated series in terms of the way it reflects migration that in turn shaped Northern Europe lacks specifics and is so far ill-defined in regard to how interaction with people and power structures in northern Europe and in Scandinavia 'shaped' Northern Europe, whether, in political, social, economic or religious terms is not made clear.

ICOMOS considers that if this idea of the influence of migration is to be pursued, then further details would be needed on the scope of the migration, as the Vikings colonised areas far beyond the area of the current nomination. Viking expansion was immense and extended to areas in North America, Russia, the Mediterranean and elsewhere.

Also more precise details of the influence of migration would need to be provided and of how sites might reflect such influence. In terms of the current series, as only one site represents the expansion outside the Scandinavian homeland, it is difficult to understand how the series might be seen to reflect migration of the Vikings from their homeland.

ICOMOS considers that this criterion has not currently been justified for the current series.

Criterion (iv): be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history;

This criterion is justified by the States Parties on the grounds that the migration and the interaction of the Norse with other peoples in Europe led to new architectural expressions and uses of the landscape. These include urban trading sites, defensive works, settlements, sites of mass-production to support long-distance trade, as well as places demonstrating ritual and belief.

This series of seven Viking Age sites illustrates the structures epitomising Viking culture in this period of migration and settlement. It encompasses the archaeological remains of sites of governance with symbolic and religious monuments, assembly sites for deciding legal and political issues, defensive structures such as ring fortresses and border defences, production sites such as quarries, trading towns with harbours, burial places such as ship burials and sites of cultural interaction.

These sites are distinctive for the Viking Age in their specific form, architecture and layout, use and function and material expression and, as such, bear exceptional

witness to this time of transition and migration in Northern Europe.

ICOMOS considers that there is no doubt that the series provide examples of buildings, architectural, technological and landscape ensembles of societies which shared significant Scandinavian-influenced traits in their material culture, at a significant stage in human history, the Viking Age. It is from migration that the Vikings would have developed new architectural expressions and landscape uses.

From the evidence provided however it is difficult to see how these sites as a series might be seen as an outstanding example of these typological traits; rather some are representative sites such as Grobiņa, while the quern stone site cannot quite support the typological category at all: it is more of an early medieval production sites.

Viking raids, trade and migration extended far beyond the Northern Europe of the nomination. If the full scope of architectural and landscape expressions of the Vikings were to be acknowledged, then both the similarities and difference of such forms would need to be addressed from the widest extent of their influence. Greenland/Canadian settlements would need to be considered alongside the more eastern Russian expressions in order to reflect the full scope as noted in the document. "This larger area of interaction stretches from Bulgar (Russia) in the east, to Vinland (Canada) in the west, and from Brattahlíó (Greenland) in the north to Byzantium (Turkey) in the south."

Such a massive extension might however bring with it the need for much clearer definition and timeframes, as outlined above, and might be better seen in terms of links with trade routes, as suggested below under Conclusions.

ICOMOS considers that this criterion has not currently been justified.

ICOMOS considers that the current serial approach has not currently been justified

ICOMOS does not consider that the criteria have been justified at this stage.

4 Factors affecting the property

Pingvellir

For this property there are concerns that date back to the time of its inscription as a National Park. Although the nominated area is now smaller, the issue of a hotel in the sensitive heart of the site is still an issue. Although the hotel was burned down and the site is now used for paved parking, there are pressures for a new building. Although it is convenient to have accommodation for visitors, this should not be in the sensitive archaeological

areas of the site. A location at the entrance of the park should be considered. There are other paved parking areas around the site and it would be desirable to introduce a more ecological approach to transport in the nominated area as well as within the wider already inscribed property.

Jelling

The management plan involves the removal of modern buildings to the outside of the archaeological area. This in itself is a good thing, but as the town centre was originally near the site, and as the town near the site is dying, perhaps consideration could be given to encouraging traders to move into empty shops.

Danevirke

There is a potential threat from a proposal to expand a gravel pit and this is currently being challenged. There are also potential and actual threats from power lines.

Hedeby

A wind turbine in front of the site significantly hampers the landscape. As it is an old model and small, it is stated that it will not be replaced.

For both Hedeby and Danevirke the issue of new wind turbines has been removed through the creation of a five kilometre exclusion zone.

Trelleborg

A wind farm in the buffer zone is problematic as it is highly visible when approaching the fortress. It, too, is old and should not be replaced. The high-voltage overhead lines also cause visual integrity issues and it would be highly desirable to underground them.

Hyllestad

A plan to build a mini hydropower station in the vicinity of the Millstone Park is still under discussion. Such a facility would probably not influence the property itself but would affect the amount of water in the River Myklebustelva and therefore could adversely impact on the landscape inside the Millstone Park.

Grobiņa

Potential threats from touristic activities such as the yearly Viking re-enactment festivals inside the nominated site highlight the need for clear tourism development plan and one is currently being developed.

Vestfold burials

The route of a new double track intercity train of the Vestfoldbanen (Vestfold railway) could pass close to the buffer zones. If the Suitable measures (e.g. embankments) will need to be taken to protect the visual integrity of the sites north of the nominated site of Borre, there is more substantial potential development pressure in the buffer zone. A developer and Horten municipality are currently proposing the construction of residential units of various size, a park, a playground and new operational facilities. Changes in the zoning plans of the existing Municipal Master Plans would be needed to

realize these plans and so far no decision has been taken. Airborne surveys (LIDAR) of the area have indicated archaeological remains which could be interesting for the interpretation of the site as a whole. There is clearly concern if the protection of the buffer zone is not strong enough to resist this scale of development.

ICOMOS considers that the main threats to the property are from visual intrusions such as wind turbines and power lines, both existing and potential, and in specific sites, new train lines and substantial development in the buffer zone.

5 Protection, conservation and management

Boundaries of the nominated property and buffer zone

The boundaries of the sites and their buffer zones are acceptable apart from Trelleborg. Here an area where recent archaeological surveys have suggested the presence of a port should be include within the site.

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

Ownership

Some sites are in public ownership while others are wholly or partly in private hands as follows:

Pingvellir is State owned.

Jelling is mainly owned by the Jelling Parochial Church Council, the Deanery of Vejle, the Diocese of Haderslev and Vejle Municipality. Private citizens own part of the palisade.

The Trelleborg fortresses are owned by the State.

Some 66% of Hedeby and Danevirke is in public ownership, including the German Federation, the State of Schleswig-Holstein, the districts (Kreise), municipalities (Gemeinden) and state foundations as well as, but on a smaller scale, the church parishes and the Association of the Danish Minority. About 33% is in private ownership.

In the Grobiņa burials and settlements, three of the burial sites, Porāni (Pūrāni), Smukumi and Atkalni are in private ownership, the Grobiņa castle and Hill Fort are owned by Grobiņa Municipality, while the Priediens burial mound site is owned by the Evangelical Lutheran Church of Latvia.

In the Vestfold ship burials, Borre has 90% owned by the Norwegian Church Endowment with the remaining 10% in private ownership; Oseberg has 11% in public ownership, 89% in private ownership; and Gokstad has 7% in public ownership and 93% in private ownership.

The majority of the Hyllestad quernstone quarries, approximately 94.5% is in private ownership, divided among 14 different property owners; approximately 5.5% is in public ownership, with Hyllestad Municipality and the Norwegian Church Endowment registered as owners.

Protection

In all countries legal protection is adequate.

Legal protections exists both at national, regional and local levels for all the nominated sites and the buffer zones.

In Germany, a series of federal laws regulate the protection of sites (nature and heritage). Since the protection of nature, landscape and culture is the responsibility of the Länder, it is the laws of the Land Schleswig-Holstein (Gesetz zum Schutz e.g. der Natur (Landesnaturschutzgesetz - LNatSchG) vom 24. February 2010. Gesetz zum Schutze der Kulturdenkmale (Denkmalschutzgesetz - DSchG) vom 21. November 1996 zuletzt geändert 8. September 2010) that govern their protection. Legal protection is operates under the supervision of the Archaeological Service of Land Schleswig-Holstein (ALSH).

Denmark: The Trelleborg Fortresses are all protected as monuments under the Danish Museum Act (Danish Museum Act from 2006). The Danish Act on the Protection of Nature (Danish Nature protection act from 2013) also protects the site and the buffer zone. Each archaeological site (fortress) is also protected by a number of decrees which depends both on national laws and municipal. The Jelling site is also subject to the regulations related to churches and cemeteries. Site management depends on local structures, but are always conducted in collaboration with the National Museum.

Iceland: Legislative protection of Pingvellir is based on the law on the National Park (Act on the National Park Pingvellir 2004 No. 47 and corresponding Regulation 2005, No. 848). The site is also protected by the Heritage Act, 2012, No. 80 and by national laws on the protection of nature, territorial planning and protection. The maintenance of the site rests with the National Park who works in collaboration with the Heritage Agency with regards to cultural, historical and archaeological monuments.

Latvia: Archaeological sites in Latvia are generally protected by the Law on Protection of Cultural Monuments and the Cabinet Regulation No. 474 of 26 August 2003 "Regulations regarding the Registration, Protection, Utilization and Restoration of Cultural Monuments, the Right of First Refusal of the State and the Granting of the Status of an Environment-Degrading Object". On a Regional level the Municipality of Grobiņa has adopted a spatial plan for the period of 2014-2025 with binding regulations for special regimes of use of monuments.

Norway: The fundamental legal instruments are the Cultural Heritage Act (1978), which includes all cultural monuments and sites older than 1537 AD, and the Planning and Building Act (2008), with regulations for municipal planning. All component parts in Norway are protected according to the Norwegian Cultural Heritage Act. Additional protection is given by regulations for nature protection and by agreements for farming and grazing to maintain the open fields. In Norway a White Paper on World Heritage was developed and adopted in 2013.

ICOMOS considers that the legal protection and overall protective measures in place are adequate.

Conservation

In Germany, the Land Schleswig-Holstein is responsible for the conservation of Hedeby and Danevirke. Preventive excavations, conservation works and restoration of monuments are the responsibility of the Archaeological Service (ALSH) and they are also responsible for archaeological excavations. The maintenance of natural areas is supported by the municipalities in collaboration with the authorities responsible for the protection of nature.

In Denmark, Jelling is the parish responsible for maintaining the site (especially the church and the cemetery) in collaboration with the National Museum. This maintenance includes mowing the grass around and on the mounds, maintenance works representing the buried monument and surrounding area. Funding is provided by the parish and the municipality, and supported by the Ministry of Culture. The Royal Jelling Interpretation Centre is jointly managed by the municipality of Vejle and the National Museum.

The conservation of the Aggersborg site is with the Danish Agency for Nature (Danish Nature Agency) who is the owner. The Vesthimmerland museum controls the small local museum. A Fyrkat, the North Jutland Museum (Nordjyllands Historiske Museum) is responsible for the maintenance of the site and immediately adjacent areas, while the Mariagerfjord council is responsible for the maintenance of private protected areas within the buffer zone. The Trelleborg site and the reconstructed Viking house belong to the National Museum of Denmark, which undertakes regular conservation.

For Iceland, the maintenance of the archaeological site is the responsibility of the national park in collaboration with the Cultural Heritage Agency, which provides advice during preventive excavations.

ICOMOS considers that conservation management and approaches are satisfactory.

Management

Management structures and processes, including traditional management processes

Briefly addressed in the nomination dossier is the 'overall management group which will consist of representatives from National Heritage Boards, Cultural Heritage Agencies and/or Ministries in the respective States Parties, according to the legal responsibilities awarded them by their respective cultural heritage laws. The respective site managers will also form part of the group. The formation of the overall management group will take place in 2014 and the first meeting is planned for 1 December 2015.'

Although the basic details appear to be in place, further details need to be provided.

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

There are management plans for all components. All are being implemented after being agreed by the partners involved in the management of the sites.

The management plan for the German sites of Hedeby and Danevirke was approved in 2013 and commissioned in 2014. To implement the plan an association has been formed supported by a scientific Advisory Board, one of whose members will be part of an International steering Committee. Management of the site itself is the sole responsibility of the ALSH.

For Jelling, the 2014 management plan is based on the 2010 management plan for the World Heritage site and has been modified to meet the demands of the new archaeological area. The group responsible for the management, called "Cooperation Council" is composed of a member of the parish of Jelling, the deanery of Vejle, the Municipality of Vejle, the Danish National Museum / Royal Jelling and Vejle Museum. The president of the council will sit in the international steering committee. The management plan includes the values of the site, a list of hazards, the administrative measures necessary for the maintenance of the property, finances and a monitoring system.

Trelleborg fortresses also have a management plan that was put in place in anticipation of the inscription as appointment as World Heritage. It was approved accepted in 2014. Representatives of the three sites make up a coordination group called the "Trelleborg Group", whose members are elected by the directors of each of the three forts or museums, municipalities, owners. The management plan is built on the same model as Jelling.

Pingvellir management plan dates from 2004 and has been established for 20 years. This period is too long for an effective management plan. A review is currently underway and expected to be completed in summer 2015.

ICOMOS considers that the management system for the property is adequate in terms of individual sites but more details are needed on the over-arching management of the series.

6 Monitoring

Detailed monitoring systems are in place for all sites, based on adequate documentation.

ICOMOS considers that the monitoring arrangements are adequate.

7 Conclusions

This serial nomination is an ambitious undertaking that attempts to reflect through seven sites the migration of peoples over several centuries of history across large parts of Northern Europe. Such an approach tends to simplify concepts, particularly the definition of historic periods, peoples, and the scope and extent of interactions, especially when the period being considered is not related to a coherent empire or state but rather to an assembly of polities that were transformed in many different ways.

The Viking Age, when large number of Norse people from Scandinavia set out to raid, trade or migrate to new homes, saw transformational changes both positive and negative depending on whether the focus is on the Vikings or the subject of their raids. It undoubtedly was a major period in history.

The nomination dossier originally focused on one main aspect of this period; the positive impact that resulted from the new ideas that Norse people absorbed from the states they came into contact with in terms of state formation in their homelands of Scandinavia and elsewhere. The main premise was that Christian states with long standing governance structures emerged in Northern Europe during the Viking Age as a result of the contact between Norse people and the already formed states they came into contact with. The seven sites were said to represent this process.

Although the intellectual arguments for the idea of state formation were well set out, there remained an issue as to how far any of the sites, apart from Þingvellir could be readily understood in terms of their contribution to state formation. In response to these and other concerns of ICOMOS, the States Parties provided a revised Statement of Outstanding Universal Value that moves the emphasis away from state formation to a more general focus on Viking migration and the impact of that migration on the development of Northern Europe.

As suggested above, there remain conceptual difficulties with this new approach. It is problematic to reflect an entire Viking Age migration in seven sites, when five are

in the homeland and only two outside in the area of expansion. These sites show aspects of Viking culture but cannot be said to demonstrate expansion.

In terms of Viking expansion, it is also debatable, whether its impact can be constrained to Northern Europe as this is where the purest Viking remains can be found. Furthermore whether or not the Viking Age can be seen as a time of linear, sequential progress is much debated as is its precise time frame.

The Scandinavian homeland of the Norse people from which Viking migration and raids took place covered Scandinavia, which is defined as including Denmark, Schleswig-Holstein in North Germany, Norway and Sweden together with the previously uninhabited islands in the North Atlantic (Iceland and the Faroe Islands). If this is accepted, then it is not satisfactory for a serial nomination to exclude sites from Sweden, one of the three main Scandinavia countries, and a critical part of the Scandinavian homeland.

Overall, ICOMOS does not consider that this series in its present form would allow the scope of Viking influence to be adequately reflected on the World Heritage list. The seven sites do not fully represent the achievements and influence of the Viking Age migrations in world history or even an adequate facet of it. There is a danger that the series could contribute to a reification of a partial view of the past, and distort the contribution of the Viking Age to world history.

The Viking migrations proved to be a powerful force for change in many parts of the world. That change was not just the results of raids but also from trade. In one sense the Viking migration routes can be seen as trade routes along which raiders seized the opportunities offered for trade and developed permanent coastal settlements; and as with most trade routes, information, knowledge and ideas travelled along them in both directions.

These trade routes were mainly across oceans, along coasts and down rivers as Viking ships, the most powerful naval vessels of the era, were the centrepieces of Viking culture.

ICOMOS considers that the focus on sea, coastal and river trade routes worked by the Vikings in the Baltic, around the North Sea and further afield mainly between the early 9th (and possibly earlier) and the late 11th centuries deserves to be explored further. The number of sites needs expanding but currently there is no framework within which new sites might be chosen.

ICOMOS considers that the development of some sort of Thematic Study on Viking migrations could be helpful. Such a study could define the key parameters of the Viking Age migrations in geographical and historical terms. It could analyse which might be considered the most major and influential routes around the Baltic and the North Sea and further afield to North America in the west, to what is now Ukraine and Russia in the east, and

to the islands of the Mediterranean in the south, and also where there were heavy settlements and where light ones. The study could also consider where the most appreciable remains of settlements have survived that might collectively be seen to demonstrate the impact of Viking trade and Viking mastery of the sea, and the overall importance of Scandinavian influence overseas. Finally the study could consider how best the main groups of sites might be reflected on the World Heritage List, whether by one series or by more than one.

ICOMOS considers that the revised Statement of Outstanding Universal Value submitted by the States Parties, whilst it cannot be said to justify the current selection of seven sites, should be seen as a new and helpful direction on which to base further work that might provide the foundation for a potential series, or more than one series of sites, that reflect the impacts of sea migration and trade during the Viking Age.

8 Recommendations

Recommendations with respect to inscription

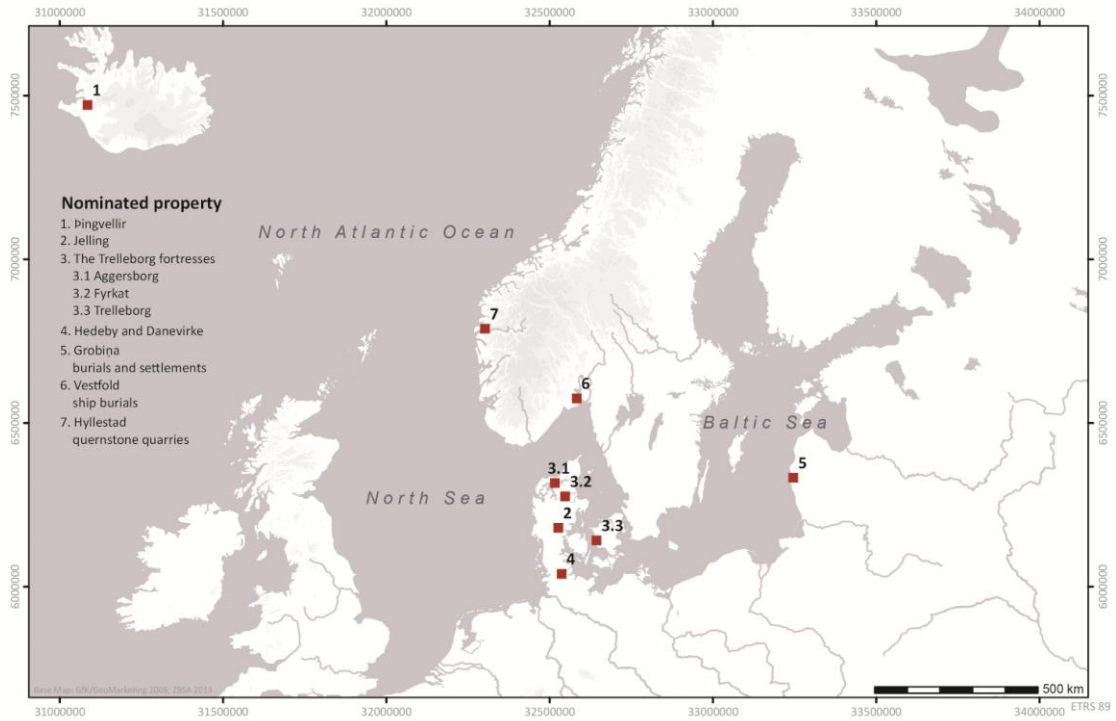
ICOMOS recommends that the examination of the nomination of Viking Age Sites in Northern Europe, Iceland, Denmark, Germany, Latvia and Norway, to the World Heritage List be **deferred** in order to allow the States Parties to:

- Explore further the full scope, scale and nature of Viking Age sea and river migration and trade routes, and the settlements that these routes engendered through:
 - Definition of the main parameters of time, space and cultural terms related to the migrations;
 - Mapping of the major migration and trade routes and of the surviving evidence for Viking trade settlements along these routes;
 - Selection of the routes where significant remains survive which illuminate migration and trade and the key facets of influence and cultural exchange.
- Define a nomination strategy, that might include one or more series, which could allow key aspects of the Viking Age migrations to be reflected on the World Heritage List, and allow future nominations to be accommodated;
- On the basis of this further work, submit a new serial nomination.

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

ICOMOS would be willing to engage with the States Parties concerned to offer advice and guidance, if

requested to do so, in the spirit of the Upstream processes.



Map showing the location of the nominated properties



Þingvellir site (Iceland)



Jelling mounds (Denmark)



Aerial view of Hedeby and the Semi-circular Wall (Germany)



Trelleborg fortress (Denmark)



The Oseberg mound - Vestfold (Norway)



Hyllestad (Norway)

The Necropolis of Bet She'arim (Israel) No 1471

Official name as proposed by the State Party

The Necropolis of Bet She'arim – A Landmark of Jewish Renewal

Location

The Northern District
Emek Yizreal Regional Council
Qiryat Tiv'on Local Council
Israel

Brief description

The necropolis of Bet She'arim, a series of man-made catacombs was developed from the 2nd century CE as the primary Jewish burial place outside Jerusalem following the failure of the second Jewish revolt against Roman rule. Located in the hilly region south-east of Haifa, overlooking the Vale of Jezre'el, the catacombs are a treasury of eclectic art works and inscriptions in Greek, Aramaic and Hebrew. Bet She'arim is associated with Rabbi Judah the Patriarch, the spiritual and political leader of the Jewish people who compiled the *Mishna* and is credited with Jewish renewal after 135 CE.

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

31 January 2002

International Assistance from the World Heritage Fund for preparing the Nomination

None

Date received by the World Heritage Centre

24 January 2014

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 7 to 10 September 2014.

Additional information received by ICOMOS

A letter was sent to the State Party on 21 August 2014 requesting a map showing the relationship of the nominated property boundary to the identified features of the property and a timetable for finalisation of legislation of the property as a National Park. A response was received on 24 September 2014. A second letter was sent to the State Party following the ICOMOS Panel in December 2014 regarding possible acceleration of finalisation of legislative protection of the buffer zone and a response was received on 28 February 2015. The information has been incorporated below.

Date of ICOMOS approval of this report

12 March 2015

2 The property

Description

The nominated property comprises 33 subterranean complexes dug out of soft limestone and dating from the 2nd to the 4th century CE. These cover a wide range of architectural and decorative burial types, from small family caves to large public complexes with several rooms. Burials were in *loculi*, *arcosolia*, *kokhim*, pit graves, simple and double-trough tombs with sarcophagi and coffins made out of wood, lead, pottery, local stone and marble and sometimes bodies were buried without a coffin. There is also evidence of secondary burial of bones in a clay ossuary and of reburial without an ossuary. The property area of 12.2ha covers the excavated complexes, the areas between them and the estimated extent of the necropolis.

Northern section (Section I)

This includes Catacombs 12-31, the most notable of which are Catacombs 14 and 20. Both have courtyards and triple-arched facades carved in the rock face. It is thought that the tomb of Rabbi Judah may be the one in the rear room of Catacomb 14 but there is no direct evidence. Catacomb 20, the largest tomb in the necropolis contains over 130 limestone sarcophagi decorated with Hellenistic and Roman motifs including wreaths, heraldic eagles, schematic bulls' heads, the menorah, lions, gazelle, and bearded human figures and bearing inscriptions of family names in Hebrew. To the west is a group of square cist graves containing lead coffins with Roman period reliefs, two with Jewish symbols. It is thought that these were brought here from one of the Phoenician cities.

Western section (Section II)

This comprises 7 catacombs including Catacombs 1-4, Hell's Cave, Sih Cave and Catacomb 11 with an adjacent mausoleum. Catacombs 1-4 known as the Menorah Caves contain reliefs and paintings of Jewish motifs including the menorah and the Torah Ark. These are executed in the style typical of Jewish popular art of the Roman period showing both eastern and Hellenistic influences. Other motifs in these and the other caves

include geometric designs, men, horses and lions, boats, shells and architectural elements. The ruins of the mausoleum dating from the 3rd century CE, comprise four ashlar facades, one decorated with an animal frieze, and contained a marble sarcophagus carved with a relief of Leda and the Swan, which was removed to the Rockefeller Museum. The Sih cave was used as a water cistern during the British mandate period (1918-1940) and then as a store room and rifle-range for the Jewish Ha-Haganah resistance organisation.

North-western section (Section III)

This section contains Catacombs 5-10 which have been only partly excavated. The arched entrance to Catacomb 6 led to a mosaic-paved court opening into halls. Catacombs 7 and 8 contain engraved menorah and inscriptions. ICOMOS notes that a further unexcavated cave opening off Catacomb 6 was exposed by looters. Cave 33 located further to the north-west was excavated in a salvage operation in 1982 but has not been conserved.

History and development

Following the unsuccessful second Jewish Revolt known as the Bar-Kokhba Revolt against Roman control of Jerusalem (132-5 CE), the Jewish leadership (*Sanhedrin*) moved to the town of Bet She'arim in Lower Galilee, where Rabbi Judah the Patriarch became its head in 165 CE. As the spiritual and political leader of the Jewish people he subsequently repaired relations with the Roman governors and is credited with Jewish renewal following the devastation of 132-5 CE. The compilation and editing of Jewish oral law into a written codex covering religious and social behaviour, known as the *Mishna* and still used today, is attributed to the work of Rabbi Judah and the *Sanhedrin* while they were based at Bet She'arim.

The town of Bet She'arim for which the necropolis developed is identified with the adjacent hill known as Sheikh Abreik, whose settlement history as derived from surface pottery goes back to the 9th century BCE. Only a small part of the hill has been investigated and the earliest architectural fragments date from the Herodian period (first century BCE to first century CE). The town is not included in the nominated property boundary but the excavated part on the northern slope of the hill is within the buffer zone. Excavations have exposed a synagogue dating from the 3rd century CE and an earlier domestic building, which is thought by some scholars to possibly have been the house of Rabbi Judah. A Basilica with remains of geometric mosaics was excavated further to the west. The excavations indicated that the settlement declined at the end of the Byzantine period, suggesting that the use of the cemetery ceased following the Gallus rebellion in the mid-4th century CE, however subsequent studies suggest that its use continued into the 5th and 6th centuries.

According to Talmudic tradition Rabbi Judah had prepared his tomb in the cemetery at Bet She'arim and was buried

there c 220 CE. The nomination dossier proposes that his burial there led to its becoming the favoured place of burial for other Rabbis of the Patriarchate and their extended families, as well as for Jews from all the neighbouring regions. ICOMOS notes that Rabbi Judah lived his last 17 years at Sepphoris after the *Sanhedrin* moved there and according to one source (*Gelilot Eretz Yisrael*) he was buried there.

The archaeological remains on the ancient mound were first noticed by French traveller Victor Guérin in 1865. Two catacombs were mapped by Conder and Kitchener of the Palestine Exploration Fund in 1872, but the site was not excavated until 1929 on behalf of the Israel Exploration Society and the Hebrew University of Jerusalem. The excavations were instigated by Jewish pioneer Alexander Zayd who built his home on the mound in the 1920s and noticed the archaeological remains. Excavation continued with interruption during WWII until 1958. The site was established unofficially as a National Park from the late 1950s and designated as "Bet She'arim Antiquities" (Plan G/325). The current layout and planting of the park derives from the landscape plan of the 1960s. At that time Catacombs 14 and 20 (the façade of the latter was partially reconstructed), a small visitors' centre and a small museum in the Cistern/Glass Workshop 28 were opened to the public.

During the 1990s interpretation panels were provided in a small central piazza. From 2006-2010 conservation works in Section II enabled these catacombs to be opened to the public but by controlled, guided visitation only.

3 Justification for inscription, integrity and authenticity

Comparative analysis

Within Israel, the State Party has compared the nominated property with the first century CE monumental tombs in Jerusalem; burial caves of the Hellenistic, Roman and Byzantine period at Maresha-Bet Guvrin (2014, criterion (v)) where there are Jewish *hypogea* of similar period to those at Bet She'arim with direct parallels in the case of the menorah caves, and the Roman period necropolis at Zippori (Sepphoris). This last has not been fully excavated but contains some burial caves similar to the small catacombs and inscriptions similar to those found at Bet She'arim. Comparative properties outside Israel include the Shatby necropolis at Alexandria, Egypt; the catacombs in Rome; Petra, Jordan (1985, criteria (i), (iii) & (iv)) and Mdina, Malta (Tentative List).

The State Party argues that despite certain similarities in date, design, artwork and function with these other necropoli, Bet She'arim is an exceptional case of great interest because it reflects the character of the Jewish people through the personality of its great leader Rabbi Judah the Patriarch and the association with his *opus magnum* the *Mishna*, the first redacted Jewish codex. It is argued that the assemblage of artworks and

inscriptions attest to Jewish integration into the surrounding culture resulting in religious tolerance as promoted by Rabbi Judah. ICOMOS considers that the attribution of the adoption of Roman-style tombs to Rabbi Judah's ideas of tolerance is not supported by any directly connecting evidence. It is noted that evidence at Jewish cemeteries in the Diaspora such as Egypt, Cyrene, Lebanon, Syria, Cyprus, Arabia, Greece, Eastern and Western Europe, North Africa and Asia Minor indicates that diasporic burial practices were often locally determined and commonly reflected the behaviours and attitudes of surrounding Jewish, pagan, and Christian populations as much as, if not more than, biblical or Levantine antecedents.

Rabbi Judah's burial at Bet She'arim is said to have drawn those of the Jewish elite from far and wide, just as the burial of Christian saints attracted others to be buried near them in other places. Regarding Rome, the State Party argues that just as the Christian catacombs in Rome contain a treasury of early Christian art including pagan and Jewish influences important for the understanding of early Christianity, so the Jewish necropolis at Bet She'arim contains artwork of supreme importance for the history of Judaism in the post-Second Temple period.

ICOMOS notes that with the exception of some studies covering funerary customs, religious and historical aspects, the great glass slab and the two mosaics discovered on the site, no updated overall studies have been carried out at Bet She'arim since the 1970s. By comparison considerable research of ancient Jewish catacombs has been undertaken over the last 20 years in Italy which has not been taken into account by the comparative analysis. Nevertheless ICOMOS considers that the comparative analysis shows that the necropolis contains a remarkable collection of artwork representative of a particular time, place and ancient people and testifies to an important period of ancient Judaism.

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:

- It represents Jewish culture at an important period of its history.
- It is the largest necropolis in Israel and one of the largest of its type worldwide.
- The exceptionally large collection of artwork and its great variety including engravings and paintings previously uncommon among Jews.
- The exceptionally large cluster of stone sarcophagi.
- The largest collection of burials of Rabbinical leaders and other high ranked Jews.

ICOMOS considers this justification is appropriate as the basis of the argument for Outstanding Universal Value because the necropolis and its collection of funerary art express the nature of a major world religious culture at a key period of its history.

Integrity and authenticity

Integrity

ICOMOS notes that while all excavated catacombs are within the nominated property boundary except for Cave 33 which is in the buffer zone, to date no geophysical investigation of the necropolis area has been carried out in order to establish its full extent. ICOMOS considers however that the nominated property includes all elements necessary to convey the nominated value and is of adequate size to ensure the complete representation of the features and processes which convey the property's significance. The nominated property does not suffer from adverse effects of development or neglect.

Authenticity

ICOMOS notes that inscriptions in the catacombs are written in Greek, Hebrew, Aramaic, and Palmyrean and indicate that Bet She'arim was a central burial place for the Jews of Palestine (Etsyon Gaver, Sepphoris, Arav, Caesarea) and of the Diaspora - Tadmor (Palmyra) and Yahmur in Syria; Antiochia and Pamphilia in Turkey; Byblos, Tyre, Sidon and Beirut in Lebanon; Neharda and Meishan in northern Mesopotamia and Himyar in Yemen, confirming the status of the necropolis as described in the nomination. ICOMOS considers that interventions made in order to open the necropolis to visitors are not an issue overall, except for the concrete access stairway constructed in the corridor of Catacomb 13 in the 1960s. ICOMOS considers that the catacombs themselves, preserved in-situ, retain authenticity in terms of location, setting, form and materials. In terms of use and function, the catacombs had ceased to be used for burial purposes by the 6th century, were abandoned and subsequently neglected. Today they are part of a national park with some open to the public; Cave 28 is used as a museum and the Sih cave is in the process of adaptation to similar use. Both these caves had previously been re-used for functions other than burial including as cisterns.

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

Criteria under which inscription is proposed

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

Criterion (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 oriental folk art of the necropolis reflects the influence of classical Roman art and included human images which were prohibited in the Jewish religion, thus expressing Jewish pluralism and tolerance during this period. The iconographic motifs and multi-language inscriptions exhibit the exchange of human and cultural values between the Jews and the Roman world.

ICOMOS considers that as well as adopting the classical art forms of its time the catacombs show influences from pluralism and cross cultural interaction with Edomites, Phoenicians, Greeks, Egyptians and Judeans, evidenced by a variety of inscriptions and other decorative details. The exhibited assimilation of burial types and artistic expression together with inscriptions indicating the origins of those buried in the cemetery are important in that they demonstrate wide dispersal of the Jewish people following expulsion from Jerusalem and the incorporation into Jewish religious culture of influences from the surrounding populations.

ICOMOS considers that this criterion has 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 the necropolis constitutes unique and exceptional testimony to ancient Judaism, directly associated with one of the pinnacles in Judaism's development, Rabbi Judah the Patriarch. It comprises one of the largest cemeteries in the Land of Israel; oriental folk-art style of reliefs and frescos on walls and sarcophagi are of exceptional value and are evidence of the Jewish culture that once flourished here, disappeared and no longer exists. It thus constitutes a unique and exceptional testimony to ancient Judaism.

ICOMOS considers that the necropolis represents a society with considerable resources and is an exceptional testimony to the resilience and revival of ancient Judaism following the destruction of the Second Temple in 132-5 CE.

ICOMOS considers that this criterion has been demonstrated.

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 necropolis is directly associated with the *Mishna*, the first written redaction of Jewish codex, which became a guide for everyday life for the Jewish people until the modern era. This was composed by Rabbi Judah the Patriarch with the *Sanhedrin*, the religious-social authority and informal national leadership

of the Jewish people in the 2nd-4th centuries CE. The necropolis where Rabbi Judah the Patriarch was buried, including the artwork decorating the burials, is a tangible testimony to his ideas and beliefs of pluralistic and tolerant Judaism as they were practiced here. The property is a testimony to the historical sources concerning the intellectual work of Rabbi Judah the Patriarch and the *Sanhedrin*.

ICOMOS notes that Rabbi Judah is recorded as having lived at Bet She'arim and returned there for burial but considers that there is no direct or tangible evidence to justify this criterion.

ICOMOS considers that this criterion has not been justified.

ICOMOS considers that the nominated property meets criteria (ii) and (iii) and the conditions of authenticity and integrity.

Description of the attributes

The attributes are the 34 excavated catacomb complexes with artwork, sarcophagi and associated objects and archaeological finds; the relationship of the necropolis to the ancient town of Bet She'arim and its setting.

4 Factors affecting the property

The buffer zone and nominated property boundary almost coincide at the edge of the Bet Zayd settlement to the east which encroaches on the mound of the ancient town of Bet She'arim. However, according to the State Party, there are no development plans for this settlement or in the immediate surrounds of the property in general and the site is visually separated from the settlement by tree planting. There are no inhabitants within the property or buffer zone.

The catacombs are affected by water runoff during rainfall; this has been countered by drainage ditches to divert the flow. ICOMOS noted the growth of microorganisms inside some Section I caves and thin roots penetrating cracks in catacomb ceilings and considers that the microclimate inside the caves needs to be monitored for moisture content and humidity. The impact of lighting installed to display the decoration may be a factor. The ceiling of Hell's Cave, partially collapsed in the past, displays evidence of severe insect infestation which is a threat to the structure of the catacombs.

Forests in the vicinity heighten the potential for fire. This is countered by provision of 8 fire hydrants within the property connected to the local Fire Department which is also provided with fire trucks, and the maintenance of fire tracks by the two relevant municipal authorities. It is considered that there is no risk from flooding, earthquake, volcanic eruption or extreme climate change. ICOMOS notes that seismic activity is not

mentioned and considers that it should be considered as part of risk preparedness because Israel is in a high risk zone and the town of Bet She'arim was destroyed by the earthquake of 363 CE.

Visitor numbers average 50,000 annually. The property can officially accommodate 1500 visitors per day without difficulties or special arrangements, which allows for a large increase overall. At present this number is only achieved at major public events. Visitors are mostly controlled by guided tours and well-marked trails; not all catacombs are open to the public and some can be visited only by pre-registration. Visitor numbers at any one time are restricted in Catacombs 20, 14 (which are always open to the public) and the Menorah Caves, of which caves 1, 3, 4 and 11 can be visited only by pre-registration and with park guides. An additional 20,000 visit (free of charge) the statue of Jewish pioneer Alexander Zayd, located on top of the mound of the ancient town of Bet She'arim in the buffer zone. Visitor-related problems such as graffiti and litter are said to be minor due to supervision by tour guides and Park personnel.

ICOMOS considers that the main threats to the property are water run-off, moisture within the caves and insect infestation. Seismic risk needs to be assessed and a risk preparedness strategy is required.

5 Protection, conservation and management

Boundaries of the nominated property and buffer zone

The boundaries of the nominated property enclose the rock formation containing the catacombs and have been defined to include the excavated sections of the necropolis and the areas between them to cover the estimated extent of the necropolis. However ICOMOS notes that no geophysical investigation has been undertaken to establish this. Also there is a need for a comprehensive map of the site which accurately records all underground features of the site in relation to the property boundary.

The boundaries of the buffer zone coincide with the boundaries of the National Park and include forested areas between the property and the settlements of Qiryat Tiv'on and Moshav Bet Zayd to the north-west, north and east. However where Moshav Bet Zayd wraps around the nominated property on the north-east slope of the ancient mound, the property and buffer zone boundaries coincide in two places, with the buffer zone being extended up the slope to enclose the excavated areas including the synagogue and basilica but excluding the Zayd and Yoffe residences built on the mound before the National Park was unofficially established in the 1950s. ICOMOS notes that the north-western and south-eastern boundaries of the nominated property and its buffer zone are very close to the built-up areas of Qiryat Tiv'on and Moshav Bet Zayd but considers that these do not have an adverse impact on the site.

ICOMOS considers that the boundaries of the nominated property and of its buffer zone are adequate, but recommends that geophysical investigations be undertaken and mapping could be improved.

Ownership

The nominated property and its buffer zone are owned by the State of Israel.

Protection

The nominated property is protected as an Antiquities Site under the Antiquities Law 1978. No changes can be made without the approval of the Israel Antiquity Authority (IAA). The property and buffer zone will also be protected under the National Parks, Nature Reserves, Heritage and National Sites Law, 1998. The northern part of the property and the buffer zone within the jurisdiction of Qiryat Tiv'on Local Council is expected to be declared officially as a National Park in a few months. The southern part of the buffer zone within the jurisdiction of Emek Yizreal Regional Council is expected to be officially declared as a National Park in 1-2 years. In response to ICOMOS' second letter, the State Party provided a declaration of intent from the Head of Emek Yizreal Regional Council to complete the legislation as soon as possible. The letter also pointed out that part of the southern section is protected under the Antiquities Law (it is the site of the ancient town of Bet She'arim) and the whole area is an agricultural area and protected from development under land use legislation. Meanwhile the property and buffer zone are protected and managed as Bet She'arim National Park in accordance with this legislation by the Israel Nature and Parks Authority (INPA).

The Park is partly fenced and the vulnerable areas such as the Menorah Caves are separately fenced. The majority of the caves are secured with locked doors out of working hours. A security alarm system connects most of the caves and facilities to an external security company. The caves are checked three times a day by Park staff.

ICOMOS considers that the legal protection process currently underway is satisfactory. ICOMOS considers that the protective measures for the property are adequate.

Conservation

A general inventory of the catacombs is provided in the nomination dossier. Archaeological research carried out in 1929-40 and 1953-58 was published by the excavators in 1973 (B. Mazar), in 1937 (B. Maisler) and in 1976 (N. Avigad). ICOMOS notes that investigations at caves 5-10 and 25-31 have not yet been published and neither have those of salvage excavations. Some finds are displayed on site in the museum in Cave 28; others are stored by the Israel Antiquities Authority. Some finds including Leda and the Swan are displayed in the Rockefeller Museum in Jerusalem and a lead coffin is in the Israel Museum. The database of 282

inscriptions recorded in the *Inscriptions from the Land of Israel* project is housed at Brown University, USA.

The nomination dossier notes that interventions in Section I in the early periods involved limited conservation methods and techniques and records are difficult to trace. ICOMOS noted some excessive repainting of images and inscriptions in red and black pigment. Conservation works were subsequently undertaken in Sections I & II from 2001 to 2010 with input from the Atra Kadisha orthodox religious organisation which protects against desecration of Jewish burial caves. The project focused particularly on the Menorah Caves in Section II of the necropolis. A visitor trail was constructed, the catacombs were cleaned and the artworks were conserved and restored jointly by the INPA and the IAA with the involvement of expert conservators. Detailed reports of studies and condition surveys of individual artworks are available together with detailed plans of the catacombs. Following archaeological excavation in 2014 of the floor of the Sih Cave it is planned to convert it to become the interpretation centre for the Menorah Caves. A sound and light show will be installed there in 2015.

Conservation works following standards set in Section II are now underway in Section III and are expected to be completed in 2014/15. Ongoing maintenance is carried out by Park staff. ICOMOS considers that active and planned conservation is adequate but special attention is needed for the insect infestation in Hell's Cave.

ICOMOS considers that the microclimate of the catacombs should be monitored and the insect infestation of Hell's Cave should be dealt with as a priority.

Management

Management structures and processes, including traditional management processes

The site has been managed by the National Parks Authority and its successor the Israel Nature and Parks Authority (INPA) since 1957. An agreement between the Antiquities Authority and the INPA was signed in 2005 which outlines the effective protocol necessary to facilitate cooperation, conservation and management of Antiquities in Israel's Nature Reserves and National Parks. A World Heritage Forum within INPA headed by the INPA director general and the director of the Archaeology and Heritage department includes directors of the various divisions of INPA, directors of district offices of INPA and of nature reserves and national parks containing World Heritage sites. This Forum convenes every six months to discuss issues pertaining to these sites. The buffer zone is managed by INPA subject to the regulations of the Israel Antiquities Authority for preserving archaeological sites.

Funding is provided through the annual government allocation to INPA supplemented by entrance fees, revenue from the shop, special project funding,

sponsorship of activities at the Park and private donations. There are seven permanent staff members including the director, cashier and maintenance workers/rangers. These are assisted by 48 volunteer guides from Qiryat Tiv'on who run three tours daily and have developed their own education kit including documentation of the inscriptions. ICOMOS considers that if the property is inscribed on the World Heritage List tourism numbers will grow and both staff and funding resources will need to be increased.

Expertise is provided by INPA including the chief scientist, chief archaeologist, and the director of conservation and development who is an architect. Other specialists including IAA personnel are available when required. New park staff members receive one week of advanced study followed by two years of on the job training before being made permanent. They then participate in relevant courses and continuing education programs as required. Risk preparedness and emergency protocols relating to visitor safety and fire-fighting, together with site landscaping and maintenance are all managed by Park staff.

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

Bet She'arim is designated as a national park in National and Regional Master Plans and the Town Planning Scheme of Qiryat Tiv'on. The Park is managed under the Bet She'arim Regional Management and Conservation Portfolio 2005 (available in Hebrew), which is the equivalent of a Property Management Plan and is currently being updated. Planned future developments include a new access road and entrance facility; enlarging the visitor centre and upgrading parking, picnic areas and trails. Currently visitors arrive at the cashier's kiosk via a narrow access route through Qiryat Tiv'on neighbourhoods, then proceed to the car park, visitor facilities and piazza with interpretation panels leading to the access trails guided by signage and pamphlets. Further interpretation is provided in the Cave of the Museum (Cave 28) in Section I. Artworks within the caves open to the public are illuminated and signposted.

Involvement of the local communities

Volunteer tour guides have worked at the Park under the Park-Community project since 1997. This is considered a very successful program. Local community events and festivals related to Jewish holidays are hosted at the Park, which is also used recreationally by nearby residents.

ICOMOS considers that current management is effective.

In conclusion, ICOMOS considers that special attention is needed for treatment and control of insect infestation. The management system for the property is adequate but staff resources and funding will need to be increased if the property is inscribed on the World Heritage List. The management plan should be extended to include

assessment of seismic risk and a risk preparedness strategy.

6 Monitoring

A monitoring system is in place which includes daily checks by Park staff for cracks, debris, water overflow and erosion. INPA and IAA experts undertake technical assessments and advice. A table of indicators, periodicity and location of records is provided. Administrative arrangements are set out in the Regional Management and Conservation Portfolio.

ICOMOS considers that the monitoring system should be extended to include monitoring of the microclimate and insect infestation within the caves.

7 Conclusions

ICOMOS considers that the comparative analysis justifies consideration of this property for the World Heritage List; that the nominated property meets criteria (ii) and (iii) and conditions of authenticity and integrity. The main threat to the property is water run-off, moisture within the caves and insect infestation. Seismic risk needs to be assessed and a risk preparedness strategy is required. The boundaries of the nominated property and of its buffer zone are adequate, but geophysical investigations need to be undertaken and mapping should be improved to show underground features in relation to the property boundary. ICOMOS considers that the legal protection process currently underway is satisfactory. Protective measures for the property are adequate. ICOMOS considers that the microclimate of the catacombs should be monitored and the insect infestation of Hell's Cave should be dealt with as a priority.

In conclusion, ICOMOS considers the management system for the property is adequate but that staff resources and funding will need to be increased if the property is inscribed on the World Heritage List. The management plan should be extended to include assessment of seismic risk and a risk preparedness strategy. The monitoring system should be extended to include monitoring of the microclimate and insect infestation within the caves.

8 Recommendations

Recommendations with respect to inscription

ICOMOS recommends that The Necropolis of Bet She'arim: A Landmark of Jewish Renewal, Israel, be inscribed on the World Heritage List on the basis of **criteria (ii) and (iii)**.

Recommended Statement of Outstanding Universal Value

Brief synthesis

Hewed into the limestone slopes of hills bordering the Vale of Jezre'el, a series of man-made catacombs was developed from the 2nd century CE as the necropolis of Bet She'arim. It became the primary Jewish burial place outside Jerusalem following the failure of the second Jewish revolt against Roman rule and the catacombs are a treasury of eclectic art works and inscriptions in Greek, Aramaic and Hebrew. Bet She'arim is associated with Rabbi Judah the Patriarch, the spiritual and political leader of the Jewish people who composed the *Mishna* and is credited with Jewish renewal after 135 CE.

Criterion (ii): The catacombs of Bet She'arim show the influence of classical Roman art including human images, inscriptions and decorative details and include iconographic motifs and multi-language inscriptions testifying to cross-cultural interaction with Edomites, Phoenicians, Greeks, Egyptians and Judeans. The assimilation of burial types and artistic expression together with inscriptions indicating the origins of those buried in the cemetery testify to the wide dispersal of the Jewish people at that time and the incorporation into Jewish religious culture of influences from the surrounding populations.

Criterion (iii): The necropolis of Bet She'arim constitutes exceptional testimony to ancient Judaism in its period of revival and survival under the leadership of Rabbi Judah the Patriarch. The extensive catacombs containing artwork showing classical and oriental influences illustrate the resilient Jewish culture that flourished here in the 2nd to 4th centuries CE.

Integrity

The property includes all elements necessary to convey the outstanding universal value and is of adequate size to ensure the complete representation of the features and processes which convey its significance. The nominated property does not suffer from adverse effects of development or neglect.

Authenticity

The catacombs themselves, preserved in-situ, retain authenticity in terms of location, setting, form and materials. In terms of use and function, the catacombs had ceased to be used for burial purposes by the 6th century, were abandoned and subsequently neglected. Today they are preserved as part of a national park with some open to the public.

Management and protection requirements

The nominated property is protected as an Antiquities Site under the *Antiquities Law 1978*. No changes can be made without the approval of the Israel Antiquity Authority (IAA). The property and buffer zone will also be protected under the *National Parks, Nature Reserves,*

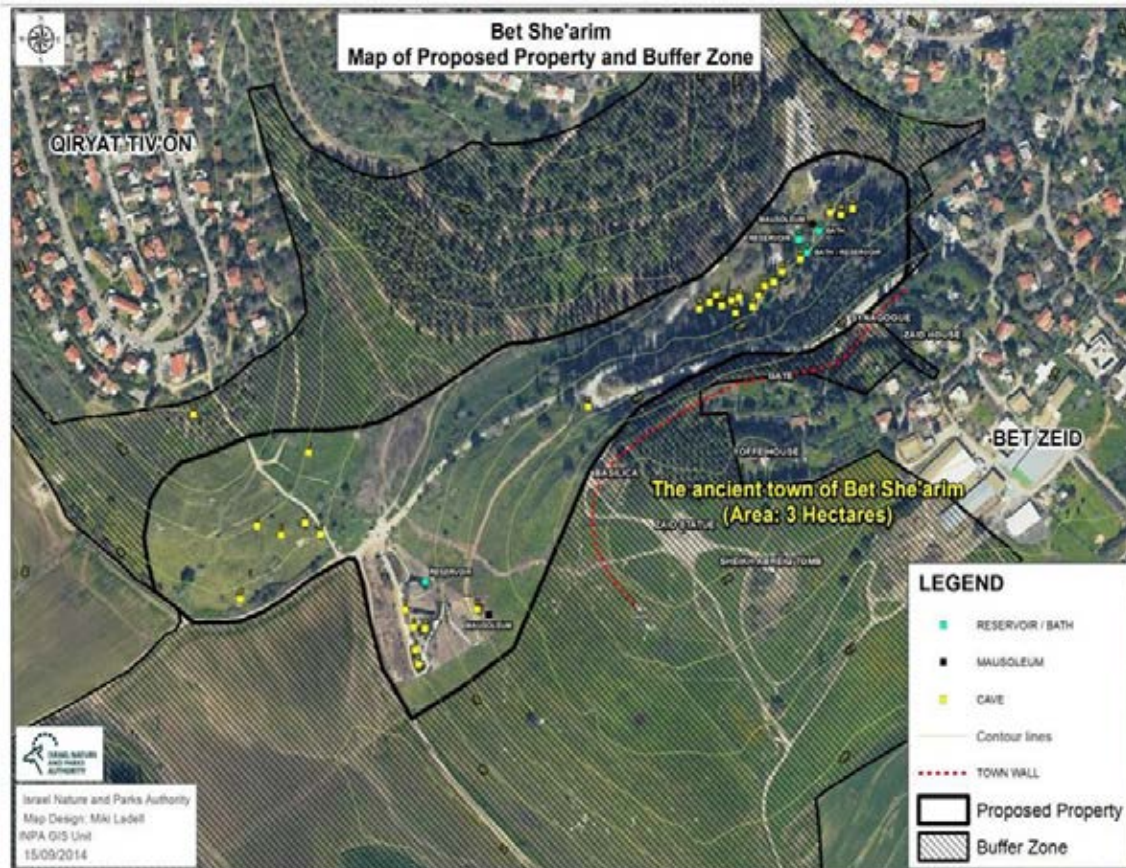
Heritage and National Sites Law, 1998. The northern part of the property and the buffer zone within the jurisdiction of Qiryat Tiv'on Local Council will shortly be declared officially as a National Park. The southern part within the jurisdiction of Emek Yizreal Regional Council is currently designated as "approved national park at detailed planning" and will be officially declared as a National Park as soon as possible. Meanwhile the buffer zone is protected by Land Use planning and the property and buffer zone are protected and managed as Bet She'arim National Park in accordance with this legislation by the Israel Nature and Parks Authority (INPA).

A World Heritage Forum within INPA headed by INPA director general and the director of the Archaeology and Heritage department includes directors of the various divisions of INPA, directors of district offices of INPA and of nature reserves and national parks containing World Heritage sites. This Forum convenes every six months to discuss issues pertaining to these sites.

Additional recommendations

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

- Completing the legislative protection of the property and buffer zone by declaring them officially as a National Park as soon as possible;
- Undertaking geophysical investigations of the site and buffer zone;
- Improving mapping to show underground features in relation to the property boundary;
- Assessing seismic risk;
- Extending the management plan to include a risk preparedness strategy and implementation of treatment for insect infestation.
- Submitting, by 1 December 2016, a report to the World Heritage Centre on progress made in the implementation of the above-mentioned recommendations for examination by the World Heritage Centre and ICOMOS.



Map showing the boundaries of the nominated property



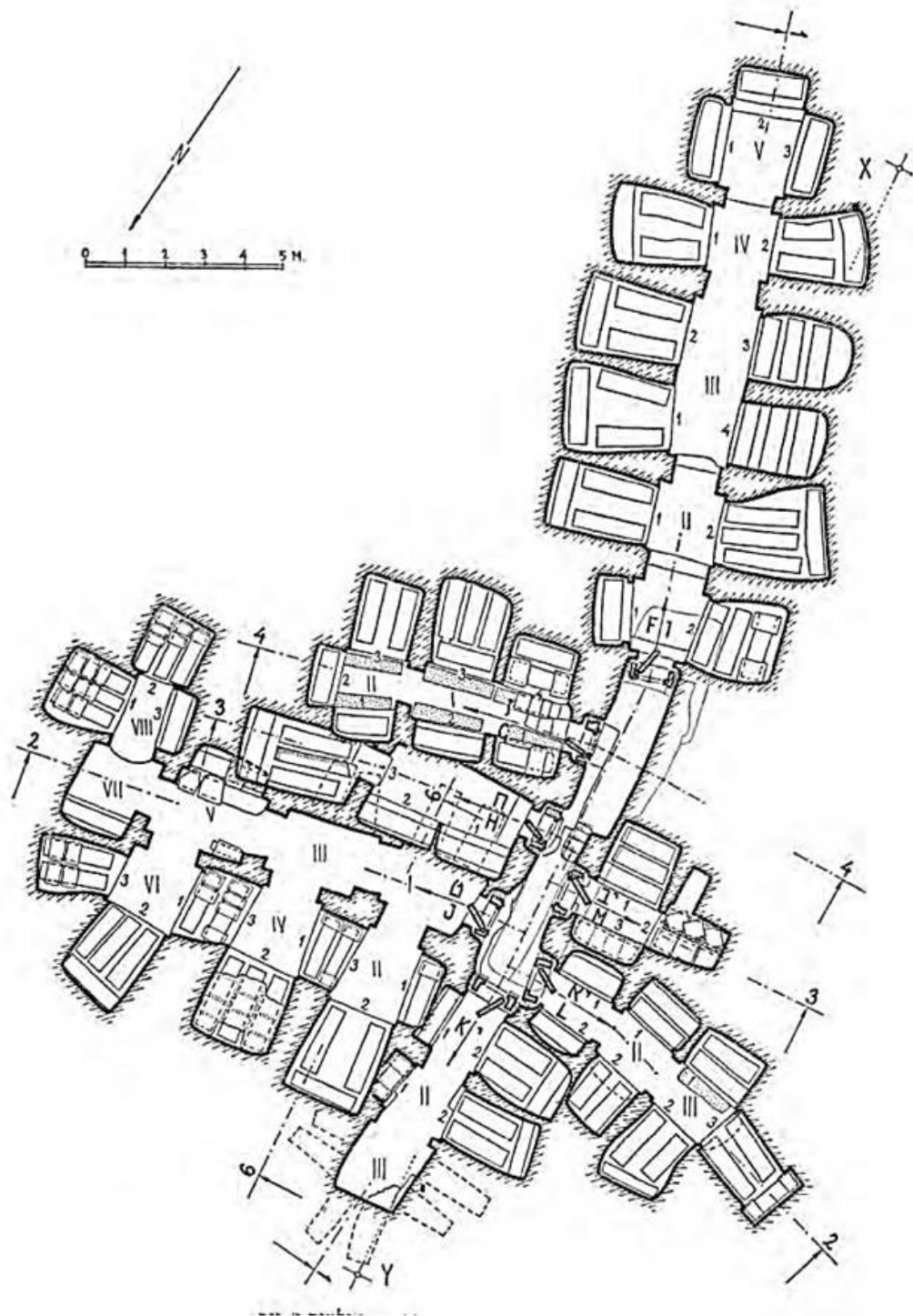
The triple arched facade of Catacomb 20



Sarcophagus



Entrance to Catacomb 13



Section I Catacomb 13 Plan

Arab-Norman Palermo and the Cathedral Churches of Cefalù and Monreale (Italy) No 1487

Official name as proposed by the State Party

Arab-Norman Palermo and the Cathedral Churches of Cefalù and Monreale

Location

Municipalities of Palermo, Monreale, and Cefalù
Sicilian Region
Italy

Brief description

Arab-Norman Palermo and the Cathedral Churches of Cefalù and Monreale is a series of nine religious and civic structures dating from the era of the Norman kingdom of Sicily (1130-1194). Two palaces, three churches, a cathedral, and a bridge are in Palermo, the capital of the kingdom, and two cathedrals are in the municipalities of Monreale and Cefalù. Collectively, they illustrate a socio-cultural syncretism between Western, Islamic, and Byzantine cultures that gave rise to an architectural and artistic expression based on novel concepts of space, structure, and decoration.

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*.

1 Basic data

Included in the Tentative List

18 October 2010

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 consulted its International Scientific Committee on Historic Towns and Villages and several independent experts.

Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the property from 22 to 25 September 2014.

Additional information received by ICOMOS

A letter was sent by ICOMOS to the State Party on 9 September 2014 to request further information about future plans to extend the serial nomination; the proposed boundaries for the buffer zone; the English-language texts of the justifications for the criteria under which inscription is proposed; the interrelationships of the management system, plan, and structure; the sources and level of funding available to the nominated serial property; the monitoring system and the inventory of previous reporting exercises; and community involvement in the preparation of the nomination dossier and management plan.

The State Party replied on 31 October and 12 November 2014, sending additional documentation which has been taken into account in this evaluation.

A second letter was sent to the State Party on 17 December 2014, asking it to confirm its proposed extension of the buffer zones; to make the Memorandum of Understanding, management structure, and Management Plan fully operational as soon as possible; and to revise the proposed management system for the overall serial property.

The State Party replied on 24 February 2015, sending additional documentation that has been taken into account in this evaluation.

Date of ICOMOS approval of this report

12 March 2015

2 The property

Description

This 6.235-ha serial property in Palermo, Monreale, and Cefalù on the northern coast of Sicily illustrates the multicultural Western-Islamic-Byzantine syncretism that characterized the Norman kingdom of Sicily during the 12th century. From the 22 major Norman-era monuments that have survived on the island, nine have been nominated for their historical importance, state of conservation, authenticity, and accessibility. They are the Royal Palace and Palatine Chapel; Zisa Palace; Palermo Cathedral; Monreale Cathedral; Cefalù Cathedral; Church of San Giovanni degli Eremiti; Church of Santa Maria dell'Ammiraglio; Church of San Cataldo; and Admiral's Bridge. Each of the nine components of the nominated serial property is described below:

1. The Palaces

The Royal Palace and Palatine Chapel stands at the highest point of the ancient city of Palermo. The palace today reflects the substantial rebuilding that took place in the medieval period and later, but parts of the Norman Romanesque work remain, such as the Pisan Tower and

Sala di Ruggero (Roger's Room), as well as combinations of Islamic and Byzantine styles within its multilayered fabric. The well-preserved Palatine Chapel in the centre of the palace contains exceptional Byzantine mosaics, inlaid marble designs, and Islamic painted ceilings within its Arab-influenced Norman architecture.

Zisa Palace was built within the Islamic-inspired garden (the Genoard, from *Jannat al-ard*, "paradise on earth") that once surrounded the ancient city of Palermo. This summer retreat is the most important and representative monument of the Genoard, and, despite significant 20th-century interventions, constitutes the best preserved model of Arab-Norman palace architecture. The crystalline forms of its *Ifriqiyan* (Islamic North African) architecture are designed to refract light. The Fountain Room on the ground level of the building is enhanced by nonreligious mosaics and vaults with stalactite-like *muqarnas*.

2. The Cathedrals and Churches

Palermo Cathedral was created in the 12th century by reconstructing an existing mosque. The massive building has undergone major changes since its construction, and now reflects a mixture of Arab, Norman, Byzantine, Romanesque, Gothic, Renaissance, and Baroque architectural styles. The large southern portico in the Catalan Gothic style was built about 1465, and the prominent dome was added about 1785. The Latin-cross interior is divided into three aisles by columns that support the vaulting. The Norman interior finishes evidently did not include extensive pictorial or mosaic figurative decorations. The tombs of the emperors and Sicilian kings were placed here in the 18th century.

Cefalù Cathedral, a fortress-like twin-towered edifice conceived by the Norman king of Sicily as a dynastic mausoleum, was built in Cluniac Romanesque form by foreign workers. The extraordinary mosaics in the central apse of the Latin-cross building were realized by Byzantine workers from Constantinople. The Romanesque idiom is also evident in the sculptural aspects of the Cathedral, particularly its cloister, while some decorative devices are the work of local workers trained in the Arab-Norman style.

Monreale Cathedral testifies to the maturity of the Norman-Islamic-Byzantine stylistic syncretism reached in the second half of the 12th century. The interior, about 110 m long by 40 m wide, has a wide central nave between two smaller aisles defined by 18 columns. Its vast expanses of mosaic scenes on a background of gold tesserae are extraordinary examples of the Siculo-Byzantine style. Also notable are its marquetry, interlaced arches, sculptural refinement, and richness of fittings, including bronze doors made by the Bonanno workshops of Pisa. The cloister has 228 paired columns with ornately carved capitals, some featuring inlaid mosaics.

Church of San Giovanni degli Eremiti, once part of a monastic complex and now a museum, is comprised of a compact series of unadorned cubic volumes surmounted

by five red stuccoed domes. Restored in the 19th century, the building's stonework is exposed in the largely undecorated interior, which is characterized by diminishing multiple arches that confer a distinctive and symbolic nature to the monument. There is also a cloister enclosed by arches supported on small paired columns.

Church of Santa Maria dell'Ammiraglio is a compact, domed Greek-cross plan to which were added a bell tower and a narthex to house the tomb of George of Antioch. The portico is later, from the Baroque period. The ornate Byzantine mosaics inside are among the most remarkable from the Komnenian period of Byzantium (1081-1185). The focal point is the image of Pantocrator Christ in the summit of the dome. The well-preserved inlaid marble flooring faithfully reflects Byzantine models, while some ornamental motifs clearly show Islamic influences.

Church of San Cataldo, now a museum, is a small, austere building, cubic in form, with three very shallow arches on each façade into which small, high windows have been set. It has three spherical red domes over its nave, and cross vaulting over two side aisles defined by four columns. The absence of interior finishes allows an appreciation of the Byzantine-style architecture, particularly the articulation of the vaults and domes. The inlaid floor created by Islamic artisans is an example of a Byzantine tradition interpreted in a new and original way.

3. The Bridge

Admiral's Bridge is a testimony to Norman civil engineering in the Mediterranean area. Built of freestone, it originally spanned the Oreto river, which has since been diverted. The bridge is partially buried, and is circumscribed by a fenced area. It has two steep, symmetrical ramps and seven spans. The arches are articulated by thick pylons, each provided with a lancet-arched opening to reduce the water's pressure during floods. Its construction technique and morphology can be associated with a diffused typology of the Maghreb area.

On 31 October 2014, the State Party indicated that the possibility of a future request to extend the nominated serial property has not been excluded.

History and development

The Normans (Northmen, descendants of the Vikings) invaded the southern Italian peninsula in the 11th century. They took possession of the Sicilian city of Palermo in 1071, and by 1091 had wrested control of the entire island from its Muslim rulers. A united Norman kingdom was created there in 1130, and Sicily became the centre of Norman power in this region under the rule of Roger II (r. 1130-1154). He set about centralizing his government at Palermo and expanding the lands under Norman rule. With his Greek admiral George of Antioch, Roger II successfully conquered *Ifriqiya* (Northern Africa), progressively occupying the coast from Tunis to Tripoli. The Normans capitalized on Sicily's central location in the Mediterranean Sea to make it an important centre for trade with Europe, North Africa, and the Middle East.

By 1135, the Norman kingdom of Sicily included a wide range of geo-cultural areas, including Campania and northern Apulia, populated by people of Latin culture; Calabria and southern Apulia, of Byzantine culture; and Sicily and the possessions of Africa, of Islamic culture. The coexistence of Christian, Orthodox, Muslim, and Jewish communities in the Sicilian realm produced a syncretic, multilingual culture. Roger II, who spoke French, Greek, and Arabic, exercised an uncommonly enlightened tolerance towards the diverse people of his realm.

The multicultural civilization over which Roger II ruled can be appreciated in the Palatine Chapel within the Royal Palace. The chapel's Norman doors, Saracenic arches, Byzantine dome, and roofline adorned with Arabic scripts illustrate the integration of Arab and Byzantine expertise with the Romanesque architecture brought by the Norman conquerors. The chapel was founded by Roger II immediately after his crowning in 1130. In 1131 he also founded Cefalù Cathedral, intended by him to be his own dynastic mausoleum. Civil projects from this era included the seven-arched Admiral's Bridge, built about 1132 and named after George of Antioch. The transformation of a former Arabic State Palace into an administrative and residential Norman Royal Palace was begun during Roger II's reign, and he founded the Church of San Giovanni degli Eremiti nearby. The Church of Santa Maria dell'Ammiraglio was founded by George of Antioch in 1143, and the Church of San Cataldo was founded about 1154-1160.

Roger II died in 1154. His lands in Africa were regained by Islamic forces between 1156 and 1160, during the reign of William I (r. 1154-1166), whose sovereignty was contested by his own Norman barons. The mosaics of the Palatine Chapel were extended during William I's time, and the Zisa Palace was founded in 1165, to be completed under William I's successor, William II (r. 1166-1189). Monreale Cathedral was built during William II's pro-ecclesiastical reign, and he and his parents were interred there. Palermo Cathedral was rebuilt on an earlier mosque by King William II's minister, the archbishop of Palermo, between about 1169 and 1185, the year it was dedicated. After reigning for two decades of peace and prosperity, William II died without an heir. The Norman kingdom of Sicily fell in 1194, 64 years after it had been established, replaced by the Swabian House of Hohenstaufen and its head, Frederick II, Holy Roman Emperor.

A number of changes were made to the buildings and structures mentioned above in the centuries that followed their initial construction. The Palatine Chapel was restored and its structure consolidated in the 1920s and 1930s. A portico was added between the two towers of Cefalù Cathedral's façade, small spires were added to the two Norman towers in the 15th century, and three large ocular windows in the central apse were closed to give space for the mosaics. Decoration of the presbyterium was completed in the 17th century. Seventy-two new abstract stained glass windows have since been installed, starting in 1985.

Admiral's Bridge was restored at the end of the 19th century. Much of the Royal Palace was rebuilt and added to in the 14th century. In the 16th century, Sicily's Spanish governors undertook important reconstructions, including a system of bastions. The Bourbons in turn built additional reception rooms and reconstructed the Sala d'Ercole in the 18th century. The Palace has been the seat of Sicily's Regional Assembly since 1947. Extensive restoration work was carried out in the 1960s.

The Church of San Giovanni degli Eremiti was modified significantly over the centuries. A late 19th-century intervention was undertaken to restore its medieval appearance. The Church of Santa Maria dell'Ammiraglio was also modified extensively, by the Benedictine nuns of Martorana, who between the 16th and 18th centuries made major changes to the structure and interior decoration. Significant later additions to the church include the current Baroque façade facing the piazza. Restorations in the late 19th century attempted to recover the original appearance of the church. The Church of San Cataldo, which was being used as a post office by the 18th century, was restored in the 19th century to more closely reflect its original appearance.

In the 14th century a crenellated parapet was added the Zisa Palace (partly destroying an Arabic inscription). More substantial modifications were made in the 17th century, when the former summer retreat was in very poor condition. Several rooms were modified, a great stair was built, and new external windows were added. After part of the building collapsed in 1971, its structure was "caged" with a system of pre-stretched cables running vertically and horizontally inside the walls, and its lost original interior volumes were reconstructed.

In Monreale Cathedral, a Renaissance portico and a mosaic pavement in the nave were completed in the 16th century, two baroque chapels were added in the 17th and 18th centuries, and damage from a fire in the choir in 1811 was repaired in the years that followed. Palermo Cathedral has had a long history of additions, alterations, and restorations. While the main (western) façade is from the 14th and 15th centuries, the present neoclassical appearance of the Cathedral, including its large central dome, date from an extensive and radical programme of work carried out between 1781 and 1801.

3 Justification for inscription, integrity and authenticity

Comparative analysis

The State Party presents a comparative analysis that is based on the attributes and characteristics that sustain the proposed Outstanding Universal Value of the nominated property. The reasons that make the nominated property stand out are summarized for most comparisons, and the authenticity and the integrity of each of the comparable properties are addressed.

Seven properties already inscribed on the World Heritage List are compared in the analysis. One, Longobards in Italy. Places of the Power (568-774 A.D.) (Italy, 2011, (ii), (iii), (vi)), illustrates some cultural and artistic appropriations that are equivalent to the Normans in Sicily. Six other properties are compared as examples of the reinterpretation or synthesis of Western, Islamic, and/or Byzantine styles: Mudejar Architecture of Aragon (Spain, 1986, 2001, (iv)); Birthplace of Jesus: Church of the Nativity and the Pilgrimage Route, Bethlehem (Palestine, 2012, (iv), (vi)); Venice and its Lagoon (Italy, 1987, (i), (ii), (iii), (iv), (v), (vi)); Early Christian Monuments of Ravenna (Italy, 1996, (i), (ii), (iii), (iv)); Monasteries of Daphni, Hosios Loukas and Nea Moni of Chios (Greece, 1990, (i), (iv)); and Alhambra, Generalife and Albayzín, Granada (Spain, 1984, 1994, (i), (iii), (iv)).

Similar properties on the Tentative Lists such as Mdina or the Romanesque Cathedrals in Puglia are not explored, and with a few exceptions (Salerno Cathedral, Campania; Northern African mosques), other properties within a defined geo-cultural region are not compared.

ICOMOS considers that the comparisons are largely relevant in the similarity of their architecture or by the presence of specific decorative aspects, and sufficiently demonstrate the importance and uniqueness of the nominated property. ICOMOS further considers that the comparative analysis could have usefully been extended to consider other properties in the various lands under the dominion or influence of the Normans in the 11th and 12th centuries – England, Malta, and parts of France, Scotland, Ireland, Northern Africa, and the southern portion of the Italian peninsula. These lands also illustrate a socio-cultural syncretism between Norman subjugators and the subjugated. Such comparisons could have demonstrated even more conclusively that the nominated property stand apart.

The question of whether there is scope in the World Heritage List for the inclusion of the nominated property has not explicitly been answered, a geo-cultural region has not explicitly been defined, and specific criteria for the comparisons, based on the proposed Outstanding Universal Value of the nominated property, have not been elaborated. ICOMOS considers that a more systematic approach to the comparative analysis would have been useful, particularly concerning the application of criteria that relate directly to the claimed values.

ICOMOS nevertheless considers that Arab-Norman Palermo and the Cathedral Churches of Cefalú and Monreale illustrates an exceptional socio-cultural syncretism between cultures, and that the comparative analysis justifies the selection of the components that form the nominated series.

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:

- It bears witness to a particular political and cultural condition, characterized by the fruitful coexistence of people of different origins (Muslim, Byzantine, Latin, Jewish, Lombard, and French), that encouraged the interchange of human values and the formation of a lively cultural syncretism.
- This interchange generated a conscious and unique combination of elements derived from the architectural and artistic techniques of Byzantine, Islamic, and Western traditions and suggested new models of synergy between environment and monument. This new style contributed to the developments in the architecture of the Tyrrhenian side of southern Italy and spread widely throughout the medieval Mediterranean region.
- The nominated monuments are an outstanding example of a stylistic synthesis that created new spatial, constructive, and decorative concepts through the innovative and coherent re-elaboration of elements from different cultures.
- The strong impact this phenomenon had in the Middle Ages contributed significantly to the formation of the Mediterranean *koine* and was a prototype for modern European civilization in the Mediterranean from the empire of Frederick II to the establishment of nation states.

ICOMOS considers that this justification for the serial approach is appropriate. The nine selected components of the nominated serial property collectively and evocatively illustrate the profound influence the Normans had on this region of Europe, and that the Arab-Norman syncretism had during and after the creation of these monuments. The attributes of the nominated serial property, particularly those associated with the introduction of Norman concepts in architecture and design, are testimonies to the transformation of Sicily's Islamic and Byzantine cultures to a European culture that took place during this period.

Integrity and authenticity

Integrity

The State Party has outlined the principal reasons why each component of the nominated serial property was selected and how it contributes to the proposed overall Outstanding Universal Value of the property. In general, the components were selected for their ability to demonstrate the syncretism that drew together Norman, Islamic, and Byzantine architectural and artistic sources, as revealed in novel concepts of space, structure, and decoration. They were further selected from among 22 major surviving Norman-era Sicilian monuments for their historical-cultural importance, integrity, and relative state of conservation, authenticity, accessibility, and usability.

The political and cultural power and wealth of the Norman kingdom of Sicily is demonstrated in the Royal Palace; in Palermo Cathedral, which stands as a political manifesto of the power of the Norman archbishop of Palermo, who built it to counter the impact made by the new cathedral in Monreale; and Cefalù Cathedral, the bastion of the ecclesiastical politics of King Roger II. The spatial qualities of Islamic mosques are recalled in the compact churches of San Giovanni degli Eremiti and San Cataldo, two multi-domed Arab-Norman edifices whose interiors are largely undecorated, allowing the building elements and construction technologies to be clearly understood.

The synthesis of Mediterranean arts is demonstrated by the Byzantine mosaics in the Palatine Chapel, Church of Santa Maria dell'Amiraglio, Monreale Cathedral, and Cefalù Cathedral apse. The Zisa Palace, a model of Arab-Norman palace architecture, is the best preserved built monument of the Genoard ("paradise on earth") garden. Arab-Norman civil engineering is represented by the Admiral's Bridge, the most intact and authentic bridge of this type still standing in Sicily.

ICOMOS considers that the nomination dossier has provided a logical, scientific basis for the selection of the components that make up this serial nomination, and for the selection of the nominated areas. The nominated serial property includes all the elements necessary to express its proposed Outstanding Universal Value, and is therefore of adequate size to ensure the complete representation of the features and processes that convey the nominated property's significance. The State Party indicates that the nominated property does not suffer unduly from adverse effects of development or neglect.

ICOMOS considers that the integrity of the whole series has been justified; and that the integrity of the individual components that comprise the series has been demonstrated.

Authenticity

ICOMOS considers that the authenticity of the nominated serial property and of its individual components has been demonstrated. In spite of significant interventions to most of the components during the centuries since their construction, the cultural values of the nominated property and of its individual components (as recognized in the nomination criteria proposed) have been demonstrated to be truthfully and credibly expressed through attributes such as their locations and settings, forms and designs, materials and substances, and uses and functions. The overall authenticity of the mosaics in particular has been confirmed by experts in the field of Byzantine mosaics.

ICOMOS considers that the authenticity of the whole series has been justified; and that the authenticity of the individual components that comprise the series has been demonstrated.

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.

Criteria under which inscription is proposed

The property is nominated on the basis of cultural criteria (ii) and (iv).

Criterion (ii): *exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design;*

This criterion is justified by the State Party on the grounds that the property "Arab-Norman Palermo and the Cathedral Churches of Cefalù and Monreale" bears witness to a particular political and cultural condition characterized by the fruitful coexistence of people of different origins (Muslim, Byzantine, Latin, Jewish, Lombard and French). This phenomenon encouraged the interchange of human values and the formation of a lively cultural syncretism; as for the monuments, it generated a conscious and unique combination of elements derived from the architectural and artistic techniques of Byzantine, Islamic and Western traditions and suggested new models of synergy between environment and monument. This new style contributed to the developments in the architecture of the Tyrrhenian side of southern Italy and spread widely throughout the medieval Mediterranean.

ICOMOS considers that a multi-directional interchange of ideas between the Norman, Islamic, and Byzantine peoples in 11th- and 12th-century Sicily resulted in a cultural syncretism that is clearly manifested in the nominated serial property. This interchange, which can be said to be substantial in terms of the influence it had at the time, can be perceived through attributes associated with the spaces, structure, and decoration of the nine monuments that comprise the nominated serial property.

ICOMOS considers, however, that the suggestion of new models of synergy between environment and monument – presumably referring to manifestations such as gardens with water and fountains – is not supported by the attributes of the landscapes that are included within the nominated property. These manifestations, which are associated with the Zisa Palace and Church of San Giovanni degli Eremiti, according to the State Party, are insufficient to sustain such a claim.

ICOMOS considers that this criterion has been justified for the whole series.

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 the property “Arab-Norman Palermo and the Cathedral Churches of Cefalù and Monreale” are an outstanding example of stylistic synthesis that created new spatial, constructive and decorative concepts through the innovative and coherent re-elaboration of elements from different cultures. The strong impact of this phenomenon in the Middle Ages contributed significantly to the formation of the Mediterranean *koine*, which was a prototype for the modern European civilization in the Mediterranean, from the Empire of Frederick II to the establishment of the nation states.

ICOMOS considers that the nominated serial property reflects a significant stage in human history: the Norman conquest of various regions of the European continent during the 10th to 12th centuries, including the southern Italian peninsula and Sicily. The attributes of the nominated serial property, particularly those associated with the introduction and integration of Norman concepts in architecture and design, are testimonies to the transformation of Sicily’s Islamic and Byzantine cultures into a blended European culture that took place during this period.

ICOMOS considers, however, that the nomination dossier has not demonstrated that the manifestations of the Norman conquest formed a prototype for the birth of modern European civilization in the Mediterranean, from the Empire of Frederick II of Swabia to the establishment of nation states. Norman law and culture, including art and architecture, had a profound influence on southern Italy, but other cultures also had significant influences in the creation of the modern Mediterranean civilization.

ICOMOS considers that this criterion has been justified for the whole series.

ICOMOS considers that the serial approach is justified and ICOMOS considers that the selection of sites is appropriate.

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

Description of the attributes

The Outstanding Universal Value of Arab-Norman Palermo and the Cathedral Churches of Cefalù and Monreale is expressed in the numerous architectural and artistic attributes that give evidence of Western, Islamic, and Byzantine cultural influences, and of the syncretic blending of these influences during the Norman era to create novel concepts of space, structure, and decoration. These attributes include the volumes, forms, plans, structures, designs, and materials of the components that comprise the nominated serial property, and their artistic, decorative, and iconographic treatments, most notably their tesserae mosaics, pavements in *opus sectile*, marquetry, sculptural elements, paintings, and fittings.

4 Factors affecting the property

Potential development pressures identified by the State Party that could affect the nominated property include traffic (limited use of public transportation, tour bus management, and congestion); social and economic pressures related to high levels of unemployment, lack of new investment, and the reduced presence of entrepreneurship, all resulting in a dependence on external finances; and inappropriate modifications to the contextual environment, thefts, and vandalism. There are also seismic and hydrogeological risks in Sicily. Tourism pressures, including from cruise ships, are considerable and are increasing.

ICOMOS considers that the main threats to the property are traffic, social and economic pressures, the impacts of tourism, and hydrogeological and seismic instability.

5 Protection, conservation and management

Boundaries of the nominated property and buffer zone

The nine components of the nominated serial property have a total area of 6.235 ha. The State Party contends that the nominated property includes all the necessary elements to express the proposed Outstanding Universal Value, and that the nine components include the most representative examples of Arab-Norman syncretism, the serial property completely preserves the structures that constitute it, and the uses related to each of the series’ components are more often than not unchanged and continuous.

ICOMOS notes that the State Party has not provided an explicit rationale or explanation in the nomination dossier for the chosen boundaries of the nominated property. The boundaries are generally limited to the footprints and/or the immediate sites of the nine components that comprise the nominated serial property.

The State Party has proposed a two-level system of buffer zones for the nominated serial property. As revised in October 2014, they total 483.008 ha (162.118 ha for the Level I buffer zones and 320.89 ha for the Level II buffer zones). The State Party advises that the Level I buffer zones are delimited to preserve the visual, structural, and functional integrity of the components of the property and of their immediate context. Each of the nine components of the nominated serial property has a Level I buffer zone. The Level II buffer zones take in a wider area, based on the nominated property’s town-planning, historical-cultural, and landscape relationships, as well as the boundaries of existing protection at the territorial level. Zisa Palace and Admiral’s Bridge do not have Level II buffer zones.

The proposed Level II buffer zone boundary for five of the Palermo components (excluding Zisa Palace and Admiral’s Bridge) generally follows the city’s historic centre

boundary as defined by the Detailed Executive Plan for the Historical Centre of Palermo within the General Regulatory Plan. The Cefalù Cathedral component is within that municipality's historic centre, defined by a General Regulatory Plan and subject to a Detailed Executive Plan. Its Level II buffer zone follows the Areas of Archaeological Interest designated under the Code of the Cultural and Landscape Heritage.

In supplementary information provided on 31 October 2014, the State Party advises that the proposed Level I buffer zones have been extended for the Royal Palace and Palatine Chapel, Palermo Cathedral, and Church of San Giovanni degli Eremiti; and significantly extended for Zisa Palace and Admiral's Bridge, since these two are outside the general protection provided by Palermo's historic city centre planning restrictions. The Level I buffer zones for Monreale and Cefalù cathedrals have also been extended to better ensure their visual integrity.

ICOMOS considers that the boundaries of the nominated serial property are adequate and that the boundaries of its buffer zones, as revised in October 2014, are also adequate.

Ownership

The Royal Palace is owned by the Italian State, and its Palatine Chapel is owned by the Ministry of Interior's Religious Buildings Foundation (Fondo Edifici di Culto); the Church of Santa Maria dell'Ammiraglio and Church of San Cataldo are likewise owned by the Religious Buildings Foundation; the Church of San Giovanni degli Eremiti, Zisa Palace, and Admiral's Bridge are State Property of the Sicilian Region; Palermo Cathedral is owned by the Diocese of Palermo; Cefalù Cathedral is owned by the Diocese of Cefalù, and its cloister is owned by the Capitolo dei Canonici (Chapter of Canons); Monreale Cathedral is owned by the Diocese of Monreale, and its cloister is State Property of the Sicilian Region.

Protection

All the components of the nominated serial property have been given the highest level of protection established by national legislation under the Italian Code of the Cultural and Landscape Heritage (Legislative Decree No. 42 of 22/01/2004, Second Part – Cultural Heritage). The Code obliges the holders of cultural properties to conserve them, and, as a measure of safeguarding, obliges every activity on the building to be authorized by the competent superintendent (Regional Department of Cultural Assets and Sicilian Identity). In addition, three components have been designated as individual National Monuments, with the same obligations as above: Church of San Giovanni degli Eremiti (Royal Decree of 15/08/1869); Church of Santa Maria dell'Ammiraglio [Church of the Martorana] (Royal Decree of 15/08/1869); and Cathedral of Monreale (Royal Decree no. 1282 of 20/10/1942). ICOMOS considers that the protection afforded is sufficient to address the major threats to the nominated property.

The proposed buffer zones (including the Level I extensions described in additional information provided by

the State Party on 31 October 2014) have a system of protection by virtue of the regulations and planning directions in the territory's current planning tools. The buffer zones also include a number of monuments designated as National Monuments, as well as areas protected under the Code of the Cultural and Landscape Heritage (Third Part – Landscape Heritage). Proposed interventions require the approval of competent authorities. The Sicilian Region's Special Plan for Hydrogeological Setting (2000) also restricts interventions in some areas of the buffer zones.

ICOMOS considers that the legal protection in place for the nominated serial property is adequate and the legal protection for the buffer zones as revised in October 2014 is also adequate.

Conservation

The State Party has analyzed the state of conservation of nominated serial property as a whole, and of each of its nine components under six categories: structure and building components; sculptural elements; paintings; mosaics; marquetry; and physical context. This analysis indicates that the nominate property as a whole is in a very good state of conservation. According to the State Party, the areas around Zisa Palace and Admiral's Bridge (both of which are in a good state of conservation) could benefit from improvements.

The state of conservation of the nine components is reported to range from fairly good or good to outstanding. Some urgent structural consolidation and restoration is required for the Royal Palace (south façade, Pisan and Greek towers, and Maqueda and Fountain courtyards). The Palatine Chapel mosaics were restored in 2009; restoration of Church of Santa Maria dell'Ammiraglio was completed in 2012; and Palermo Cathedral underwent large-scale restoration and structural consolidation in the late 1980s.

Zisa Palace was the subject of a comprehensive reconstruction and restoration in the 1970s and 1980s, after its partial collapse. Actions to correct the presence of damp in the Fountain Room walls were taken in 2007. The building is now considered by the State Party to be in a good state of conservation. Cefalù Cathedral was fully restored in the 1980s, and its cloister in 2007. The mosaics at Monreale Cathedral were restored 1965-1982, and in 1979 the wooden ceilings were consolidated.

ICOMOS considers that the state of conservation of the nominated serial property as a whole, and of its nine individual components, is adequate.

Management

Management structures and processes, including traditional management processes

Management of the serial components is currently undertaken individually by each owner. A proposed management structure and plan for the nominated serial

property as a whole has been laid out in a Memorandum of Understanding, which as of 20 February 2015 has been signed by representatives of the all institutional subjects that compose the management system.

The Memorandum establishes a Steering Committee comprised of representatives of the owners, managers, and institutions that are responsible for the nine components. This Committee will specify the activities to be carried out annually. The Sicilian UNESCO Heritage Foundation will implement the decisions of the Steering Committee, follow the guidelines and objectives included in the Management Plan, and monitor the property. The overall goal is to coordinate the managers' activities and to improve cooperation for the protection, improvement, and socio-economic development of the territories concerned through the promotion of their historical artistic, architectural, and landscape heritage, as well as their intangible cultural heritage.

The State Party advises that the Superintendent for the Cultural and Environmental Heritage of Palermo has a staff of 15 overseeing the components under its jurisdiction, and that the various owners (dioceses of Palermo, Cefalù, Monreale, etc.) as well as the individual components also have dedicated staff. The proposed operational structure to manage the nominated property includes a technical-scientific manager, an architect experienced in regional and town planning, and an expert in communication and promotion.

Management related to conservation and protection of the components is currently financed by funds from the national and regional administrations. According to the Memorandum of Understanding, management of the nominated serial property, if inscribed, will be funded by annual contributions from the municipalities of Palermo, Cefalù, and Monreale and the foundations and institutions that manage the nominated property; from possible public and private contributions and donations; and from sponsorships of events and other activities.

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

The nominated serial property has a general management system whose objectives are to protect and conserve the values of the nominated property and to promote the socio-economic growth of the territory. This management system includes a coordinated Management Plan that encompasses all nine components. The Plan, which represents a declaration of principles and actions that authorities and communities undertake to follow, is a coordinating instrument to protect the proposed Outstanding Universal Value of the nominated property for current and future generations, and is aimed at rationalizing and integrating the resources and actions related to the processes of protection and development. The Plan has been elaborated with particular attention to extending its field of interest to the buffer zones and to the "relative territories of reference."

The Plan includes a description of the serial property and its components; the system of protection, planning, and control for the nominated property, buffer zones, and setting; existing planning at the civic and regional levels; the management system; the territorial context; and action plans. ICOMOS notes that the effectiveness of the recently implemented Management Plan cannot be judged at this time.

In February 2015, the State Party advised that revisions to the Memorandum of Understanding were made to reinforce the centrality of the concept of Outstanding Universal Value – and of the attributes and features that are associated with it – in the Management Plan, which had been inadequately emphasized in its earlier iteration. In addition, mechanisms to undertake impact assessments for proposed changes, developments or interventions are now more fully addressed. Furthermore, revisions were made to the Memorandum and the Plan to support tourist enhancement strategies that guarantee the protection, conservation and sustainable enhancement of the Outstanding Universal Value of the serial property.

Involvement of the local communities

The State Party notes that the development of the Management Plan involved the participation of experts charged with drawing up the document as well as interested institutional subjects representative of the widest range of actors with "legitimate interests." The Plan includes objectives and activities to increase the local community's awareness of the cultural value of the nominated serial property.

In conclusion, ICOMOS considers that the management system for the overall serial property, as revised in October 2014 and February 2015, is adequate.

6 Monitoring

A suite of key indicators has been developed as the measures of the nominated serial property's state of conservation. These include indicators covering the Level II buffer zones and the entire urban areas. These indicators are related to the overall state of all the components; the pressures of human activities; the effectiveness of actions taken; and the quality, services, and accessibility of the urban areas. Their periodicity ranges from monthly to every ten years. The suite of indicators also includes some that are specific to the fabric of the nominated serial property, such as structural damage, damp, and deterioration, to be measured every year or two years. This monitoring system will be made operational in the event the nominated serial property is inscribed and its coordinated management begins. Reports from the monitoring already being carried out by different institutions are kept in their respective offices.

ICOMOS considers that many of the chosen key indicators relate to the proposed Statement of Outstanding Universal Value, and to the attributes of the identified

threats, though none yet expresses a benchmark that indicates a desired state of conservation.

In November 2014, the State Party provided a summary inventory in tabular form of recent cataloguing related to the components of the nominated property (except Cefalù Cathedral) and their states of conservation. Regrettably, this inventory does not include brief summaries or extracts from the reports, or references to published sources.

ICOMOS considers that the proposed monitoring system is satisfactory, and strongly urges that it be implemented at the earliest opportunity.

7 Conclusions

The nominated serial property Arab-Norman Palermo and the Cathedral Churches of Cefalù and Monreale is an exceptional testimony to the Norman conquest of various regions of the European continent during the 10th to 12th centuries, and to the multi-directional interchange of ideas in its kingdom of Sicily that resulted in a socio-cultural syncretism between the island's Western, Islamic, and Byzantine cultures. The attributes of the nominated serial property, particularly those that gave rise to an architectural and artistic expression based on novel concepts of space, structure, and decoration, testify to the transformation of Sicily's Islamic and Byzantine cultures into a blended European culture that took place during this period. Its series of nine religious and civic structures authentically illustrates the profound influence the Normans had on this region of Europe, and that the Arab-Norman syncretism had during and after the creation of these monuments. The relevant attributes conveying the proposed Outstanding Universal Value are included within its boundaries. It is in a good state of conservation and has the highest level of protection at the national level. The management system and Management Plan for the overall serial property, as revised in October 2014 and February 2015, are adequate.

ICOMOS notes that, in spite of the commendable effort made by the State Party in the elaboration of the nomination dossier, the translation of the dossier into one of the working languages of the World Heritage Committee is noticeably deficient, something that makes the proper understanding of the information difficult. ICOMOS considers that this does not constitute a minor aspect, since nomination dossiers become references for new nominations, for comparative analyses, and for other types of research or dissemination activities. A proper understanding of the contents of nomination dossiers is also a requirement to be fulfilled by the States Parties. The State Party is thus invited to consider the possibility of proceeding to a proper translation of the original text.

8 Recommendations

Recommendations with respect to inscription

ICOMOS recommends that Arab-Norman Palermo and the Cathedral Churches of Cefalù and Monreale, Italy, be inscribed on the World Heritage List on the basis of **criteria (ii) and (iv)**.

Recommended Statement of Outstanding Universal Value

Brief synthesis

Located on the northern coast of the Italian island of Sicily, Arab-Norman Palermo and the Cathedral Churches of Cefalù and Monreale is a series of nine religious and civic structures dating from the era of the Norman kingdom of Sicily (1130-1194). Two palaces, three churches, a cathedral, and a bridge are in Palermo, the capital of the kingdom, and two cathedrals are in the municipalities of Monreale and Cefalù. Collectively, they are an outstanding example of a socio-cultural syncretism between Western, Islamic, and Byzantine cultures. This interchange gave rise to an architectural and artistic expression based on novel concepts of space, structure, and decoration that spread widely throughout the Mediterranean region.

The monuments that comprise this 6.235-ha serial property include the Royal Palace and Palatine Chapel; Zisa Palace; Palermo Cathedral; Monreale Cathedral; Cefalù Cathedral; Church of San Giovanni degli Eremiti; Church of Santa Maria dell'Ammiraglio; Church of San Cataldo; and Admiral's Bridge. Each illustrates important aspects of the multicultural Western-Islamic-Byzantine syncretism that characterized the Norman kingdom of Sicily during the 12th century. The innovative re-elaboration of architectural forms, structures, and materials and their artistic, decorative, and iconographic treatments – most conspicuously the rich and extensive tesserae mosaics, pavements in *opus sectile*, marquetry, sculptural elements, paintings, and fittings – celebrate the fruitful coexistence of people of different origins.

Criterion (ii): Arab-Norman Palermo and the Cathedral Churches of Cefalù and Monreale bears witness to a particular political and cultural condition characterized by the fruitful coexistence of people of different origins (Muslim, Byzantine, Latin, Jewish, Lombard, and French). This interchange generated a conscious and unique combination of elements derived from the architectural and artistic techniques of Byzantine, Islamic, and Western traditions. This new style contributed to the developments in the architecture of the Tyrrhenian side of southern Italy and spread widely throughout the medieval Mediterranean region.

Criterion (iv): Arab-Norman Palermo and the Cathedral Churches of Cefalù and Monreale is an outstanding example of stylistic synthesis that created new spatial, constructive, and decorative concepts through the

innovative and coherent re-elaboration of elements from different cultures.

Integrity

The serial property includes all the elements necessary to express its proposed Outstanding Universal Value, including religious, civic, and engineering works, and is therefore of adequate size to ensure the complete representation of the features and processes that convey the property's significance. The property does not suffer unduly from adverse effects of development or neglect.

Authenticity

The cultural value of the property and of its individual components is truthfully and credibly expressed through attributes such as their locations and settings, forms and designs, materials and substances, and uses and functions. The authenticity of the mosaics in particular has been confirmed by experts in the field of Byzantine mosaics.

Management and protection requirements

The nine components of the serial property are under the ownership of various governmental and religious bodies. They have been given the highest level of protection established by national legislation under the 2004 Italian Code of the Cultural and Landscape Heritage. In addition, the Church of San Giovanni degli Eremiti, Church of Santa Maria dell'Ammiraglio (Church of the Martorana), and Monreale Cathedral have been designated individually as National Monuments. The Level I and Level II buffer zones are protected by virtue of the regulations and planning directions in the territory's current planning tools.

A management system and Management Plan for the serial property as a whole have been laid out in a Memorandum of Understanding. The Memorandum establishes a Steering Committee comprised of representatives of the owners, managers, and institutions that are responsible for the nine components. This Committee will specify the activities to be carried out annually, and the Sicilian UNESCO Heritage Foundation will implement the Committee's decisions. The Management Plan includes a description of the serial property and its components; the system of protection, planning, and control for the nominated property, buffer zones, and setting; existing planning at the civic and regional levels; the management system; the territorial context; and action plans.

Long-term challenges for the protection and management of the property include eliminating or mitigating the consequences of human actions (vandalism, theft, fire); degenerative phenomena provoked by the pressures of mass tourism, including cruise ships; environmental disasters (earthquakes, landslides, floods, pollution), particularly for monuments subject to seismic risk; and socio-economic decay of the

historic urban centres. These potential vulnerabilities and threats to the property's Outstanding Universal Value, authenticity, and integrity must be fully addressed by the Management Plan and management structure.

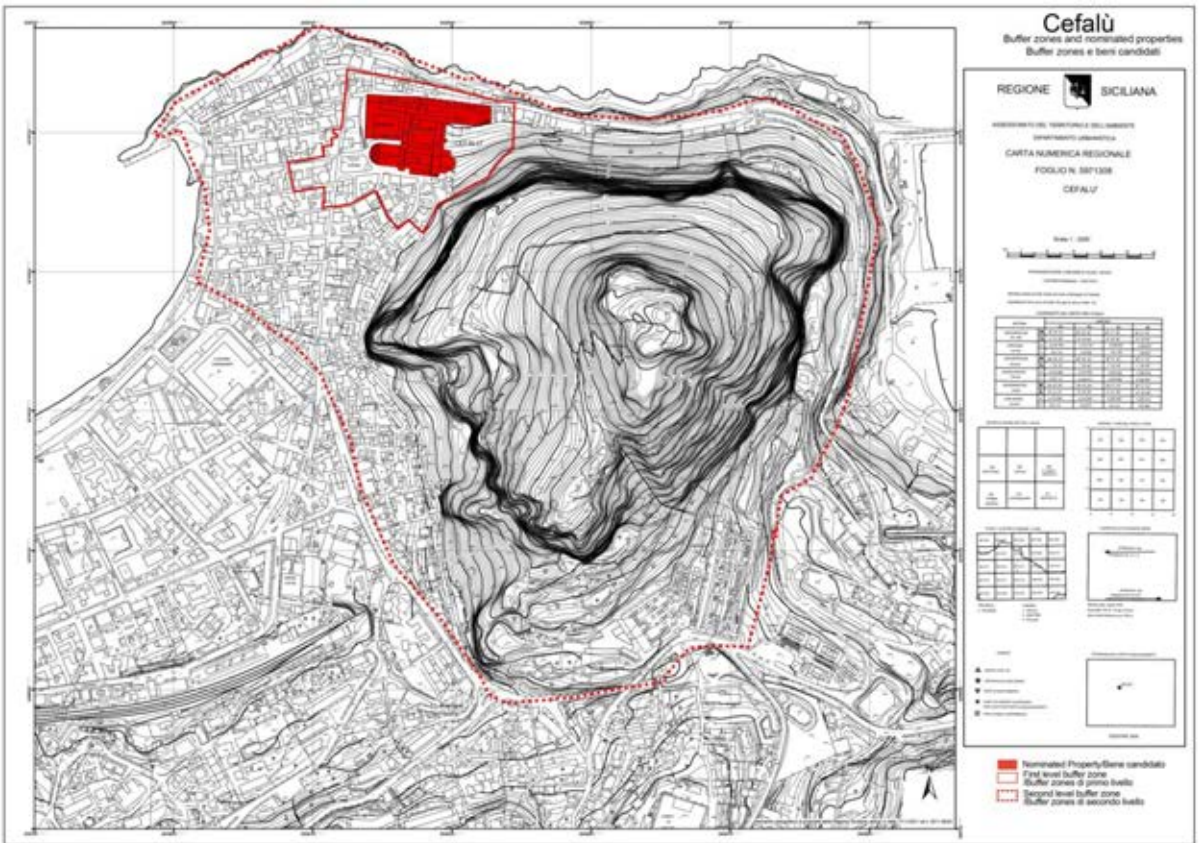
Additional recommendations

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

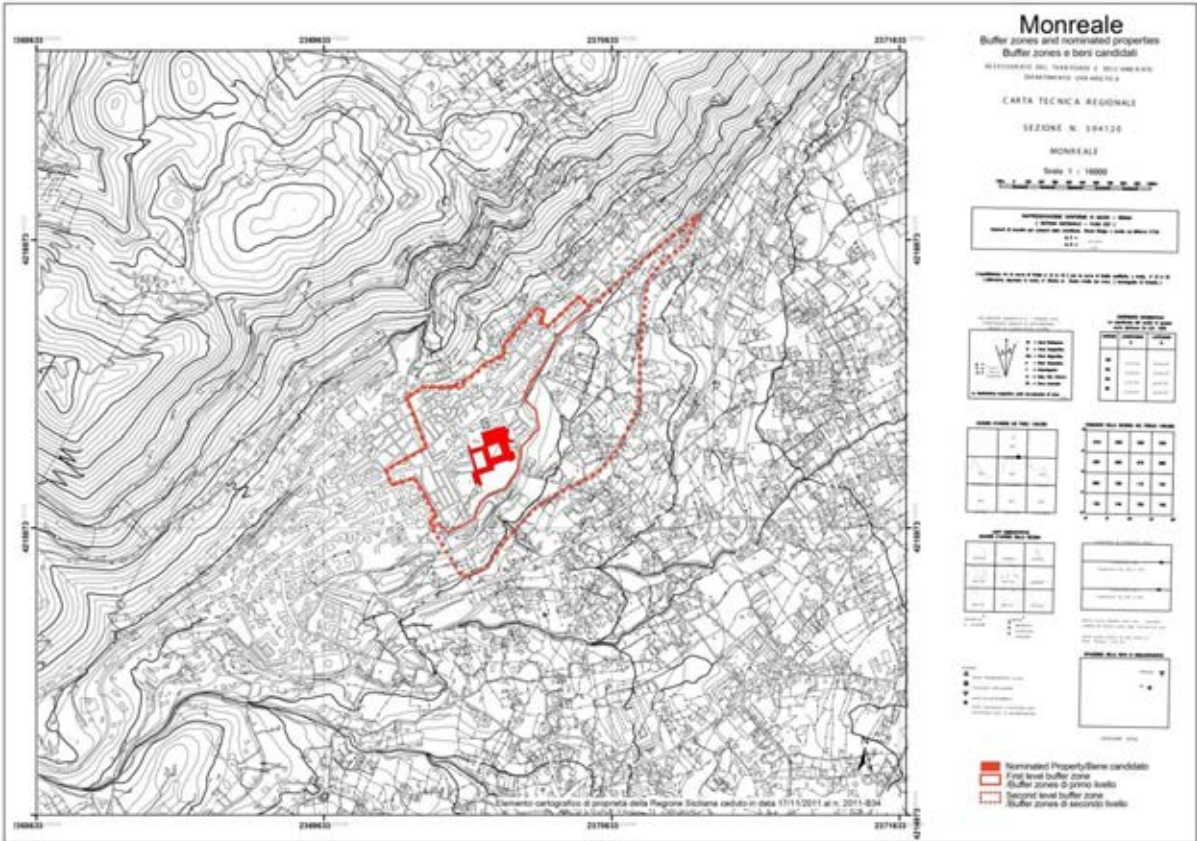
- Implementing the proposed monitoring system at the earliest opportunity;
- Proceeding to a new translation of the nomination dossier to be kept in the archives as a reference for new nominations or comparative studies.



Revised map showing the boundaries of the nominated property of Palermo



Map showing the boundaries of the nominated property of Cefalù



Map showing the boundaries of the nominated property of Monreale



Palermo: Royal Palace, the Palatine Chapel



Cefalú Cathedral



Monreale Cathedral, cloister



Palermo: Church of San Cataldo



Palermo: Church of San Giovanni degli Eremiti

Rjukan-Notodden (Norway) No 1486

Official name as proposed by the State Party

Rjukan-Notodden Industrial Heritage Site

Location

Telemark County

Brief description

Located in a dramatic landscape of mountains, waterfalls and river valleys, the Rjukan-Notodden Industrial Heritage Site comprises a cluster of pioneering hydro-electric power plants, transmission lines, factories, transport systems and towns. The complex was established by the company Norsk-Hydro to manufacture artificial fertilizer from nitrogen in the air in response to the Western world's demand for increased agricultural production in the early 20th century. Rjukan and Notodden company towns, 80 kilometres apart, include workers' housing and social institutions connected by railway lines and ferry services to ports of embarkation for the fertilizer and other products. Three of the pioneering power plant buildings (Vemork, Såheim and Tinfos II) constructed between 1905 and 1940 are intact and still in use.

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

26 November 2009

International Assistance from the World Heritage Fund for preparing the Nomination

None

Date received by the World Heritage Centre

30 January 2014

Background

This is a new nomination.

Consultations

ICOMOS consulted TICCIH and several independent experts.

Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the property from 1 to-5 September 2014.

Additional information received by ICOMOS

A letter was sent to the State Party on 20 August 2014 requesting additional information on the industrial processes, boundaries, protection and management and future development projects. Some information was provided to the technical evaluation mission and received on 19 September 2014 & 6 October 2014 including the timetable for legislation and approval of the Management Plan, explanation of legislative changes, information regarding items in the buffer zone and future development projects. A response to the letter was received on 6 November 2014. A second letter was sent to the State Party following the ICOMOS Panel in December 2014 regarding extension of the property boundary and completion of the legislative protection of the property, together with some management and monitoring issues. A telephone meeting between the State party and ICOMOS was held on 15 January 2015 at the request of the State Party to clarify some points in ICOMOS' second letter. A response was received on 26 February 2015. The information has been incorporated below.

Date of ICOMOS approval of this report

12 March 2015

2 The property

Description

The nominated property comprises the interlinked water courses from the Møsvatn regulating reservoir on the Hardangervidda mountain plateau down to Heddalsvatnet Lake, a stretch of 93km and covers a total area of 4959.5ha. It includes the elements of four interrelated functions or themes: hydroelectric power production, electro-chemical processing industry, the transport system and two company towns Rjukan and Notodden. These are surrounded by a buffer zone of 33,967.6ha.

Hydroelectric power production

The hydroelectric power generation system was developed by Norsk Hydro to exploit the water drops totalling over 700 metres from the high plateau created by the waterfalls of Tinnfossen, Svælgfos and Rjukanfossen. Cheap electricity was required to manufacture synthetic nitrogen fertilizer based on the energy-intensive, electro-chemical Birkeland/Eyde process. The first test facility utilised the Tinfos I power plant outside Notodden from 1901. The gable-roofed, plastered brick building remains as a shell and is used as a workshop. This was followed by Hydro's Svælgfos (1907) which at the time was the second largest power plant in the world after Ontario Power by the Niagara River. Today this is represented only by the stone building which was the lightning arrester house and workshop. The major Hydro pioneering power plants along the interlinked water courses include Tinfos II (1912) with original decorated interiors, fixtures and fittings largely intact; the decorative stone-clad concrete Vemork power station at Rjukan (1911) fed by a high

pressure system with a great head of water and rock tunnels, regulated by the concrete dam at Møsvatn, and Såheim (1915), a distinctive concrete building with cupola-capped towers. Other architectural elements include the old stone intake gatehouse at Vemork; the penstock valve house at Vemork which remains encased in the concrete applied by the Germans to protect it during WWII; concrete workshop buildings associated with Såheim, the concrete Cable House (1915), transformer and distribution station (1915) and remains of power distribution lines. Vemork was possibly the world's biggest power plant when it began operation, and Såheim larger still in terms of output. In world terms however, ICOMOS notes that the important advances in hydroelectric power were really in distribution capability to distant cities and industries rather than output in kilowatts.

Industrial facilities

Norsk Hydro's test factory for the production of nitrogen from the air in order to produce synthetic fertilizer was created at Notodden. This was already a traffic hub and industrial community due to the Tinfos AS Company which was first a paper manufacturer and later developed an ironworks. Today the shell of the concrete Tower House A (1907-21) remains at Notodden, together with other buildings including the rendered brick and concrete Calcium Nitrate Factory (1915-16) which has been much altered, Furnace House C (1907-9), the Testing Plant and Electrical Workshop (1909), Laboratory and Workshop (1915), Hydrogen Factory (1927), the Ammonia Water Plant (1914-16) and the Minaret, a 63m high concrete tower used as air intake for the production of gaseous nitrogen in the ammonia production process.

The facilities at Rjukan were built for large scale production by Hydro and were much more extensive. Here the Furnace House and the Tower House were prominent elements in a production line based on the electric arc process. Remaining buildings at Rjukan include Furnace House I (1910-11) comprising five gabled halls, steel framed and clad in brickwork, the brick Boiler House (1911), Laboratory (1911), Nitrogen Plant (1928), Compressor House (1928), and retains a complete acid tower as a freestanding object, the only one remaining from the original 32 in Tower House 1 (now demolished). This is a granite tower which enclosed limestone quartz aggregate through which water percolated to absorb nitrous gases and produce nitric acid as a stage in the nitrate production. At both sites industrial production has continued inside Hydro's buildings adapted for enterprises that are historically linked to Hydro.

Transport system

An interconnected transport system of two railway lines and two steam-powered ferry crossings joined Rjukan's facilities to Notodden to enable the saltpetre to be transported on to world markets via the Telemark Canal. The railway was electrified in 1911 and is largely intact including railway buildings, ferry quays and two ferries now installed as part of the Norwegian Industrial Workers

Museum at Vemork. Important structures are tunnels and bridges including the Gaupesprang riveted steel truss bridge (1909); the picturesque Notodden old railway station building (1908-9); Rjukan Quay (1909 - the Railway Quay); Tinnoset Railway Station buildings (1909); Tinnoset Ferry Quay and buildings (1909); 10 of the original 11 lighthouses along Tinnsjøen Lake (1908/1939/1962), Mæl Ferry Quay 1909; Mæl Railway Station 1909/1917; Mælsvingen houses (c 1914); Ingølsland Railway Station; Rjukan Railway Station; Såheim Engine Shed; together with railway track, signalling and overhead line equipment. The line closed in 1991 and its ownership together with that of the ferry quays, slipways, lighthouses, railway stock, tracks and railway buildings was transferred to the Rjukan Line Foundation in 1997. In 2012 ownership was transferred to the Vemork Museum.

Rjukan and Notodden Company towns

Notodden

Workers' housing in Notodden was provided by both Tinfos AS and Hydro, expanding the original settlement which served the surrounding farming community. The Hydro housing areas of Grønnebyen (1906) and Villamoen (1908) are located on terraces above the factory and the lake, with Own Homes (1910-14) and Tinnebyen (1917-20) to the east. Hydro housing is also located at Svælgfos (from 1905) and Lienfos (from 1909) north of the urban centre. Hydro is credited with laying out the commercial centre and also built a primary school, theatre and municipal baths – now all demolished - a hospital which still exists and an administration building. The housing layout reflects garden city ideals and architecture of the period.

Rjukan

This was a self-contained model company town created by Hydro based on ideas drawn from Sweden and Germany and laid out along both sides of the Mana River. The housing was mostly along the north side in order to maximise sunlight and stratified according to social order with workers' housing lower down. Over 140 house types were designed often by German-trained architects in both wood and brick and following modern ideas of light and ventilation. Bathrooms with hot water, a flush toilet and electric lighting in every apartment were intended to attract workers, who would get an opportunity to buy their own home. The town reached its peak of around 12,000 residents in 1920, when it was the largest industrial town in Norway. Schools, children's home, parks, hospital, library, post office, sports grounds and halls were all built by Hydro, as well as the necessary infrastructure, again reflecting garden city ideals. The prestigious buildings were designed by recognised architects in styles varying from historicism, art nouveau, neoclassicism to functionalism. Power plant buildings were constructed using reinforced concrete, steel and glass.

A catalogue of existing buildings and structures considered to be attributes of the property's value is included in the nomination dossier.

History and development

Telemark is a traditional farming area and the development of the Rjukan-Notodden hydroelectric scheme, saltpetre factories and towns required the purchase of farms on which to build. The area is also rich in mineral resources which have been mined in the past. The watercourses had been used in earlier centuries for waterwheels to generate power for mills and saws and floating timber from the forests to the saw mills. From the 18th century the mountains and waterfalls also attracted tourists. The existing conditions which enabled the establishment of Hydro's large factories for production of fertilizer were the canalised river system with locks connecting to the sea; the Tinfos power plant which could be used for the test factory, and the water drop of the Rjukanfossen waterfall which could be harnessed for the large amount of cheap energy required.

The establishment of the Norsk Hydro Company by engineer and industrialist Sam Eyde in 1905, the year of Norway's full independence opened the way for large-scale industrial development in Telemark. At the beginning of the 20th century the world's known natural sodium nitrate resources (saltpetre) in South America were greatly depleted and the search was on to find a synthetic replacement to increase crop yields in advance of the predicted food crisis. Development of the alternating current system of electricity in the late 19th century and its use at the first power plant at Niagara Falls paved the way for the use of hydroelectricity to power Birkeland's electric arc furnace which drew nitrogen from the air, producing 'Norway saltpetre'. Working with engineer and entrepreneur Sam Eyde, who had studied in Germany and had business and social connections both there and in Sweden, the two brought together expertise and financial capital from a wide range of sources. By 1912, Hydro was contributing 71,000 tonnes to the world's fertilizer market.

During WWI ammonia nitrate became more important as it could be used to make explosives and Hydro built an ammonia nitrate plant at Notodden. After the war the focus returned to agricultural fertilizer and by 1920 production of Norway saltpetre amounted to 135,000 tonnes, doubling every ten years until it became the largest nitrogen exporter in Europe by the 1950s. In the inter-war period Hydro changed to a production method based on electrolytic hydrogen and new facilities were built 1928-9, with ammonia production in Notodden and continued fertilizer production using the Haber-Bosch method in Rjukan. The stock market crash led to rationalisation of Hydro's activities during the 1930s. Germany took over Rjukan's facilities during WWII and built installations to produce heavy water shipped to Germany for use in controlling nuclear fission. Rjukan consequently became the focus of sabotage attacks by the Allies and at the end of the War the Norwegian State took over as the majority shareholder due to the strategic importance of the enterprise. Hydro subsequently moved its fertilizer business and activities to Herøya near Porsgrunn in the late 1960s.

Today Notodden Industrial Park is home to around 50 enterprises and the town continues as a centre for commerce, the service industry and education. Rjukan Industrial Park accommodates 30 different enterprises in an area of 21 ha containing 34 buildings. The town is regarded as a tourism centre for Tinn Municipality.

The East-Telemark watercourse continues to be used for hydroelectric power production and as a tourist waterway. The original Tinfos II, Vemork and Sâheim power stations are still intact and in operation. They have been supplemented by several new plants which have generally been constructed in rock caverns. The visible façade of the New Vemork power plant located in a rock cavern behind the old power plant is a Brutalist-style concrete structure. The old Vemork power plant now houses the Norwegian Industrial Workers Museum with its exhibition, offices, cafeteria and shop. The original generator sets still in place in the generator hall form part of the permanent exhibition of the museum. The old Tinfos I power plant remains as building shell. The New Tinfos I plant (1955) is a Functionalist-style building of painted concrete. The lakes and rivers are no longer used commercially except for tourist vessels.

3 Justification for inscription, integrity and authenticity

Comparative analysis

The State Party points out that the comparative analysis for this property needs to be seen in the light of the ICOMOS 'Filling the Gaps' report of 2005 which highlights typological, chronological-regional and thematic categories into which this property fits. Within Norway the property is compared with Odda and Tysedal on the Tentative List which represents the exploitation of the natural topography for use of hydroelectric power to produce artificial fertilizer by the carbide and cyanamide processes. The industrial process could be seen to complement that at Rjukan-Notodden but the overall establishment does not include transport infrastructure or a company town and is thus less representative of the overall enterprise. The property is also compared with Hydro's establishment at Herøya near Porsgrunn where the company established the world's biggest calcium nitrate factory in the 1920s with options for both sea and overland transport and to which it moved its activities from Rjukan-Notodden in the late 1960s. This represents the industrial phase that followed the pioneering plants at Rjukan-Notodden but is said not to demonstrate the same values at similar depth. Other industrial enterprises referred to in Norway are said to either represent a later phase of industrial development or do not reflect similar values.

The property is compared with World Heritage listed properties at Ironbridge Gorge, UK (1986, (i), (ii), (iv) & (vi)); Blaenavon Industrial Landscape, UK (2000, (iii) & (iv)); New Lanark, UK ((2001, (ii), (iv) & (vi)); Saltaire, UK (2001, (ii) & (iv)); Crespi d'Adda, Italy (1995, (iv) & (v)); Volklingen Iron Works, Germany (1994, (ii) & (iv));

Zollverein Coal Mine Industrial Complex in Essen, Germany (2001, (ii) & (iii)); and Salins-les-Bains & Royal Saltworks of Arc-et-Senans, France (1982, 2009, (i), (ii) & (iv)), none of which represent the same period and type of global industrial development. Humberstone & Santa Laura Saltpeter Works, Chile (2005, (ii), (iii) & (iv)) is similar in responding to the world-wide demand for fertilizer but not in terms of the combination of hydroelectricity and electro-chemical processes.

The property is also compared with properties on the Tentative List at Ivrea, Italy; Industrial complexes at Ostrava, Czech Republic; Kyushu and Yamaguchi, Japan; La Constancia Mexicana, Mexico; Pilgrim's Rest Reduction Works, South Africa and other relevant enterprises in UK, Germany, Sweden, France, Switzerland, Austria, and particularly Canada and the USA, where the Niagara Falls were the site of the beginnings of hydroelectric power and electro-metallurgic industry. The State Party argues that Rjukan-Notodden stands out as representative of the new form of global industrial economy based on electricity in the early 20th century by the way it was organised and financed in one overall project. The State Party suggests however that in relation to hydroelectric power generation reflecting the importance of electricity, a number of sites could be combined as a transnational series. ICOMOS considers that in fact the restriction of the tie-in of power production to the limited purpose of fertilizer production at Rjukan-Notodden meant that by comparison the Niagara plants in particular supplied greater capacity for more uses distributed over far greater areas. However ICOMOS concurs with the State Party's claim that the nominated property is clearly distinguished by its combination of industrial themes and assets which together make it an exceptional representation of early 20th century industrial development.

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:

- Ground-breaking industrial development as electricity replaced coal as a source of energy
- Testament to social transformation in the Western world at the beginning of the 20th century
- Created to produce a product (synthetic fertilizer) considered essential for the future of civilisation
- Representative of the exchange of results from science and research across national borders
- A complete ensemble of the contributing elements of hydroelectric power, industrial production, transport system and company towns created as one project.

ICOMOS considers that the first point of this justification needs to consider that coal-fired and oil-fired electricity also powered new global industries in the early 20th century. It would be more appropriate to say "ground-breaking industrial development using electricity as a source of energy". ICOMOS considers that the other points are appropriate.

Integrity and authenticity

Integrity

In general all important remaining physical structures and objects that are testimony to the industrial pioneering period of the production of artificial fertilizer for agriculture in Norway in the early 20th century are within the boundaries of the nominated area. ICOMOS notes that the ruins of Svælgfos I power plant, the Lienfos Dam and the foundations of the nitrogen and the ammonia gasometers at Rjukan together with some other structures within the nominated property are not considered as attributes by the State Party because of their ruinous state, but are considered as "supporting values". ICOMOS considers that they are integral to the hydropower and fertilizer production and should be maintained as part of the nominated property. ICOMOS notes that the ruins of Svælgfos II power plant, transformer station, plant operations manager's residence, penstock foundations, a section of the Svælgfos-Tinfos timber flume, and Lienfos power station remains which are part of the Svælgfos and Lienfos cultural environments are not included within the property but are in the buffer zone, although said to be part of the pioneering period of significance of the site. According to the State Party this is because of their lack of integrity and authenticity. ICOMOS also notes that there are also nine other power stations which are specified neither as attributes, nor as "supporting values". Additional information provided by the State Party in response to ICOMOS' query on this states that these were all built many years later than those relating to the key period of the property and all except New Tinfos I power plant (built in 1955) are located in the buffer zone and not in visible vicinity of the older ones. While not considered an attribute of the nominated property, New Tinfos I is protected under the Cultural Heritage Act as of 20 June 2014. ICOMOS considers that the nominated property is of adequate size to ensure the complete representation of the features and processes which convey the property's significance. However ICOMOS considers that integrity would be improved by inclusion of the Svælgfos and Lienfos cultural environments within the property boundary. In response to ICOMOS' letter and subsequent telephone meeting the State Party has provided new maps showing that the boundaries now enclose these areas. The physical fabric of the property and its significant features are generally in a good condition. The property is not suffering from adverse effects of development or neglect.

Authenticity

ICOMOS considers that the overall authenticity of the nominated property and its setting is high.

Hydroelectric power production

Hydro's power plants in the Tinnelva River have mostly been demolished, but some ruins of Lienfos as well as of Svælgfos I and II are still in place. The Myrens Dam that supplied water to Tinfos I power station is now dry and its penstock has been removed. The old Møsvatn Dam and Skardfoss Dam have been replaced by new dams but are still in place beneath the higher water level.

Industrial facilities

Notodden

Since the 1950s new buildings unrelated to the fertilizer production have been added and some of the historic buildings had been demolished. However the remaining shells of the historic buildings and their positions relative to each other still convey the organisation of the electric arc production lines A (1906-1934), B (1911-1934) and the Haber-Bosch production line (1929-1968). The form and design as well as the construction material of the buildings have largely been preserved, but most of the buildings have had minor alterations (new doors, windows, colours and some extensions) and have been re-roofed, although the traditional type of roofing has been used.

Rjukan

The demolition of buildings including all but one tower since the 1950s has left large vacant spaces. The remaining Barrel Factory has had significant changes to its façade. However, the remaining buildings with their positions relative to each other still convey the functional stages of the Rjukan I and II electric arc processes and the Rjukan III Haber-Bosch process.

Transport system

The whole transport system has been preserved, and its character and setting remain largely unchanged. Overhead line equipment is damaged and partly missing but still conveys electrification. Cranes have been removed from Rjukan Quay at Tinnoset harbour but the foundations and railway tracks remain. The lighthouses along Tinnstjøen Lake remain intact.

Rjukan and Notodden company towns

Notodden

Houses in the Grønnebyen area underwent some modernisation in the 1950s, but their general character, form, design and materials are well preserved apart from the replacement of the original outhouses by uniformly designed garages. The Villamoen area has changed to a greater degree due to new houses built by others than Norsk Hydro, but the overall 'villa' character of the settlement is retained.

Rjukan

The town plan and structure with its different housing areas and town square as well as the individual type-

houses, administrative, social and infrastructure buildings remain nearly unchanged from the 1920s. Individual buildings have had inappropriate architectural alterations (windows, doors, cladding, décor and extensions) since the time Norsk Hydro pulled out, but this has not affected the area as a whole and guidelines are being prepared for improvements and restoration.

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

Criteria under which inscription is proposed

The property is nominated on the basis of cultural criteria (ii) and (iv).

Criterion (ii): *exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design;*

This criterion is justified by the State Party on the grounds that the results of science and research from Europe and North America were brought together in the artificial fertilizer production enterprise at Rjukan-Notodden where the natural topography enabled generation of hydroelectricity in the large amounts required for the process. Together with social innovations in workforce provision which brought together international planning ideas and innovative transport solutions, these themes combined to enable production of a new, globally significant product for the world-wide market.

ICOMOS considers that the property manifests an exceptional combination of industrial themes and assets tied to the landscape, which exhibit an important exchange on technological development in the early 20th century.

ICOMOS considers that this criterion has been justified.

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

This criterion is justified by the State Party on the grounds that the dams, tunnels and pipes to take water to the power plants; power lines to the factories; the factory areas and equipment; the company towns with workers' housing and social institutions; and the railway lines and ferry service necessary to take the product to a world market, all created within the powerful natural environment that enabled hydroelectric power production, combine as an outstanding technological and architectural ensemble illustrating new global industry in the early 20th century.

ICOMOS considers that the sites all combine as an outstanding technological and architectural complex in a natural landscape harnessed for industrial purposes.

ICOMOS considers that this criterion has been justified.

ICOMOS considers that the nominated property meets criteria (ii) & (iv) and conditions of authenticity and integrity.

Description of the attributes

The attributes are the buildings, structures and objects that relate to the pioneering period of the production of hydroelectric power and artificial fertilizer for agriculture in Norway in the early 20th century as set out in the nomination dossier. These include the Tinfos, Svælgfos, Vemork and Såheim power plants with their specified related buildings and structures; regulating dams and power transmission structures; the Hydro Industrial Parks in Notodden and Rjukan with their specified associated buildings, structures and production equipment; the Transport System including the Tinnoset and Rjukan Lines with their specified associated buildings, structures, rolling stock and ferries; Notodden and Rjukan company towns to the extent of the specified housing areas, buildings, structures and parks together with the waterways and landscape setting.

4 Factors affecting the property

The town of Rjukan has not been subject to development pressure due to its relatively remote location. Notodden is subject to greater development pressure and the proposal to upgrade the highway between Eastern and Western Norway to cross the nominated property either through or slightly north of Notodden's town centre may exacerbate this. Municipal plans have capacity to deal with increased residential density. Development pressure is significant along the valley between Møsvatn and Tinnsjøen lakes on the periphery of the buffer zone due to demand for holiday homes and tourism related activities particularly skiing. However view lines are currently affected primarily by vegetation growth. The estimated number of residents in the nominated property is 300 in Notodden and 850 in the Rjukan area.

Modifications of power plants to meet safety requirements and upgrades for increased production are considered the biggest development factors in relation to the hydroelectric power components.

The Notodden Industrial Park is subject to development pressure from new and upgraded enterprises currently controlled by zoning plans. Industrial production equipment stored in the open at these sites is subject to severe deterioration due to weather.

Notodden Railway Quay and Station will be subject to upgrade and change in the longer term due to use for new purposes subject to State and Municipal plans. The Rjukan Line is part of the Norwegian Industrial Workers' Museum but both it and the Tinnoset Line are subject to deterioration and the latter has suffered theft of overhead lines in uninhabited areas. Planned

electrification of the rebuilt section of the former Tinnoset Line which connects the Bratsberg Line to the new public transport terminal just west of the Notodden Old Railway Station will require some modification to the platform at the old station building. This will be subject to relevant legislative Heritage permits.

Climate change involving a higher rainfall in Norway is expected to increase erosion and vegetation overgrowth as well as the risk of floods, landslides and avalanches. The hydro-electric power facilities enable flood control; dam reinforcement guards against dam failure, and warning systems are in place to enable evacuation in the event of a major uncontrolled discharge. Seismic activity is considered minimal; municipal and county authorities deal with landslides and rock falls on a regular basis. Threats due to strong gusty winds and fire are countered by the Municipal 24 hour fire service. The industrial enterprises comply with Norway's fire safety legislation in relation to fire protection.

The nomination dossier records that risk zone maps have been prepared and indicate that emergency procedures could be improved in relation to securing buildings prior to flood; areas subject to landslide and avalanche and response times in areas at risk of fire.

Tourism numbers swell to equal the population of the municipality in Rjukan in winter, largely due to skiing but are negligible in Notodden. It is considered that both towns have adequate capacity to accommodate a further increase in visitors, as do the industrial parks and railway/ferry systems. The estimated number of visitors to Notodden Hydro Industrial Park is 2-3,000 annually.

ICOMOS considers that the main threats to the property are deterioration in exposed and unused areas and extreme weather impacts. View lines are vulnerable to development pressure.

5 Protection, conservation and management

Boundaries of the nominated property and buffer zone

The nominated property boundaries enclose the interlinked watercourses used by Hydro and Tinfos AS for power production around 1920 from Møsvatn Dam to Heddalsvatnet Lake. Where the water runs through tunnels and pipes the boundaries follow the outside of these installations. Where the railway runs along the watercourses its outer boundary forms the property boundary. Where the boundary crosses Tinnsjøen Lake it includes the ferry route and lighthouses, but excludes the northern part of the lake. The towns of Rjukan and Notodden are included to the extent they covered in 1930.

The buffer zone covers the landscape of valleys in which the watercourses run and includes Møsvatn Lake, the Vestfjorddalen Valley, Tinnsjøen basin and valley down to

Heddalsvatnet Lake. It is bounded by the horizon as seen from the valley floor, or from vessels on Tinnsjøen Lake and includes the immediate setting of the property with all additional objects of “supporting value” as well as all important view lines.

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

Ownership

All attributes within the nominated property are privately owned except for the production equipment which is owned by the Municipality and the two railway lines and parts of Rjukan Hydro Town which are owned by the State. The buffer zone is almost all in private ownership, exceptions being some properties owned by the Municipality and the National road which is State-owned.

Protection

Cultural Heritage protection in Norway is largely the responsibility of the Ministry of Climate and Environment, through its Directorate of Cultural Heritage, which administers the Cultural Heritage Act 1978, amended 2009. It is also the responsibility of the County Council which cooperates with the municipalities in preparing master plans and zoning plans to ensure protection of Cultural Heritage of national or regional value under the Planning and Building Act 2009, amended 2012.

A table in the nomination dossier shows which attributes and their component parts are protected by The Cultural Heritage Act 2013. These include both Industrial Parks in total, and the whole Transport System except for Mælsvingen with five houses which are protected under the Planning and Building Act 1985. Of the Power Plants; Tinfos I & II, parts of Vemork and Sâheim are protected under the Cultural Heritage Act, and other parts are protected by the Planning and Building Act or other general legislation not Heritage related. Only a few specific buildings in Notodden and Rjukan towns are protected under the Cultural Heritage Act, the remainder are protected under the Planning & Building Act or other general legislation. In response to ICOMOS' second letter and the telephone meeting, the State Party has provided a new timetable showing that all items will be protected by the Cultural Heritage Act or specific Heritage provisions of the Planning & Building Act by June 2015, together with supporting letters from the relevant authorities.

All objects with “supporting value” within the buffer zone are cultural Heritage sites and protected by the Cultural Heritage Act and/or the additional regulations of the Planning and Building Act. A further protective function is established by the zoning plans of the municipalities.

ICOMOS considers that the legal protection planned to be complete by June 2015 will be adequate. ICOMOS considers that the protective measures for the property are adequate.

Conservation

The thirteen nominated attributes of the property and their components have been inventoried in detail and their condition assessed according to the Norwegian Standard 3423 ‘Condition Survey of protected buildings and buildings with historical value’. Tables are provided in the nomination dossier, which show that conservation/maintenance works have been undertaken, are underway or are planned where required. ICOMOS considers that the conservation measures are appropriate to conserve the property’s values, integrity and authenticity.

ICOMOS considers that conservation is adequate.

Management

Management structures and processes, including traditional management processes

A ‘Declaration of Intent’ has been signed by the State Party and relevant county council and municipalities undertaking to protect the Outstanding Universal Value and the buffer zone. A provisional World Heritage Council comprising representatives from the Directorate for Cultural Heritage, the Telemark County Council, the three municipalities (Notodden, Tinn and Vinje) and the Norwegian Industrial Workers Museum has been set up to deliver a management structure for the property should it achieve World Heritage status. The Tinn and Notodden municipalities currently have one World Heritage coordinator each. If World Heritage status is achieved, a World Heritage Coordinator with responsibility for the whole area will be appointed. According to additional information provided by the State Party in response to ICOMOS' letter, the partnership agreement between Telemark County and the municipalities as a basis for setting up the permanent World Heritage Council was approved in June 2014, with a World Heritage coordinator as Secretary. It is proposed that the World Heritage Council will meet annually with central stakeholders, including the owners of companies within the Industrial Parks who may also participate in its ordinary meetings.

Meanwhile the attributes are managed by the County Council and municipalities under the Ministry of Climate and Environment and its Directorate for Cultural Heritage with input from various ministries and government agencies. The Directorate’s staff includes specialists in relevant fields as does the staff of the County and Municipal authorities. Other expertise is provided by the Norwegian Institute for Cultural Heritage Research, three ship conservation centres and the Norwegian Industrial Workers’ Museum. Funding is provided through the annual allocation to the Directorate for Cultural Heritage for work on World Heritage sites. The total for 2013 was NOK 60 million. Various other sources of funds are available to private owners and businesses. ICOMOS notes that the Management Plan does not include further risk preparedness measures said in the nomination dossier to be required – see Factors affecting the property above. However in response to ICOMOS’

second letter the State Party has provided further details of the risk preparedness measures which will be included in the Management Plan.

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

A number of national, regional, county and local plans cover the nominated property area. The future major road crossing the site is mentioned above. This will be subject to relevant legislative controls. The Regional Plan for Tourism and Experiences 2011-24 adopted by the County Council 15 June 2011 provides funds for tourism projects that promote the application for World Heritage status in the period 2013-2016. The strategy for culture and cultural Heritage in Telemark will contain objectives and measures related to World Heritage. Long term priorities include increasing knowledge of cultural Heritage in the county and craftsmen training. Notodden local plans include conservation guidelines relating to cultural Heritage protection and a municipal emergency response plan. Tinn local plans focus on developing business and services opportunities in parallel with supporting World Heritage status.

The Management Plan has been prepared and was approved by the parties to the 'Joint Declaration of Intent' in 2013. An Action Plan is provided for 2014-2019. This includes goals and actions for conservation, strengthening of Outstanding Universal Value, competence building and research, information & presentation, and visitor management and will be reviewed in 2020. ICOMOS notes that as well as omitting the risk preparedness strategy, the Action Plan does not mention reactivating the Railway Line/Ferry system for tourism purposes, although it appears to be intended.

Involvement of the local communities

It is proposed in the Management Plan that the World Heritage Council will hold meetings with stakeholders, representatives of business and industry and voluntary organisations at least once a year.

ICOMOS considers that the current management system is effective.

In conclusion, ICOMOS considers that the management system for the property is adequate. The Management Plan should be extended to include a risk preparedness strategy as proposed in the State Party's additional information.

6 Monitoring

An outline for monitoring activities is provided in the nomination dossier with the division of responsibilities still to be determined by The Directorate of Cultural Heritage and the County and Municipal authorities. ICOMOS notes that detailed indicators are also yet to be defined. In

response to ICOMOS' second letter the State Party has provided a more detailed outline of the monitoring programme to be included in the Management Plan. ICOMOS considers this needs to be further refined to relate to the inventory/data base of objects.

ICOMOS considers that the monitoring system will be adequate when it is further refined to relate to the inventory/data base.

7 Conclusions

ICOMOS considers that the comparative analysis justifies consideration of this property for the World Heritage List; that the nominated property meets criteria (ii) & (iv) and conditions of integrity and authenticity. The main threats to the property are deterioration in exposed and unused areas and extreme weather impacts. View lines are vulnerable to development pressure. The boundaries of the nominated property and of the buffer zone are adequate.

ICOMOS considers that the legal protection will be adequate when all proposed changes to the legislation are in place, which is expected to be by June 2015. ICOMOS considers that conservation is adequate and the management system for the property is adequate. The monitoring system needs to be further refined to relate to the inventory/data base.

8 Recommendations

Recommendations with respect to inscription

ICOMOS recommends that Rjukan-Notodden Industrial Heritage Site, Norway be inscribed on the World Heritage List on the basis of **criteria (ii) and (iv)**.

Recommended Statement of Outstanding Universal Value

Brief synthesis

Located in a dramatic landscape of mountains, waterfalls and river valleys, the Rjukan-Notodden Industrial Heritage Site comprises a cluster of pioneering hydro-electric power plants, transmission lines, factories, transport systems and towns. The complex was established by the Norsk-Hydro company which brought together results of science and research from Europe and North America to produce hydroelectricity and manufacture artificial fertilizer from nitrogen in the air in response to the Western world's demand for increased agricultural production in the early 20th century. Rjukan and Notodden company towns incorporated social innovations in workforce provision influenced by international planning ideas which together with innovative transport solutions enabled supply of a new, globally significant product for the world-wide market.

Criterion (ii): Rjukan-Notodden Industrial Heritage Site manifests an exceptional combination of industrial themes and assets tied to the landscape, which exhibit an important exchange on technological development in the early 20th century.

Criterion (iv): The technological ensemble of Rjukan-Notodden comprising dams, tunnels, pipes, power plants, power lines, factory areas and equipment, the company towns, railway lines and ferry service, located in a landscape where the natural topography enabled hydroelectricity to be generated in the necessary large amounts stands out as an example of new global industry in the early 20th century.

Integrity

In general all important remaining physical structures and objects that are testimony to the industrial pioneering period of the production of artificial fertilizer for agriculture in Norway in the early 20th century are within the boundaries of the nominated area which is of adequate size to ensure the complete representation of the features and processes which convey the property's significance. The physical fabric of the property and its significant features are generally in a good condition. The property is not suffering from adverse effects and neglect.

Authenticity

The property incorporates buildings, structures and remains which convey credibly and truthfully its Outstanding Universal Value as a pioneering industrial enterprise for the production of artificial fertilizer in the early 20th century.

Management and protection requirements

The property is protected under the Cultural Heritage Act 1978, amended 2009 and the Planning & Building Act 2009, amended 2012. All specified items will be protected by the Cultural Heritage Act or specific heritage provisions of the Planning & Building Act by June 2015. The buffer zone is protected under the Cultural Heritage Act and zoning controls pursuant to the Planning & Building Act.

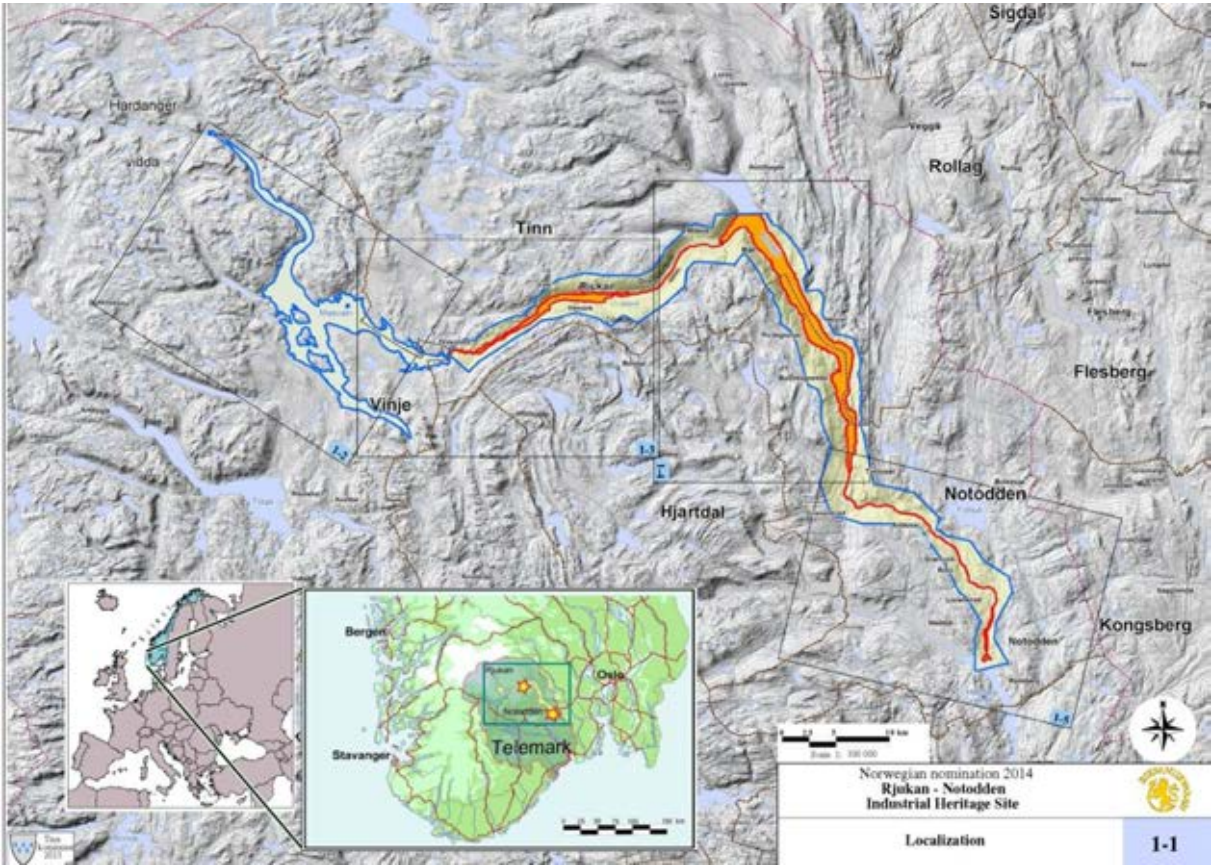
A 'Declaration of Intent' has been signed by the State Party and relevant county council and municipalities undertaking to protect the Outstanding Universal Value and the buffer zone. A provisional World Heritage Council comprising representatives from the Directorate for Cultural Heritage, the county authority, municipalities and the Norwegian Industrial Workers Museum has been set up to deliver a management structure for the property. A World Heritage Coordinator with responsibility for the whole area will be appointed. The Management Plan 2014-2019 includes an Action Plan with goals and actions for conservation, strengthening of Outstanding Universal Value, competence building and research, information & presentation, and visitor

management and will include a risk preparedness strategy.

Additional recommendations

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

- Extending the Management Plan to include a risk preparedness strategy as proposed;
- Refining the Monitoring System to relate to the inventory/data base.



Revised map showing the boundaries of the property



Tinfos II Power Plant



Såheim Power Plant



Notodden, Hydro Industrial Park



Rjukan, Hydro Industrial Park

Monumental Ensemble of Târgu Jiu (Romania) No 1473

Official name as proposed by the State Party

The Monumental Ensemble of Târgu Jiu

Location

Municipality of Târgu Jiu

Gorj County

Romania

Brief description

The nominated property is an ensemble of five interrelated sculptural installations aligned on a virtual 1.5-km-long axis superimposed on the Avenue of the Heroes in central Târgu Jiu. These sombre, contemplative, yet accessible architectural sculptures were created in 1937-1938 to commemorate the Romanian soldiers who died defending the city in 1916. Designed and executed by Constantin Brâncuși, an influential pioneer of abstract sculpture, the installations consist of the circular limestone *Table of Silence*, with 12 stone seats surrounding it; 30 limestone stools that line the *Alley of the Chairs*; the *Gate of the Kiss*, an austere travertine portal; two stone benches flanking this portal; and, almost 1.5 km to the east, the *Endless Column*, a slender 29.35-m-tall metal shaft.

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 two groupings of 5 *monuments*.

1 Basic data

Included in the Tentative List

1 March 1991

International Assistance from the World Heritage Fund for preparing the Nomination

None

Date received by the World Heritage Centre

27 January 2014

Background

This is a new nomination.

Consultations

ICOMOS consulted its International Scientific Committee on 20th century Heritage and several independent experts.

Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the property from 2 to 6 October 2014.

Additional information received by ICOMOS

A letter was sent by ICOMOS to the State Party on 12 September 2014 to request further information about the nature of the “conceptual” axis that is superimposed on the Avenue of the Heroes; the selection of the proposed boundaries for the nominated serial property and the buffer zone; the criteria chosen for the nominated property; the techniques used in restoring the monuments; development pressures in the buffer zone; legal and planning mechanisms; the sources and level of funding available; the implications of a possible increase in the number of visitors to the nominated property; and community involvement in the preparation of the nomination dossier and the management plan.

The State Party replied on 24 October 2014, sending additional documentation which has been taken into account in this evaluation.

On 16 January 2015, ICOMOS sent a letter to the State Party informing it that the nominated property does not fulfil the requirements set out in the *Operational Guidelines for the Implementation of the World Heritage Convention*, and therefore ICOMOS will recommend to the World Heritage Committee that the nominated property not be inscribed on the World Heritage List.

Date of ICOMOS approval of this report

12 March 2015

2 The property

Description

The nominated serial property, which covers 1.0 hectare, is located in the municipality of Târgu Jiu in south-western Romania. The ensemble of five sculptural installations that comprise the nominated serial property are situated in two urban parks that are almost 1.5 km apart: Constantin Brâncuși Park (the former Public Garden) bordering the river Jiu; and Park of the Endless Column. The two parks are not visible from each other. The sculptures are aligned along a conceptual west-east axis that is superimposed on the Avenue of the Heroes, a narrow thoroughfare that links the two parks. The ensemble created by Constantin Brâncuși in 1937-1938 to honour the Romanian soldiers who fell in battle near the river during the First World War is considered the symbolic nucleus of Târgu Jiu. The sculptures all invite interaction and contemplation.

The nominated serial property consists of five elements sited in two components. From west to east, they are:

Within Constantin Brâncuși Park

The *Table of Silence* is a sculptural installation comprised of a low, circular limestone table about 2 m in diameter surrounded by 12 hourglass-shaped limestone seats. Intended to evoke the traditional place of family gathering (or The Last Supper), it stands on an elliptical plot of land approximately 19 m wide by 15 m long. The *Alley of the Chairs* is comprised of 30 limestone stools arranged in five

groups of three on each side of a 10 m wide by 70 m long stretch of the main pathway, which links the *Table of Silence* with the *Gate of the Kiss*. The latter is a travertine portal or arch about 6.5 m wide, 5 m high, and 1.7 m deep, carved on-site by the artist with the intent of distilling his concept of “The Kiss” to its essence and rendering it as a gateway. The portal and two stone benches flanking it stand within an approximately 10-m-square polygon. The three plots of land in Constantin Brâncuși Park are contiguous.

Within Park of the Endless Column

The *Endless Column* (or *Column of the Infinite*) is a metal structure with a highly pronounced verticality intended to evoke infinity. Its 15 identical octahedral cast-iron modules and 2 half-modules (base and top), stacked on a hidden steel pillar, are plated with a gold-coloured brass coating. The *Endless Column* stands on a circular plot of land approximately 42 m in diameter.

The 1.5-km-long conceptual axis along which all the sculptures are aligned is also included in the nomination.

The nominated serial property is “buffered” by a single irregular 59.13-ha zone that follows existing property lines. It is comprised of the entirety of the two parks in which are located the *Table of Silence*, *Alley of the Chairs*, *Gate of the Kiss*, and *Endless Column*, with an adjacent area that extends to the lower boundaries of the first row of properties found around Park of the Endless Column and on the west bank of the river Jiu (a segment of the river is also included). The buffer zone also includes the Avenue of the Heroes and the properties along it that have direct access to this street, as well as the segment of Constantin Brâncuși Boulevard and the properties along this segment that face Constantin Brâncuși Park.

History and development

Through the efforts of Aretia Tătăărăscu, president of the National Women's League of Gorj and wife of the prime minister, the celebrated Paris-based Romanian sculptor Constantin Brâncuși was asked in 1934 to design a monument in memory of the Romanians who fell near the river Jiu during the First World War. Brâncuși initially envisioned a very tall metal “endless” column, a motif he had already been exploring for about two decades. Enthusiasm expressed by Brâncuși's compatriots led him to broaden the project to include an ensemble of sculptures to more fully express homage to the fallen. He decided to locate the *Endless Column* outside the riverfront park and to place there instead three stone installations: the *Table of Silence*, *Alley of the Chairs*, and *Gate of the Kiss*. The column's planned location was revised to a hill about 1.5 km distant, but along the same alignment as the stone installations.

In the fall of 1937, landscape architect Frederic Rebhuhn prepared a plan for the riverfront park to place the stone elements of the ensemble according to Brâncuși's concept. In November, Rebhuhn landscaped the hill on which the *Endless Column* was being erected under

engineer Ștefan Georgescu-Gorjan's direction. The municipality decided to complete a complementary redevelopment project whereby a memorial avenue was inserted into the existing urban street pattern between the two parks. Once completed, this west-east axis, named Calea Eroilor (Avenue of the Heroes), connected the works of Brâncuși and integrated them into the urban structure of the city. The derelict 18th-century Saint Apostles Peter and Paul Church, located on the same axis, was reconstructed with Brâncuși's full acceptance.

The *Endless Column* and *Gate of the Kiss* were repaired in 1965-1966, when the column's metal modules were sandblasted and their surfaces re-plated with zinc, copper, and silicone, and some of the stone portal's damaged travertine elements were replaced and repaired and lead sheeting and scuppers were installed atop its lintel. The column was again re-plated ten years later. A 21-cm deviation from the vertical at the top of the column was discovered in 1983-1984, due possibly to a failed attempt by the government to pull it down in 1950.

The *Endless Column* was placed on the World Monuments Watch List of 100 Most Endangered Sites in 1996 to draw attention to the poor state of conservation of the monumental ensemble and their parks. The column was disassembled to investigate the condition of its modules, supporting pillar, and foundation. After an intense debate among international experts over methodology, consensus was reached in 1998 and full restorations of the *Endless Column* and of the stone sculptures were undertaken between 2000 and 2004 by the Government of Romania, World Monuments Fund, World Bank, UNESCO, and other institutions and experts working in partnership. The two parks were re-landscaped between 2004 and 2006.

3 Justification for inscription, integrity and authenticity

Comparative analysis

The State Party has inferred rather than demonstrated that there is scope in the World Heritage List for the inclusion of the nominated property; and, with respect to the body of similar properties within the defined geo-cultural area (the modern world), has implied that there are no other similar properties that could be nominated.

The State Party's comparative analysis is based on the three frameworks outlined in *The World Heritage List: Filling the Gaps* (ICOMOS, 2005). The State Party pays particular attention to properties illustrating the Modern Movement in architecture that are currently on the World Heritage List. Seven are compared in some depth: the Fagus Factory in Alfeld (Germany, 2011, (ii), (iv)); Rietveld Schröderhuis (Rietveld Schröder House) (Netherlands, 2000, (i), (ii)); Skogskyrkogården (Sweden, 1994, (ii), (iv)); Sydney Opera House (Australia, 2007, (i)); Tugendhat Villa in Brno (Czech Republic, 2001, (ii), (iv)); and Luis Barragán House and Studio (Mexico, 2004, (i), (ii)). ICOMOS believes that the

relevance of these iconic properties to the ensemble of sculptures at Târgu Jiu is at best superficial: the World Heritage List does not yet contain a wide enough range of built heritage of the modern era to allow a relevant typological comparison with the nominated property.

Comparisons are also made to 14 inscribed properties that the State Party believes potentially exhibit the symbolism and spirituality of the ensemble in Târgu Jiu. The properties chosen for detailed comparisons are categorized by the State Party as *megalithic sanctuaries*, such as Stonehenge, Avebury and Associated Sites (United Kingdom, 1986, (i), (ii), (iii)); *monumental tombs*, such as the Mausoleum of the First Qin Emperor (China, 1987, (i), (iii), (iv), (vi)); *ancient sanctuaries*, such as the Acropolis, Athens (Greece, 1987, (i), (ii), (iii), (iv), (vi)); *memorial and burial sites*, such as the Taj Mahal (India, 1983, (i)); and *sites of memory*, such as the Hiroshima Peace Memorial (Genbaku Dome) (Japan, 1996, (vi)). The relevance of these comparisons is likewise cursory: the basis for the symbolism and spirituality of these properties is remote from the symbolic/spiritual basis that underpins the Monumental Ensemble of Târgu Jiu.

The nominated property is further compared to two works of monumental sculpture already inscribed on the World Heritage List: the Statue of Liberty (United States of America, 1984, (i), (vi)) and the Holy Trinity Column in Olomouc (Czech Republic, 2000, (i), (iv)) – neither of which ICOMOS considers to be wholly comparable.

Comparisons with properties on the Tentative Lists of other States Parties (Sites mégalithiques de Carnac (France), for example) suffer the same shortfall: fully comparable properties have generally not yet attracted the attention of States Parties, vis-à-vis World Heritage. One exception is the ensemble of First World War Funerary and Memorial Sites, on Belgium's Tentative List. While significantly different in scope and built form, this serial property's components have a similar *raison d'être* and were created in the same time period and geo-cultural context as the ensemble at Târgu Jiu.

The State Party's final comparative analysis addresses this gap in the World Heritage inventory by assessing monumental memorials erected during the interwar period in Belgium, France, Italy, Serbia, and Romania, and after the Second World War in Eastern Europe (Romania, Hungary, and Soviet Union). This limited group of comparatives excludes some key memorials erected outside the European fields of combat, most notably in the United States of America and Australia. ICOMOS considers that the comparative analysis would have been stronger if it had taken into consideration monuments such as the Liberty Memorial in Kansas City, United States of America (1921-1926) and the ANZAC War Memorial in Sydney, Australia (1929-1934).

In Europe, the Canadian National Vimy Memorial in France (1925-1936) and the Island of Ireland Peace Park in Belgium (1998) are not fully compared in the nomination dossier. *The Grieving Parents* (1924-1932) in

Belgium's Vladslo German war cemetery is a notable Expressionist sculptural installation that would seem to warrant comparison. The extraordinary abstract war memorials of the former Yugoslavia may also be relevant in a comparative context. More recent sculptural installations such as the Jatiyo Smriti Soudho in Bangladesh (1978-1982) and the Mandurah War Memorial in Australia (2004-2005) may have relevance as evidence of an interchange over time of the values expressed in the Târgu Jiu prototype of symbol-laden, axially planned, abstracted architectural memorials.

ICOMOS considers that the values of the nominated serial property reside both in its sculptural forms and in the symbolism of the ensemble. The comparatives selected by the State Party do not fully address the attributes that express these values, such as their sculptural qualities, their interrelationships with their sites, their evocation of sacrifice and other moments fundamental to human existence, and their symbolic expression of basic values of humanity.

The nominated serial property includes the complete ensemble of sculptural installations by Constantin Brâncuși, and therefore could justify the selection of the elements to form the nominated series. If the proposed Outstanding Universal Value is associated with the overall memorial scheme in Târgu Jiu, however, the nominated serial property excludes the physical manifestation of the Avenue of the Heroes and the Saint Apostles Peter and Paul Church, both of which are important components of that scheme.

ICOMOS considers that the comparative analysis does not justify consideration of this serial property for the World Heritage List at this time.

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 Monumental Ensemble of Târgu Jiu, a unique creation, is a masterpiece of the creative genius of the sculptor Constantin Brâncuși as well as a work illustrative of the creative genius of humankind, as demonstrated by the sophisticated humanist significance of its interpretation of the supreme sacrifice; its vision that brings together, in perfect composition, symbols and ideals that belong to the cultures of ancient civilizations and that address the entire world; and the novelty of its language and design, all of which mark this sculptural and architectural work as a turning point in the evolution of the history of modern art.
- The Monumental Ensemble of Târgu Jiu, the epitome of the artistic pursuits of Brâncuși, opens a new perspective of a technical and semantic nature in the works of modern statuary art and confirms, in terms of a visual arts manifesto, a revolutionary method of expression.

- This ensemble is the most sophisticated expression of Brâncuși's minimalist artistic vocabulary – which was devised throughout his entire oeuvre and was characterized by the pursuit of perfection, formal purity, and the dominant power of the material – by which Brâncuși gave modern sculpture awareness of pure form and thus marked its further development.

ICOMOS considers that this justification is for the most part appropriate, in that the Monumental Ensemble of Târgu Jiu is a notable example of 20th-century public sculpture and undoubtedly represents a high point in the artistic pursuits of Constantin Brâncuși, who is widely acknowledged as one of the most influential sculptors of the 20th century. However, the interchange and diffusion of the values and concepts expressed in the ensemble at Târgu Jiu have not been fully and causally linked to subsequent commemorative monumental ensembles or other relevant works of the modern era.

Integrity and authenticity

Integrity

The State Party has assessed the integrity of the nominated property as sculptural works of art. In this context, the key features and attributes of the nominated property that carry potential Outstanding Universal Value may be considered to be whole and intact, and none are threatened by development, deterioration or neglect. The physical fabric of the property's significant features is in good condition, having undergone a thorough and respectful restoration in 2000-2004. The State Party has also expressed the importance of preserving the integrity of the monumental ensemble's conceptual axis – though it has not assessed the current (or future) integrity of this intangible component.

The State Party has not assessed the nominated property's integrity as a memorial, however. ICOMOS notes that a number of contextual changes have been made at the riverfront – including construction of a flood control embankment – and elsewhere. In addition, elements relevant to the memorial purpose have been left outside the nominated area without explanation (see the discussion in "Boundaries of the nominated property and buffer zone" below), and a logical and scientific basis for the selection of the nominated area has not been provided, nor has it been demonstrated that the 1.0-ha nominated property ensures the complete representation of the features and processes that convey its significance.

Authenticity

ICOMOS considers that, as sculptural works of art, the nominated property is authentic in terms of the location and setting, forms and designs, materials and substances, use and function, and spirit and feeling of the individual installations. Recent interventions have been carried out with respect for the original design intent and physical fabric of these works of art, and accepted international standards for such outdoor installations have been followed. However, the authenticity of the nominated

property related to its memorial function has not been demonstrated.

In conclusion, ICOMOS considers that the conditions of authenticity and integrity for the whole series as a memorial have not been met.

Criteria under which inscription is proposed

The property is nominated on the basis of cultural criteria (i) and (ii).

Criterion (i): *represent a masterpiece of human creative genius;*

This criterion is justified by the State Party on the grounds that, as a masterpiece of the creative genius of the Romanian sculptor Constantin Brâncuși, as well as a work illustrative of the creative genius of humankind, the Monumental Ensemble of Târgu Jiu, erected in memory of the heroes of Gorj who fell during the First World War, is a unique creation of Outstanding Universal Value. By the sophisticated humanist significance of the interpretation of the supreme sacrifice, by its vision that brings together, in perfect composition, symbols and ideals that belong to the cultures of ancient civilizations and that address the entire world, as well as the novelty of the language and design, this sculptural and architectural work by Brâncuși marks a turning point in the evolution of the history of modern art.

ICOMOS observes that the *Endless Column* is acknowledged by a number of experts to be among the notable monumental public sculptures of the 20th century. It can also be considered a masterpiece in the oeuvre of Constantin Brâncuși, along with his much smaller studio-sized works such as *The Kiss* series, *Bird in Space* series, and ovoid-shaped series, none of which can be considered as works of monumental sculpture under Article I of the World Heritage Convention. The other sculptural installations that comprise the Monumental Ensemble of Târgu Jiu are much less widely renowned, either as works of monumental sculpture or as memorials.

ICOMOS considers that this criterion has not been justified for the whole series, but could possibly be justified if the nomination is focused on the *Endless Column* as an individual work of monumental sculpture.

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 Monumental Ensemble of Târgu Jiu, the epitome of the artistic pursuits of the Romanian sculptor Constantin Brâncuși, opens a new perspective of a technical and semantic nature in the works of modern statuary art and confirms, in terms of a visual arts manifesto, a revolutionary method of expression.

Throughout his entire oeuvre, Brâncuși devised a minimalist artistic vocabulary that was characterized by the pursuit of perfection, formal purity, and the dominant power of the material. The Târgu Jiu ensemble is the most sophisticated expression of these concepts by which Brâncuși gave modern sculpture awareness of pure form and thus marked its further development.

ICOMOS considers that specific, physical evidence of subsequent monumental public sculpture that demonstrates an important interchange of human values over a span of time or within a cultural area of the world directly related to the nominated property has not been provided. Moreover, ICOMOS considers that the description of Brâncuși's artistic vocabulary and expression fits more comfortably under criterion (i).

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

ICOMOS considers that the serial approach has not been justified and that the choice of the components has not been fully demonstrated.

In conclusion, ICOMOS does not consider that the criteria have been justified for the nominated property as a whole, but criterion (i) and perhaps criterion (ii) could possibly be justified if the nomination is focused on the *Endless Column* as an individual work of monumental sculpture; and that the conditions of authenticity and integrity for the whole series as a memorial have not been met.

4 Factors affecting the property

The nomination dossier does not identify any developmental, environmental or natural threats to the potential Outstanding Universal Value of the nominated property. It notes that there is a possible danger from broken trees; that the city can be affected by earthquakes; that the concentration of air pollutants is generally within legislated limits; and that climate change is not an issue. Visitation to the monumental ensemble is difficult to measure: there is no charge to visit, and there is no system to count visitors.

The nomination dossier does not identify developmental, environmental or natural threats to, or pressures on, the buffer zone. Instead, it briefly summarizes the actions that are allowed and prohibited under legislation. ICOMOS considers that any threats to the buffer zone that have previously been raised, or that may reasonably be predicted or expected, must be identified.

ICOMOS considers that there are no significant threats to the nominated property. Known or potential threats to the buffer zone remain to be identified.

5 Protection, conservation and management

Boundaries of the nominated property and buffer zone

The nominated serial property is a 1.0-hectare area comprised of two tangible components: a plot of land approximately 95 m long by 10 m wide in Parc Constantin Brâncuși; and a circular plot of land about 42 m diameter in Park of the Endless Column, almost 1.5 km distant. The boundaries tightly circumscribe the five individual sculptural installations, excluding, for example, the majority of the two urban parks in which they are located. The nomination dossier does not provide an explicit rationale or justification for these proposed boundaries.

The nominated property also includes an intangible component, an axis superimposed on the Avenue of the Heroes along which the sculptural ensemble is aligned. The axis as defined by the State Party is conceptual, and has no physical area. According to the State Party, the ensemble's components (including the conceptual axis) are the result of a unitary concept, and no part of the ensemble can be separated from the rest without the ensemble's significance being altered: as a philosophical message and artistic design, the whole cannot be understood except in its entirety. The State Party therefore contends that the conceptual axis is part of the nominated property, which consequently cannot be considered a serial nomination.

There is no discussion of alternative boundaries that would physically include the Avenue of the Heroes or the Saint Apostles Peter and Paul Church, which is located on the same axis and is likewise conceptually and physically part of the same overall memorial scheme – even if not designed by Brâncuși. Both the avenue and the church are within the proposed buffer zone. ICOMOS observes that properties are required to demonstrate Outstanding Universal Value through their physical attributes.

The nomination does not include an explicit rationale or explanation for the chosen 59.13-ha buffer zone boundary, nor does it explain how this boundary relates to the protection, conservation, and management of the features and attributes that sustain the potential Outstanding Universal Value of the nominated property. The boundary appears to have been drawn on the basis of current property ownership, which may or may not be adequate as an added layer of protection for the potential Outstanding Universal Value of the nominated property.

ICOMOS considers that the boundaries of the nominated property and of its buffer zone have not been adequately explained or justified.

Ownership

The nominated property is owned by the municipality of Târgu Jiu.

Protection

The Monumental Ensemble of Târgu Jiu (which first came under the protection of the Romanian State in 1955 when the works of Brâncuși were listed as “monuments of sculptural art”) and its buffer zone are afforded the highest degree of legal protection at the regional and national levels, in conformity with the List of Historical Monuments published in Official Journal No. 670bis/2010. Legal protection is assured by Law No. 422/2001 for the protection of historical monuments and Law No. 564/2001 concerning measures for protecting historical monuments inscribed on the World Heritage List.

ICOMOS considers that the legal protection in place is adequate.

Conservation

The nominated property has been documented and described as part of the restorations undertaken in 2000-2004 and as part of the nomination process. Its present state of conservation is good, and the components are subject to regular and appropriate maintenance by persons with the appropriate level of skill and expertise – though this work relies upon experts from outside Târgu Jiu. No urgent measures are known to exist. The north pillar on the west side of *Gate of the Kiss* has a crack that is being monitored.

ICOMOS considers that the state of conservation of the property is good, and that the conservation measures adopted are effective. ICOMOS also considers that a programme to improve local capacities in the fields of maintenance, architectural conservation, and urban control would be highly advantageous.

Management

Management structures and processes, including traditional management processes

Management of the monumental ensemble is currently conducted by a team led by the mayor and deputy mayor and including representatives of the Constantin Brâncuși Municipal Cultural Centre, Investment Services, Urbanism Services, and Municipal Management Services.

The State Party advises that inscription of the nominated property on the World Heritage List would trigger implementation of an overall management framework – the Management Programme for UNESCO Monuments – for all components, in accordance with Government Decision 1268 of 2010 (as amended by Decision 1102 of 2011), Program for the Protection and Management of Historic Monuments on the UNESCO World Heritage List. This Government Decision also requires the county council to appoint a coordinator for each monument inscribed on the World Heritage List.

The proposed management system will likewise be made operational three months after the property is inscribed on the World Heritage List. This system will include a UNESCO Organization Committee comprised of

representatives from the municipal, county, and national levels, which will assume an executive role in coordinating the protection and enhancement of the monuments. It also will include a Management Plan Implementation Unit to manage the investment projects included in the management plan and to monitor their implementation.

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

A protection and management plan for the sculptural ensemble was approved in 2014 by the Târgu Jiu Local Council under Decision No. 3/01.10.2014. The plan describes the property and its value, integrity, and authenticity, and outlines key management issues and objectives related to management, protection, development, promotion, and tourism. An action plan is included to guide the implementation of conservation and enhancement projects.

In the course of developing and updating urban planning documents, a new plan for the Calea Eroilor Monumental Ensemble urban planning zone (PUZ) was drafted in 2013 and is currently in the process of being approved. It delimits the monumental ensemble and its buffer zone, establishes regulations for urban interventions, and proposes solutions for the re-instatement of the historic prospect where it has been altered, as well as the potential for an underground tourist facility in Park of the Endless Column. Public and private investment in the protection zone is achieved by applying Local Development Regulations. Maintenance, conservation, restoration, enhancement, and use of the two parks in which the monuments are located are also regulated.

The General Inspectorate for Emergency Situations carries out risk management for earthquakes and floods, the risks from which, the State Party notes, are minor. Risks of vandalism are managed by the local police. An integrated county program for air quality management is in the implementation phase.

Permanent funding provided through local, central, and European sources will be used for the protection, enhancement, and promotion of the nominated property and to monitor its state of conservation. Restoration, conservation, and enhancement take place in collaboration with specialists from the Ministry of Culture, which also contributes financially to support this work.

Involvement of the local communities

The State Party indicates that development of the management plan was participatory, involving all the major players. The Constantin Brâncuși Municipal Cultural Centre has undertaken an extensive media campaign for inscription of the Târgu Jiu ensemble. Concerning visitor management, local authorities are in the process of developing a plan to promote cultural tourism in the medium term (2014-2020). Two associations were created in 2014 to develop and implement programs promoting sustainable cultural tourism. ICOMOS considers that any

tourism plan should explicitly have as its first objective the protection, conservation, and management of potential Outstanding Universal Value.

In conclusion, ICOMOS considers that the management system for the property is adequate. Furthermore, ICOMOS recommends that any tourism plan commit above all to protect, conserve, and manage potential Outstanding Universal Value.

6 Monitoring

For ongoing monitoring, the State Party advises that a conservator of historical monuments will be called upon to visit the monumental ensemble each spring and fall, and that a relevant specialist (structural engineer, geologist, biologist, etc.) will be summoned if changes are observed in the state of conservation. The obligations and responsibilities for long-term monitoring, as established by the National Institute for Research and Development in Buildings, are currently managed by the Constantin Brâncuși Municipal Cultural Centre. Future responsibility is unclear in the nomination dossier.

The nomination dossier includes eight key indicators, as well as their periodicity. One indicator relates to security and the remainder relate to potential harms to the physical condition of the ensemble (atmospheric acidity, biological attacks, etc.). ICOMOS considers that these key indicators, which focus almost exclusively on the physical condition of the sculptures, are not fully representative of all the important aspects of the nominated property and do not relate as closely as is desirable to all the attributes that convey potential Outstanding Universal Value. None of the key indicators express a benchmark indicating a desired state of conservation.

Concerning the results of previous reporting exercises on the state of conservation of the nominated property, the State Party has indicated that this section of the nomination dossier is not applicable. ICOMOS considers that such reports are vital tools in support of a property's ongoing protection, conservation, and management.

ICOMOS considers that the future responsibility for long-term monitoring needs to be clarified, and that the proposed key indicators should relate more closely to the full range of attributes that convey potential Outstanding Universal Value.

7 Conclusions

The Monumental Ensemble of Târgu Jiu has been well researched and is adequately protected and managed. The nominated serial property includes one of the notable works of monumental public sculpture of the 20th century, the *Endless Column*. However, the stone sculptural installations in Constantin Brâncuși Park are much less widely renowned, both as works of

monumental sculpture and as memorials. Moreover, the interchange and diffusion of the values and concepts expressed in the ensemble are not fully and causally linked to subsequent works. A logical and scientific basis for the selection of the nominated area has not been demonstrated, nor has the chosen buffer zone boundary been supported by an explicit rationale or explanation of how it relates to the protection, conservation, and management of the nominated property. The monitoring system also needs to be strengthened and provided with a wider scope that addresses the memorial purpose of the ensemble, not just limited to material conservation issues.

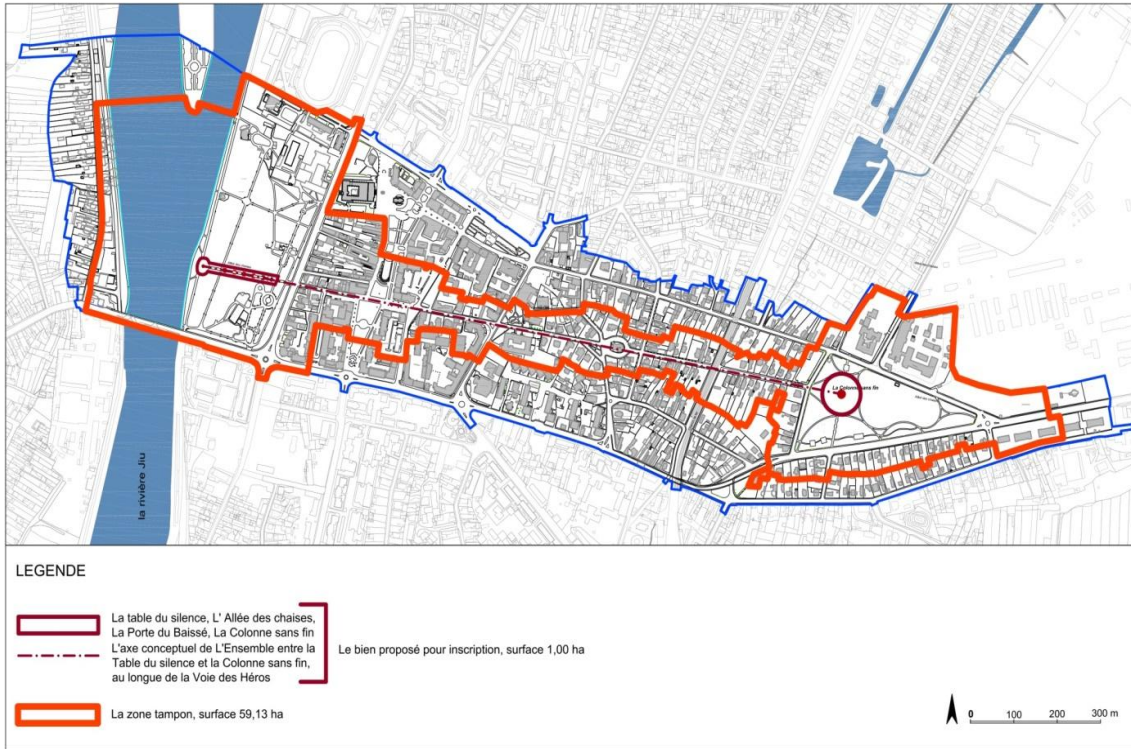
The conditions of authenticity of the nominated serial property related to its memorial function have not been demonstrated, and despite the State Party expressing the importance of preserving the integrity of the monumental ensemble's conceptual axis, the conditions of integrity of this intangible component have not been assessed. Elements relevant to the memorial purpose have been left outside the nominated area, and contextual changes have been made. The conditions of authenticity and integrity for the whole series as a memorial have thus not been met.

A nomination could possibly be justified if focused on the *Endless Column* only, as a work of monumental sculpture. In such case, the boundaries of the nominated area and buffer zone would need to be revised accordingly, and the name of the nominated property changed.

8 Recommendations

Recommendations with respect to inscription

ICOMOS recommends that The Monumental Ensemble of Târgu Jiu, Romania, should **not be inscribed** on the World Heritage List.



Map showing the boundaries of the nominated property



The Endless Column



View of the conceptual axis, "the Alley of the Chairs" and the "Gate of the Kiss"



The Alley of the Chairs



Aerial view of the conceptual axis with "Table of Silence"

La Rioja and Rioja Alavesa Wine and Vineyard Cultural Landscape (Spain)

No 1482

Official name as proposed by the State Party

La Rioja and Rioja Alavesa wine and vineyard cultural landscape

Location

Autonomous Community of La Rioja
Basque Country

Brief description

The nominated property comprises the vineyard landscape of La Rioja and Rioja Alavesa DOCa appellation wine region. It extends along the plains along the banks of the upper and middle Ebro River and on the slopes of the Cantabrian and Iberian Mountain Ranges. The vine and wine culture has left its imprint on the landscape and on the structure of human settlements down the centuries and has shaped the identity of the local communities. Viticulture is still vibrantly practiced in the region and has been able to evolve so as to continue to represent an important social and economic factor within the region.

Category of property

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

In terms of the *Operational Guidelines for the Implementation of the World Heritage Convention* (July 2013) paragraph 47, it is a *cultural landscape*.

1 Basic data

Included in the Tentative List

29 January 2013

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 Committee on Cultural Landscapes and several independent experts.

Comments about the evaluation of this property were received from IUCN in December 2014. ICOMOS carefully examined this information to arrive at its final decision and its March 2015 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 14 to 17 October 2014.

Additional information received by ICOMOS

ICOMOS sent a letter to the State Party on 6 October 2014 requesting additional information on the following aspects:

- the rationale of the buffer zone and a more precise description of its shape;
- the augmented description of the property and of its peculiarities and historic development;
- expansion of the comparative analysis;
- additional cartographic documentation illustrating protected areas and properties within the nominated area and the buffer zone;
- the management structure and its resources.

The State Party responded on 7 November 2014 and the additional information provided has been incorporated into the relevant sections of this report.

Although not requested by ICOMOS, on 26 December 2014, the State Party sent a second letter containing some further additional information on the historic, artistic and archaeological heritage as well as on archival sources of the nominated area and the proposal to modify the size and delimitation of both the nominated property and the buffer zone. The specific content is dealt with in the relevant sections of this report.

Date of ICOMOS approval of this report

12 March 2015

2 The property

Description

The nominated property (in the initial proposal 58,927ha, 603sqkm in the latest communication by the State Party of 26 December 2014) is located in northern Spain, south of the Cantabrian Mountain Range along the Ebro River. Its territory falls in the Rioja Autonomous Community and the Basque Country and would cover the area with a denser presence of heritage features and longer historical development of the sub-zones Rioja Alavesa and Rioja Alta of Rioja DOC appellation (the area of the qualified appellation of origin- DOCa, including Rioja Baja, covers ~63.000ha and extends also into the Navarra Autonomous Community). The selected area includes the most representative parts of the entire DO wine region,

exhibiting traces of an uninterrupted evolution since the Middle Ages, and possibly the Roman era.

For its position and geomorphology, La Rioja benefits from the Atlantic and Mediterranean climatic influences: the mountains have a moderating effect on the climate and also protect the vineyards from the fierce winds which are typical of northern Spain.

The Iberian mountain range, with altitudes ranging between 1,000 and 2,000m, extends parallel to the south of the river for ~40-60 km. Tectonic activity has created a sequence of parallel corrugations forming short valleys and torrential streams which empty into the Ebro River.

The whole region contains higher peaks although it mostly occupies a plateau at ~460m above sea level. Vineyards are concentrated in the foothills and on the slopes of the first hills rising above the fluvial plains, where the land is used for cereals, sugar beet and potatoes but also for olive and almond trees. The plains feature peculiar formations named *cerros testigo* (inselberg) that create sudden variations with steeper slopes and allow for landscape diversity.

The soil types include chalk clay, ferrous clay and alluvial soils. In the Rioja Alavesa marl prevails while in the lower hills and in the close river plains it is mainly alluvial.

The vineyard areas of Rioja Alavesa and Rioja Alta are located closer to the mountains, at slightly higher elevations, and exhibit a cooler climate compared to La Rioja Baja, which extends into the drier and warmer plains. Climatic differences also influence the characteristics of the wines produced in each sub-area.

The vineyard landscape of the nominated areas is varied: wide slopes with extensive vineyards along the banks of the river alternate with areas with smaller irregular parcels interrupted by *ribazos* (or uncultivated fringes), now under threat due to mechanisation; rocky outcrops rising from the slopes dramatize the landscape; while the Ebro River represents the unifying element of the region; villages are mainly located on top of the highest hills or by the river.

The grape varieties cultivated in the Rioja DOC region include Tempranillo, Garnacha, Mazuelo, Graciano (black berries) and Viura, Malvasia, Garnacha blanca (white berries). In 2008 rediscovered indigenous and non-native varieties were authorised within the DOC region. Grape varieties, however, do not have a specific geographic association within areas of the DOC region, or with wine making. In the past, in fact, different types of grapes were cultivated in mixed plots. However, planting and farming of vines has evolved and several changes have been introduced.

The long-standing tradition of wine making in the region is attested to by several rock-hewn wine presses. The first ones were found in a relatively delimited area on the left bank of the Ebro River (Zabala – San Vicente de la

Sonsierra, Santa Ana in Ábalos, Montebuena and Santurnia in Labastida), but recently they have also been detected on the Ebro's right bank (Baltracones, Tricio, Briones, Briñas, Haro, San Asensio, Arnedillo). They consist of round, elliptical or square vats hewn into the rocks with a sloping bottom to direct the must towards a larger rock cut receptacle from where the wine was collected. Studies on toponyms and the fact that the presses are often found in clusters suggest that they were once located near settlements which have now disappeared. Research is still in its infancy but it is suggested that rock-hewn presses could date back to as early as the 14th century AD.

The nominated property encompasses several examples of wineries, from the most traditional, like the *calados* - traditional cellars excavated in the rock - to the most audacious examples of contemporary architecture, several of which have been built in the region and within the nominated property. The traditional *calados* types encompass both cellars with the entrance at the same level, in which the slope was exploited to obtain an underground space with a direct access to the outdoors (barrios de las bodegas in Quel), and cellars excavated at a lower level than the entrance: in this case the cellar could be dug in the rock to create tunnels below ground.

In general, cellars and wineries were built in clusters and, in villages, they often formed an independent underground network from the above ground buildings. The oldest cellar documented to date is located in the district of Tudelilla. To ensure ventilation, vents, named *tuferas*, from the material used to build them, were constructed: they were either integrated into the walls of above-ground buildings or built as independent structures.

The 19th century brought major changes also to wineries with the importation of French methods from the Bordeaux region, introduced by local authorities and further stimulated by owners of large estates who could invest in modernisation. A new type of winery spread, associated with the new wine-making method, located close to the vineyards. With the end of the 20th century and the beginning of the 21st century, new architectural trends entered the region and, as part of a conscious promotion programme, stylish wineries started to be constructed by 'star' architects such as Gerhy, Calatrava, Hadid, and others.

Shelters, or *guardaviñas*, dot the vineyard landscape. They were used to store tools, to take rest breaks in, but also to make sure that the grapes were not stolen, as their name suggests. The use of guards in vineyards is documented already in the 11th century AD and this practice has continued until very recently. *Guardaviñas* exhibit different morphologies and building techniques: the most interesting is represented by the dome-shaped vine-huts (in the area of San Vicente).

Castles and watchtowers bear witness to the restless history of the region. Traces and ruins of these defensive structures have been documented along the Ebro Valley

as well as in the smaller valleys of its tributaries: they date back to Roman times, to the Arab occupation (watchtowers – *atalayas*) as well as to later periods.

Several bridges were built in the area to cross rivers or overcome irregularities of the terrain (e.g., ravines, gullies, etc.): the monumental bridge of Mantible and the viaduct at Alcanadre deserve mention.

Ancient roads and routes cross the region, as the Ebro Valley has always been a major corridor: the river itself was used as a means of transportation, roads were built by the Romans and later, the Camino de Santiago also passed through the region and, in connection with these major communication routes, a network of secondary roads and tracks developed.

The buffer zone (124,374ha as indicated in the nomination dossier, 554sqkm as mentioned in the letter of 26 December 2014 sent by the State Party as additional information) encompasses an area with similar characteristics to the nominated property, covering the extant parts of La Rioja and Rioja Alavesa as well as part of Rioja Baja DOC-zone.

History and development

The territory was home to Celtiberians, pre-Roman tribes of the Berones, the Autrigones and the Vascones, when the Romans colonised the region which became part of Hispania Tarraconensis. Vine cultivation and wine making in La Rioja started presumably with the Roman occupation and spread between the 1st and 4th centuries AD. In the 8th century AD the area was conquered by the Arabs, and remained in their hands until the 9th-10th centuries.

The earliest written evidence of the existence of the grape in La Rioja dates to 873 AD, in the form of a document from the Public Notary of San Millán regarding a donation to the San Andrés de Trepeana Monastery. As was the case all over Europe, religious orders reintroduced and practiced winemaking in La Rioja in early medieval times.

In the year 1063, the first testimony of viticulture in La Rioja appears in the "*Carta de población de Longares*" (Letter to the Settlers of Longares) and in 1102 the King of Navarra and Aragon granted the first legal recognition to the Rioja wine. The town and villages were granted a certain level of independence and local regulations were consolidated in *Fueros*, which attested rights and privileges and on the basis of which further rules concerning viticulture and wine making were elaborated.

Between the 16th and 18th centuries wine production spread and additional regulations were issued: in 1560, harvesters from Longares chose a symbol to represent the quality of the wines; in 1635, the mayor of Logroño prohibited carts in the streets near wine cellars, in case the vibrations caused a deterioration of the quality of the wine; in 1650, the first document to protect the quality of Rioja wines was issued; in 1790, the *Real Sociedad Económica de Cosecheros de La Rioja* (Royal Economic

Society of Rioja Winegrowers) was established to promote the cultivation and commercialisation of Rioja wines.

In the early 19th century the Bordeaux wine-making process was introduced in the region, which spread also thanks to the contribution by fleeing wine-traders and winemakers from France. In 1852 the first fine wine from the Duque de la Victoria area was produced with this method; in 1892, the Viticulture and Enology Station of Haro was founded, tasked with quality-control.

In 1902, a Royal Decree defining the *origin* of Rioja wines was issued, while the *Consejo Regulador* (Regulating Council) was created in 1926 with the objective of limiting the zones of production, expanding the warranty of the wine and controlling the use of the name "Rioja". In 1970 the Regulations for Denominación de origen were approved as well as Regulations for the Regulating Council. In 1991, the "*Calificada*" (Qualified) recognition was awarded to La Rioja.

In this process of valorisation of the wine and of its region, the vine cultivation area within the DOC region increased by 60% of the total area between 1985 and 2011.

3 Justification for inscription, integrity and authenticity

Comparative analysis

The comparative analysis presents an inventory of the most relevant wine regions in Europe and the other continents, listing some 48 wine areas in Europe and 49 from the rest of the world, and offering a wide picture of world viticultural regions. It then restricts the scope to Europe.

Relevant examples have then been selected on the basis of three factors: significance focussing on the prevalence of vine-growing/wine-making, climatic conditions, and length of the historical development of vine-growing.

With regard to the first factor, the nomination dossier identifies 9 properties where wine-making is a key element of the value, and 5 properties where this activity does not represent the main aspect of their significance.

The analysis has then excluded examples which, for the morphology of the land, exhibit a structure that would not be comparable with the nominated property, namely vineyards in the mountains, or vineyards on steep slopes or terraces, and has kept only those on low hills or plains.

The climatic factor has been used mainly to classify and select the relevant Spanish examples: 5 wine regions receive Atlantic influences, while 11 regions present a Mediterranean climate; only the nominated property enjoys a combined Atlantic and Mediterranean influence.

With regard to continuity of vine cultivation, the nomination dossier recognises that this is common to several vineyards, at least in Europe; however, what differentiates the nominated area from other regions is the coexistence of tradition and modernity, the integration into traditional techniques of modern wine making systems.

Another difference marking out the nominated property compared to others is that the production system was not laid down by a centralised power but by the organisation at local level of the *petit bourgeoisie* and of small producers.

The comparison with the selected sites is summarised in tables in which 18 criteria are indicated. Only the 5 World Heritage Properties having vine/wine growing as the core element for their significance have been included; for the 5 others whose core value would not be vine/wine growing, a qualitative comment has been provided.

Four out of the five selected World Heritage properties have also been discussed in qualitative terms and only the Tokaj region has been found to exhibit some similarities in terms of land use in vine-growing. Four further properties included in the Tentative lists have been examined but the nominated property is different in relation to vine-growing and wine-making, as well as climatic, landscape and soil parameters.

ICOMOS requested clarification on the rationale adopted to compare the nominated property with other relevant examples. The State Party responded on 7 November 2014, providing an additional explanation of the comparative methodology as well as an expanded analysis.

ICOMOS considers that the additional information clarifies how the analysis has been conducted and how many, out of the several vineyard landscapes mentioned throughout the analysis, have been used for comparison.

ICOMOS concurs with the European scope of the comparison and observes that, while most of the reflections on the analysis clarify the peculiarities for the selected examples, the specific characteristics of the nominated property do not emerge in a clear manner. Most of the aspects that are said to be specific to this region, such as soil, climate or orography, are also relevant features marking other wine areas. The combination of different climatic conditions is not peculiar only to this region, as, in fact, vine-growing and especially grape ripening need a specific range of temperatures, and this is caused by a combination of climatic influences (e.g., in Burgundy, three different climatic components contribute to form the Burgundy climate) and geomorphological conditions.

ICOMOS, however, notes that the analysis has not considered some relevant properties within the national context, e.g., the regions of Jerez-Xérès and Manzanilla-Sanlúcar de Barrameda, which should have been added

to the comparison. Besides this, the analysis has not detailed the specificities of the nominated property in respect to others already inscribed on the World Heritage List, e.g., the World Heritage property "Vineyard Landscape of Piedmont: Langhe-Roero and Monferrato" (Italy, 2014, (iii) and (v)), with which La Rioja shares similarities in terms of landscape features, as well as the territorial and settlement pattern (e.g., the underground system of cellars).

ICOMOS considers that the factors mentioned in the conclusions of the analysis to justify the specificity of this vineyard landscape, namely sense of identity, physiographic and climatic conditions, the development model (bottom-up versus top-down), the ability to pursue change as a challenge for improvement, are aspects that are shared, in different ways, by other vineyard territories and landscapes.

ICOMOS also considers that the historical divisions have not been considered as a benchmark for comparison, among the 18 indicated in the tables of the nomination dossier and synthesised in the additional information, and therefore cannot be introduced as discriminating element at the summary stage but should have been investigated also for other examples throughout the comparison.

In summary, ICOMOS considers that the comparative analysis carried out by the State Party has not succeeded in demonstrating which are the specificities of La Rioja that would distinguish it from other similar properties inscribed, or not, on the World Heritage List.

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

Justification of Outstanding Universal Value

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

- Marked by specific natural factors such as orography and climate, it is an outstanding example of the adaptation of the population to the environment depicting the modifications impressed and occurred to the territory by human activities to develop vine-growing and wine making;
- This fertile region has been inhabited for many centuries, the two-millennia long vine-growing tradition has matured into an outstanding element of identity and social cohesion for the inhabitants;
- It has generated a development model for viticulture which is peculiar to this region, where the farming and wine making systems have been adapted to the diversity of the territory, marking the continual adaptation and wine-making related architecture up to the present-day;

- The constant evolution and experimentation of its winemaking techniques, nurtured by the strong identity of the local communities;
- The adaptation of the vineyards and vine plots to the topography, in small plots or larger areas;
- The landscape features and the historical heritage that still survive in the area contribute to the understanding of the evolution of this of this vineyard landscape.

In its letter sent on 6 October 2014, ICOMOS asked the State Party for additional information on the description of the features, peculiarities of the nominated property and to associate them to their attributes.

In its response, the State Party provided an augmented illustration of the key aspects of the property, among which those considered relevant are the cultural blending throughout history (early consumption without production in the pre-Roman epoch; Roman domination with the introduction of vine-growing and wine-making techniques; Arab domination and new farming techniques; the role of the Benedictine monasteries; the effect of the Camino de Santiago; the introduction of Bordeaux wine-making and its adaptation to the region; the internationalisation of Rioja wines; the 20th-21st centuries evolution of wine-making and wineries; the bottom-up regulations concerning wine-making; the focus on external markets; the recent recovery of autochthonous species.

The additional information provided by the State Party upon ICOMOS' request underlines the presence within the property of different types of vineyards, a fact which diversifies the landscape structure. This is reflected also by the variety of grape types and attests to the evolution of wine-making over several centuries and under different conditions.

Legal privileges (*fueros*) gave to municipalities a certain autonomy which helped the development of self-regulation and the issuing of ordinances (*ordenanzas*) concerning also wine-making. Associations of producers began since the 18th century to defend their interests, and in 1926 the Rioja Designation of Origin was issued. The nominated property is a singular landscape model not replicated elsewhere.

ICOMOS considers that the above justification illustrates traits of the nominated property that are also common to many other evolving cultural landscapes based on viticulture and wine-making, especially in Europe: almost the same periodisation can be traced throughout European vineyards, with the exception of the Arab occupation which is, however, a common element within the Iberian Peninsula. In fact, the expanded justification submitted by the State Party does not clarify how the nominated property could add to the representation of values, features and cultural phenomena illustrated by the vineyard landscapes already inscribed on the World Heritage List.

On the other hand, the aspect concerning the early autonomous regulatory activity has not been sufficiently

detailed on the foundation of in-depth historical analyses and has not been linked to the relevant attributes conveying the values of the nominated property. Also, the underground cellar quarters have only been mentioned among other landscape features.

In summary, ICOMOS considers that the nomination dossier and the provided additional information have not demonstrated how and through which attributes the nominated property would illustrate outstanding and specific aspects of the vineyard landscapes and of the associated activity that may enrich and expand the representation of this theme and type of cultural property on the World Heritage List, in accordance with the objectives of the Global Strategy for a Representative, Balanced and Credible World Heritage List.

Integrity and authenticity

Integrity

The nomination dossier holds that the nominated property represents a geographical unit, uniform in term of climate and coherently dedicated to vine-growing/wine making, encompassing all the attributes that are necessary to convey its values and to understand its formation process and its culture. The region has a manageable size while at the same time illustrating the complexity of this landscape. The nominated property is in a good state of preservation and illustrates well the coexistence of past, present and future. The social integrity is granted as the traditional profile of small owners has been maintained: 87% of the wine estates are smaller than 1ha and there are around 16,000 farmers dedicated to vine-growing. Protection and management measures are said to be well established and sufficient to grant the adequate state of conservation of the property.

ICOMOS observes that the determination of the nominated property has been based mainly on the DOC appellation delimitation, although not covering all of it: the rationale for delimiting the property is not clear, nor has it been adequately clarified in the additional information despite the explanation provided (see boundaries section).

Additionally, it is not clear whether the nominated property or the buffer zone includes, or not, the territory of the recent extension of the Rioja DOC appellation designation.

With regard to the viticultural landscape's characterising features, ICOMOS also notes that the traditional *ribazos* have been disappearing due to the modification of farming methods and the tendency to expand as much as possible the cultivated plots, thus modifying the traditional aspect of the landscape, reducing the biodiversity and losing the positive contribution of these micro-environments also to the wine-making process (e.g., the loss of yeasts).

ICOMOS considers that, at the moment, it is not clear to what extent the nominated property "*includes all elements necessary to express its Outstanding Universal Value; is*

of adequate size to ensure the complete representation of the features and processes which convey the property's significance", as required by paragraph 88 of the *Operational Guidelines*, therefore further reflection on the integrity of the nominated area in relation to a clearer measurement and justification of the proposed Outstanding Universal Value is necessary to meet the conditions of integrity.

Authenticity

According to the nomination dossier, the specificity of the property lies in its strong physiographic characteristics and in vine-growing and wine-making activities which have marked the region and particularly the nominated property, with its different vineyard types. Since the 18th century wine-making has become the major activity in the area and the organisation of villages, wineries and cellars bear witness to this phenomenon. The built heritage associated with the vineyards attests to its relationship to the place through its materials, techniques and use of the specific relief conditions. The territorial structure still bears witness through its features (castles, fortresses, bridges, villages...) to the history of the place and particularly to the 17th-18th centuries. Also, archival documentation bears witness to the long history of wine-making in the area and to the rules and ordinances that were issued to regulate the sector.

In the additional information provided, the State Party has included copies of some of the archival sources of information used to support the claims for the conditions of authenticity.

While ICOMOS observes that these documents represent important testimonies to the history of vine-growing and wine-making, ICOMOS also considers that the arguments presented to illustrate the authenticity of the nominated property relate to a proposed justification of Outstanding Universal Value which is grounded in arguments that do not demonstrate how the property stands out in respect to many other properties already inscribed, or not, on the World Heritage List.

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

Criteria under which inscription is proposed

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

Criterion (ii): exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design;

This criterion is justified by the State Party on the grounds that the property represents the result of the passage and influences of different cultures and civilisations through the natural corridor of the Ebro Valley: vine growing and

winemaking began in the Roman era, and the Arab conquest introduced new farming and irrigation techniques; commercial relationships shifted the production from rosé wines to red wines. In the 19th century, due to political and environmental conditions - namely the presence of France in the region, the early spread of phylloxera, and the move to the region of several French traders and wine makers - made possible the introduction of Bordeaux wine-making methods and the modernisation of the related infrastructure.

ICOMOS considers that the arguments put forward to justify this criterion illustrate exchanges that have occurred in similar ways in several other vineyard cultural landscapes in Spain and throughout Europe (with the exception of the Arab conquest which is peculiar to Spain), therefore they do not support the claims of exceptionality for the nominated property with regard to this criterion.

ICOMOS considers that this criterion has not been justified.

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

This criterion is justified by the State Party on the grounds that La Rioja and Rioja Alavesa vineyard landscape bears witness to a wine-making tradition. Differently from other regions where adherence to tradition has been the key reference, the nominated property shows an ability to accommodate change and to pursue innovation, as is today demonstrated by the vibrant oenological activity and by the new wineries conceived by famous contemporary architects to interpret the attitude of a new generation of wine-makers.

ICOMOS considers that any successful wine region has consciously dealt with tradition, changes - not always sought - and innovation, at least because in Europe the spread of phylloxera between the 19th and the 20th centuries obliged vine-growers to face this 'cataclysm' and adapt to completely different farming and wine-making methods. The diversification of the vineyards also cannot be considered peculiar to this region, because it could be found in many regions as a site-based way of adapting to specific local topography. The styles of contemporary wineries which have recently been built within the nominated property do not always fit well into the landscape and definitely do not in the towns and villages; additionally, this combination of wine fashion with architectural fashion is not specific to this region but is a rather widespread phenomenon as a marketing strategy.

ICOMOS considers that the arguments used to justify this criterion appear too generic and are applicable to many vineyard landscapes; some structures that are suggested as attributes illustrating the justification for this criterion do not provide an added value to the

landscape; on the contrary, they may detract from its character (e.g., the contemporary wineries).

ICOMOS considers that this criterion has not been justified.

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

This criterion is justified by the State Party on the grounds that the nominated property represents an exceptional model of a landscape structured by wine culture, despite the presence of historical frontiers and territorial divisions. It constitutes a prototype of agricultural landscape where vine-growing and wine-making have acted as elements of social cohesion. The nominated property exhibits a 2000 year history of vine/wine culture which has progressively become the dominant trait. The autonomy conceded to municipalities through specific privileges (*fueros*) has led to the elaboration of local regulations for wine-making concerning salaries and commercial aspects since the Middle Ages, and to the self-organisation of vine growers. From the 18th century onwards the organisation of vine growers has regulated their own activity in order to improve the sector.

ICOMOS considers that the arguments proposed to justify this criterion are very general and could be for the most applied to several vineyard landscapes inscribed, or not, on the World Heritage List. The early regulatory aspect has not been adequately examined, described and contextualised with reference to the impacts they had on production and directly or indirectly on the nominated property and its attributes, in order to provide sufficient arguments that could justify this criterion at this stage.

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

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

This criterion is justified by the State Party on the grounds that the nominated property is a vibrant world revolving around wine production: more than 15,000 vine-growers and 600 wineries exist in the area and continue to be occupied in the sector. Down the centuries, the vocation of the region to vine-farming and wine-making has developed into a specific wine culture.

ICOMOS considers that the arguments put forward to justify this criterion are very general and common to almost all other centuries-old vineyard areas. Vine/wine culture is indeed a very important and characterising trait

of many human societies and civilisations; however, it is not demonstrated here how exceptionally this link manifests itself as it is not specifically related to any particular expression that would support the claims for this criterion.

ICOMOS considers that this criterion has not been justified.

In conclusion, ICOMOS does not consider that the criteria have been justified at this stage.

4 Factors affecting the property

The nomination dossier recognises that due to its large extent and the inclusion of urban centres, the nominated property may be prone to urban development pressures.

Also, the vineyard landscape may experience changes because of the development of farming techniques: e.g., the planting model changed in past centuries from blanket, triangular or square to goblet in the 19th century; and today further changes have been brought in with the introduction of trellises. The widening of plot size due to mechanisation, on the other hand, appears less probable due to the ownership fragmentation. Abandonment of traditional cellars is also a factor threatening the values of the property.

According to the nomination dossier new infrastructures may also threaten the visual integrity of the property, although these are seen as necessary to ensure the quality of life of the population. The need for new infrastructure is, on the other hand, said to be unpredictable, as they depend on technological advancements.

Urban development is also seen as a risk factor, due to the recent expansion of built-up areas which have had negative impacts on the landscape.

Environmental threat factors are said to be restricted to climate change. Flood is not seen as a major threat as works to the river banks in recent years have decreased the risks, the latest events dating back to 2003 and 2007.

ICOMOS considers that the threats identified by the State Party are the most relevant ones and some of them should be tackled with urgency, particularly energy infrastructure (wind farms, the recently closed nuclear plant of Santa Maria de Garoña, and concessions for extraction of hydrocarbons), communication and production facilities. In this regard, ICOMOS believes that planning large-scale infrastructure cannot be deemed unpredictable since they need to be carefully planned and verified through the impact assessment procedures.

ICOMOS however also notes that the success of the Rioja wines has pushed agricultural land-use intensification, which may also threaten the landscape and the biological

diversity of the region, which the several protected areas within the nominated property suggest to be rich. In particular, the enlargement of the farming plots and the elimination/reduction of the *ribazos*, which have multiple beneficial functions in the vineyards, are also important threat factors.

IUCN states that: *“Traditionally vines were planted in mixed plots, with the majority of plots being less than 1ha, however, it seems that plantations of more than 5ha have risen in recent years. It appears that the ribajos and the traditional plantation layout in small mixed plots could be threatened by this trend of increasing size of the cultivation plots, and increasing mechanisation, which could in turn impact the existing biodiversity values of the nominated property.”*

Also, large leisure facilities such as golf courses, represent a latent threat to the nominated property and to its agricultural vocation, despite the fact that some proposals have already been stopped by the competent administrations.

Urban development is certainly a further important negative factor affecting both the landscape and the urbanised areas, through inappropriate building forms, design and materials.

Finally, ICOMOS also believes that particular attention should be given to floods due to the recent increase of unpredictable extreme storm events that may, in any case, put under stress the defence system created for the river as well as the system of short, tributary streams.

ICOMOS considers that the main threats to the property are new infrastructures, changes to the landscape mosaic deriving from modifications to farming techniques, and urban development. All three need to be urgently addressed by the State Party and the Regions concerned. Attention should be given to flooding possibilities.

5 Protection, conservation and management

Boundaries of the nominated property and buffer zone

According to the nomination dossier, the nominated property is the most representative of the wine appellation and is limited to the sub-zones Rioja Alta and Rioja Alavesa, whilst part of the Rioja Baja sub-zone is encompassed in the buffer zone.

However, not all the DOC region has been included, and the buffer zone exceeds the delimitation of the DOC appellation, therefore on 6 October 2014, ICOMOS requested additional information from the State Party, who responded explaining that functional criteria, landscape integrity and vineyard density have been considered when drawing the boundaries of the nominated property and of

the buffer zone. In principle, the DOC appellation would coincide with a coherent landscape unit; however the density of heritage features within the DOC appellation region is said to be much higher in the western side of the area; at the same time the fluvial lowland also exhibits a reduced integrity due to infrastructure and industrial development.

ICOMOS notes that the additional explanation provided on 7 November 2014 by the State Party does not clarify how boundaries of both the nominated property and of the buffer zone have been drawn: the additional information mentions the use of an algorithm to define the boundaries, but how this algorithm has been designed is not explained, nor have the functional criteria been detailed.

In this regard, ICOMOS considers that the use of geomatics technology can certainly help in the delineation of the boundaries but cannot be the sole reference, nor can their determination be based only on the result of computer-based calculations but should include an on-site verification to check natural and administrative limits, richness in relevant cultural or landscape features and conditions of integrity and authenticity.

On 26 December 2014, the State Party sent a second letter with further additional information concerning the redefinition of the boundaries and the size of both the nominated property and the buffer zone. The first would now be slightly increased to 603 square km, against the 58,927ha proposed in the nomination dossier, while the buffer zone would be significantly reduced to 554 square km in accordance with a stricter adherence to paragraphs 103 – 107 of the *Operational Guidelines*. The State Party has also provided the new geographical coordinates for the buffer zone, informing that these had already been recorded in the archives of the Governments of La Rioja and of the Basque Autonomous Communities but were subsequently modified on the grounds of a wider scope given to the buffer zone in the nomination process.

In relation to the modified delimitation of the nominated property proposed by the State Party in its letter of 26 December 2014, ICOMOS observes that the State Party has not clarified the reasons why it has proposed this change, nor is it immediately evident, as the slight enlargement does not cover in its totality the Rioja DOC region anyway, nor has it explained which are the qualitative modifications to the boundaries in respect to the ones proposed in the nomination dossier and depicted in the higher definition maps sent along with the additional information on 7 November 2014.

ICOMOS observes that any reconsideration of the boundaries of the nominated property has to be carried out in conjunction with the revision of the justification for inscription and of the selected criteria, and needs to be assessed by an ICOMOS evaluation mission.

With regard to the buffer zone, while ICOMOS notes that its reduction makes it more comprehensible in relation to the provisions of the *Operational Guidelines*, it also notes

that even in the revised buffer zone, the boundaries of the nominated property and of the buffer zone run very close to one another in certain parts: this closeness may prevent the buffer zone providing the nominated property with an adequate added layer of protection, particularly from visual impacts, as requested by paragraph 104 of the *Operational Guidelines*.

Finally, ICOMOS considers that the effectiveness of the buffer zone in protecting the nominated property is of crucial importance in that the buffer zone encompasses Logroño (152,698 inhabitants), the capital city of the Autonomous Community of La Rioja. This implies a high pressure on the nominated property, due to the vibrancy of the city and its vicinity to the nominated property.

In conclusion, ICOMOS considers that it is not clear how and why the boundaries of the nominated property have been modified and considers that any change to the limits of the nominated property need to be carried out in conjunction with the reconsideration of the justification for inscription and of the selected criteria. As for the buffer zone, both the initially proposed and revised versions, ICOMOS notes that in certain stretches its boundaries run very close to the nominated property and this may limit the ability of the buffer zone to provide an added layer of protection to the nominated property, as required by the *Operational Guidelines*, paragraph 104.

Ownership

Most of the nominated property is in private ownership which is very fragmented. The underground cellars are also privately owned and in many cases, this is unknown.

Protection

The nominated property's legal framework is complex as it falls under two distinct autonomous regions – La Rioja and the Basque Country.

For this reason an inter-country working group has been set up to coordinate protective measures which currently, in both La Rioja and Basque countries, imply a number of individual sites being protected under the respective relevant legislation. Additionally, in the Basque Country a resolution was issued on 13 December 2013 to declare the Landscape of Wine Culture and Vineyard of La Rioja Alavesa as a Property of Cultural Interest – BIC - which is the highest protective status under Spanish legislation; in La Rioja Country a similar resolution was passed on 18 October 2013. Once the BIC declaration has been enforced, any intervention within the protected property will have to be authorised by the competent body at the regional level.

ICOMOS requested additional information concerning the extent of the area concerned with this declaration and the time frame for its finalisation. The State Party responded on 7 November 2014 that the nominated property and the buffer zone are covered in their entirety. For the finalisation and entering into force of the declaration, no specific time frame was indicated by the State Party, however it was held to be imminent for La Rioja

autonomous community, while for the Basque country the technical documentation had been completed. The protective measures that accompany the BIC declaration cover the whole range of heritage features included within the nominated property.

Upon ICOMOS' request, the State Party has also provided additional maps illustrating the current state of protection of the nominated property and its buffer zone. These maps clarify that current protective designations according to the law in force both for the protection of cultural and natural heritage do not cover the overall property in that protected areas and sites only include limited areas within the nominated property and the buffer zone.

Several overlapping planning instruments regulate building development in the nominated area, both at the wider territorial and the municipal level. The Territorial Plan for La Guardia (Rioja Alavesa) covers the landscape homogeneous unit of the landscape of La Guardia, listed in the Rioja Alavesa Catalogue of Landscapes for which guidelines are currently being prepared with a view to improving the quality of the landscape.

In summary, at the date that this report has been finalised no overall stable protection is in force for the nominated property in its entirety, the only thing applying at this stage being the preventive safeguard measures, triggered by the BIC (*Bien de interes cultural*) declaration procedure according to the Spanish Historical Heritage Act (1985). No precise information about the timeframe for the finalisation and enforcement of this legal instrument has been provided, although the procedure is held by the State Party to be in an advanced state.

In conclusion, ICOMOS considers that the legal protection in place will be adequate when the declaration of the entire property in both Countries as a *Bien de interes cultural* is finalised and enforced. ICOMOS considers that the protective measures for the items formally protected under the existing legislation are adequate but they do not cover the entirety of the nominated property nor of the buffer zone. The DOC appellation does not contribute directly to ensuring the protection of the values of the nominated property in that it is designed to protect the stability of the quality of the wine.

Conservation

According to the nomination dossier, in recent years an increased awareness towards the rural built heritage has made possible the complete inventory of these features in La Rioja Alavesa, and documented vineyard shelters have also been restored or stabilised. On the other hand, a complete inventory of *calados* and underground cellars is still missing, and their state of conservation is not known. ICOMOS considers that a necessary job will be the complete documentation and mapping of these elements. Those still in use are in a good state of conservation but abandonment processes are already impacting on the maintenance of this type of heritage. Their conservation, however, represents a challenge

both technically and administratively. The 19th century cellars constructed after the introduction of the Bordeaux method are all still in use and well-maintained. Protected architectural heritage is overall in a good state of conservation. An inventory has also been undertaken for the landscape units of the area.

ICOMOS considers that the systematic mapping and inventory of landscape and cultural resources related to the vine-growing and wine-making is essential and urgent in order to develop a comprehensive knowledge and understanding of the nominated property.

In conclusion, ICOMOS considers that the conservation of the attributes related to the vineyard landscape and agricultural activity is crucial and in this regard their systematic documentation should be continued according to a comprehensive programme, so as to develop a comprehensive programme of conservation and valorisation.

Management

Management structures and processes, including traditional management processes

A joint management body has been established with reporting tasks to the departments responsible for protection of cultural heritage assets and landscape.

The articulation of the state constituencies in Spain implies multiple levels with different territorial and competency scopes (e.g., the Autonomous Communities, the territorial administrations and the municipal councils). Therefore coordination among all the different levels of the administration appears fundamental.

To this end, two bodies have been envisaged: the Board of Cultural Landscapes of Wine and Vineyards of La Rioja and Rioja Alavesa and the Panel for the Landscapes of Wine and Vineyards Charter of La Rioja and Rioja Alavesa. The first has coordination, control, protection, management and monitoring tasks. It envisages a collegial presidency and vice-presidency, representatives from both autonomous communities, one from the Control Board of the Qualified Designation of Origin Rioja and four representatives from the Panel of the Charter.

The Panel of the Charter represents a participatory platform for all signatories of the Charter, which is a document of engagement for the protection and promotion of the territory involving administrations, civil society, and local populations. The Panel includes a plenary assembly, a standing committee and selected committees according to the matter to be discussed.

ICOMOS requested additional information concerning the management bodies and the State Party responded on 7 November 2014 that these were being constituted. With regard to the Landscape Board, that is the management body, some steps had been undertaken, i.e. a bilateral protocol between the Presidents of the two autonomous

communities had been set up and exchange activities initiated. The State Party estimated that finalising the Landscape Board will require 3-4 months. Meanwhile an action plan was drafted.

ICOMOS observes that some important steps have been made since the submission of the nomination dossier to achieve an overarching management plan but still much needs to be done, as the constitution of the joint management body will represent a starting point for coordinated management.

The necessary financial resources needed to grant the functioning of the management structure are ensured by the budget of both autonomous communities. With regard to human resources and training, according to the State Party they are adequate to tackle the issues and challenges of the nominated property.

No specific risk management has been mentioned in the nomination dossier. ICOMOS considers that it would be important that this aspect is addressed in the management system/framework/plan.

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

The policy framework for the management of the property relies on the existing institutional framework and on the ad-hoc structure being set up. The nomination dossier describes a management system grounded in existing legal and planning framework and the most relevant document for the protection but also the management of the property in terms of conservation is the BIC declaration being finalised.

On ICOMOS' request, on 7 November 2014, the State Party provided additional information on the updated status of the management plan and of its action plan.

ICOMOS concurs with the State Party that the Action plan is still at its preliminary stage and would require further dialogue among all stakeholders to become more concrete and operational.

Involvement of the local communities

ICOMOS considers that establishing an effective participatory platform during any nomination process is very important.

ICOMOS notes that the awareness raised by the nomination process should be capitalised as it may help to improve the effectiveness of the whole existing system to address the issues of the nominated property, namely, the most important, development pressure and the effects of modernisation.

ICOMOS also observes that the overarching management system comprises several distinct bodies, whose functions and internal organisation is not yet clear, in particular in relation to the operational aspects.

ICOMOS considers that a clarification of internal organisation, staff and human resources is necessary.

However, ICOMOS also observes that this process is at its very beginning and it needs to be supported at the political and institutional levels of the two autonomous communities and by the municipalities in order to attain effectiveness.

In conclusion, ICOMOS considers that the management system for the property will be adequate when the bilateral protocols between La Rioja and the Basque Country are signed and when the Landscape Board is established and made fully operational through an adequate staff. The management system should be extended to include a risk management strategy as well as consideration of the long-term sustainability and functionality of the overall management structure, also in relation to budget. ICOMOS recommends that the joint management structure be assigned a permanent staff so it can perform its envisaged tasks.

6 Monitoring

A GIS system has been developed for the nomination and it will also be used for monitoring purposes. A number of indicators already measured have been selected and would ensure that the state of conservation of the property is monitored.

ICOMOS considers that the approach of the State Party is pragmatic in trying to use monitoring systems already in place. However, to ensure that the monitoring system could be really effective only if property-based, therefore the different systems could be integrated on the ground of specific monitoring objectives. Measurement of selected indicators could reflect the situation only of the nominated property and its buffer zone, to be compared with the wider region. Finally, monitoring indicators for the management system could also be developed, so as to verify periodically its effectiveness.

In conclusion, ICOMOS considers that the monitoring system should be further developed to include specific monitoring objectives and to encompass monitoring indicators to verify the effectiveness of the management system.

7 Conclusions

The nominated property to the World Heritage List corresponds to a geographical and cultural area included within the 'Rioja' qualified Designation of Origin (DOCa).

The nominated property epitomizes the typical European vineyard landscape in terms of landscape structure, historic development and socio-economic evolution.

The geo-morphological and orographic articulation of the region has given rise to different ecosystems and this has been recognised by several designations as natural protected areas. The Ebro River represents the unifying geographical element of this landscape region, which, nevertheless, features a still diversified landscape mosaic. The settlement articulation with hilltop villages, castles and watchtowers, and ancient roads, attests to the border character of the region down the centuries.

The nomination dossier of the cultural landscape of the wine and vineyards of La Rioja and Rioja Alavesa has been conceived to emphasise all the factors that contribute to shape the area as an evolving wine-based region. In so doing, ICOMOS considers that it has focussed on those factors that are commonplace among historic European vineyard landscapes and has failed to highlight the possible outstanding specificities of this vineyard landscape and of its associated features.

The arguments that have been presented in the nomination dossier appear too general and do not characterise the nominated property in respect to other ones inscribed, or not, on the World Heritage List. The additional information provided by the State Party on ICOMOS' request elaborates on the same arguments, and, in relation to the historic development of the property, clearly depicts a pattern of evolution and of historic and environmental factors common to many other European vineyard cultural landscapes. The comparative analysis has not convincingly demonstrated which values of the nominated property stand out in respect to other similar properties.

The delimitation of the nominated area, which covers almost in its entirety the Rioja wine qualified appellation of origin region (DOCa), poses some questions in that it is said to be defined on the basis of the density of heritage features and other factors, but it excludes the DOC portion within the Navarra Autonomous Community, which is barely mentioned within the nomination dossier, without demonstrating how this part does not meet the selective criteria adopted to define the boundaries of the nominated property.

The recent socio-economic revitalisation of the region and the popularity of Rioja wines, particularly overseas, has already brought significant and rapid changes, e.g., the extension of the DOCa region by up to 60% of the original area between 1985 and 2011; the ongoing agricultural intensification of land use in the vineyards, with subsequent elimination of landscape features (e.g., the *ribazos*, the enlargement of cultivated plots); as well as the upgrading and development of new infrastructure for energy production and related to wine-making; urban and tourism-related development, which have caused localised, but expanding, negative impacts that have already impaired the visual integrity of the region.

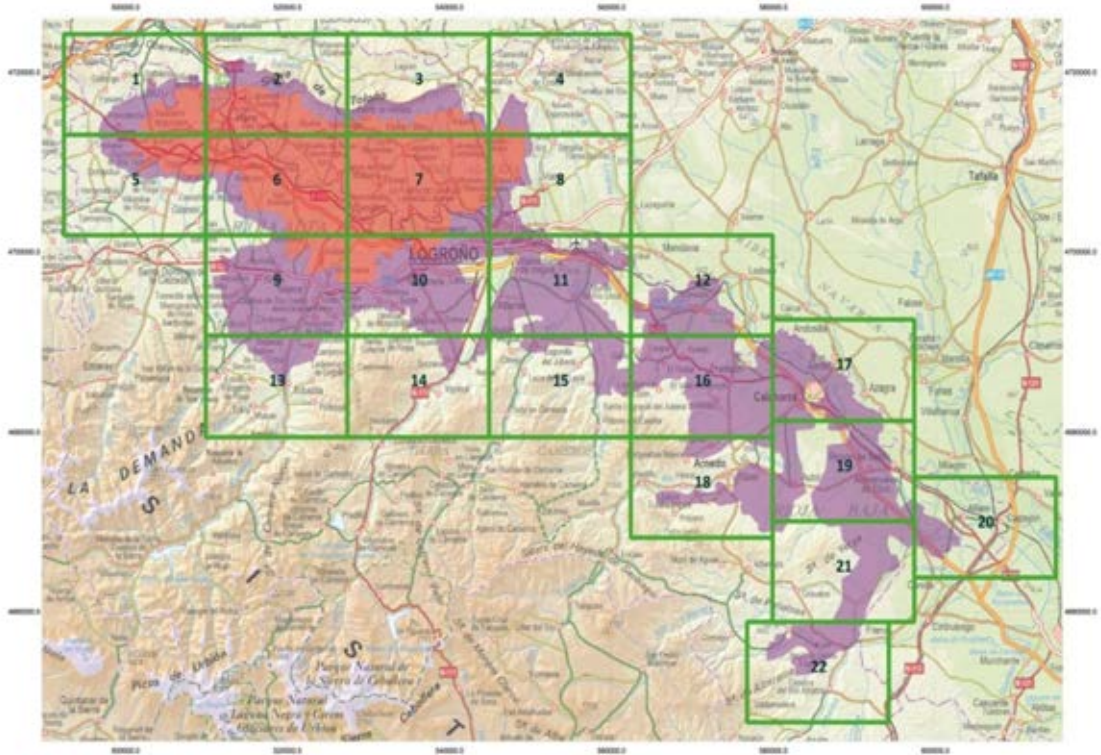
8 Recommendations

Recommendations with respect to inscription

ICOMOS recommends that the examination of the nomination of La Rioja and Rioja Alavesa Wine and Vineyard Cultural Landscape, Spain, 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 to bring into focus the areas of potential significance of the property in relation to its attributes and, if such a study suggests that a robust case could be made to justify the Outstanding Universal Value of the property, then reconsider the scope of the nomination in relation to the specificities of other vineyard cultural landscapes inscribed, or not, on the World Heritage List.

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 property



Vineyard, Rioja Baja



Vintage, Briones



Winepress at Lagares



Guardaviñas, San Martín



Wine cellar, Haro

Diyarbakır Fortress and Hevsel Gardens Cultural Landscape (Turkey) No 1488

Official name as proposed by the State Party

Diyarbakır Fortress and Hevsel Gardens Cultural Landscape

Location

Diyarbakır Province
Southeastern Anatolia Region
Turkey

Brief description

The Diyarbakır Fortress and Hevsel Gardens Cultural Landscape is located on an escarpment in the Upper Tigris River Basin, part of the region known as the 'Fertile Crescent', an area of many cultures and civilizations over time. The fortified city and its associated landscape were an important centre and regional capital during the Hellenistic, Roman, Sassanid and Byzantine periods, through the Islamic and Ottoman periods to the present. The nominated property includes the impressive Diyarbakır City Walls of 5800m – with its many towers, gates, buttresses and 63 inscriptions from different historical periods; and the fertile Hevsel Gardens that link the city with the Tigris River and supplied the city with food and water. The City Walls, and the evidence of their damage, repair and reinforcement since the Roman period, present a powerful physical and visual testimony of the many periods of the region's 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*.

In terms of the *Operational Guidelines for the Implementation of the World Heritage Convention* (July 2013), paragraph 47, it is also a *cultural landscape*.

1 Basic data

Included in the Tentative List

25 February 2000

International Assistance from the World Heritage Fund for preparing the Nomination

None

Date received by the World Heritage Centre

30 January 2014

Background

This is a new nomination.

Consultations

ICOMOS consulted its International Scientific Committee on Fortifications and Military Heritage and several independent experts.

Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the property from 25 to 28 August 2014.

Additional information received by ICOMOS

A letter was sent to the State Party on 20 August 2014 requesting clarification on maps, the attributes of the proposed Outstanding Universal Value, details of the restoration and repair projects, zones for legal protection, ownership details, progress on the management plan, development projects, and visitor management. Additional information was received from the State Party on 20 October 2014 and 17 December 2014. A second letter was sent to the State Party following the ICOMOS Panel meeting on 29 December 2014 regarding the boundaries of the nominated property and the buffer zone, details of the hydraulic and agricultural systems, monitoring indicators, management system and restoration projects for the city walls. Additional information from the State Party was received on 19 February 2015 following these requests. The additional information received from the State Party has been incorporated in this report.

Date of ICOMOS approval of this report

12 March 2015

2 The property

Description

Diyarbakır is located on the eastern side of a slightly sloped wide basalt plateau reaching towards the Tigris River from Karacadağ, which is on average 650m above sea level and 70-80m from the Tigris Valley.

Diyarbakır is a remarkable settlement. Its location and 7000 years of history have been closely related to its proximity to the Tigris (Dicle) River. Structures relating to this long history, and the different religions, societies, states and governments still stand in the city of Diyarbakır. Components of the nominated property include the Amida Mound, the City Walls (including many inscriptions), Hevsel Gardens, Ten-Eyed Bridge, the Tigris River valley and the natural and water resources of the area. Each of these components is briefly discussed below.

Amida Mound

Traces of first settlements in Diyarbakır are seen at Amida Mound, known as İçkale (Inner Castle). The mound and its surrounding area display all the stages of the development of its urban history. To the north, İçkale is established on the rocks known as Fis Kaya. All civilizations that ruled the city used this part as their

control centre and it expanded to its current extent in the Ottoman period. The mound covers an area of approximately 700m² and has four gates, two of which open to the inside of the walls, and two to the outside. The four gates of İçkale are, Oğrun, Saray (Palace), Fetih (Conquest), and Küpeli. İçkale also has 19 towers.

Features within İçkale include the prison, church, courthouse, museum, "Aslani" (lion) fountain, İçkale Mosque (Prophet Suleiman Mosque) and the Arch, located on the entrance of İçkale, from the Artuqid Period and built to give İçkale's entrance a grand view. The 1206-07 dates in the inscription correspond to the reign of Sultan Mahmud of the Artuqids. The İçkale Museum Project started in 2000.

City Walls

The City Walls (Dişkale), also known as the Outer Castle, reached their current extent during the Roman Empire's rule in the 4th century. The length of the Dişkale walls (i.e. Outer Castle Walls) is 5200m. Together with the İçkale walls, the city walls total 5800m. The Dişkale walls are composed of towers and bastions that border the Suriçi District. The bastions that encircle the Dişkale have 82 towers and buttresses in different sizes that support it. The towers have square, circular and polygonal shapes.

The width of the city walls vary between 5-12m. The walls also include the round path (chemin de ronde) that is 2m above the ground. The main materials used to build the Diyarbakır Fortress were the local basalt, limestone (which features inscriptions and mouldings), and brick (used in the curved cover towers). The steep artificial slopes around the Fortress have 'antique quarry' status.

In total, the City Walls have 63 inscriptions on them that reflect the different periods of the city's history. Six of these belong to the Byzantine period, four of them are in Greek and one in Latin, and Syriac inscriptions are located on the Dağ Gate. The rest of the inscriptions belong to the Islamic period.

Natural Resources

Important water resources of the city are the Gözeli Spring, Anzele Spring, Alipinar Spring and İçkale Spring. The Anzele Spring is located in the west part of the City Walls. It provides for the water needs of many mosques in the city, houses and gardens to the Urfa Gate, powers the mills outside of Mardin Gate, and irrigates the Hevsel Gardens.

Due to the topographic and climatic diversity of the Anatolian Peninsula, the nominated cultural landscape has an outstanding habitat and species richness, where wild ancestors of many plants grow (including wheat, barley, lentils, chickpea and peas).

Tigris Valley

The Tigris Valley is located to the east of the city centre of Diyarbakır. The valley is characterised by a wide variety of

habitats such as woodlands, thickets, swamps, marshes, meadows and moorland and agricultural areas.

Hevsel Gardens

The Hevsel Gardens have existed since the establishment of the city. There are several possible explanations for the name of this area – Hevsel (or Efsel). It is a large green link between the city and the Tigris River, and provides a magnificent view of the city and the city walls.

Hevsel Gardens are located in an area from the Mardin Gate within the Tigris Valley and extends to the Ten-Eyed Bridge in the south and Yeni Gate in the east. These Gardens, defined as the green lungs of the city, sustained the fruit and vegetable needs of the city's population until the 1960's. In the Ottoman Period the Hevsel Gardens were covered entirely in Mulberry trees. Today, the Hevsel Gardens cover an area of 4000 decares. 1000-1500 decares of this section is poplar wood and 2500 decares are still used for fruit and vegetable farming. The Hevsel Gardens are also known as a 'hidden bird sanctuary' that hosts approximately 189 bird species.

The many endemic plant and animal species specific to the Tigris River add to the importance of the Gardens.

Ten-Eyed Bridge

The Ten-Eyed Bridge is located 3km south of Diyarbakır, at the outskirts of Kırklar Hill on the southern border of the nominated property. According to inscriptions on the bridge, it was first constructed in the Umayyad period by Architect Ubeyd under the administration of Kadi Ebu'l Hasan Abdülvahid in 1064-1065 in the time of Nizamüdevle Nasr. However, some researchers argue it might have been built earlier.

The bridge was initially named 'Silvan Bridge' as it was located on the Silvan Road, but today it is known as the Ten-Eyed Bridge because of its ten arches.

History and development

The first mention of the city in written sources can be dated to 866 BCE. The name of Diyarbakır was written as 'Amidi' or 'Amida' on a hilt belonging to Adad-Ninari (1310-1281 BCE). According to its west Semitic origin, the name of Amid implies solidity and power. It is thought that the name Amidi belongs to the Subaru (Hurri-Mitanni) Period.

Diyarbakır is referred to as Amida in all subsequent Roman and Byzantine sources. The city began to be referred to as Diyarbakır from the 1900s, and the name was formally changed to Diyarbakır by a Council of Ministers' decision in 1937.

The larger region which is also referred to as Diyarbekr and included many settlements such as Erbil, Erzen, Cizre, Hani, Silvan, Harran, Hasankeyf, Habur, Ceylanpınar, Rakka, Urfa, Siirt, Sinjar, Imadiye, Mardin, Muş, and Nusaybin apart from the current city of Diyarbakır. South-eastern Anatolia is part of the region

known as the 'Fertile Crescent', known for its exceptionally rich natural resources that supported a very vibrant economic life for thousands of years, and a succession of different cultures.

Settlements in the Neolithic Period have been excavated in the area of Diyarbakır (particularly at the site of Çayönü, dated between 9300 BCE and 6300 BCE), demonstrating the transitions to settled life. The findings from other excavations at Diyarbakır relate to the Halaf Culture (6000 to 5400 BCE).

Diyarbakır was an important city in the Roman period. The city expanded in several stages during the Roman period to reach its final extent. The first part (labelled 'Green City' in the nomination dossier) occupied the eastern part of the city and part of the south-west district. The 2nd stage (labelled 'Red City' in the nomination dossier), expanded the city to the west during the period of the Roman Emperor Constantine. A Latin inscription on the North Gate relates to the rebuilding at this time.

Subsequent to the signing of the "Jovianus Treaty" by Jovian and Shapur (Persian), the city became the new metropolis of Roman Mesopotamia with Nisibis abandoned to the Persians. As a result, Diyarbakır became the most advanced city, in contact with western satrapies (Sophéné, Ingiléne, Sophané). The population increased significantly, and the city was extended to the southwest for the people that moved to Diyarbakır from Nisibis. The city walls were again extended to include this new area.

Between 634 and 661, after 5 months of siege that resulted in the fall of Diyarbakır to Islamic forces, the city entered the Islamic Period.

Due to disagreements in the Islamic states, the Umayyad state declared its establishment after passing the Caliphate to the Umayyad. Diyarbakır became the capital of its province in 728 and again became an important centre. However, there was no development activity during the Umayyad period, and no works belonging to the Umayyad have been identified in Diyarbakır.

Various Byzantine incursions occurred during this period; parts of the city walls were destroyed in 899, and were reconstructed to improve the city's defence (as documented by several Abbasid inscriptions). The Ten-Eyed Bridge was damaged by the Byzantine armies, but they were unable to take the city due to the strength of the fortifications.

Marwanid, whose dominance of the region occurred in the late 10th century, established various zoning activities in Amid, and the city walls of Diyarbakır were repaired and raised. In 1056 the towers of Dağ Gate were restored and one of these towers was used as a mosque. During this period, inscriptions were made on the restored towers.

In 1085, after a prolonged siege and destruction of the Hevsel Gardens, unable to withstand the hunger, the city gave in to Seljuk. The Seljuk Period in Diyarbakır, between 1085 and 1093, saw further repairs and reconstructions to the walls of Diyarbakır. Towers number 15, 32, 42 (now known as Malik Shah or Nur Tower), and 63 (known as Findik Tower) were constructed during this period. The inscriptions on them confirm this information. Later in the Seljuk period, conflicts resulted in damages to the city walls in 1117-1118. Various repairs and reconstructions occurred and are documented by inscriptions on some of the gates and towers.

The Artuqid period of occupation of Diyarbakır began in 1183. Archaeological excavations in 1961-1962 located the palace, decorated with mosaic and tiles belonging to the period of Artuqid Emperor Malik Salih Nasireddin Mahmoud (1200-1222). During this period, the Arch known as the Artuqid Arch at the castle entrance was built. Much of the work done on the city walls during this period remains today, and there are many inscriptions related to this period. The 'outer walls' were reduced during the Ayyubid Period (1232-1240).

In 1394, Timur surrounded Diyarbakır and was able to enter the city through a hole on the city wall, and demolished many buildings. When Timur left Anatolia in 1403, he gave the city to Artuqid Kara Yöyük Osman Bey. During this period, Diyarbakır was an important camp on the trade route to Aleppo. The Caravans set out from Tabriz, and went to Aleppo through Diyarbakır. For this reason, the Aq Qoyunlu (1401-15) became a state by making Diyarbakır its first capital. As in other periods, the city walls were damaged and repaired at many points during the Aq Qoyunlu period. Silk was grown in the Hevsel Gardens, contributing to the important trade from and through Diyarbakır to Aleppo. There are four inscriptions of Aq Qoyunlu in the city; one of them is on the Grand Mosque, and three of them are on the bastions of Uzun Hassan.

In 1515, after taking Amid, the Ottoman Empire further developed trade, built new public (commercial, religious and cultural) structures and contributed to the renewal of the city. The Ottoman period extended until 1922.

During the Republic Period (1928-1945), there was not enough space inside the city walls and there was settlement at Diyarbakır outside the walls. Nizamettin Efendi, the governor of the period, broke down the walls located at the north and south parts of the Fortress in 1930 on the grounds that they prevented the airing of the city. Other developments include the establishment of a public park in Dağ Gate area, and the western parts of the City Walls, the inner and outer parts of the walls were made into green areas.

Population growth from the 1950s and the start of squatting from the 1960s expanded settlements and structures into a large part of the outer contour of the castle including the archaeological site at the Inner

Castle. Since this time, there has been a physical fragmentation of the settlements and the appearance of multi-storey buildings. In order to prevent damage and destruction, Suriçi was declared 'Urban Site' in 1988.

Since 1990, conflicts in the region and associated migrations to the city have put added pressure on the buildings and infrastructure of the Suriçi District. Faced with unplanned urbanization, squatting and occupation, the Municipality began works to remove illegal settlements, undertook various landscape measures and improved access to the city walls in 2002. From 2002, there has been a project to restore the city walls and to transform the Inner Castle to an Archaeological Museum. A new Conservation Plan was adopted in 2012, and there are plans to improve the tourism facilities.

3 Justification for inscription, integrity and authenticity

Comparative analysis

The comparative analysis compares the Diyarbakır Fortress and Cultural Landscape with selected cultural landscapes, wall structures, castles and citadels from the Medieval, Roman and later periods. The nominated property is compared with: Erbil Citadel (Iraq), Aleppo Citadel (Syria), Damascus Citadel (Syria), Carcassonne Walled City (France) and Berat Castle and City (Albania). Identified comparable wall structures are Istanbul's Historical Peninsula (Turkey), The Great Wall (China) and the Frontiers of the Roman Empire (Germany/United Kingdom). The Late Period Castles that the nominated property is compared with are Mazagan (El Jadida) Portugal City (Morocco), Elvas and Fortification (Portugal), İznik Fortress (Turkey), Alanya Fortress (Turkey) and Kayseri Fortress (Turkey). Cultural landscapes that are compared with the nominated property include Istanbul Yedikule Vegetable Gardens (Turkey), Agave Landscape and Ancient Industrial Facilities of Tequila (Mexico), Tokaj Wine Region Historic Cultural Landscape (Hungary), Rice Terraces of the Philippine Cordilleras (Philippines), Alto Douro Wine Region (Portugal), Hallstatt-Dachstein / Salzkammergut Cultural Landscape (Austria) and Wachau Cultural Landscape (Austria).

ICOMOS considers that while this comparative analysis is very far reaching and not all the comparisons are strongly relevant, it nevertheless demonstrates the distinctive qualities of the Diyarbakır Fortress and Cultural Landscape. Although some of the compared properties such as Aleppo in Syria, Berat Castle in Albania, and the Mazagan Garrison City in Morocco have some similarities with the nominated property, the strong visual presence of the walls, the physical and visual link with the Hevsel Gardens, the Castle landscape and the inscriptions on the walls and towers make this area different from these other cultural properties.

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

Justification of Outstanding Universal Value

The Diyarbakır Fortress and Cultural Landscape is considered by the State Party to be of Outstanding Universal Value as a cultural property for the following reasons:

- The nominated property is an example of a frontier, border city that has been important over millennia and has survived due to its strategic location at the frontier between the East and the West, mainly due to the availability of the navigable river, the fertile valley, abundance of water and garden crops.
- The Fortress reflects different civilizations in terms of construction techniques, materials and geographical planning.
- The nominated property, located on the crossroads connecting Mesopotamia and Anatolia, and connecting Mesopotamia to northern countries through Anatolia, became a point on which the cultures in this region met and merged.
- Diyarbakır Fortress is a rare structure that can reflect the multi-layered cultures of Mesopotamia.
- Diyarbakır Fortress, with its strong structure, inscriptions and gates is a beautiful and strong example with respect to architecture, construction technique, masonry and decoration, not just for Antique period between the Hurrians and the Byzantium but for the Middle Age civilizations between the Byzantium and the Ottomans.
- The nominated property is one of the most successful examples of methods for combining water resources, fortresses and cities in this region's civilizations, and is an important example for Mesopotamia.

ICOMOS considers that this justification is appropriate.

Integrity and authenticity

Integrity

Apart from the section demolished in 1930, the City Walls are intact and generally in a good state of conservation. In addition to the main components of the nominated property proposed by the State Party – the Hevsel Gardens, Diyarbakır City Walls and the İçkale – there are other attributes within the boundaries of the property such as the Tigris River Valley, the Ten-Eyed Bridge, water and other natural resources that contribute to the potential Outstanding Universal Value of this property. The inclusion of these elements within the property boundary is supported by ICOMOS.

There are controls in place for buildings and settlements within and around the boundary of the nominated property. Hundreds of illegal structures have recently been removed and the State Party has undertaken to conduct further archaeological excavations in order to

better document the architectural remains in the lower open area. Nevertheless, ICOMOS notes that at the edge of the desert plate which closes the horizon of the nominated property there are many high-rise constructions, including two mosques, the Dicle University (of Tigris) and brickworks. While these are all located outside the buffer zone, they impact on the visual setting of the property.

Over the past half century there have been some restoration interventions to the city walls, some of which are not of good quality. ICOMOS notes that in sections where grey cement was used there has been some deterioration of the stones. Furthermore, ICOMOS notes that these restorations have not been adequately documented. Overall, approximately 1/5 of the wall has been restored and the State Party has indicated that 43 million Euros has been obtained for the restoration of the 66 towers. It is of the highest importance for the integrity and authenticity of the nominated property that this work be carefully planned and documented.

The Hevsel Gardens have four terraces or sections which are all part of the nominated property, namely, the high terrace (zone of the mills), the intermediate terrace (zone of mulberry trees), the low terrace (zone of the poplars) and bed of the Tigris River. The integrity of the Hevsel Gardens is impacted by the unauthorised settlements and businesses established at the bottom of the citadel, by blocked drains, and water quality issues. The bed of the Tigris River is today reduced because of the dams that divert water upstream. The Ten-Eyed Bridge was restored in 2008.

ICOMOS recognises the significance of the hydraulic and agricultural systems as important contributory features in the history of the Diyarbakir Fortress and Hevsel Gardens although a greater level of documentation of these could be undertaken in order to support the integrity of the property and for future planning (e.g. for determining the location of needed new pathways). This is an aspect of further detail that could enhance the understanding of the nominated property and its values.

ICOMOS considers that the integrity of the nominated property is adequate, but is vulnerable due to various development pressures in the city centre and surrounding the nominated property, and some poorly executed conservation works to the City Walls in the past.

Authenticity

Although Diyarbakir Fortress no longer performs its function as a defensive structure, it has survived for many centuries and still clearly encircles the innermost core of the historic city. It is therefore still possible to read the importance of these walls, and to recognise their materials, form and design. The City Walls, including small details of damage and repair over the centuries are very

important attributes to the proposed Outstanding Universal Value.

A substantial part of the 5.8km-long ring consisting of bastion walls, gates and towers of the old city remain, and justify the arguments put forward by the State Party about their authenticity. The Hevsel Gardens have also maintained their historical and functional links to the city.

ICOMOS notes that while these elements and links are clear, the lack of documentation of restoration work is an issue for determining and maintaining the authenticity of the restored sections.

ICOMOS considers that while there are some areas that need further attention, the requirements for integrity and authenticity have been met.

Criteria under which inscription is proposed

The property was nominated on the basis of cultural criteria (i), (ii), (iii), (iv) and (v), but the State Party subsequently revised the proposal to consider only criteria (ii), (iv) and (v).

Criterion (ii): *exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design;*

This criterion is justified by the State Party on the grounds that the location of the nominated property - on the crossroads connecting Mesopotamia and Anatolia, and connecting Mesopotamia to the northern countries through Anatolia – enabled it to become a point where the cultures in this region met and merged. Diyarbakir has been a military and/or cultural capital of different civilizations in different periods at this strategic transition point between the West and the East. All of these different civilizations affected the culture and beliefs of each other, traces of which can be witnessed today through the tangible and intangible components of the cultural landscape. The State Party also suggests that artistic progress and interactions that took place in time can be seen in the various inscriptions found on the towers and gates.

ICOMOS considers that while this property is located in a regional context well-known for its layering of histories and cultures, and that some attributes of the nominated property provide evidence of these stages (such as the inscriptions), the cultural landscape as a whole does not strongly demonstrate the interchanges envisioned by this criterion. Accordingly, ICOMOS considers that the reasons provided by the State Party in relation to this criterion are more appropriately considered according to other cultural criteria (as discussed below).

ICOMOS considers that this criterion has not been justified.

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

This criterion is justified by the State Party on the grounds that Diyarbakır Fortress, with its structures, inscriptions and gates – is a beautiful and strong example with respect to its architecture, construction techniques, masonry and inscriptions/decorations through many historical periods, from the Roman period to today.

ICOMOS considers that the justification provided for this criterion is appropriate, and that much of the material provided by the State Party in relation to the consideration of criteria (ii) and (v) is more appropriately and convincingly considered according to this criterion. The nominated cultural landscape offers a rare and impressive example, particularly in relation to the extensive City Walls (and their numerous features) and their continuing relationship with the Hevsel Gardens and the Tigris River.

ICOMOS considers that this criterion has been justified.

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

This criterion is justified by the State Party on the grounds that the most significant natural elements that factored in the location decision of the Diyarbakır Fortress are the shield shaped Karacadağ volcanic cone and basalt plateau, the Hevsel Gardens and the Tigris River. These elements enabled the creation and development of the nominated property throughout history and make the Fortress and its surrounding cultural landscape significant within the context of Mesopotamia.

ICOMOS considers that while the natural resources and landforms of the nominated property and its setting have shaped its history and are therefore important contributory attributes to the cultural landscape, they do not sufficiently demonstrate Outstanding Universal Value according to this criterion.

ICOMOS considers that this criterion has not been justified.

In conclusion, ICOMOS considers that the nominated property meets criterion (iv), and that while very vulnerable, the requirements for integrity and authenticity have been met.

Description of the attributes

The potential Outstanding Universal Value of the Diyarbakır Fortress and Hevsel Gardens Cultural Landscape is expressed through the Amid Mound (also known as the İçkale or Inner Castle), Diyarbakır City Walls (known as the Dışkale or Outer Castle), including its towers, gates and inscriptions, the Hevsel Gardens, the Tigris River and Valley, and the Ten-Eyed Bridge. The ability to view the walls within their urban and landscape settings is considered to be contributory, as are the hydrological and natural resources that support the functional and visual qualities of the nominated property.

4 Factors affecting the property

According to the State Party, the Diyarbakır Fortress and Cultural Landscape occurs within a seismic zone, and some built elements are vulnerable to fire. The property has suffered from deterioration from climatic and natural processes, lack of maintenance, misuse, illegal structures and informal occupation, traffic, graffiti and lack of public awareness.

Despite the prohibitions in place, unauthorised structures and activities occur around the Tigris Valley and Hevsel Gardens. These pose various threats to the nominated property, and have a negative impact on the purposes and values of these areas.

As noted above, the restoration work over the last 50 years on the City Walls is of variable quality, some of which has had detrimental impacts on the conservation of the stonework. Recent work has been a source of strong debate and was formally halted in January 2015 during the evaluation of this nomination in order to reconsider the conservation planning and methods. ICOMOS considers that exceptional care and attention to detail is required, as the stones are an extraordinary witness of the histories of this region, including in their small details of past damage and repair, and evidence of fittings, etc.

Diyarbakır does not have a current Tourism Master Plan, although the State Party intends to prepare a detailed study as part of the Management Plan. The growing interest in the area has resulted in a rise in new hotel developments, so the lack of an effective plan is acknowledged by the State Party as a threat.

The Buffer Zone is also affected by some factors. The old city (Suriçi) is affected by population pressures, urban sprawl and new development (including some unauthorized developments). There are approximately 1500 buildings which have more than 2 storeys in Suriçi.

For the Buffer Zone around the outside of the nominated property, one of the biggest problems is the new housing area built on Kirkklar Hill. There are many high-rise buildings which are already built, and the project is continuing, although the Municipality has now established some height controls in this area. There are two licensed

sand quarries in the buffer zone which will close in 2017 and will not be renewed. The State Party has plans to re-use the quarried areas for fish farming and fruit growing.

The nominated property has 6,330 inhabitants and about 84,848 inhabitants live in the buffer zone, a total of 91,178 inhabitants overall.

ICOMOS considers that the main threats to the property are various issues arising from the current population pressures such as unregulated occupation and uses, poor past conservation work on the City Walls, damage to the buildings of Suriçi, urban development inside and outside the City Walls, traffic, and tourism development.

5 Protection, conservation and management

Boundaries of the nominated property and buffer zone

The nominated property covers an area of about 520.76 ha and has two buffer zones. Diyarbakır Suriçi District is defined as the first buffer zone measuring 132.20 ha. The second buffer zone, surrounding the outside of the nominated property measures was proposed by the State Party for an area of 1289.69ha. The boundaries of the property and the buffer zones have been adjusted by the State Party through the dialogue with ICOMOS during the evaluation period. As a result, the spring of Anzélé has been included in the property boundary (rather than the buffer zone). ICOMOS supports these changes to the property boundary and buffer zones on the grounds that they more appropriately enclose the attributes of the proposed Outstanding Universal Value, as well as indicating the area needed for protection of the setting of the nominated property.

The first buffer zone contains the historic city of Diyarbakır Suriçi District with many historical buildings – including 125 monuments and 382 houses with heritage value. It contributes to the visual integrity of the nominated property and is therefore vulnerable to pressures of inappropriate development.

The second buffer zone surrounds the outside of the nominated property and has been extended by the State Party through dialogue with ICOMOS to include additional areas to the north and east of the nominated property in order to protect the views to and from the property.

In conclusion, ICOMOS considers that the boundary of the nominated property and the boundaries of the two buffer zones (as revised by the State Party during the evaluation process) are appropriate.

Ownership

The Diyarbakır City Walls and Towers are owned by the General Directorate of National Estate of the Ministry of Finance. However, the usage right of the towers and bastions belongs to the Ministry of Tourism. The areas

surrounding of the City Walls is under the authorization of Diyarbakır Metropolitan Municipality.

The properties and land of Hevsel Gardens belong to the Housing Development Administration, to the Diyarbakır Metropolitan Municipality, Waqfs (Foundation) and to private owners. The properties within the buffer zone belong to the General Directorate of Foundations, Provincial Special Administration, Financial Treasury, and Housing Development Administration, Ministry of National Education, Turkish Armed Forces as regards the central executive units whilst Diyarbakır Metropolitan Municipality, Sur District Municipality and Yenişehir District Municipality are responsible for the local units. In addition, there are properties belonging to Dicle University, Turkish Electricity Distribution Corporation, Non-Governmental Organisations, associations, foundations and private persons.

Protection

The historical City Walls and Towers are protected through designation as an “Urban Site” in accordance with the decision of Regional Board of Cultural Heritage Conservation and the Law No. 2863 on Code of Protection of Cultural and Natural Properties. Amida Mound in the Inner Castle is designated as a “1st degree Archaeological Site”, requiring permission from the Diyarbakır Regional Board of Cultural Heritage Conservation before any new construction or physical intervention. Special provisions for the historical City Walls, towers and wall gates are provided in the Suriçi Urban Site Conservation Plan; and permission from the responsible municipality is required before any new constructions or physical interventions occur in the settlements outside of the City Walls and in Hevsel Gardens. All archaeological studies and excavations in these areas are monitored and controlled by the Ministry of Culture and Tourism, Diyarbakır Museum Directorate.

The Law No. 2872 of Environmental Law controls and administers the agricultural activities in the Tigris Valley and Hevsel Gardens. Diyarbakır Provincial Directorate of Food, Agriculture and Livestock, the Ministry of Forestry and Water Affairs Diyarbakır Provincial Directorate and State Hydraulic Works are also the responsible institutions. Moreover, the Soil Conservation Board, which is included in decisions about Hevsel Gardens and Tigris Valley, conducts its works in accordance with the “Application Regulations on Soil Conservation and Land Use Law”.

In relation to the buffer zone, protection is provided through permit mechanisms administered by the Diyarbakır Regional Board of Cultural Heritage Conservation before any new construction or physical intervention for registered assets in Historical Suriçi District. All archaeological studies or excavations carried out in Buffer Zone are monitored and controlled by the Ministry of Culture and Tourism, Diyarbakır Museum Directorate.

Within the buffer zones, legal permission is required from the responsible municipality before any new constructions and/or physical interventions are carried out. These should be given in accordance with the provisions of Conservation Plan in Suriçi District, although the town planning regulations are advisory provisions for private owners, and the coordination with the management of the proposed World Heritage property is not evident.

In conclusion, ICOMOS considers that while there is legal protection in place for the key attributes of the nominated property, the coordination of these provisions and the protection of the buffer zone should be strengthened.

Conservation

Although the nominated property has been affected by wars and increasing development pressure, especially from the 20th century, Diyarbakır Fortress and Hevsel Gardens Cultural Landscape is generally in a satisfactory state of conservation.

Before 2008, the Ten-Eyed Bridge was used for vehicular traffic, affecting its structure. In 2008, the Metropolitan Municipality's Transportation Coordination Centre (UKOME) decided to close the bridge to vehicular traffic and it is now only used by pedestrians. The latest restoration works were completed in 2009 and the bridge is in good condition.

As noted above, the variable quality of the restoration works conducted on the city walls, towers and gates have impacted on the overall state of conservation. The gates and walls have also been damaged from motor vehicle accidents and use of the bastions as car parking areas. In response, the Transportation Master Plan and Conservation Plan prepared and approved by the Metropolitan Municipality, plans to use the areas surrounding of the walls as a ring road and to impose restrictions on traffic flow within Suriçi. Moreover, as much as possible, a green belt is being created between the city walls and the streets.

Some parts of the walls are covered with graffiti as well as electric poles and connecting cables close to the bastions and towers, causing some visual impacts. The problems of neglect of the towers are being dealt with through the Function Determination Study for Diyarbakır Historic Wall Towers.

In conclusion, ICOMOS considers the general state of conservation of the nominated property and buffer zone to be adequate, although many of the plans established by the State Party have yet to be fully implemented and there are aspects requiring improvement.

Management

Management structures and processes, including traditional management processes

Diyarbakır Fortress and Hevsel Gardens Cultural Landscape is divided into two major management components, namely, the Diyarbakır Fortress and the Hevsel Gardens. In order to develop suitable policies for these, seven implementation zones have been established – three of these concern the Diyarbakır Fortress, and the remaining four zones are associated with the Hevsel Gardens:

- MA1 – Diyarbakır Fortress and City Walls
- MA2 – İçkale (Inner Castle)
- MA3 – Diyarbakır City Walls Protection Band
- MA4 – Hevsel Gardens
- NA5 – Hevsel Gardens Impact Zone
- MA6 – Ben ü Sen
- MA7 – Tigris River Public Shore Usage

The Buffer Zone inside the city walls (Suriçi) has three planning zones based on conservation issues, and the ability to directly affect the condition/views to the City Walls. The Buffer Zone encircling the nominated property is divided into nine zones based on the area's social and economic functions.

The Management Plan for the property consists of 6 themes that focus on restructuring economic activities, conservation processes (for tangible and intangible heritage), planning activities, administrative improvements and risk management.

The nominated property will be managed by a Site Management Directorate that is led by a site manager, appointed by the Municipality. Supervision of the implementation of the Management Plan will be done by the Supervision Unit. The Site Manager will be supported by the Advisory Board and the Coordination and Supervision Board. The Advisory Board will be charged with reviewing the plan and making suggestions on the revision of the mid-term strategy and revision of the Management Plan every 5 years. The Coordination and Supervision Board has the authority to make decisions about site management and is responsible for the implementation of the Management Plan in relation to Regulations established in 2005 in accordance with the Protection of Cultural and Natural Properties Law. The Coordination and Supervision Board is supported by the Education Board – responsible for training of personnel; and the Science Board – responsible for all scientific activities arising from the Management Plan.

ICOMOS notes that the management system is not yet fully operating and that numerous organisations are involved in the protection and management of the nominated property; the overall functioning of the management system is complex and is not entirely clear. The management of the buffer zones (particularly in relation to the Suriçi District) is not yet well coordinated

with the management of the nominated property. For these reasons, ICOMOS considers the management of the nominated property to be adequate once it is fully implemented, but could be improved.

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

There are many plans already in place for Diyarbakır. In addition to the management plan, the most important other plans include the Southeastern Anatolia Project (GAP) Action Plan, Suriçi Urban Site Conservation Plan and Diyarbakır-Bismil 1/25,000 scaled Environmental Plan. These plans largely focus on the conservation and rehabilitation of historic structures in Suriçi, infrastructure improvements, and protection of the agricultural areas and the environment.

Tourism numbers are not particularly high. There are three Tourism Information Offices built by Diyarbakır Metropolitan Municipality and Diyarbakır Governorship in Diyarbakır Historic Suriçi. A further Tourism Information Office will be opened in the Inner Castle within the nominated property after the restoration project. Tourism materials are available from the Diyarbakır Metropolitan Municipality Tourism Information Offices in Kurdish, Turkish, English and Arabic, and there are five kiosks with tourism information located within Suriçi. Virtual tours are available, and a mobile app is available in a number of languages for the Gazi Street Rehabilitation Project. Tourism materials present the heritage of the city walls and the historic city centre.

Involvement of the local communities

Recent increases in population in Diyarbakır create challenges for community involvement, and many of the pressures on the nominated property result from these pressures and/or neglect to the attributes of the nominated property. The State Party is working to address these through the involvement of the local population. School children in particular are being taught about the importance of their city's heritage and the situation is starting to show signs of improvement.

In conclusion, ICOMOS considers that the management system for the property could be adequate when fully in place, and could be further improved through strengthening the coordination of the management arrangements for the nominated property and the buffer zones, and through continued efforts to engage with local communities to support the conservation and appropriate development of the nominated property.

6 Monitoring

The State Party has outlined indicators for monitoring the state of conservation of the nominated property. These include monitoring of illegal excavations, fire, inventory of archaeological materials recovered during

site works, the overall cleanliness of the Hevsel Gardens, and the physical condition of the Diyarbakır Fortress and City walls (including structural problems, climatic effects, and control of damage). The periodicity of monitoring is provided, as well as record keeping responsibilities.

ICOMOS considers that the monitoring indicators are useful, but need to be expanded to also include impacts of diversion dams on the Tigris River.

In conclusion, ICOMOS considers that the monitoring indicators are generally adequate but could be further augmented to cover the full range of likely factors that could have an impact on the Outstanding Universal Value of the property and its state of conservation.

7 Conclusions

ICOMOS considers that the Diyarbakır Fortress and Hevsel Gardens Cultural Landscape demonstrates Outstanding Universal Value in relation to criterion (iv). The City Walls, and the evidence of their damage, repair and reinforcement demonstrate the many periods of the region's history, and present a powerful physical and visual testimony. The requirements for authenticity and integrity have been met, although they are considered very vulnerable due to current human-induced pressures, past conservation work on the City Walls of variable quality, damage to the buildings of Suriçi, and urban development, and because the property boundary has not included the city centre of Suriçi. While there is adequate legal protection in place for the key attributes of the nominated property, the protection of the buffer zones needs to be strengthened, and coordination of the provisions for legal protection should be improved. There are many pressures affecting this property, and continued work to address these is needed. An adequate management system has been outlined, but is not yet in place and should be further improved, particularly in relation to the coordination of the activities of the many involved organisations for both the nominated property and the two buffer zones.

8 Recommendations

Recommendations with respect to inscription

ICOMOS recommends that the nomination of Diyarbakır Fortress and Hevsel Gardens Cultural Landscape, Turkey, be **referred back** to the State Party in order to allow it to:

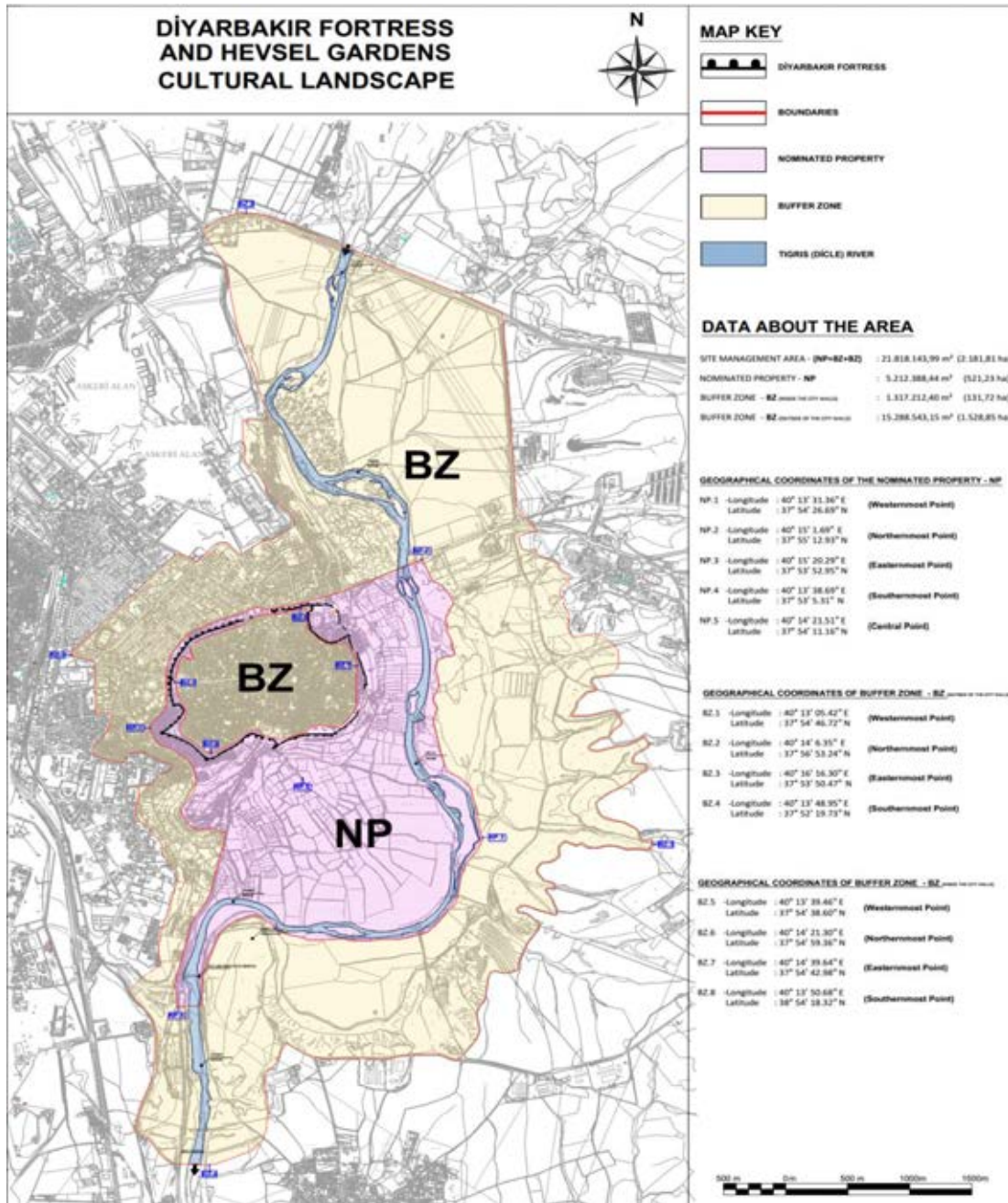
- Strengthen the legal protection of the buffer zone, through reinforcement of the provisions of the Conservation Plan in Suriçi District to protect the urban fabric and strengthening mechanisms for consideration of heritage impacts in development approvals processes;

- Reinforce the coordination of the legal protection for the nominated property and the two buffer zones.
- Fully implement the proposed management system, including the management structures and advisory mechanisms and provisions for community involvement.

Additional recommendations

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

- Improving the presentation of the property;
- Improving the scientific basis and procedures for planning the restoration and maintenance of the City Walls, including documentation of the walls and the work undertaken;
- Improving the management of vegetation and water drainage near the walls, taking care to record archaeological evidence in these areas when new works occur;
- Further improving the study and documentation of the Hevsel Gardens, and the agricultural and water management systems that support the continuing use and significance of the nominated property;
- Improving the monitoring indicators;
- Conducting a detailed Heritage Impact Assessment in accordance with the ICOMOS *Guidance on Heritage Impact Assessments for Cultural World Heritage Properties* for future development projects to allow the potential impacts on the Outstanding Universal Value of the property to be recognised at an early stage; and submitting all proposals for development projects to the World Heritage Committee for examination, in accordance with paragraph 172 of the *Operational Guidelines for the Implementation of the World Heritage Convention*.



Map showing the boundaries of the nominated property



Diyarbakir Fortress and Hevsel Gardens



BenuSen Tower



Keçi Tower



Hevsel Gardens



Ten-Eyed Bridge

The Forth Bridge (United Kingdom) No 1485

Official name as proposed by the State Party

The Forth Bridge

Location

Estuary of the River Forth
Fife (north end) and Edinburgh City (south end)
Scotland

Brief description

The railway bridge over the River Forth estuary in Scotland is the world's longest multi-span cantilever bridge. It opened in 1890 and still operates today as an important passenger and freight rail bridge. More than 2.5 km long, this large-scale structure was designed and built using advanced civil engineering design principles and construction methods. Its distinctive industrial aesthetic is the result of a forthright, unadorned display of its structural elements. Innovative in its concept, design, materials, and scale, the Forth Bridge represents a milestone in the history of bridge construction.

Category of property

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

1 Basic data

Included in the Tentative List

27 January 2012

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 consulted several independent experts and the International Committee for the Conservation of the Industrial Heritage (TICCIH).

Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the property from 1 to 3 October 2014.

Additional information requested and received from the State Party

A letter was sent by ICOMOS to the State Party on 17 September 2014 to request further information about the relationship of the setting to the nominated property, and the delineation of that setting; the decision not to create a buffer zone specifically for the nominated property; the nature of the Forth Bridge's new technologies, design principles and construction, its innovations in design and concept, and its influence on practice and construction; the changes to the bridge made over time; the interrelationships between the Forth Bridges Forum, Forth Bridge World Heritage Nomination Steering Group, and Forth Bridge Partnership Management Agreement Group; the nominated property's owner, Network Rail; and the current status of the draft Property Management Plan for the nominated property.

The State Party replied on 24 October 2014, sending additional documentation, and supplementary information was provided to the technical evaluation mission on 4 October 2014, all of which has been taken into account in this evaluation.

A second letter was sent to the State Party on 17 December 2014, requesting further information on the proposed *de facto* buffer zone; key viewsheds and views of the bridge; the composition and roles of the bodies managing and monitoring the property; the presumption against construction of wind turbines; and an interpretation and tourism plan. The State Party replied on 26 February 2015, sending additional documentation that has been taken into account in this evaluation.

Date of ICOMOS approval of this report

12 March 2015

2 The property

Description

The nominated property, which covers 7.5 ha, is a cantilever trussed bridge that spans the estuary (Firth) of the River Forth in eastern Scotland, linking Fife to Edinburgh by railway. The structure of the bridge, which is 2,529 m long from escarpment to escarpment, takes the form of three double-cantilever towers, with cantilever arms to each side. The towers rise 110 m above their granite pier foundations, and the cantilever arms each project 207 m from the towers, linked together by two suspended spans, each 107 m long. The two spans formed by the three towers are therefore each 521 m wide (for 28 years the greatest span in the world). The central cantilevered sections of the bridge are continued at each end by steel approach viaducts sitting on tall granite piers. The superstructure is distributed both above and below the deck, thereby reducing the steelwork's apparent bulk.

This large-scale engineering work is comprised of about 54,000 tons of mild steel used as main compression struts of rolled steel plate riveted into 4-m diameter tubes, and lighter spans used in tension. Mild steel was a relatively

new material in the 1880s. Its use on such a large-scale project was innovative, and helped to bolster mild steel's reputation. Because of its propensity to rust, the exposed steel is protected by paint (a distinctive red colour for the Forth Bridge) to prevent structural decay from corrosion.

History and development

John Fowler and Benjamin Baker started design of the Forth Bridge in 1880. A £1.6-million contract for its construction was awarded by the Forth Bridge Railway Company on 21 December 1882 to a partnership that became Tancred, Arrol & Co. The primary challenges in the bridge's design and construction were geographical (creating clear spans of unprecedented length), logistical (managing a volume of masonry and steel that exceeded any single bridge before or since), technical (exploiting a relatively new material, mild steel), and aesthetic (creating a functional and economical structure that was both truthful in expression and visually appealing).

There were two phases to the construction of the bridge. The first, from 1882 to 1885, focused on the substructure, including sinking the caissons and constructing the foundations and piers on which the upper structure of the bridge sits. The second, from 1886 to 1889, focused on the superstructure, including erecting the three cantilever towers and the approach viaducts. About 4,600 men were employed at the peak of construction; 73 died. The bridge was completed on 15 November 1889, successfully tested in January 1890, and officially opened on 4 March 1890.

Alterations undertaken since 1890 include strengthening the deck trough that carries trains in 1913, installing floodlighting in the 1990s, and adding a walkway around the Jubilee Tower in 2012. Painting the steelwork with a red oxide paint was a more-or-less continuous process until very recently. Modern cup-head bolts are now often used in repairs to mimic the original rivets.

The Forth Bridge has been in continuous use since 1890, and remains an important part of the United Kingdom and Scottish railway networks. Care and maintenance of the bridge declined significantly during the final years of state ownership (1947-1993). Its present owner, Network Rail, completed a 10-year, £130-million restoration of the bridge in 2011, including stripping all the steelwork down to bare metal and repainting it with a longer-lasting glass-flake epoxy system developed for the offshore oil and gas industry. In addition, a few smaller angle sections that had suffered significant corrosion were replaced in-kind during the restoration programme. The bridge is estimated to retain about 99.5 percent of its original steelwork.

3 Justification for inscription, integrity and authenticity

Comparative analysis

The State Party presents a comparative analysis of bridges within a geo-cultural area it defines as global, in respect of the international nature of large-scale engineering works in the late 19th century. Comparisons

are made to large bridges on the basis of their construction material (with a focus on mild steel), form, and span. The State Party makes particular reference to the thematic study *Context for World Heritage Bridges*, prepared by Eric DeLony in 1996 for the International Committee for the Conservation of the Industrial Heritage (TICCIH) and ICOMOS. This study concludes that only three cantilever bridges might have the potential to demonstrate Outstanding Universal Value: the Forth Bridge; the Poughkeepsie Bridge (1886-1899) in New York State, United States of America; and the Quebec Bridge (1903-1919) in Quebec, Canada. The study notes that the steel Forth Bridge, "*perhaps the world's greatest cantilever,*" was "*the crowning achievement of the material during the 19th century.*"

Comparisons are also made to the four properties already on the World Heritage List where a bridge is the principal focus for inscription: Mehmed Paša Sokolović Bridge in Višegrad (Bosnia and Herzegovina, 2007, (ii), (iv)); Old Bridge Area of the Old City of Mostar (Bosnia and Herzegovina, 2005, (vi)); Ironbridge Gorge (United Kingdom, 1986, (i), (ii), (iv), (vi)); and Vizcaya Bridge (Spain, 2006, (i), (ii)). With the possible exception of the latter, none are comparable in a meaningful way.

Comparisons are likewise made to bridges that are components of larger properties already on the World Heritage List, the most relevant of which is the Luiz I Bridge in Oporto, Portugal (1885) (Historic Centre of Oporto (Portugal, 1996, (iv)). While it is the largest wrought-iron span in the world, the Luiz I Bridge does not figure in the justification for inscription on the World Heritage List, which focuses on Oporto's urban fabric and its many historic buildings. And, finally, comparisons are made to the three large bridges that are on the Tentative Lists: the Puente de Occidente wire-cable suspension bridge in Medellin, Colombia; the lattice-truss Malleco Viaduct in Chile; and the now-demolished bowstring-arch Yenisei River Railway Bridge in Krasnoyarsk, Russian Federation.

ICOMOS considers that the State Party has adequately demonstrated that long-span bridges represent a class of monument that is not currently well represented on the World Heritage List. The State Party's analysis shows that there is room on the List for the nominated property, and that there are few similar properties that could be nominated.

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 Forth Bridge's steel-built cantilever design, devoid of decoration, is an aesthetic achievement of tremendous grace.
- Its design represents a unique level of creative genius in conquering a scale and depth of natural barrier that had never before been overcome.
- In civil engineering, it was a crucible for the application of new design principles and new construction methods.
- It exerted great influence on civil engineering practice the world over, and is an icon to engineers world-wide.
- It is a potent symbol of the railway age, part of the revolution in transport and communications that represents a significant stage in human history.
- It is a unique milestone in the evolution of bridge and other steel construction, innovative in its design, concept, materials, and enormous scale.
- It marks a landmark event in the application of science to architecture that profoundly influenced humankind in ways not limited to bridge building.

ICOMOS considers that this justification is generally appropriate: the Forth Bridge, an extraordinary and impressive milestone in the history of bridge construction, is innovative in its concept, design, materials, and enormous scale; it was designed and built using advanced civil engineering design principles and construction methods; and it possesses a distinctive industrial aesthetic that is the result of a forthright, unadorned display of its structural elements. ICOMOS considers, however, that its direct influence has not been demonstrated; rather than being the prototype for subsequent structures, it was the culmination of a typology, a single outstanding example scarcely repeated but widely admired as an engineering wonder of the world.

Integrity and authenticity

Integrity

ICOMOS considers that the nominated property contains all the elements necessary to express the property's Outstanding Universal Value, that it is of adequate size to ensure the complete representation of the features and processes that convey the property's significance, and that it does not suffer from adverse effects of development or neglect. ICOMOS also considers that a logical and scientific basis has been presented for the selection of the area being nominated – though being limited to the bridge itself, it is the smallest conceivable, and justifiable, area for this engineering work. ICOMOS concurs with the State Party that the Forth Bridge is in an excellent state of conservation after completion of its 10-year restoration in 2011, and that the risk from decay or neglect is small for the foreseeable future.

Authenticity

ICOMOS considers that the links between the potential Outstanding Universal Value of the nominated property and its attributes are truthfully expressed, and that the

attributes fully convey the value of the nominated property. In particular, the nominated property is fully authentic in its form and design, which are virtually unaltered; in its materials and substance, which have undergone only minimal changes; and in its use and function, which have continued as originally intended. The use of traditional hot rivets is a subject worth investigating for selected and highly visible repairs of the Forth Bridge in the future.

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

Criteria under which inscription is proposed

The property is nominated on the basis of cultural criteria (i), (ii), and (iv).

Criterion (i): *represent a masterpiece of human creative genius;*

This criterion is justified by the State Party on the grounds that the Forth Bridge is an aesthetic triumph in its avoidance of decoration and yet an achievement of tremendous grace for something so solid. Its steel-built cantilever design represents a unique level of new human creative genius in conquering a scale and depth of natural barrier that had never before been overcome by man.

ICOMOS considers that the Forth Bridge is a creative masterpiece because of its distinctive industrial aesthetic, which is the result of a forthright, unadorned display of its massive functional structural elements. ICOMOS considers, however, that the point concerning the creative genius required to conquer a natural barrier could be applied to most large-scale bridges that are the first at their respective locations.

ICOMOS considers that this criterion has been justified.

Criterion (ii): *exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design;*

This criterion is justified by the State Party on the grounds that the Forth Bridge was a crucible for the application to civil engineering of new design principles and new construction methods. It was at that time the most-visited and best-documented construction project in the world. It therefore exerted great influence on civil engineering practice the world-over and is an icon to engineers world-wide.

ICOMOS considers that the Forth Bridge is notable for the design principles and construction methods employed during its erection, including innovative approaches related to wind loading, thermal changes, hydraulic machinery, and the organization of the construction effort, but that an important interchange of human values over a span of time or within a cultural area of the world has not yet been demonstrated.

ICOMOS considers that this criterion has not been justified.

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

This criterion is justified by the State Party on the grounds that the Forth Bridge represents a significant stage in human history, namely the revolution in transport and communications. The railway age, of which it is a potent symbol, was made possible by, and influenced the speed and connectivity of, the industrial revolution. The bridge forms a unique milestone in the evolution of bridge and other steel construction, is innovative in its design, its concept, its materials and in its enormous scale. It marks a landmark event in the application of science to architecture that went on to profoundly influence mankind in ways not limited to bridge-building.

ICOMOS considers that the Forth Bridge is an outstanding and unique milestone in the evolution of bridge design and construction during the period when railways came to dominate long-distance land travel, innovative in its concept, in its use of mild steel, and in its enormous scale. ICOMOS considers, however, that the bridge's global importance as a symbol of the railway age, and/or its influence on humanity beyond bridge-building, have not been adequately demonstrated.

ICOMOS considers that this criterion has been justified.

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

Description of the attributes

The Outstanding Universal Value of The Forth Bridge is expressed in its massive, unadorned structure comprised of granite piers supporting a superstructure of mild steel rolled plate riveted into tubes used in compression and lighter spans used in tension, all painted a distinctive red colour, and in its clear spans of unprecedented length. The bridge's visual impact on the setting, and its continuing use, are also contributing attributes.

4 Factors affecting the property

There is little development pressure possible within this very tightly delimited property. Potential threats to the proposed Outstanding Universal Value of the nominated property identified by the State Party include the creation of visitor access structures and the possible future electrification of the railway. One option for visitor access envisions a visitor centre with a glass ceiling underneath the bridge, and lifts to carry passengers up the eastern face of the Fife Tower to a viewing platform at the top.

Such visitor access is currently at the pre-application stage. Detailed designs of proposed buildings, lifts, walkways, and associated infrastructure for "the Forth Bridge Experience" have yet to be prepared by Network Rail, and no formal proposals have been submitted.

Development pressures outside the nominated property but in its vicinity could include a significant increase in the number of visitors to both Queensferry and North Queensferry; heightened pressure on existing services and infrastructure, including roads and public transport; potentially detrimental alterations or additions to properties immediately adjacent to the bridge; destruction of valuable features and views around the bridge in response to pressure from development; influence on the value of property in the neighbourhoods close to the bridge; increased demand for development in the setting of the bridge; and wind turbines.

The new Queensferry Crossing cable-stayed road bridge that is currently under construction approximately 1 km to the west of the nominated property is due to open in 2016. Between this bridge and the nominated Forth Bridge is the Forth Road Bridge, a suspension bridge built in 1964 and a Category 'A' listed building. It will become a dedicated public transportation corridor for buses, cyclists, and pedestrians after the new road bridge is opened. These two very large bridges are close to the nominated property, but not so close as to have a negative impact on its proposed Outstanding Universal Value.

No severe environmental pressures are mentioned. Disaster risk management will be addressed through the Property Management Plan. The State Party notes a concern in the bridgehead communities that any increases in visitor numbers will need to be managed appropriately.

ICOMOS considers that there are no immediate threats to the property itself, but that there are potential threats outside the property related to possible increases in the number of visitors and developments in the setting. ICOMOS recommends developing, as part of the Property Management Plan and in full consultation with residents, an interpretation and tourism plan associated with the value of the nominated property. It should consider strategies that avoid overwhelming North Queensferry and Queensferry, such as remote parking, shuttle systems, and alternatives to automobile travel. If a visitor centre is formally proposed, it should be submitted at the earliest possibility to the World Heritage Centre for review, in accordance with paragraph 172 of the *Operational Guidelines*. ICOMOS further considers that a clearer presumption against the construction of wind turbines within the key viewsheds of the bridge should be made in the appropriate planning instruments and Property Management Plan.

5 Protection, conservation and management

Boundaries of the nominated property and buffer zone

The boundaries of the nominated property are defined by the single contract that was let in 1882 for the construction of the masonry and steel elements of the Forth Bridge, as represented in the original contract drawings. In physical terms, the nominated property is limited to the stone and steel-built elements of the 2,529-m-long bridge itself, from escarpment to escarpment. It includes the cantilever piers it stands on, and the caissons set into the water to support the central pier, but not the submerged rock of Inchgarvie Island or the rock in North Queensferry on which the two other piers stand. The embankments and cuttings connecting the bridge to the rest of the rail network are not included within the proposed boundaries, nor are the islands or the marine portions of the Firth of Forth itself.

No “buffer zone” for the purpose of protecting the nominated property from wider threats has been specifically created for this nomination. The State Party contends that the nominated property is adequately protected through the local planning system and, in particular, through the suite of existing designation systems (both cultural and natural). These are supported by detailed analyses of views and viewsheds undertaken in support of this nomination. These analyses (which have no status in relation to planning controls) allow planning authorities to take into consideration in their decision-making the protection of views identified as being of value.

The State Party proposed in October 2014 that the Conservation Areas at each end of the bridge designated under the Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997, combined with the suite of other existing cultural and natural heritage designations, collectively comprise a *de facto* buffer zone (“Bridgehead Zone”). The State Party further advised on 26 February 2015 that this aggregation of planning designations will also include the marine area of the estuary (which in the nomination dossier had been omitted), and that marine protection will also be included in an updated version of actions contained within the Property Management Plan and coordinated with the key viewsheds. These revisions have been initiated and will be completed by the end of 2015. The estimated total area of the proposed polygonal Bridgehead Zone, including the relevant marine area, is 1,233 ha, about 40 percent of which is on land.

ICOMOS considers that the boundaries of the nominated property are adequate, and that boundaries of the *de facto* buffer zone, as revised in February 2015 to include the relevant marine area of the estuary, are also adequate. A limited number of key viewsheds and views of the bridge should also be selected and included in the appropriate planning instruments and management plan, with the objective of ensuring their protection.

Ownership

The nominated property is owned and managed by Network Rail Limited, a public sector arm’s-length body of the Department for Transport.

Protection

The Forth Bridge is listed at Category ‘A’ as a “building of special architectural or historic interest” under City of Edinburgh Council, Edinburgh Burgh HBNUM: 40370 Item No: 30 QF; and Fife Council, Inverkeithing Parish HBNUM 9977 Item No: 6. This listing, given effect in 1973, gives the nominated property the highest level of statutory protection for a structure that is in use.

Any changes that affect the special interest of the bridge require the consent of both City of Edinburgh and Fife councils, with advice in certain circumstances from Historic Scotland on behalf of Scottish Ministers. Directions for planning authorities with regard to listed buildings are set out in the Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997, as amended.

ICOMOS notes that the setting of a World Heritage property in Scotland is protected under the 2014 Scottish Planning Policy, wherein the planning authority must protect and preserve the Outstanding Universal Value.

ICOMOS considers that the legal protection in place, with the inclusion of the relevant marine area of the estuary in the *de facto* buffer zone and the safeguarding of key viewsheds and views of the bridge, is adequate.

Conservation

The nominated property has been documented and will be digitally mapped and scanned in 2015. Its present state of conservation is good, and active conservation measures include regular inspections: effectively, one-sixth of the bridge is inspected visually by Network Rail each year. There is no discernible threat to its continued use. The draft Management Plan identifies actions to further protect and enhance the condition of the historic fabric. The conservation measures are appropriate to conserve the nominated property’s value, authenticity, and integrity. Funding for maintenance and conservation work has been identified by the State Party, and the work is carried out by persons with the appropriate level of skill and expertise. There are no urgent issues following the recent 10-year restoration project.

ICOMOS considers that the state of conservation of the property is good, and that the conservation measures adopted are effective.

Management

Management structures and processes, including traditional management processes

Management of the nominated property is currently the responsibility of its owner, Network Rail. In the event the Forth Bridge is inscribed on the World Heritage List, a Partnership Management Agreement will be implemented

as one of the first actions of the draft Property Management Plan. It involves the members of the Forth Bridge World Heritage Nomination Steering Group (a subgroup of the Forth Bridges Forum) that have statutory planning functions, including Network Rail, Historic Scotland, Fife Council, and City of Edinburgh Council. The role of the Forth Bridge Partnership Management Agreement Group will be to protect the property's Outstanding Universal Value while helping it continue as an operating structure.

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

A draft Property Management Plan for the nominated property is included with the nomination dossier. Now operational, its prioritized six-year action plan began in 2014. In addition to benchmark information, the Plan includes the Statement of Outstanding Universal Value; statutory duties of main bodies and other existing management arrangements; operation of heritage protection measures and land use planning; a summary of pressures and threats and opportunities for change or improvements; means of implementing the Plan, and measures by which it will be monitored.

The Town and Country Planning (Scotland) Act 1997 and The Planning etc. (Scotland) Act 2006 (which modifies and amends many of the 1997 provisions) provide the legal framework for local planning policy. They act as the primary legislation guiding planning and development in Scotland. Edinburgh and Fife Local Development Plans – the local interpretations of regional and national planning policy – are both expected to be completed in 2015; the Fife version is intended to include policy specifically directed at protecting the context of the Forth Bridge. Both Local Development Plans will be linked to the two relevant Conservation Area designations.

Concerning visitor management, there is currently no public pedestrian access to the bridge, and no means of counting individual visitors. The number of people who experience and interact with the bridge in their daily lives, however, is very large, as up to 200 passenger trains cross the rail bridge every day. The State Party has outlined some possible initiatives to manage visitors, including creating new visitor facilities and presentation experiences. Current resources, including staffing levels, expertise, and training, appear to be adequate. Network Rail is currently committed to approximately £1 million per year over the next five years for ongoing care and maintenance of the bridge structure. Risk management will be addressed through the Property Management Plan.

Involvement of the local communities

Local communities have been involved in the development of the nomination and the Property Management Plan, and the Fife and Edinburgh city councils have formally agreed to support the nomination.

ICOMOS considers that the management system for the property is adequate. ICOMOS recommends that various improvements initiated by the State Party, as outlined in February 2015, be completed, including clarifying the institutionalization of the current Steering Group; formally incorporating World Heritage into the remit of the Forth Bridge Partnership Management Agreement Group; and developing an interpretation and tourism plan as part of the Property Management Plan.

6 Monitoring

Monitoring the condition of the nominated property is part of Network Rail's mandated maintenance programme, and the results are recorded in its Civil Asset Register and electronic Reporting System, which is tailored to the maintenance and monitoring needs of the bridge. Network Rail also has an asset management plan. The nomination dossier includes four key indicators: two make reference to the Buildings at Risk Register; one to the enhancement of, or harm to, key views by foliage or new development; and one to train tickets sold to North Queensferry and Dalmeny. ICOMOS considers these key indicators, as well as their periodicity, to be vague. The key indicators should relate more directly to the attributes that convey potential Outstanding Universal Value (that is, to more than just the physical condition of the bridge), to ensure that these attributes are protected, conserved, and managed in order to sustain that value. The key indicators do not express a benchmark that indicates a desired state of conservation.

ICOMOS considers that the proposed key indicators should be more specific and relate more directly to the attributes that convey potential Outstanding Universal Value.

7 Conclusions

ICOMOS considers that the Outstanding Universal Value of the nominated property has been demonstrated. The Forth Bridge represents an extraordinary milestone in the history of bridge construction, notable for its enormous scale, its innovative use of materials, its advanced design principles and construction methods, and its distinctive industrial aesthetic. The relevant attributes conveying the Outstanding Universal Value of the nominated property are included within its boundaries. The nominated property is in a good state of conservation, and has the highest level of protection at the national level. Its *de facto* buffer zone, as proposed in October 2014 and revised in February 2015 to include the relevant marine area, is adequate. Key viewsheds and views of the bridge should be safeguarded, including from wind turbine construction. The management system for the property, while adequate, will benefit from the organizational clarifications that have been initiated, and the Property Management Plan should include an interpretation and tourism plan.

8 Recommendations

Recommendations with respect to inscription

ICOMOS recommends that The Forth Bridge, United Kingdom, be inscribed on the World Heritage List on the basis of **criteria (i) and (iv)**.

Recommended Statement of Outstanding Universal Value

Brief synthesis

The Forth Bridge, which spans the estuary (Firth) of the River Forth in eastern Scotland to link Fife to Edinburgh by railway, is at 2,529 m long the world's longest multi-span cantilever bridge. It opened in 1890 and continues to operate as an important passenger and freight rail bridge. This enormous structure, with its distinctive industrial aesthetic and striking red colour, was conceived and built using advanced civil engineering design principles and construction methods. Innovative in design, materials, and scale, the Forth Bridge is an extraordinary and impressive milestone in bridge design and construction during the period when railways came to dominate long-distance land travel.

This large-scale engineering work's appearance is the result of a forthright, unadorned display of its structural elements. It is comprised of about 54,000 tons of mild steel plate rolled and riveted into 4-m diameter tubes used in compression, and lighter steel spans used in tension. The use of mild steel, a relatively new material in the 1880s, on such a large-scale project was innovative, and helped to bolster its reputation. The superstructure of the bridge takes the form of three double-cantilever towers rising 110 m above their granite pier foundations, with cantilever arms to each side. The cantilever arms each project 207 m from the towers and are linked together by two suspended spans, each 107 m long. The resulting 521-m spans formed by the three towers were individually the longest in the world for 28 years, and remain collectively the longest in a multi-span cantilever bridge. The Forth Bridge is the culmination of its typology, scarcely repeated but widely admired as an engineering wonder of the world.

Criterion (i): The Forth Bridge is a masterpiece of creative genius because of its distinctive industrial aesthetic, which is the result of a forthright, unadorned display of its massive, functional structural elements.

Criterion (iv): The Forth Bridge is an extraordinary and impressive milestone in the evolution of bridge design and construction during the period when railways came to dominate long-distance land travel, innovative in its concept, its use of mild steel, and its enormous scale.

Integrity

The property contains all the elements necessary to express the Outstanding Universal Value of The Forth Bridge, including granite piers and steel superstructure. The 7.5-ha property is of adequate size to ensure the

complete representation of the features and processes that convey the property's significance, and it does not suffer from adverse effects of development or neglect.

Authenticity

The Forth Bridge is fully authentic in form and design, which are virtually unaltered; materials and substance, which have undergone only minimal changes; and use and function, which have continued as originally intended. The links between the Outstanding Universal Value of the bridge and its attributes are therefore truthfully expressed, and the attributes fully convey the value of the property.

Management and protection requirements

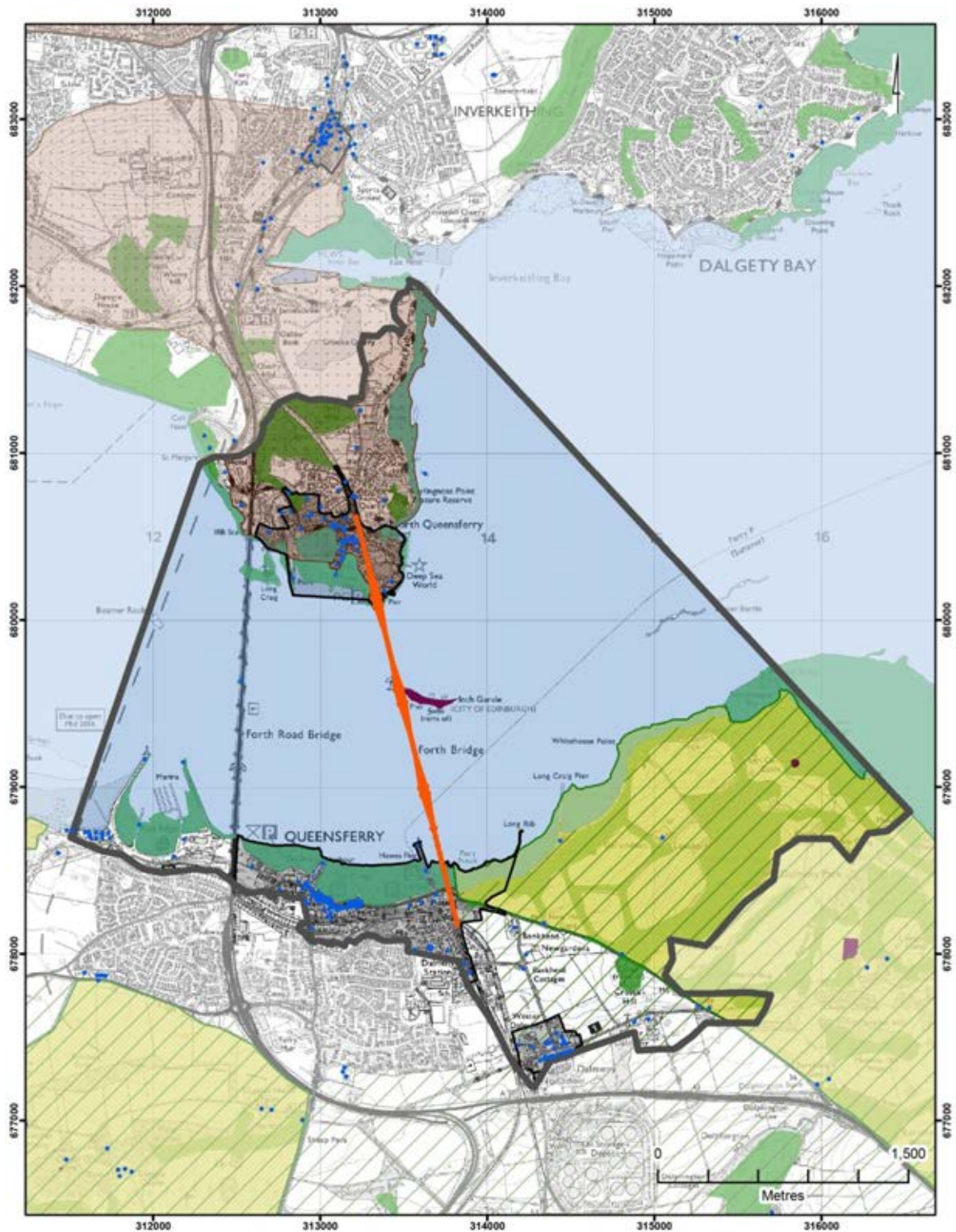
The Forth Bridge is listed at Category 'A' as a building of special architectural or historic interest, giving the property the highest level of statutory protection. Its immediate surroundings are also protected by means of a suite of cultural and natural heritage designations. Owned by Network Rail Limited, the property will be managed in accordance with a Property Management Plan by the bodies that have a statutory planning function. The Forth Bridges Forum partnership has been established to ensure that local stakeholders' interests remain at the core of the management of the Forth bridges.

Specific long-term expectations related to key issues include maintenance of strong community support, broadening understanding in the context of world bridges, attention to developments within key views, risk management, and inspiring others.

Additional recommendations

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

- Creating key indicators that are more specific and relate more directly to the attributes that convey potential Outstanding Universal Value;
- Extending the Property Management Plan to include an interpretation and tourism plan;
- Submitting to the World Heritage Centre, by 1 December 2016, a report on the selection of key viewsheds and views of the bridge for inclusion in the appropriate planning instruments and management plan, along with an analysis of their effectiveness in ensuring the protection of these key viewsheds and views, for examination by the World Heritage Committee at its 41st session in 2017;
- Submitting plans for any proposed visitor centre at the earliest possibility to the World Heritage Centre for review, in accordance with paragraph 172 of the *Operational Guidelines for the Implementation of the World Heritage Convention*.

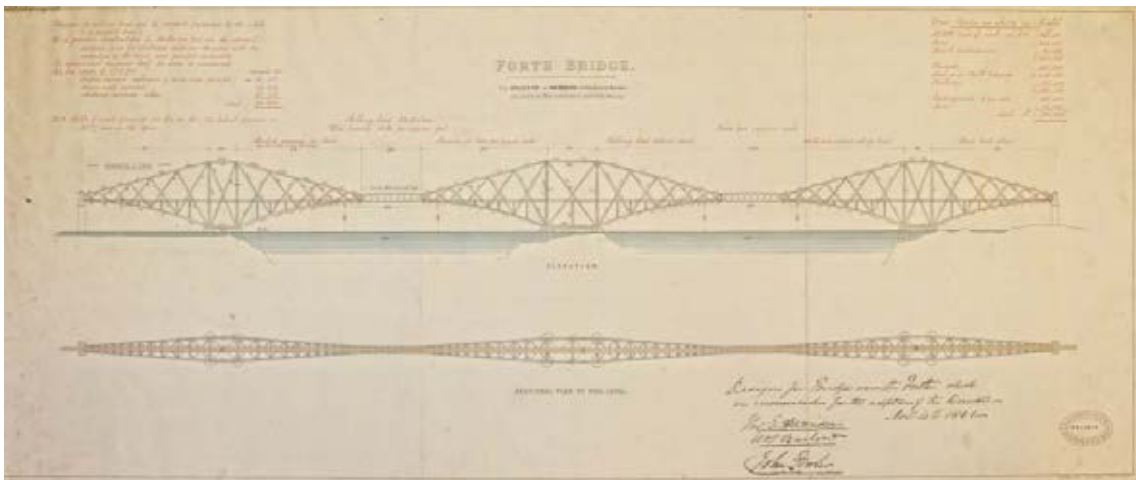


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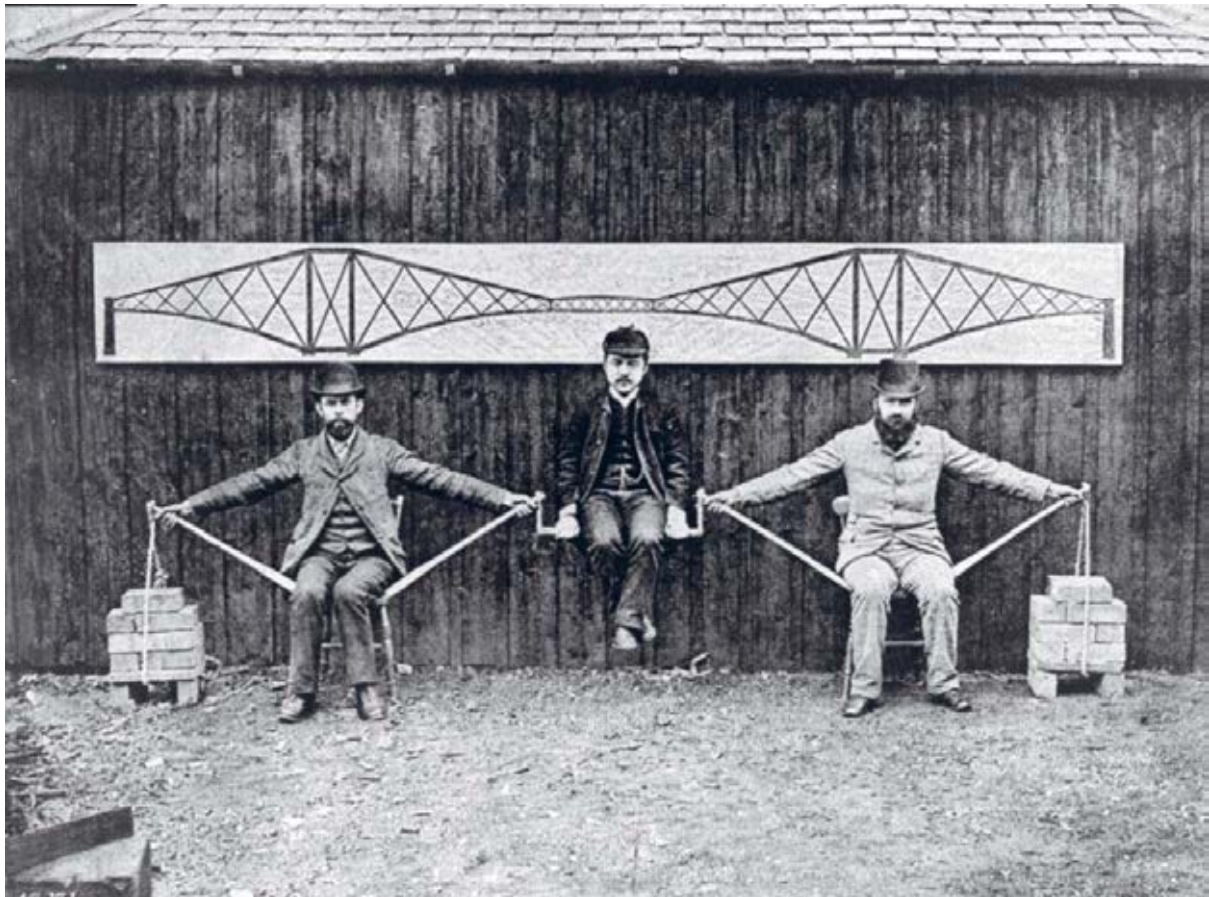
Title:		Key	
The Forth Bridge: Bridgehead Zone		Nominated Property	Listed Building
Bridgehead Zone Boundary		Scheduled Monument	Natural Heritage Protected Sites
Scale: 1 : 30,000 @ A4		Inventory Battlefield	Marine Planning Area
Projection: British National Grid		Conservation Area	Green Belt
		Gardens and Designed Landscape	



Map showing the boundaries of the nominated property



Drawing of the Forth Bridge signed by Mr. Barlow, Sir Fowler, and Mr. Harrison (1881)



The human cantilever



Photograph showing progress of the Queensferry main tower



Forth Bridge from South Queensferry



View of the Forth Bridge from South Queensferry

San Antonio Missions (United States of America) No 1466

Official name as proposed by the State Party

San Antonio Missions

Location

City of San Antonio, Bexar County and
Mission Espada, Wilson County
Texas, United States of America

Brief description

San Antonio Missions is a serial nomination of five frontier mission complexes situated along a 12 kilometre stretch of the San Antonio River Basin as well as a geographically detached ranch founded by Franciscan missionaries in the 18th century. The property illustrates the Spanish Crown's efforts to colonize, evangelize and defend the northern frontier of New Spain and comprises a range of architectural and archaeological structures including farmlands (*labores*), cattle grounds (*ranchos*), residences, churches, granaries, workshops, kilns, wells, perimeter walls and water distribution systems.

Category of property

In terms of categories of cultural property set out in Article I of the 1972 World Heritage Convention, this is a serial nomination of 6 *sites*.

1 Basic data

Included in the Tentative List

30 January 2008

International Assistance from the World Heritage Fund for preparing the Nomination

None

Date received by the World Heritage Centre

21 January 2014

Background

This is a new nomination.

Consultations

ICOMOS has consulted its International Scientific Committees on Shared Built Heritage, Earthen Architectural Heritage and several independent experts.

Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the property from 22 to 27 September 2014.

Additional information received by ICOMOS

ICOMOS sent a letter to the State Party on 14 November 2014 requesting the State Party to comment on information received by individuals introducing themselves as representatives of the indigenous community of Mission Valero regarding a development project at HemisFair Historical Park. The State Party responded by letter of 24 November 2014 providing detailed comments on the matter. ICOMOS sent a second letter on 22 December 2014, requesting additional information on integrity/completeness of the missions, the justification of criterion (iv) as well as the definition of boundaries and buffer zones. The State Party provided responses on all these items by letter of 6 February 2015, which are included under the relevant sections below.

The State Party had further provided additional information on development projects in and around the property on 30 May 2014. On 7 November 2014 the State Party sent another letter responding to some queries which occurred during the technical evaluation mission and well as providing further updates on the enactment of a so-called Mission Protection Overlay District, as well as updated details on two development projects.

ICOMOS also received a number of letters from individuals introducing themselves as descendants of the indigenous community of Mission Valero (the Alamo). These communications express opposition to a development project envisaged for HemisFair Historical Park and argue that the area concerned should be part of the property. The State Party's response is indicated above and integrated in the relevant sections below.

Date of ICOMOS approval of this report

12 March 2015

2 The property

Description

The San Antonio missions include six serial components, comprising a chain of five frontier missions established by the Spanish Crown in the 18th century – the missions Valero (the Alamo), Concepción, San José, San Juan and Espada – as well as a ranch associated to Mission Espada and located 37 kilometres south of these five complexes in Floresville, Wilson County.

The missions are located on high grounds on both banks of the San Antonio River in the territory of the city San Antonio and share an intricate system of water distribution channels utilizing the fresh water resources from two springs that here join together to form the San Antonio River. Purpose of the mission's establishment was the intention to evangelize the area's indigenous population and establish local settlements of dependants loyal to the Spanish Crown and Catholic faith.

The complexes combine an area of 300.8 hectares. The five missions share one common buffer zone of 2,068 hectares. The ranch component Rancho de las

Cabras is not surrounded by a buffer zone. The six components shall be described separately organized from north to south below.

Mission Valero (the Alamo)

The northernmost of the missions is Valero with its former church "the Alamo". The component covers approximately 1.7 hectares in the heart of downtown San Antonio. Nowadays surrounded by dense 19th and 20th century developments, Mission Valero retains only its church, the convent barracks and remains of its water channels. In addition archaeological remains of the former perimeter walls have been identified in several locations.

The site also contains a museum, a reconstructed wall section and visitor structures which were created in the 20th century. The walls of the colonial church are retained and illustrate floral and geometric carvings. The sacristy and a room to its west known as the monk's burial room also retain traces of plaster and decorative paintings on their interior walls. The former living barrack – so-called *convento* - is preserved as a long, arcaded, one-storey structure built of limestone rubble, in some sections restored. The site is surrounded by new perimeter walls constructed in the 20th century.

Mission Concepción

Mission Concepción is located east of the San Antonio River, close to its confluence with San Pedro Creek, and covers an area of 13.3 hectares. Its limestone church and former convent structures retain a large amount of the original fabric of its construction era and also its setting has retained the open land between the mission and the river. Apart from the church and convent, the mission still presents various workshops and support buildings to the south-east, and open plaza to the west and archaeological remains of a granary, an enclosure wall and indigenous living quarters.

The south-east of the mission at its road access, the component includes a limestone quarry, principle source of construction material for the complex. The mission also included a well, the location of which is today marked by a modern stone well. The most significant structure in the complex is certainly the church, with its twin bell towers and cruciform ground plan. It is a fine example of the late baroque style of New Spain. A significant part of the west elevation still retains remains of plaster, stucco and painted decoration.

Mission San José

Mission San José is the largest of the five mission complexes, comprising church, convent barracks, granary of the colonial era, as well as indigenous living quarters along the perimeter walls and a grist mill from the early 20th century. The mission is located in a low-density residential area on the west bank of the San Antonio River and covers an area of 20.6 hectares. The structures are arranged around an open plaza surrounded to all sides by stone walls and several buildings.

The church, a single aisle structure dominating the mission complex, is marked by its single bell tower and elaborately carved two-storey portal. The grist mill, partly reconstructed in the 1930s, remains operational and provides testimony to the 18th century mission technology. The original granary retains interior plasters and wall decorations and original kilns remain visible next to the grist mill structure. The mission complex contains several late 20th century structures including the visitor centre, the Harris House / Discovery Centre and the early 20th century priest's residence.

Mission San Juan

Mission San Juan covers 130.5 hectares in a rural area on the east bank of San Antonio River and combines the former mission complex and its agricultural lands – so-called *labores* – as well as an extensive water distribution system. The complex also retains the church, *convento* and support structures, as well as remnants of indigenous quarters and the perimeter wall. The mission also retains its gate house through which the component is entered and remains of a second unfinished colonial church.

The extensive farmland and water distribution system, which extends 10.8 kilometres and begins at a dam 4 kilometres north of the mission complex, makes this the largest among the serial components. The farm fields cover 33 hectares in size and retain the colonial era distribution of plots, indicating the amount of land that could be farmed by one family. These are long strips of land, designed to allow each farmer direct access to the water distribution channels.

Mission Espada

Mission Espada is the most rural of the five complexes and covers 94.7 hectares on the west bank of San Antonio River, 12.4 kilometres south of Mission Valero (the Alamo). The mission is composed of church and *convento*, ruins of support structures and perimeter walls as well as 44 hectares of farmland with a water distribution system continuously operating for 265 years.

The architectural structures of Mission Espada represent several subsequent building phases. It contains two churches, an earlier modest structure and a late-colonial church as well as a *convento*, granary, garden and indigenous living quarters. The walls of the indigenous living quarters are retained at different heights illustrating structures that continued to be in use up to the 1950s.

The extensive farm lands are watered by distribution channels of 9 kilometres length originating at a dam to the north of the component. This system also integrates an aqueduct with two Roman arches spanning a distance of 3.65 metres.

Rancho de las Cabras

The Rancho de las Cabras is a 40 hectares ranch associated with Mission Espada located 37 kilometres south at Floresville in Wilson County. Prior to 1985 the

architectural remains of a chapel and rooms were visible but have since been buried in sand for preservation purposes. Archaeological excavations have further confirmed the existence of a perimeter wall, two bastions and a compacted clay floor plaza.

History and development

In 1709 veteran missionary Antonio Olivares led an expedition to the San Antonio area in search of new locations for missionary activity. The combination of clean fresh water, fertile lands and a considerable number of species for hunting contributed to the decision to establish missions along the San Antonio River. Olivares himself founded the Mission Valero in 1718 on the east side of the river which was moved to the west side two years later by Francisco Hidalgo who took over its leadership.

When the war between Spain and France began in Europe its repercussions spread to Texas and in 1719 Spanish missionaries fled the East Texas missions in fear of French attacks. Father Margil, former head of the three Zacatecan missions in East Texas sought refuge in the San Antonio River Basin and established Mission San José in 1720. However in 1720 also the East Texan missions were re-established under the supervision of the Apostolic College of Santa Cruz de Querétaro. In 1730 a decision to withdraw military presence from the area left the missions extremely vulnerable and the Querétaran friars relocated their missions to the San Antonio River Basin, establishing in 1731 missions Concepción, San Juan and Espada to relocate their existing missionary communities. They were also joined by groups of indigenous populations such as the Pajalac and Benados, who relocated with the missions to San Antonio. In the same year a caravan of settlers from the Canary Islands arrived and established a municipal government.

The indigenous communities addressed by the mission were predominantly Coahuiltecan but encompassed as many as 200 groups who spoke different languages and dialects. Only few became mission settlers by coercion while most joined voluntarily for security of livelihood as well as food and water resources. Over the years with the assistance of indigenous workers water distribution systems and the architectural structures were built after initially relying on temporary structures for up to two decades. Often the church buildings were the first stone structures constructed, with foundations started in Mission Valero and San José in 1744, San Juan, Concepción and Espada in 1745.

In the late 18th century a process of secularization of the missions started. Spanish secularization laws dictated that the indigenous inhabitants were entitled to their lands and other material goods, and that their spiritual leadership would pass from the missionaries to the secular clergy and archbishops. Although the laws required secularization to be completed within ten years, the missionaries in San Antonio Basin only handed over to the local municipalities and dioceses when they were forced to do so. Formal secularization occurred in Mission Valero in 1793, Mission San José, San Juan,

Espada and Concepción in the year 1794. Following secularization several ownership changes occurred in the 19th and early 20th century. The mission structures gradually fell into disuse and became prone to decay.

In the second half of the 20th century, the missions remained in the care of the Archbishops diocese with assistance of the National Park Service for conservation and research, the State of Texas with administration by the Daughters of the Republic of Texas (Mission Valero) or were under the full responsibility of the National Park service (Mission Espada in 1983).

3 Justification for inscription, integrity and authenticity

Comparative analysis

The comparative analysis is based on the assumption that the Spanish Crown's colonization and missionary activities are relevant themes for the World Heritage List and are already presented in six inscribed properties. These are the Franciscan Missions in the Sierra Gorda of Querétaro, Mexico (2003, (ii) and (iii)), the Jesuit Missions of the Chiquitos, Bolivia (1990, (iv) and (v)), the Churches of Chiloé, Chile (2000, (ii) and (iii)), the Baroque Churches of the Philippines (1993, (ii) and (iv)), the Jesuit Missions of the Guaranis: San Ignacio Mini, Santa Ana, Nuestra Señora de Loreto and Santa Maria Mayor (Argentina), Ruins of Sao Miguel das Missoes (Brazil) (1983, 1984, (iv)), and the Jesuit Block and Estancias of Córdoba, Argentina (2000, (ii) and (iv)).

These other properties are said to differ on a thematic basis in that three are archaeological sites while the remaining almost exclusively focus on churches as an architectural element and do not include all features and aspects of missionary settlements and life.

An in-depth comparison is further carried out in relation to six missions in south-central California, seven missions in southern California and the four Salinas Missions in New Mexico (United States of America), seven missions in Baja California and the Three Gateway Missions (Mexico), as well as the Three Pimeria Alta Missions in Arizona and Sonora (United States of America and Mexico). The analysis considers the condition of physical attributes, the evidence of testimony for colonization, evangelization and defence and the question whether the missions remain in religious use as well as whether communities with historic relations to the missions continue to live in the nearby settlements.

Following the comparison of mission groups, 117 individual mission complexes were compared to illustrate that the variety of aspects illustrated by the San Antonio missions cannot be communicated by any single mission complex as well as that the state of conservation of the San Antonio missions is exceptional even if compared on an individual basis. It is concluded that the San Antonio Missions are unique in providing detailed

evidence on the interaction between colonizers, missionaries and the indigenous communities.

ICOMOS notes that the comparative analysis does not compare the features of the individual serial properties nor does it provide comparison on ranches to justify the inclusion of Rancho de las Cabras. The assumption is that the missions can only be considered as a group and that the nomination would be incomplete if a smaller number were selected. With reference to this group, the Rancho de las Cabras provides an additional element illustrating the cattle farming associated to the mission complexes. None of the other four missions retains a similar ranch that could have contributed this aspect.

ICOMOS considers that the comparison with other groups of Spanish mission complexes demonstrates that the San Antonio missions form a unique complex of frontier missions in the northernmost territories of New Spain. Likewise, the individual comparisons show that single San Antonio missions represent a remarkable example of Spanish colonization and evangelization. While not every of the five missions stands out in this individual comparison, especially the southern mission complexes do and ICOMOS reminds that according to par 137 of the *Operational Guidelines* it is the series as a whole – and not necessarily the individual parts of it – which have to demonstrate Outstanding Universal Value.

ICOMOS does however regret, that no comparative analysis is offered on a local level comparing why certain elements, such as fields and distribution channels have been included while others were not. Questions occur in particular in locations where water distribution channels continue outside the included agricultural area with no apparent purpose. ICOMOS assumes based on the rationale implied in the nomination that all elements which belong to the five missions and the protection of which can be guaranteed in the long term have been included in the proposal. Based on this assumption, ICOMOS is able to accept the current selection despite the missing comparative approach.

ICOMOS considers that despite a lack of comparison of individual elements included in the property boundaries, 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 San Antonio Missions are collectively the most complete extant example among the hundreds of missions that once underpinned the Crown's efforts to colonize, evangelize, and defend its empire;
- The mission complexes are a persistent and vibrant testimony to an interweaving of cultures from the European and North American continents based on

dramatic value changes of all groups involved but most strikingly the missions' indigenous inhabitants;

- The five missions are a unique example of mission complexes lying in exceptional proximity, yet succeeded to each establish dependent communities which were prepared for eventual secularization;
- The substantial remains of water distribution systems whose *acequias* (water channels) carry the San Antonio River's waters to the farm fields testify the exchange of technical knowledge adapted from Arab irrigation traditions, imported and sophisticated by the Spanish settlers and implemented and maintained by the indigenous population.

The serial approach is justified by the State Party in considering the San Antonio Missions as a group of missions with close historic and functional relations, which as a group provide evidence to the missionary life, colonization practices, evangelization strategies and processes of secularization in the San Antonio River Basin. Each mission adds additional features, such as well preserved churches, residence barracks, granaries, mills, indigenous quarters, farm fields, water channels or perimeter walls. The Rancho de las Cabras is included as an associated element to Mission Espada. Although it does not geographically form part of the group in the river basin, it adds an additional feature which each mission used to have but which as a type remains rarely preserved today.

ICOMOS considers that the justification provided is indeed largely appropriate. The San Antonio Missions are an exceptionally complete example of the Spanish Crown's efforts to colonize, evangelize, and defend its empire. The missions are also testimony to an interweaving of cultures from the European and North American continents.

The five missions likewise are a unique example of mission complexes lying in proximity and sharing a common approach to defence. In this density of evangelization activity, it is even more remarkable, that each mission established dependent communities which were prepared for secularization.

Integrity and authenticity

Integrity

The five missions were selected based on their geographical and functional relationship in the San Antonio River Basin. Although founded independently the missions are located at a distance of less than five kilometres from each other and shared a common approach to defence against attacks. The missions as a group, and not individually, combine all functional elements needed to understand the purpose and role in colonization, evangelization and eventual secularization. At the request of ICOMOS' the State Party elaborated that a sixth mission, Mission San Francisco Xavier de Najera had been established in 1722, it had never constructed any permanent architectural structures but

was abandoned by 1726 and was merged with Mission Valero.

The functional elements include farmlands (*labores*), best presented in mission San Juan and Espada; cattle grounds (*ranchos*), only retained in Rancho de las Cabras which is associated to Mission Espada; residences, well preserved in Mission Valero; churches, especially the two tower church in Mission Concepción; granaries, as in Mission San José; workshops, which can be seen in Mission Concepción; a mill as in Mission San José; indigenous living quarters as in Mission Espada, perimeter walls shown in Mission Concepción; water distribution systems, most exceptionally preserved in Mission San Juan and Mission Espada, which also contributes an aqueduct and dam; and the missions' relation to the San Antonio River, well documented in Mission Concepción.

However, ICOMOS considers that the justification for the serial approach is predominately based on the linkages between the missions along the San Antonio River. It is therefore surprising that the river itself, the connecting part between the five missions, is not included in the property. Upon ICOMOS' inquiry, the State Party argued that the San Antonio River bed had been channelized in the 1950s for flood control, changing its historic location and appearance and the State Party did not consider it would meet the condition of integrity. ICOMOS considers that this response seems satisfactory and the connecting characteristics of the river are preserved through its inclusion in the buffer zone.

Several serial components are affected by development pressures and past changes to their setting have had negative impacts on integrity. Especially in Mission Valero (the Alamo) massive urban development happened decades ago and has destroyed the visual connection to the River setting. However, it appears that development threats are reduced by urban planning restrictions and the property can be considered free of immediate threats.

ICOMOS considers that the integrity of the whole series has been justified.

Authenticity

The missions have evolved over time and not all remains which characterize the missions today date back to the time before secularization. Especially in the 19th century structures were added to the complexes and these were even extended or modernized in the 20th century as the priest's residence in Mission Espada. However, ICOMOS considers that the stratigraphy of the different consecutive additions is well legible in most sites and early physical remains can be easily identified.

Most churches retain authenticity of material, design and workmanship in relation to their original construction. An exception is Mission San José, for which roof and part of the walls of the church have been reconstructed during the 1930s. Four of the serial components have retained partial authenticity in use and function as their church

complexes are still under the responsibility of the archdiocese and used for church services. Only Mission Valero (the Alamo) has become a touristic site with didactic intention.

The authenticity in setting is unfortunately lost in some places, in particular Mission Valero. On the other hand the missions Espada, San Juan and the Rancho de las Cabras illustrate a very high degree of authenticity in setting. ICOMOS considers that Mission Valero is the only serial component in which authenticity is limited in a number of aspects for which its inclusion in the series could be debated. However, ICOMOS also notes that Mission Valero contributes an important element to the series as it was the foundation of the San Antonio Missions, the first one to be created by the Franciscan Order, and the first enclave that acted as a pole of attraction to the rest of them. As the integrity of the series would be reduced with the exclusion of Mission Valero, ICOMOS considers that its shortcomings with regard to authenticity can be accepted in the overall series.

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, despite concerns regarding reduced authenticity of Mission Valero, been demonstrated.

In conclusion, ICOMOS considers that the conditions of integrity and authenticity of the whole series have been justified.

Criteria under which inscription is proposed

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

Criterion (ii): *exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design;*

This criterion is justified by the State Party on the grounds that the water distribution systems constructed to irrigate the farmlands illustrate an interchange between indigenous peoples, missionaries, and colonizers. It is argued that these irrigation systems initiated a fundamental change in the life of the Coahuiltecas, who within one generation turned from hunter-gatherers to agriculturalists. The interchange is documented through a system that was initially developed by the Moors, sophisticated by the Spanish and then constructed with the assistance of the indigenous population and modified to the local topography. The State Party further points out that the maintenance of the irrigation system brought the missionaries and indigenous population together under a common cause.

ICOMOS considers that the justification presented is exclusively limited to the acequias or irrigation systems, an element not present in all property components and

hence cannot justify Outstanding Universal Value for the series.

However, justifications provided by the State Party under other criteria have the potential to be recognized under criterion (ii). This applies in particular for the San Antonio Missions as an example of the interweaving of Spanish and Coahuiltecan culture, illustrated in the integration of the indigenous settlements towards the central plaza, the decorative elements of the churches which combine Catholic symbols with indigenous natural designs and the post-secularization evidence which remains in several of the missions and illustrates the loyalty to the shared values beyond missionary rule.

ICOMOS considers that this criterion has been justified for the whole series.

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 San Antonio missions provide a unique testimony to the interweaving of cultural traditions from Europe and North America. This is said to be illustrated in the layout of the missions in which the indigenous quarters are oriented towards the inner plaza and not outside the perimeter wall, the fact that many indigenous settlers learned European crafts and actively contributed to their production as well as the fact that the missions symbolize a special identity which is neither wholly Spanish nor wholly indigenous.

ICOMOS considers that while the claims made in the justification of this criterion are correct, criterion (iii) is used to recognize the testimony of a civilization or a cultural tradition and not the interchange of several. ICOMOS considers that the arguments presented are better recognized under criterion (ii) which is focused on cultural interchanges, as to limit the testimony of the San Antonio missions to exclusively the Spanish missionaries would not adequately recognize the indigenous contribution.

ICOMOS considers that this criterion has not been justified.

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

This criterion is justified by the State Party on the grounds that the ensemble of the five 18th century mission complexes is the most complete example of the Spanish efforts to evangelize, colonize and defend the empire. It reflects Spain's ultimate goal of creating secular and self-supporting communities of Spanish subjects. The State Party also highlights that due to the geopolitical context of the northern frontier of the Spanish Empire, the missions had to defend themselves

and were constructed with defensive perimeter walls. The density of five missions within 12 kilometres of the San Antonio River Basin in addition strengthened their overall defensive capacities.

At the request of ICOMOS the State Party added further explanatory information, in particular that the missions represent a specific typology of Spanish colonial mission complexes, which demonstrate the specific adaptation of mission complexes to a society which was not fully agrarian and located at the edge of the empire. ICOMOS considers that structural integration of the indigenous, non-agrarian communities in colonial mission complexes, including specific architectural adaptation for this purpose, is another expression of the intensity of encounter and cultural exchange of the missions. However, it does not support the claim for a specific typology of mission structures. It is rather an additional architectural element which underlines the interchange of human values recognized under criterion (ii). While the defensive walls add a specific type of protective structure to the complexes and such walls are preserved in few colonial mission complexes, the walls alone do not seem sufficient to speak of a unique type of mission which is an outstanding example of edge-of-the-empire typology at this stage in history. ICOMOS considers that some of the claims in this criterion are better recognized under criterion (ii).

ICOMOS considers that this criterion has not been justified.

ICOMOS considers that the serial approach is justified and that the selection of sites is appropriate.

ICOMOS considers that the nominated property meets criterion (ii) and the conditions of authenticity and integrity.

4 Factors affecting the property

Development pressures could occur in some sections of the buffer zone, mainly near Mission Valero. There are effective control mechanisms such as city ordinances that cover the buffer zone and approval procedures for any development include review by the professional staff of the City Office for Historic Preservation and the Historic and Design Review Commission. Nevertheless, the accelerated growth of the city of San Antonio requires a periodic control of the potential menace of development, which is already foreseen by the State Party as a monthly monitoring procedure.

The State Party has indicated by letter of 30 May 2014 a number of development projects which are currently underway. The developments within the serial property are an expansion of the boardwalk trail at Mission San Juan, stabilization of church and convent at Mission Espada, and the redevelopment of St John's seminary north of Mission Concepción into mixed residential

housing, commercial space and an arts venue. Further projects have been identified in the buffer zone including redevelopment of the trailer park south of Mission Concepción to family apartments, redevelopment of a property north of Mission San José towards an YMCA facility and residential apartments, the expansion of the San Antonio Convention Centre south of Mission Valero and the HemisFair redevelopment project south of the Convention Centre, converting the 1968 World Fair grounds into a mixed used residential and retail development.

ICOMOS received several correspondences regarding the HemisFair redevelopment project, which seems opposed by members of the indigenous community. It is claimed that the property includes water distribution channels which formerly belonged to Mission Valero as well as indigenous burials of former mission inhabitants. In its response to ICOMOS' request for comment the State Party assured that the water channels will be preserved and integrated into a plaza of the development. However, in view of the State Party the remains are too fragmented to qualify for inclusion in the property.

One additional development pressure identified by the State Party concerns the fact that further development surrounding the boundary has increased the amount of impermeable surfaces, which in turn increases water run-off into the water distribution channels of the mission complexes. The National Historic Park collaborates closely with any new developments to prevent erosion of the channels.

Tourism pressures at present are only visible in Mission Valero which attracts around one million visitors per year. Although large visitor number likely change the perception of the missions, much larger increases would be necessary to create risks of physical damages to the historic structures.

Natural disasters are a minimal concern for the property, which was not affected by past floods of the San Antonio River and suffered from rare wildfires. There are no major environmental pressures in the property but it can be assumed that with population and traffic growth air pollution is likely to increase.

ICOMOS considers that the main threats to the property are urban and infrastructure developments.

5 Protection, conservation and management

Boundaries of the nominated property and buffer zone

The boundaries of the property are largely appropriate. The river, which had both connecting and defensive function and provides the proximity and connection of the missions has been included in the buffer zone based on concerns regarding its historic integrity. ICOMOS notes

that the river is an important connecting element of the properties and that the buffer zone regulations ensure that this special role is retained.

The buffer zone protects well the five serial components in San Antonio; however, there are two areas where the rationale for initially excluding segments is not clearly demonstrated. ICOMOS requested the State Party to consider the inclusion of these segments in the buffer zone, which the State Party agreed to.

In Rancho de las Cabras no buffer zone is envisaged as, according to the State Party, the surrounding area is rigorously protected as extensive agricultural land and cannot change its use due to flood plain protection. The State Party provided further photographic documentation illustrating that vegetation cover blocks sight relationships between the site and its surroundings. ICOMOS considers that the surrounding properties seem to be effectively protected at present but that due to this it would just be a formality to add an appropriate buffer zone which could add long-term protection in case the attribution as agricultural land may change in the future, and medium- or high-rise development be envisaged which would be visible above the vegetation cover.

In conclusion, ICOMOS considers that the boundaries of the nominated property and the buffer zone of the five mission complexes is adequate. ICOMOS further recommends that a buffer zone for Rancho de las Cabras is defined in the future.

Ownership

San Antonio mission ownership is predominantly in the hands of public institutions and shared by the City of Antonio, Bexar County, San Antonio Missions National Historical Park, National Park Service, San Antonio River Authority, State of Texas, Texas General Land Office, Texas Park and Wildlife Department. In addition some components belong to two private bodies and one public corporation.

Protection

The Missions of San Antonio are protected by federal laws and designations, Texas State laws and designations, City of San Antonio ordinances, and cooperative agreements, easements, and deed restrictions. Mission Valero (the Alamo), Mission Espada and Mission Concepción have been designated as National Historic Landmarks in the 1960s. Mission San José is a National Historic Site since 1941. The other four missions are on the National Register of Historic Places. At the federal level, Mission San José is also designated as a Texas State Historical Site and all five missions are Texas State Antiquities Landmark as well as on a local level City of San Antonio Local Landmark. None of these designations is recent and the latest have been attributed in the 1980s. ICOMOS considers that these protective designations ensure effective protection at the highest level.

The surrounding buffer zone is protected by a number of protective and regulatory instruments which have been

put in place by the relevant authorities to protect the historic setting and surroundings of the five mission complexes. In terms of protection, the buffer zone is managed by the City of San Antonio, which is asked to consult the members of the advisory committee to add an additional level of protection in the buffer zone in the future, by developing a new type of view shed ordinance which will protect 360 degrees around the perimeter of each mission compound. ICOMOS considers that the protection of the buffer zone is sufficient and that the future ordinance will significantly strengthen the protection of visual integrity.

ICOMOS considers that the legal protection in place is adequate.

Conservation

The state of conservation of the nominated property is generally good. Conservation and rehabilitation measures are ongoing in several locations of the missions. All conservation measures undertaken follow a programmed approach integrating scientific analysis of materials and methods as well as documentation. The measures are lead by local conservation staff and technicians who are also advised by academics from universities and research centres or institutions in Texas, United States and abroad. Following the completion of conservation projects, long-term monitoring procedures are established and the structures continue to stay closely monitored.

The traditional construction materials are subject to gradual decay and degradation, in particular the historic plaster surfaces which are exposed to wind and water erosions. To control these conditions, maintenance procedures have been established on the basis of sustainable techniques and use of traditional materials similar to the original ones. The maintenance procedures also include the re-pointing of masonry with compatible lime mortar which is undertaken on a five- to seven-year cycle.

San Antonio River has been negatively affected by river regulations starting from the 1950s, which also had impacts on the water distribution channels and former agricultural fields of the San Antonio missions. In the meantime, the historic water distribution channels and their dams in the vicinity of the river have been recovered by the National Park Service, with the aim of reinstating the original function and features. The city of San Antonio has also embarked in the so-called San Antonio River Improvement Project, which involves river recreation and maintenance activities.

In conclusion, ICOMOS considers that the state of conservation of the property is overall good and the conservation measures undertaken are appropriate.

Management

Management structures and processes, including traditional management processes

Management of the nominated series is complex and based on the ownership structure which includes nine different owners as described above. These owners will remain responsible for the day-to-day management of their respective properties. For overarching issues which concern all serial components of the property, an advisory committee has been established in 2012 to advise on preservation, interpretation and outreach activities and to make recommendations on frameworks for continued cooperation. The advisory committee includes all landowners, the General Land Office, the San Antonio Conservation Society, the National Parks Conservation Association, the Daughters of the Republic of Texas, and Los Compadres de San Antonio Missions National Historical Park. The advisory committee meets at least quarterly while in between urgent issues are coordinated by the National Park Service. ICOMOS considers that the advisory committee does qualify as an overarching management mechanism for the property.

Financial resources for management as well as human resources differ considerably between the serial components. The San Antonio Missions National Historical Park, which is primarily government funded, has a base operating budget of slightly less than 3.8 million US Dollars. The expertise available to the missions is varied and highly skilled with several universities cooperating and providing advice. The site does not have a site specific risk preparedness or disaster management concept as the State Party assures that natural disasters are of little concern to the property. ICOMOS considers that a disaster response plan should nevertheless be integrated into the management plan

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

A so-called management plan has been submitted with the nomination dossier. The plan describes all institutions which partner in the management and broadly defines their contributions and fields of responsibility. Following this the plan established a list of eight goals and provides an overview of actions – introduced only by their heading – which are to be implemented. What remains completely unclear is when, by whom, with which resources these are to be implemented and what the achieved outcomes will be. Completely missing are indicators to allow for quality assessment.

This document has been adopted by all nine property owners and provides a very general basis for the coordinated management. However, ICOMOS considers that it should be referred to as a document of management aims and principles rather than a management plan. ICOMOS further considers it desirable to develop a strategic planning document in the future which can provide more detailed guidance and activities,

including an implementation schedule, to the management partners.

Involvement of the local communities

The advisory committee which guided the preparation of the nomination held a number of public consultation meetings and invited all community members, who claimed descend from one of the missions included to contribute to the nomination dossier. This opportunity was taken up by some individuals who contributed to the documentation submitted. ICOMOS was contacted by individuals who presented themselves as members of the indigenous community regarding a development project in the buffer zone, which is discussed above. However, ICOMOS considers that this aspect does not imply a general opposition of indigenous communities to the nomination at hand.

In conclusion, ICOMOS considers that the management system for the overall serial property is adequate; ICOMOS further considers that a strategic management plan should be developed on the basis of the principles, goals and actions agreed by all owners.

6 Monitoring

The nomination provides a number of monitoring indicators divided according to the specific goals they monitor. The indicators are presented with the periodicity of the exercise, which ranges from daily to annually and the location of monitoring records. ICOMOS considers that the indicators presented are relevant and sufficient, but that the responsible agencies for each indicator should be defined and that the methods of evaluation should be described in more detail to ensure consistent standards over different monitoring cycles.

In conclusion, ICOMOS considers that that the monitoring indicators are sufficient but that responsible agencies and standard evaluation methods need to be defined.

7 Conclusions

ICOMOS considers that the San Antonio Missions are an exceptionally complete example of the Spanish Crown's efforts to colonize, evangelize, and defend its empire. The missions are also testimony to an interweaving of cultures from the European and North American continents. The five missions a unique example of mission complexes lying in unusual proximity connected through the San Antonio River. In such density of evangelization activity, it is even more remarkable, that each mission established its own dependent communities and prepared these for eventual secularization.

ICOMOS considers that the San Antonio Missions fulfil criterion (ii) as an example of the interweaving of Spanish and Coahuiltecan culture, which remains illustrated in the integration of the indigenous settlements towards the central plaza, the decorative elements of the churches which combine and integrate indigenous natural designs, as well as the post-secularization evidence which remains in several of the missions. Authenticity can be justified despite some concerns regarding Mission Valero, which, however, is an important component of the series. Likewise, integrity is demonstrated for the individual mission complexes and the series as a whole.

The State Party did positively respond to ICOMOS' recommendation to modify the buffer zone in two areas located south of the Mission San José and north of Mission Valero. ICOMOS further recommends that a buffer zone should also be defined for Rancho de las Cabras in the future to provide long-term protection against medium- or high-rise development, even though this may seem highly unlikely to occur at present.

ICOMOS considers that the main threats to the property are urban and infrastructure developments, however, protection measures in place seem to prevent any inappropriate developments through complex approval procedures. All five properties enjoy national protection as National Historic Sites or National Historic Landmark. Conservation measure are appropriate at the missions have at their availability a wide range of expertise including from universities and national institutions.

An advisory committee brings together all property owners and stakeholders to ensure the overarching coordination of management. The so-called management plan submitted contains goal, principles and general fields of action which all stakeholders agreed to in writing. ICOMOS recommends however that a strategic management plan is developed to provide more detailed management guidance to all management authorities in the serial property. ICOMOS considers that also the monitoring scheme would benefit from more detail in terms of agencies responsible for the monitoring exercise as well as standard evaluation methods to ensure consistency over several monitoring cycles.

8 Recommendations

Recommendations with respect to inscription

ICOMOS recommends that the San Antonio Missions, United States of America, be inscribed on the World Heritage List on the basis of **criterion (ii)**.

Recommended Statement of Outstanding Universal Value

Brief synthesis

The San Antonio Missions are a group of five frontier mission complexes situated along a 12.4-kilometer (7.7-

mile) stretch of the San Antonio River basin in southern Texas. The complexes were built in the early eighteenth century and as a group they illustrate the Spanish Crown's efforts to colonize, evangelize and defend the northern frontier of New Spain. In addition to evangelizing the area's indigenous population into converts loyal to the Catholic Church, the missions also included all the components required to establish self-sustaining, socio-economic communities loyal to the Spanish Crown.

The missions' physical remains comprise a range of architectural and archaeological structures including farmlands (*labores*), cattle grounds (*ranchos*), residences, churches, granaries, workshops, kilns, wells, perimeter walls and water distribution systems. These can be seen as a demonstration of the exceptionally inventive interchange that occurred between indigenous peoples, missionaries, and colonizers that contributed to a fundamental and permanent change in the cultures and values of all involved, but most dramatically in those of the Coahuiltecan and other indigenous hunter-gatherers who, in a matter of one generation, became successful settled agriculturists. The enclosed layout of each mission complex and their proximity to each other, the widespread sharing of knowledge and skills among their inhabitants, and the early adoption of a common language and religion resulted in a people and culture with an identity neither wholly indigenous nor wholly Spanish that has proven exceptionally persistent and pervasive.

Criterion (ii): The San Antonio Missions are an example of the interweaving of Spanish and Coahuiltecan culture, illustrated in a variety of elements, including the integration of the indigenous settlements towards the central plaza, the decorative elements of the churches which combine Catholic symbols with indigenous natural designs, and the post-secularization evidence which remains in several of the missions and illustrates the loyalty to the shared values beyond missionary rule. The substantial remains of the water distribution systems are yet another expression of this interchange between indigenous peoples, missionaries, and colonizers that contributed to a fundamental and permanent change in the cultures and values of those involved.

Integrity

The five missions were selected based on their geographical and functional relationship in the San Antonio River Basin. Although founded independently, the missions are located at a distance of less than five kilometres from each other and shared a common approach to defence against attacks. The missions as a group, and not individually, combine all functional elements needed to understand their purpose and role in colonization, evangelization and eventual secularization. The property is of sufficient size to adequately ensure the representation of the Outstanding Universal Value. Several serial components are affected by development pressures and past changes to their setting have had negative impacts on integrity. Especially in Mission Valero (the Alamo) massive urban development happened

decades ago and has destroyed the visual connection to the river setting. However, it appears that development threats are reduced by urban planning restrictions and the property can be considered free of immediate threats at present.

Authenticity

The missions have evolved over time and not all remains which characterize the missions today date back to the time before secularization. Especially in the 19th century, structures were added to the complexes and these were even extended or modernized in the 20th century. However, the stratigraphy of the different consecutive additions is well legible in most sites and early physical remains can be easily identified. The churches with the exception of Mission San José retain authenticity of material, design and workmanship in relation to their original construction. Four of the serial components have retained some authenticity in use and function as their church complexes are still used for church services. Missions Espada, San Juan and the Rancho de las Cabras illustrate a very high degree of authenticity in setting. Mission Valero is the only serial component in which authenticity is limited in a number of aspects. However, as it contributes an important element to the series as the foundation of the San Antonio Missions, the first one to be created by the Franciscan Order and the first enclave that acted as a pole of attraction to the rest, these shortcomings are acceptable within the overall series.

Management and protection requirements

The Missions of San Antonio are protected by federal laws and designations, Texas State laws and designations, City of San Antonio ordinances, and cooperative agreements, easements, and deed restrictions. Mission Valero (the Alamo), Mission Espada and Mission Concepción have been designated as National Historic Landmarks. Mission San José is a National Historic Site and the other four missions are on the National Register of Historic Places. At the federal level, Mission San José is also designated as a Texas State Historical Site and all five missions are Texas State Antiquities Landmarks as well as on a local level City of San Antonio Local Landmarks. The Texas Historical Commission must review in advance any modifications proposed for the structural elements located in the nominated property.

The United States National Park Service manages all the property within the boundaries of the San Antonio Missions National Historical Park, which was established under Public Law 95-629 (1978) and Public Law 101-628 (1990). The four mission churches within the National Historical Park are owned and operated by the Archdiocese of San Antonio. The State of Texas owns the property of Mission Valero/The Alamo. Management of the nominated series is complex and based on an ownership structure which includes nine different owners. These remain responsible for the day-to-day management of their respective properties. For overarching issues which concern all serial components of the property, an

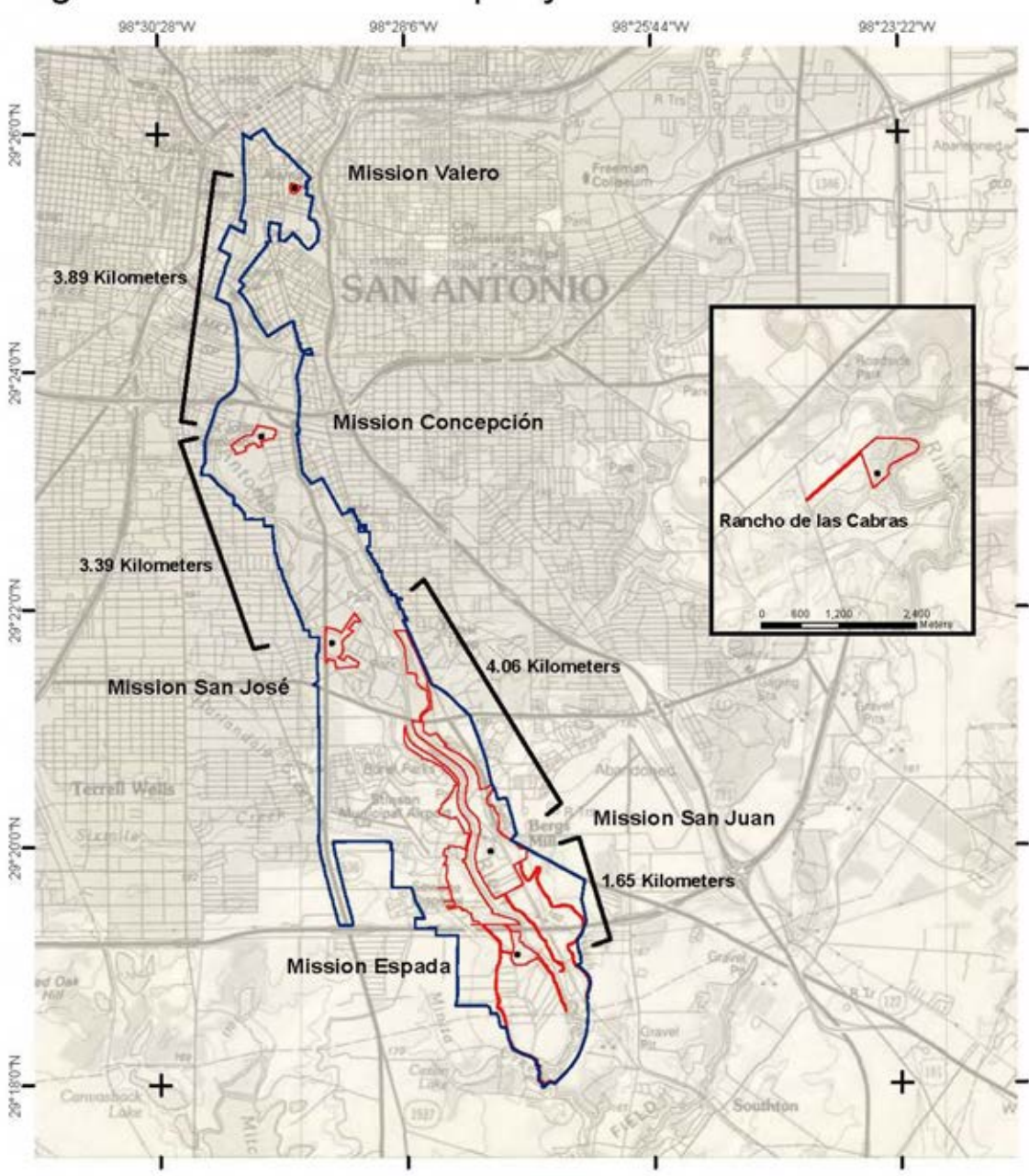
advisory committee was established in 2012 to advise on preservation, interpretation and outreach activities and to make recommendations on frameworks for continued cooperation.

A document of management objectives describes all institutions which partner in the management of the property and broadly defines their contributions and fields of responsibility. This document has been adopted by all nine property owners and provides a general basis for the coordinated management. There is continual monitoring for potential threats to the property to ensure none jeopardize the attributes that sustain the property's Outstanding Universal Value. Perhaps the most significant potential threat is the rapid growth and development of the City of San Antonio. The San Antonio River is an important connecting element of the properties and the buffer zone regulations ensure that this special role is retained.

Additional recommendations

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

- Defining and formalizing a buffer zone for Rancho de las Cabras;
- Preparing on the basis of the management document submitted a strategic management plan, integrating also disaster response mechanisms, which provides all property owners guidance on management strategies and actions on the basis of the goals, principles and actions they have agreed upon.



Legend

- Nominated Property
- Buffer Zone

N

0 1.25 2.5 5 Kilometers

Projection: Transverse Mercator
Datum: North American 1983
Date: February 2015

Map showing location of the nominated properties



Mission Concepcion, church and convent



Mission San Juan, church



Mission Espada, church



Mission Alamo

IV Cultural properties

A Africa

New nominations

B Arab States

New nominations

C Asia – Pacific

New nominations

D Europe – North America

New nominations

Extensions

Nominations deferred by previous sessions of the World Heritage Committee

E Latin America and the Caribbean

New nominations

Bagrati Cathedral and Gelati Monastery

(Republic of Georgia)

No 710bis

Official name as proposed by the State Party

Gelati Monastery

Location

Tkibuli district
Republic of Georgia

Brief description

Gelati Monastery is currently one part of the serial property of Bagrati Cathedral and Gelati Monastery. This major boundary modification is for the reduction of the property to enclose only Gelati monastery and its monastic precinct.

On the lower southern slopes of the mountains of the Northern Caucasus, Gelati monastery belongs to the 'golden age' of medieval Georgia, a period of political strength and economic growth between the reigns of King David IV 'the Builder' (1089-1125) and Queen Tamar (1184-1213). It was David who in 1106 began building the monastery near his capital Kutaisi on a wooded hill above the river Tskaltsitela. The main church was completed in 1130 in the reign of his son and successor Demetré. Further churches were added to the monastery throughout the 13th and early 14th centuries.

Gelati was not simply a monastery: it was also a centre of science and education, and the Academy established there was one of the most important centres of culture in ancient Georgia.

The monastery is richly decorated with mural paintings from the 12th to 17th centuries, as well as a 12th century mosaic in the apse of the main church, depicting the Virgin with Child flanked by archangels. The monastery also contains the tomb of David the Builder.

Category of property

In terms of categories of cultural property set out in Article I of the 1972 World Heritage Convention, this is currently a serial nomination of two *monuments*.

The proposed modification is for a reduction to one single *monument*.

1 Basic data

International Assistance from the World Heritage Fund for preparing the Nomination

None

Date received by the World Heritage Centre

29 January 2014

Background

The currently serial property of *Bagrati Cathedral and Gelati Monastery* was inscribed on the World Heritage List in 1994 on the basis of criterion (iv). It was inscribed on the World Heritage List in Danger in 2010.

At its 37th session (Phnom Penh, 2013), the World Heritage Committee, in decision 37COM 7A.32, has expressed "*its deep regret that despite previous decisions the re-building of Bagrati Cathedral has been completed, and considers that the Bagrati Cathedral has been altered to such an extent that its authenticity has been irreversibly compromised and that it no longer contributes to the justification for the criterion for which the property was inscribed.*"

As a result, the World Heritage Committee requested "*the State Party to submit, by 1 February 2014, a request for a major boundary modification for the property to allow Gelati Monastery to justify the criterion on its own.*"

Consultations

ICOMOS consulted several independent experts.

Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the property from 26 to 30 October 2014.

Additional information received by ICOMOS

ICOMOS sent a letter to the State Party on 22 December 2014 requesting:

- Clarification of the responsibilities of the various agencies and organisations involved in the management of the site;
- Details as to how a higher level of commitment might be put in place by the major stakeholders to ensure adequate protection and management of the property;
- Details as to how adequate resources will, or might, be made available for the long-term programme of restoration of the fabric of the monastery and its wall paintings;
- A timetable for when physical and visual protection for the buffer zone will be formalised and when clear guidelines and guidance for management and any development within the buffer zone will be put in place.

A response to ICOMOS' letter was received by the World Heritage Centre on 4 March 2015. As this was after the 28 February 2015 deadline set out in the *Operational Guidelines* for submitting additional information, the material has not been reviewed by ICOMOS.

The State Party provided further information on conservation work in its State of Conservation report submitted on 30 January 2015.

Date of ICOMOS approval of this report

12 March 2015

2 The property

Description

The two sites of the serial property, Bagrati Cathedral and Gelati Monastery, although nominated together because of their historical and spiritual connections, are 12 km apart and are of different dates, and illustrate different stages of Georgian medieval architecture and culture.

The major boundary modification proposes a reduction to the property, involving the removal of Bagrati Cathedral, and a justification for Gelati Monastery to satisfy criterion (iv) on its own.

The following description focuses on Gelati Monastery.

Gelati Monastery

The monastic precinct is surrounded by an enclosing wall within which are a main church, two other churches, a bell tower, two gates, the former Academy building, and a number of dwellings and subsidiary structures.

The whole complex is sited on a natural terrace with wooded hills above and a village and river below. The main church of the monastery, the Church of the Nativity of the Virgin, is flanked by the Church of St George to the west, with the two-storeyed Church of St Nicholas and the Academy building behind it.

Church of the Nativity of the Virgin

The Church of the Nativity of the Virgin was begun by King David the Builder in 1106 and completed under his son, King Demetre I in 1130. King David's tomb is in the south porch which was the original entrance.

The church is constructed of yellowish limestone blocks in a cross-in-square plan, with the dome resting on the corners of apse walls and on two massive piers. To the west, is a narthex from which three large doors lead to the church. The façades of the church are decorated with blind arcades and their turned columns and capitals echo those around the windows.

The chapels of St Andrew and St Marina to the east and west of the southern porch date from the 12th century although the latter was reconstructed in the 13th century. The northern porch and the chapel of the Saviour to its east date from the early 13th century. The second chapel of St Marina was added in the mid-13th century.

Murals and Mosaics

Within, the main church is richly decorated with mosaics and paintings. The mosaics were executed between 1125 and 1130 and cover around 50 square metres of the conch of the apse. They depict the Virgin with Child flanked by archangels on a luminous gold background. The lower parts were damaged in a fire of 1510 and replaced with painting in the following decades.

The oldest wall paintings, executed between 1125 and 1130, are found in the narthex. The centre of the vault features the Ascension of the Cross by the Archangels, while the remainder of the vault and the upper registers of the walls display the seven ecumenical councils, while around the window is St Euphemia's Miracle at the Council of Chalcedon. The murals are among the best surviving examples of 12th century Georgian wall painting. Here we have the earliest surviving representation of the seven ecumenical councils in the East Christian world. Apparently, the murals of Gelati reflect the disputes between the Diophysites and Monophysites that took place in the Caucasus in the early 12th century.

The rest of the mural paintings in the church, covering much of the remaining interior, date from the period after a fire of 1510 and were executed in several stages during the 16th century. As well as images of Christ Pantokrator and the prophets, the Divine Liturgy, the Communion of the Apostles, and scenes from the life of the Virgin, the murals also contain numerous portraits of royal donors. They include more than 40 portraits of kings, queens, and high clerics and are unparalleled in Georgia.

Murals are also found in the chapels of the church. The most significant are the wall paintings in the Chapel of St Andrew commissioned by the King David VI Narin and dating from 1291 and 1292. They contain a double portrait of the king.

These paintings reflect the zenith of mural painting in Georgia. While Georgian mural paintings show influences from Byzantine style, during their peak in the 11-13th centuries a unique Georgian hagiography emerged that diverged from Byzantine forms.

Later murals are found in the first Chapel of St Marina which belongs to the so-called folk tradition which prevailed in West Georgia in the 16th century. Murals in other chapels date from the 16th, 17th, and 18th centuries.

The Church of St George was constructed to the east of the main church in the mid-13th century. It is a reduced copy of the main church, but with more elaborate stone decoration typical of its date. Its murals were painted between 1565 and 1583 by order of the Catholicos Evdemon I Chkhetidze and King George II of Imereti.

The Church of St Nicholas, to the west of the main church, dates from the late 13th century. The church is

two-storied, which makes it unique in Georgian church architecture. All four sides of the lower storey consist of arches, supported by corner piers.

The Bell-Tower was constructed in the 13th century above a pool and spring to the northwest of the main church.

The Academy, a large rectangular hall to the west of the Church of St Nicholas, according to established opinion, housed the Gelati Academy and was founded by David the Builder. It is thus considered to date from the foundation of the monastery.

The Academy was restored in the mid-20th century after falling into ruin. In the past few years excavations have been undertaken to the north of the Academy building and a complex system of foundation walls and cellars of different ages has been uncovered. These contain an underground tunnel linking between the so-called wine cellar of the Academy to other buildings.

Royal graveyard

Within the four hectare monastic enclosure are royal graves, reflecting the monastery's role as a burial place for the Georgian Royal family.

Domestic buildings

There are also three 19th and 20th century domestic buildings used by the church.

History and development

Christianity became established in Georgia as early as 1st century when it was adopted as the state religion in what was then Iberia (East Georgia). Stone churches are believed to have been constructed from the 4th century onwards. The characteristics of the ecclesiastical architecture which emerged, were influenced by its location at the interface of Byzantine and Sassanian Iranian cultures.

In the 9th century, a strong Kingdom was formed in South Georgia (mostly in what is now Turkey) ruled by the Bagration dynasty. In late 10th century, King Bagrat III united most of Georgia under his rule. He moved his capital to Kutaisi, (in the centre of what is now Georgia) an ancient city reputed by the Greeks to be the final destination of the Argonauts and the residence of the legendary Colchian King Aëtes. In Kutaisi, Bagrat III built a new cathedral (completed in 1003) known as Bagrati after his name.

The revival of Georgian culture that started with the unification of the country continued in the 11th century but was hampered by political instability, resulting from invasions of Seljuk Turks in the 1060s.

It was David IV, crowned king in 1089 and later named "the Builder", who completed the unification of Georgia as a result of reforms to the army and administration, and alliances with the Crusaders that allowed him to

expel the Seljuk Turks from the Caucasus. His reign is the beginning of what is known as the "Golden Age" of Medieval Georgia when Georgian culture flourished. This period lasted for around 120 years until the end of the reign of Queen Tamar (1184-1213).

The Gelati Monastery and the Gelati Academy both reflected the cultural and intellectual development of this Golden Age. King David wanted to create a centre of knowledge and education of the highest international standard of his times. He made every effort to gather the most eminent intellectuals to his Academy such as Johannes Petritzi, a Neo-Platonic philosopher best known for his translations of Proclus, and Arsen Ikaltoeli, a learned monk, whose translations of doctrinal and polemical works were compiled into his *Dogmatikon*, or book of teachings, influenced by Aristotelianism. He went on to found the smaller Ikalto Academy.

Gelati also had a scriptorium where monastic scribes copied manuscripts (although its location is not known). Among several books created there the best known is an amply illuminated 12th century gospel, which is kept in the National Centre of Manuscripts.

As a royal monastery, Gelati possessed extensive lands and was richly endowed with icons, including the well-known gold mounted Icon of the Virgin of Khakhuli (now housed in the Georgian National Museum).

After the disintegration of Georgia in the late 15th century, Gelati monastery became the property of the Kings of Imereti. In 1510, the Monastery was partially burnt by the invading Turks. King Bagrat III restored the buildings and in 1519, established an Episcopal See. Between 1565 and 1578, the See of the Catholicos of West Georgia was moved from Bichvinta (in Abkhazia) to Gelati and the Church of St George became a Catholicate Cathedral.

In 1759, the monastery was again set on fire by the Lezgians (from Dagestan) and almost immediately King Solomon I made efforts to restore it. After the conquest of the Kingdom of Imereti by the Russian Empire in 1810, the Catholicate of West Georgia and the Gelati Episcopal See were abolished. However the monastery continued to function until the Soviet occupation of Georgia. In 1923 it was closed and turned into a branch of the Kutaisi Museum. Religious services and monastic life resumed in Gelati in 1988.

By the early 20th century, the structures of the major buildings of the Gelati monastery, except for the Academy, were in a relatively good condition. Some conservation and restoration works were undertaken in 1962 and 1963, when the Academy was re-roofed.

3 Justification for inscription, integrity and authenticity

Comparative analysis

The main purpose of the analysis included in the nomination dossier is to demonstrate that Gelati on its own does not have any comparators within Georgia that might also have similar value and attributes.

The analysis shows how the general layout of Gelati illustrates the Georgian monastic architectural tradition of free standing buildings within a walled courtyard. Although the same general concept can be seen in medieval monasteries such as Ikalto, Nekresi, Shiomgville, Martvili, etc, none of them is as large as Gelati or as elaborate in terms of their architectural form or decoration.

The cross-in-square plan and multi-domed form developed in East Georgia in the 10th and 11th centuries. It can be seen in the Cathedral of Bichvinta (now in Abkhazia) which was built by King David III in the 10th century and may have influenced Gelati. At Gelati, though, the unusual width of the main dome of the main church and the abundance of light in the interior recall middle Byzantine churches and reflect its royal status.

The system of façade decoration with blind arches and wide window frames was developed in East and South Georgia in the 10th century. Around 1000, it was introduced into West Georgia being notably applied in Bagrati Cathedral, which must have been the source of inspiration for the builders of Gelati.

The main church of Gelati displays a masterful synthesis of these architectural developments in and outside Georgia. The creative skill and proficiency of its architect makes the church the most outstanding example of such synthesis now surviving intact in Georgia.

What further differentiate Gelati from other monasteries are its interior mosaics and murals. Study of the plaster in the apse attested that from the beginning, the conch was prepared for mosaic decoration, while the apse was prepared for murals in secco technique. Thus, the mosaic was incorporated into the original decoration of the church. The combination of mosaics and murals is rare in Middle Byzantine churches. Although the mosaic reflects the artistic principles of the Middle Byzantine mosaic art, its images are also rooted in local Georgian art. The practice of decorating churches with mosaics was not widely spread in Georgia. The few other examples are either preserved in small fragments (Tsromi) or completely destroyed (Akhiza). The mosaic is the only well-preserved mosaic decoration of a sanctuary in the larger historic region of Eastern Asia Minor and the Caucasus.

In summary, ICOMOS considers that the comparative analysis demonstrates that within current day Georgia, and within greater Georgia, Gelati is the best example of a Georgian monastery from the 12th century onwards

due to its considerable size, clear spatial concept, and the high architectural and decorative quality of its main buildings. It reflects in an exemplary way the cultural and intellectual developments of the “Golden Age” of Georgia. After the reconstruction of Bagrati Cathedral, the property has become the most distinguished reflection of architecture of this Golden Age.

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

Justification of Outstanding Universal Value

Gelati is being nominated alone to express similar values to those for the inscribed property of Bagrati Cathedral and Gelati monastery.

The justification for inscription of the serial property on the basis of criterion (iv) was for the way both Bagrati Cathedral and Gelati Monastery represent the highest flowering of the architecture of medieval Georgia.

As set out above, the two sites illustrate different stages of Georgian medieval architecture and culture. While Bagrati was constructed by King Bagrat III in 1000 and reflects the culture emerging at the time of the country's unification, Gelati was built between 1106 and 1131 during the reign of David IV, known as David the Builder, and his son, at the beginning of the more stable Golden Age that followed the expulsion of the Seljuk Turks in 1121. Over a century separates their construction, they reflect different political circumstances and uses and, while Bagrati was badly damaged by the Turks in 1691 and was a ruin at the time of inscription, Gelati has survived as a complete monastic ensemble.

The following summarises the reasons the State Party has put forward for Gelati justifying specific aspects of the flowering of medieval architecture in Georgia.

Gelati Monastery is:

- The highest expression of the artistic idiom of the architecture of the Georgian “Golden Age”.
- Distinguished for its harmony with its natural setting, a well thought-out overall planning concept, and the high technical and artistic quality of its buildings.
- A magnificent architectural ensemble that illustrates the Georgian appropriation of the Imperial idea of power.
- One of the most powerful visual symbols of Medieval Georgia and the most vivid reflection of cultural and intellectual development in the “Golden Age”, which was a significant expression of the power and high culture of Eastern Christianity at this time.

ICOMOS considers that this justification in general is appropriate but that it should be augmented with specific references to the considerable size, clear spatial concept, and the high architectural and decorative quality of main buildings of the monastery, and that

clearer details should be provided of the main attributes. Furthermore, ICOMOS considers that its royal associations, relationship to the royal capital of Kutaisi and its role as one of the most important centres of culture and learning in ancient Georgia should also be noted.

ICOMOS considers that these additions also reflect the views set out within the 1993 ICOMOS evaluation report that stated:

“Gelati Monastery is a well preserved historical ensemble. It is of special importance for its architecture, its mosaics, its wall paintings, and its enamel and metal work. Gelati was not simply a monastery: it was a centre of science and education, and the academy established in the Monastery was one of the most important centres of culture in ancient Georgia. By virtue of its high architectural quality and the outstanding examples of art that it houses, Gelati Monastery is a unique Georgian cultural treasury, and a rare case in the history of world culture.”

Integrity and authenticity

Integrity

ICOMOS considers that no important original feature of the monastery from the 12th and 13th centuries have been lost during the centuries. The whole monastic precinct is included in the nominated property and contains all the buildings of the monastery; it thus fully meets the notion of wholeness. All the attributes necessary to express the potential Outstanding Universal Value are present and included in the nominated area.

All of the main buildings of the monastery as well as the buildings added in the 13th century are intact but not all are in a good state of conservation. In the main church, the original mosaic decoration of the apse is in relatively stable condition. In general, the late medieval paintings are fairly well preserved. However, to a large extent, the other paintings, namely in the narthex and in the chapels have been in bad condition for a long time. The condition of the paintings in St. George’s church is the most precarious, while St. Nicholas church has almost entirely lost its decoration over the centuries. With the recent interventions on roofing the process of deterioration has been, if not stopped, at least considerably decelerated.

ICOMOS considers that there are also vulnerabilities related to the buffer zone and wider setting. Although the natural setting of the monastery has generally been preserved, some development pressures exist, but the level of threats is low and the processes are currently under control.

Authenticity

ICOMOS considers that the fabric and decoration and the spatial planning and layout of the property are authentic in form and design.

Overall, the architectural forms, spatial arrangement and decoration fully convey their value. The roofs are mainly covered with provisional material from the 1960s. The cupolas are equipped with glazed tiles, a reconstruction of the last few years.

For a long time, major parts the mural paintings have been in a bad condition. With the repair of the roofs, the process of degradation should be slowed down. Although damaged and vulnerable, the paintings are in authentic state (see Conservation below).

The one area where there is a loss of authenticity is in the Academy building. At the time of inscription, in 1994, the Academy building was a roofless ruin. Although ICOMOS “expressed grave doubts about the projects being discussed ... for the re-roofing of the Academy building at Gelati”, in 2009 the upper parts of the ruin’s walls were rebuilt, a new wooden roof constructed and the interiors re-shaped. Although a usable space has been created, the building has lost its atmosphere and spirit and the work has not been undertaken on the basis of evidence of what existed before it became a ruin. There has thus been loss of authenticity for this important element of the monastery.

ICOMOS considers that overall the conditions of integrity and authenticity have been met although authenticity has been to a degree weakened by the re-building of the Academy, and is vulnerable due to the fragility of some of the wall paintings.

Criteria under which inscription is proposed

Both Bagrati Cathedral and Gelati Monastery together were inscribed in 1994 under criterion (iv): *Bagrati Cathedral and Gelati Monastery represent the highest flowering of the architecture of medieval Georgia.*

Gelati Monastery alone is now justified under cultural criteria (iv) as follows:

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;*

Gelati Monastery is the masterpiece of the architecture of the “Golden Age” of Georgia and the best representative of its architectural style, characterized by the full facing of smoothly hewn large blocks, perfectly balanced proportions, and the exterior decoration of blind arches.

The main church of the monastery is one of the most important examples of the cross-in-square architectural type that had a crucial role in the East Christian church architecture from the 7th century onwards. Gelati is one of the largest Medieval Orthodox monasteries, distinguished for its harmony with its natural setting and a well thought-out overall planning concept.

The main church of the Gelati Monastery is the only Medieval monument in the larger historic region of Eastern Asia Minor and the Caucasus that still has well-preserved mosaic decoration, comparable with the best Byzantine mosaics, as well as having the largest ensemble of paintings of the middle Byzantine, late Byzantine, and post-Byzantine periods in Georgia, including more than 40 portraits of kings, queens, and high clerics and the earliest depiction of the seven Ecumenical Councils.

ICOMOS considers that the justification is appropriate.

ICOMOS considers that this criterion has been justified.

ICOMOS considers that criterion (iv) can be justified for Gelati alone and that Outstanding Universal Value of Gelati Monastery has been demonstrated as a specific aspect of the flowering of the architecture of medieval Georgia.

4 Factors affecting the property

ICOMOS considers that potential threats are not negligible, but most are restricted.

Threats from development in future appear to be unlikely, if the extensive proposed buffer zone is effectively managed.

Traffic of heavy trucks from a nearby existing stone quarry do result in noise and pollution, although, the impact on the property is fairly limited. ICOMOS notes that no extension of its activities is currently planned. Furthermore, the Master Plan provides possible solutions to resolve this issue, notably with a proposed new road access to the quarry.

Should the number of monks increase considerably, the present monastic buildings would not be spacious enough to host all of them. The Master Plan designates a possible location outside the boundary of the property where a new building of limited size (length and height) could be constructed.

A non-negligible threat could come from new buildings for tourist infrastructure in the village. ICOMOS considers that it will be essential to ensure that new guest-houses or hotels are not built near the property and are limited in number. Furthermore, their dimensions should be strictly controlled, with a height of two storeys. The negative impact of a new three storey guest-house facing across the Tskaltsitela River is evident.

Earthquakes are a risk across the whole of Georgia. The compartment of the main buildings should be monitored for seismic activities. ICOMOS notes that the buildings have withstood earthquake dynamics for nine centuries and any risk prevention improvements should avoid irreversible measures.

A Risk Preparedness Plan is being discussed to address fire, severe weather events and significant temperature changes etc. and should be progressed. Furthermore, Georgia has a painful memory of recent war and the risk of military conflict is an unfortunate reality that can lead to evacuation or other necessary measures of protection.

As Gelati is located far enough from the city of Kutaisi, currently there are no particularly acute air pollution problems.

ICOMOS considers that the main threats to the property are potential inadequately regulated development in the buffer zone and uncontrolled tourism pressures.

5 Protection, conservation and management

Boundaries of the nominated property and buffer zone

The proposed boundary for the property is identical to the one as clarified in 2010 under the Retrospective Inventory process. It includes the entirety of the monastery within its surrounding stone wall, together with a strip 30metres wide beyond the wall.

The proposed enlarged buffer zone has been defined recently. Its delimitation is based on the work of an interdisciplinary group of experts and GIS modelling. Data used includes field observation and inventories of the many monuments in the region (58 monuments, among them 10 chapels, including the Motsameta Monastery), as well as satellite chapels of the monastery and David's watchtower. ICOMOS notes that account has also been taken of historical context and social and cultural links between the monastery and its setting, as well as visual links with Kutaisi.

The resulting buffer zone not only consists of the immediate surroundings of the monastery and the entire wooded hillside, but the visual envelope of the valley. The Minister of Culture and Monuments Protection approved the boundary on 9 January 2014.

A municipal cemetery is located to the east in the immediate surroundings of the monastery. This contributes to regular visits to the monastery by the inhabitants of the village and to intensifying relationships between the local population and the monastery site. ICOMOS notes that its transfer to another location is apparently being considered in order to allow expansion.

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

Ownership

In accordance with a Constitutional Agreement concluded between the State of Georgia and the Apostolic Orthodox Church of Georgia, all ecclesiastic buildings in Georgia, Gelati Monastery among them, are

owned by the Georgian Orthodox Patriarchate of Georgia. The Council for Ancient Georgian Art and Architecture, which is chaired by the Patriarch, cooperates with the National Heritage Agency and the Ministry, and advises the Church authorities on all conservation measures.

Protection

Gelati monastery has been a Listed Monument of National Significance since the Soviet period. It was listed in the Georgian National Register of Monuments by presidential decree on 07.11.2006. It has both physical and visual protection areas and ICOMOS notes that the latter is currently being extended to provide an adequate buffer zone.

ICOMOS considers that until such extra measures are in place, the protection of the buffer zone is less clear. As no development plan exists for the region (priority is now being given to their development for urban zones), every development project or potential project has to be permitted by local authorities, specifically the municipality, after assessment by the Ministry of Culture and Monuments Protection. Currently, the assessment is on a case-by-case basis and no precise prescriptions are in force. In order to avoid pressure being exercised, ICOMOS considers that it is important to establish clear rules and guidance for the management of the buffer zone.

ICOMOS considers that the legal protection in place is adequate for the property. For the buffer zone, clear physical and visual protection needs to be put in place as well as clear rules and guidance for its management.

Conservation

Since 2009, works have followed a Conservation Master Plan (see Management).

The main conservation problems concern the roofs. The majority are still covered insufficiently by provisional methods, partly dating from Soviet times, while the remainder have modern roofing sheets. The masonry of the buildings has been significantly damaged by earthquakes, as well as by man-made interventions and rain and wind. Damage to cornice stones means that they no longer fulfill their protective function.

The authorities are aware of this precarious situation. ICOMOS considers that it is essential to give the highest priority possible to investment in roof work and for such work to continue progressively until all has been addressed. A World Bank funded project is now starting to support systematic repair and conservation of the structures.

The main dome of the Church of the Nativity of the Virgin has recently been strengthened with the insertion of a ring beam of steel and lime mortar. A joint ICOMOS-World Bank mission visited the property in January 2015 to consider the efficacy of this intervention and to make

overall recommendations on the conservation and monitoring approaches.

The mission concluded that the overall bearing structure of the church – foundation (*stereobate*), *crepidoma*, walls, arches – are mostly in satisfactory condition and do not seem to require heavy structural interventions. They nevertheless recommended further surveys and modelling as well as the introduction of a permanent monitoring system.

The Conservation Master Plan suggests glazed tiles for all the roofs of the churches. In the past few years, archaeological excavations around the monument have shown that originally the domes were covered by glazed tiles (greenish-turquoise, light blue, green and light brown colors). Extensive research has been carried out to determine the specific characteristics of the original tiles and to find local ways of reproducing them by hand in all their varied hues. Tiles have now been put back on the Bell Tower and St Nicholas' church dome. ICOMOS considers that it can't be excluded that glazed tiles were used for the cupolas only, whilst the naves were covered with stone tiles. ICOMOS considers that a researched solution to this issue should be submitted to the monitoring group.

After the completion of roof-restoration, measures for consolidation and conservation (not of restoration or completion) will be necessary and urgent.

Several interventions will have to be executed in coming years on the stone facades, in particular on the main church and on St. Nicolas. The work should be based on the principles of 'minimal intervention', and limited to cleaning, filling in missing joint-mortar of lime, in rare cases inserting loosened stones, fixing and plastering damaged blocks.

ICOMOS notes that the situation of the interior paintings in the main church as well as in the church of St. George is a cause for concern. Their poor state of conservation is mainly due to former water penetration from roofs and upper windows, now stopped, and additionally to the effects of condensation. Currently, only urgent measures are being undertaken and these are executed with a high standard of professionalism.

A minor issue, but still important for long-term conservation, is the maintenance of services such as the existing historic water system, but also drainage, electricity, water under pressure, sewerage, heating-ventilation, interior and exterior lighting and safety systems. While some of these have been implemented in recent years, others are still awaiting adequate funding.

Academy building

In the near future it will be important to consider and evaluate approaches to recent archaeological discoveries. It seems clear that no construction that would surmount the height of the ground before excavation should be considered.

ICOMOS considers that support for essential conservation and restoration work on roofs and wall paintings is urgently needed in order to allow a sustained work on both. Allied to this urgent work is the need for a programme to address restoration of stone facades and provision of adequate services.

Management

Management structures and processes, including traditional management processes

From 2006 to 2008, the Ministry of Culture, Monuments Protection and Sports of Georgia elaborated a Conservation Master Plan for the Gelati Monastery in collaboration with the Orthodox Church of Georgia. The plan provides a framework for the National Agency responsible for the implementation of conservation works, and subsequent conservation activities have followed this plan. As the Master Plan does not meet all of today's requirements, it will be updated in 2015.

A Management Plan is under preparation. A draft was submitted with the Nomination dossier. The draft text sets out in detail the context for the management of the property, the constraints that exist, and the key stakeholders. It needs to be augmented with a more detailed framework to show how management will be enacted and where responsibilities lie. A revised draft will be submitted in May 2015 to the World Heritage Centre for comment by ICOMOS.

Day to day management is entrusted to the monastic community. Gelati Monastery (unlike many other monasteries in Georgia) is open for visitors. With its 30 monks living in the precinct, the monastery administration is responsible for the current management of the site. That comprises basic cleaning and maintenance inside the churches, general upkeep of the territory, especially for the area within the enclosure walls, and ensuring safety.

Long-term interventions are implemented by the National Agency for Cultural Heritage Preservation of Georgia. Its local representative agency is the Kutaisi Historical Architectural Museum-Reserve, which is responsible for monitoring and management of the property, maintaining it in a good state of conservation and for providing a proper methodology for interventions.

The Agency also caters for the general management framework. It issues permits and would act in case of illegal or inappropriate intervention. Finally, it ensures proper documentation and recording of the site and prepares reports to World Heritage Centre. In future, it will run the new visitor centre with facilities and information for tourists.

The Agency's human resources are however limited, in number as well as in capacity.

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

The Conservation Master Plan contains documentation of all components of the monastery. It sets out rehabilitation projects for each of the architectural components as well as plans for archaeological excavations and the conservation of wall paintings.

ICOMOS considers that taking into consideration that the property is a living monastery and a monument at the same time, precise zoning of the territory of the monastery to ensure on the one hand the privacy for monks and on the other hand adequate space for visitors is important.

The location for new monastic buildings in case the number of monks should exceed the present capacity has been proposed outside the monastery grounds. A proposal for co-operation with the World Bank is being considered to allow construction of a visitor centre outside the site. The plans would include improved visitor access routes to the site. Such a proposal if brought forward should be submitted to the World Heritage Committee for examination, at the earliest opportunity and before any commitments are made, in accordance with paragraph 172 of the *Operational Guidelines for the Implementation of the World Heritage Convention*.

Recently a Memorandum on Collaboration on Cultural Heritage Issues between the Georgian Apostolic Autocephaly Orthodox Church and the Ministry of Culture and Monument Protection of Georgia has been signed. It concerns all properties of the church. Nevertheless, it seems that an unresolved management conflict still exists. It is essential that clarification is provided of procedures and specific responsibilities for the special case of Gelati Monastery.

ICOMOS considers that the structure of the overall management system for the property is adequate but it is essential that clarification is provided for responsibilities and procedures.

6 Monitoring

The property is documented by good quality architectural plans. In addition, a series of good professional photographs have been made. ICOMOS notes that precise tri-dimensional measuring is lacking. Such data is essential as a basis for monitoring movements on the buildings on a regular basis. Especially in the event of an earthquake, it would be extremely important to be able to compare data before and after the event.

ICOMOS did not find it possible to verify how extensively current conservation work is documented. Although no documentation of recent intervention was available, it cannot be assumed that it did not exist. Such documentation should include descriptions, illustrations and justification for conservation interventions, as well as

documentation of the state of conservation before, during and after work.

ICOMOS considers that monitoring should be strengthened to encompass tri-dimensional measurements and that a full documentation process for conservation work should be put in place.

7 Conclusions

This major boundary modification has been assessed in the context of decision 37COM 7A.32 of the World Heritage Committee.

ICOMOS considers that Gelati Monastery alone can be considered to reflect certain aspects of the flowering of the architecture of medieval Georgia in an outstanding way and that the major boundary modification thus can be justified.

8 Recommendations

Recommendations with respect to inscription

Recalling decision 37COM 7A.32 of the World Heritage Committee at its 37th session which “*Requests the State Party to submit, by 1 February 2014, a request for a major boundary modification for the property to allow Gelati Monastery to justify the criterion on its own*”;

ICOMOS recommends that the major boundary modification of Bagrati Cathedral and Gelati Monastery, Republic of Georgia, be **referred back** to the State Party in order to allow it to:

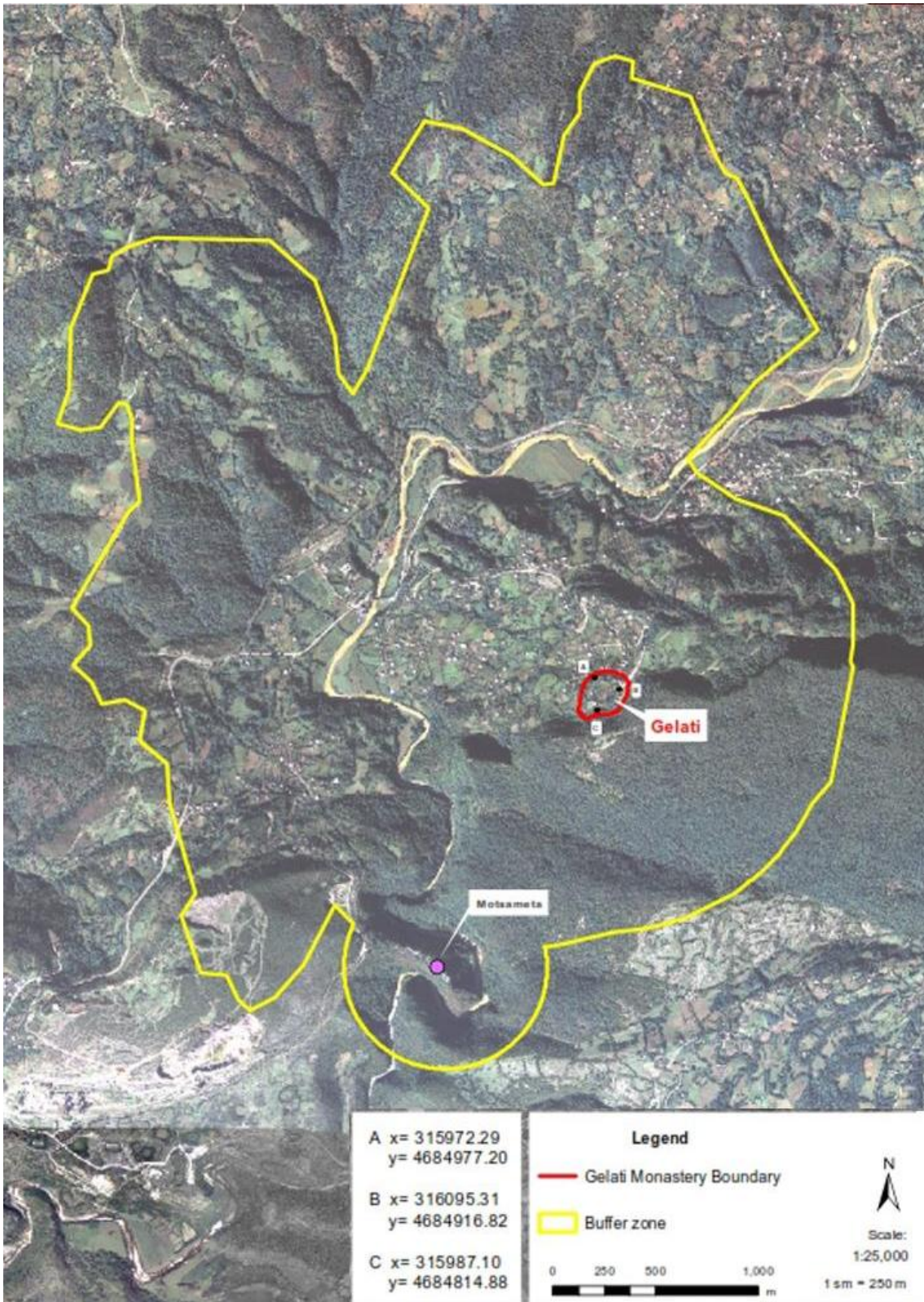
- Clarify management procedures and responsibilities of the various agencies and organisations involved;
- Provide details as to how a higher level of commitment might be put in place by the major stakeholders to ensure adequate protection and management of the property;
- Submit the revised draft Management Plan for review;
- Provide a timetable for when physical and visual protection for the buffer zone will be formalised and when clear guidelines and guidance for management and any development within the buffer zone will be put in place.

Additional recommendations

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

- Giving urgent attention to providing adequate resources for long-term programmes of restoration for the fabric of the monastery and its mural paintings;

- Avoiding further reconstruction work particularly on the excavated ruins north of the Academy building;
- Developing a clear system of documentation for any conservation and restoration work;
- Putting in place tri-dimensional measuring and monitoring to help gain a better understanding of the overall stability of the various buildings in the monastery;
- Submitting any future proposals for a visitor centre, or new visitor arrangements, or for new accommodation for monks, to the World Heritage Committee for examination, at the earliest opportunity and before any commitments are made, in accordance with paragraph 172 of the *Operational Guidelines for the Implementation of the World Heritage Convention*.



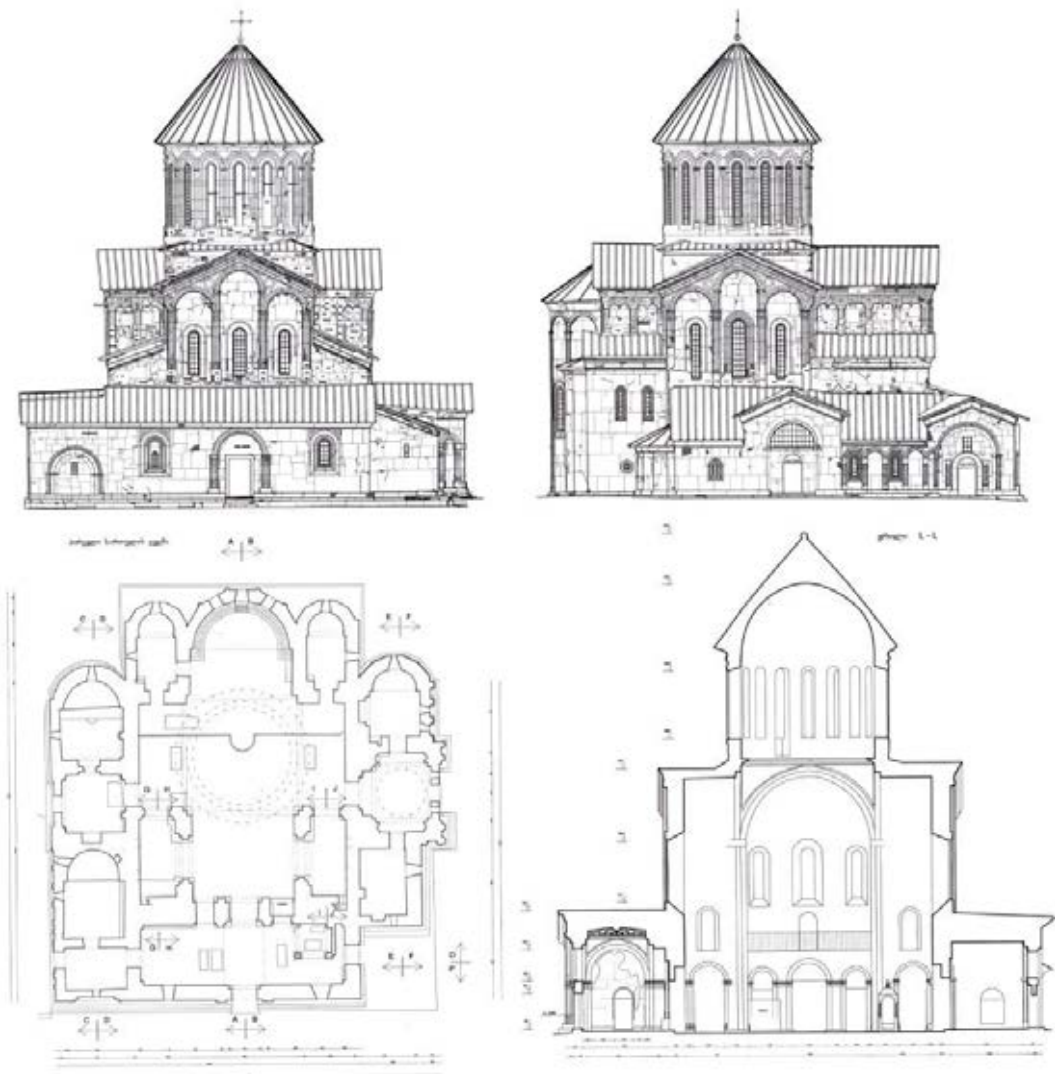
Map showing the boundaries of the nominated property



Gelati Monastery seen from the south-west



Academy, Church of St Nicholas, and bell-tower seen from the south



The main church, measured drawings of west and north elevations, plan and cross-section



Main church, interior view looking east

Routes of Santiago in Northern Spain (Spain)

No 669bis

Official name as proposed by the State Party

Routes of Santiago in Northern Spain

Location

The Autonomous Communities of Galicia, Cantabria, La Rioja, the Principality of Asturias, and the Basque Country
Spain

Brief description

The Routes of Santiago in Northern Spain is a network of four interconnected Christian pilgrimage routes, three of which lead to Santiago de Compostela in Galicia. Proposed as an extension of the serial property "Route of Santiago de Compostela" (1993), this almost 1500-km-long network is comprised of the Coastal, Interior, Liébana, and Primitive routes, as well as 16 individual cathedrals, churches, monasteries, and other structures along these four Ways of Saint James. The proposed extension includes some of the earliest paths of pilgrimage to Santiago de Compostela created after the 9th-century discovery there of a tomb believed to be that of the Apostle James the Greater.

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 20 *monuments*.

In terms of the *Operational Guidelines for the Implementation of the World Heritage Convention* (July 2013), annex 3, this is also a *heritage route*.

1 Basic data

Included in the Tentative List

27 April 2007

International Assistance from the World Heritage Fund for preparing the Nomination

None

Date received by the World Heritage Centre

22 January 2014

Background

This is a proposed extension of the serial property "Route of Santiago de Compostela" (Spain) (the "French" Route), which was inscribed on the World Heritage List on the basis of criteria (ii), (iv), and (vi) at the 17th session of the World Heritage Committee (17 COM, 1993).

Consultations

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

Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the property from 15 to 23 September 2014.

Additional information received by ICOMOS

A letter was sent by ICOMOS to the State Party on 4 September 2014 to request further information about the proposed official name of the extended serial property, the choice of components that comprise this proposed extension, and the possibility of further extending the inscribed serial property; the choice of boundaries for the buffer zones; the relationship between the proposed boundaries and the existing protective legislation; the existing and proposed management system; the two components that have previously been inscribed on the World Heritage List; the sources and level of funding available; and community involvement in the preparation of the nomination dossier and management system.

The State Party replied on 17 October 2014, sending additional documentation which has been taken into account in this evaluation.

A second letter was sent to the State Party on 23 December 2014, asking it to provide further explanation of the methodology used in choosing the proposed extension's component parts, boundaries, and buffer zones; to reconsider the proposed changes to the wording of the criteria justifications; to provide additional documentation on the authenticity and integrity of the nominated pilgrimage routes; to provide a clarification of how the coordinated management system will be integrated in the existing management framework; and to undertake additional comparative studies with the two already inscribed Route of Santiago de Compostela properties and with other Jacobean routes.

The State Party replied on 25 February 2015, sending additional documentation that has been taken into account in this evaluation.

Date of ICOMOS approval of this report

12 March 2015

2 The property

Description

The proposed extension is comprised of four Christian pilgrimage routes in northern Spain and 16 of the most culturally significant structures along these routes. The *Coastal Route* starts at the mouth of the Bidasoa, a short river that forms part of the border between Spain and France, and follows the coast of the Bay of Biscay (Cantabrian Sea) westward to Santiago de Compostela by way of Donostia–San Sebastián, Bilbao, Santander, and Gijón, a distance of 936.28 km. Three additional routes branch off the Coastal Route. From east to west, they are

the *Interior of the Basque Country-La Rioja Route* (196.0 km long), which connects the start of the Coastal Route with the already inscribed French Route (the best known and most used of the Jacobean pilgrimage routes) by way of Vitoria-Gasteiz and thence to Compostela; the *Liébana Route* (55.32 km long), which provides access to Santo Toribio de Liébana Monastery, a Catholic pilgrimage site; and the *Primitive Route* (311.31 km long), which branches off the Coastal Route just east of Gijón to travel through Oviedo and Lugo and thence to Compostela via the French Route.

The Primitive Route linking Oviedo with the Galician capital largely follows ancient Roman inland routes in the western part of Asturias. It became the first pilgrimage route used after the tomb believed to be the Apostle's was discovered. The subsequent development of the northern pilgrimage routes facilitated the growth of cities and the creation of new population centres in this region of the Iberian peninsula. The inclusion in the nominated serial property of Roman walls, five cathedrals, four churches, two collegiate, two monasteries, a bridge, and a tunnel with a medieval roadway provides evidence of this history and development.

Inscribed property

The already inscribed World Heritage property, Route of Santiago de Compostela (1993), is a 738-km-long pilgrimage route from Spain's north-eastern border with France to Santiago de Compostela in the north-western corner of the Iberian peninsula. Known as the "French Route" (Camino Francés), it is the continuation of four pilgrimage routes in France (The Routes of Santiago de Compostela in France, inscribed in 1998) that merge into two after crossing the Pyrenees into Spain at Roncesvalles (Valcarlos Pass) and Canfranc (Somport Pass) and then converge at Puente la Reina south of Pamplona. The French Route passes through five Autonomous Communities and 166 towns and villages. The already inscribed property includes a large number of individual buildings and structures of historic interest along the route, including religious establishments, facilities such as hostels to assist pilgrims, and bridges, locks, and commemorative crosses. These range in date from the 11th century to almost the present day.

In October 2014 the State Party stated it does not foresee any further extensions to the already inscribed property.

History and development

The Routes of Santiago in Northern Spain developed following the 9th-century discovery in Galicia of the remains believed to be those of the Apostle James the Greater. "Primitive" segments of these routes, some Roman in origin, were used by the first pilgrims to visit the site. To avoid the Muslim-occupied territories immediately to the south, there emerged a consolidated east-west route along the Christian-occupied northern coast of the Iberian peninsula, possibly in the early 11th century.

Changes in the political spectrum of the Iberian peninsula due to the southward expansion of the Christian kingdoms beginning in the 11th century led to the decline of the Northern Routes in favour of the French Route – which was less difficult to traverse – as the preferred way to reach Santiago de Compostela. Abetting this decline was the early 12th century *Codex Calixtinus*, considered to be the first pilgrims' guide to Santiago de Compostela. Its detailed itinerary was confined to the French Route, the path taken by its author, Aymerid Picaud.

The 12th century saw the French Route achieve its greatest influence, used by thousands of pilgrims from all over western Europe and facilitating a cultural interchange between the Iberian peninsula and the rest of Europe. A smaller number of pilgrims continued to use the Northern Routes for various reasons: the Primitive Route included the second most important Jacobean pilgrimage destination, the relics in the Cámara Santa in Oviedo (Monuments of Oviedo and the Kingdom of the Asturias (Spain, 1985, 1998)); and the Coastal Route provided the most direct access for pilgrims living in the Aquitaine area and along the Cantabrian coast. The Coastal Route was connected to the French Route by roads originally created during the Roman Empire and the early Middle Ages to cross the mountain passes, repurposed to support the pilgrimage. Farther west, the Liébana Route gave access to Santo Toribio de Liébana Monastery, the destination for pilgrims wishing to venerate its most important relic, the Lignum Crucis.

Despite the rise of the French Route to become the main conduit serving Santiago de Compostela (Santiago de Compostela (Old Town) (Spain, 1985)), the old Northern Routes endured. A 13th-century Royal policy of urban renewal enabled a new economic and social momentum along the Northern Routes, which led to redevelopment and an increase in the flow of pilgrims on the coastal paths. The old routes were modified and churches, hospitals, and hostels for pilgrims were built. The surviving Northern Routes are a symbiosis of older sections and the changes made during this period.

Use of the Jacobean pilgrimage routes fluctuated during the 16th to 18th centuries, in step with the impacts of outside forces such as religious reforms and wars. The most profound decline came after the French Revolution (1789-1799). The growing secularization that followed lasted until the second half of the 20th century. After remaining in decline for years, the Routes of Santiago reached a new high point during the second half of the 20th century, after a renewed interest in their history, itineraries, and cultural heritage emerged and heritage policies were put in place to catalogue, protect, and promote the Routes, which were designated of historical importance by Spain in 1962. The designation as the first European Cultural Route by the Council of Europe in 1987, and the 1993 Jubilee (Holy) Year at Santiago de Compostela, helped spur the French Route's revival.

In the 1990s, Galicia launched an extensive promotional campaign and created an International Committee of

Experts, and the Autonomous Communities began to define the exact itineraries of the various Ways of Saint James. The trajectories of the Northern Routes have since been reconstituted on the basis of a large compendium of written, archaeological, and landscape sources, and analytical work, including on-site. The Association of Friends of the Way of Santiago has also contributed significantly to the revival of the Jacobean phenomenon since the last decades of the 20th century.

3 Justification for inscription, integrity and authenticity

Comparative analysis

The State Party did not include a comparative analysis in its original 1993 nomination of the French Route of Santiago de Compostela. ICOMOS, in its evaluation of the nomination, did not comment on the northern pilgrimage routes in Spain, stating of Spain's French Route that there was *"no comparable Christian pilgrimage route of such extent and continuity anywhere in Europe."* Furthermore, the subsequent 1998 nomination dossier for the Routes of Santiago de Compostela in France did not include a comparative analysis of other pilgrimage routes. ICOMOS, in its evaluation of the routes in France, indicated that its previous conclusion about the section in Spain – that there was no comparable route – was equally valid for the nominated sections in France.

As regards the present proposal for an extension of the Route of Santiago de Compostela to include the four Northern Routes, the State Party has provided a cursory comparative analysis in its nomination dossier. Christian pilgrimages are proposed as the geo-cultural focus, the Saint James pilgrimage being one of the "trinity" of great Christian pilgrimages, the other two being to Jerusalem and to Rome. Neither the Jerusalem itinerary (a short segment of which is in Birthplace of Jesus: Church of the Nativity and the Pilgrimage Route, Bethlehem (Palestine, 2012, (iv), (vi)) nor the Rome itinerary (the Via Francigena) is discussed.

In February 2015, the State Party submitted brief comparisons with six other Jacobean routes: the two already inscribed on the World Heritage List; the Portuguese Route; the Southeastern Route (Vía de la Plata); the English Route; and the Spanish routes connecting Catalonia to Compostela. The characteristics that each shares with the Northern Routes, as well as those that set them apart, are highlighted in point form. To summarize: the legal protection and state of conservation of the non-inscribed comparatives are considered by the State Party to be "variable" or less robust than the Northern Routes; and the comparatives are later in date than the Northern Routes.

ICOMOS observes that specific attention must be paid to how a proposed extension compares with the original nomination, and how the values of the original nomination are articulated in the proposed extension. ICOMOS considers that the present analysis would have been more

useful had it focused on how the proposed extension's values and attributes compare with those of the already inscribed properties in Spain and France. ICOMOS considers that comparisons with additional Jacobean routes that share some or all of these same values would have served to highlight the full range of similarities and differences between the proposed extension and other Jacobean routes, both in Spain and beyond, and thereby more clearly indicate what makes the proposed extension stand apart.

While the comparative analysis in the nomination dossier does not include a discussion that justifies the selection of the 16 individual built components (cathedrals, churches, monasteries, etc.) that are included in this present proposal for an extension of Route of Santiago de Compostela, supplementary information submitted in October 2014 summarizes the conditions for their selection: each component must be of exceptional quality and value, and highlight the history of the Jacobean pilgrimage routes in northern Spain; each must reflect the occupation of this territory before the emergence of the phenomenon of pilgrimage to Compostela; each must reflect an aspect of northern Spain's different cultural periods from the first pilgrimages that traversed the Roman roads to the start of the belief that the apostle James' tomb was in Spain; and each must have Spain's highest legal protection.

Additional information provided by the State Party in February 2015 demonstrates how these conditions have been applied in the context of an inventory of more than 2,000 elements directly associated with the Northern Routes. ICOMOS considers that this additional information demonstrates in a readily defined and discernible way how the 16 components chosen by the State Party can be seen to extend, complement or amplify the attributes of the already inscribed property while bearing the same Outstanding Universal Value.

ICOMOS considers that the comparative analysis justifies consideration of this extension to the already inscribed property.

Justification of Outstanding Universal Value

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

- It completes the two existing Route of Santiago de Compostela World Heritage properties (the main Christian pilgrimage in Europe) by adding the earliest routes of the Saint James pilgrimage, which date back to the 9th century, as well as other northern and coastal routes that resulted from the rise of the Jacobean phenomenon in the High and Late Middle Ages.
- The Northern Routes are cultural and monumental axes at the same level and with the same historic and heritage significance as the Jacobean pilgrimage routes already on the World Heritage List.

- The French Route and Northern Routes retain the most complete material record of the Christian pilgrimage routes, a heritage that stands out for the richness of its art and architecture.

ICOMOS considers that this justification concerning the earliest routes of the Saint James pilgrimage is most appropriate for the Primitive Route, whose early date and trajectory from Oviedo to Compostela are accepted by scholars. While the existence and trajectory of a demonstrable pre-11th-century pilgrimage path is not as clear for the Coastal Route, ICOMOS considers that it, along with the Interior Route and the Liébana Route, are important testimonies to the rise of the Jacobean phenomenon in the High and Late Middle Ages.

The "Route of Santiago de Compostela" (Spain, 1993) was inscribed on the World Heritage List on the basis of criteria (ii), (iv), and (vi):

Criterion (ii): The Pilgrimage Route of St James of Compostela played a fundamental role in facilitating the two-way interchange of cultural developments between the Iberian peninsula and the rest of Europe during the Middle Ages.

Criterion (iv): Pilgrimages were an essential part of European spiritual and cultural life in the Middle Ages and the routes that they took were equipped with facilities for the spiritual and physical well-being of pilgrims. The Route of St James of Compostela has preserved the most complete material record in the form of ecclesiastical and secular buildings, settlements both large and small, and civil engineering structures.

Criterion (vi): The Route of St James of Compostela is outstanding testimony [to the] power and influence of faith among people of all classes and countries in Europe during the Middle Ages and later.

At its 38th session (Doha, 2014), the World Heritage Committee adopted a retrospective Statement of Outstanding Universal Value that included the following revised justifications:

Criterion (ii): The Route of Santiago de Compostela played a crucial role in the two-way exchange of cultural advances between the Iberian Peninsula and the rest of Europe, especially during the Middle Ages, but also in subsequent centuries. The wealth of cultural heritage that has emerged in association with the *Camino* is vast, marking the birth of Romanesque art and featuring extraordinary examples of Gothic, Renaissance, and Baroque art. Moreover, in contrast with the waning of urban life in the rest of the Iberian Peninsula during the Middle Ages, the reception and commercial activities emanating from the *Camino de Santiago* led to the growth of cities in the north of the Peninsula and gave rise to the founding of new ones.

Criterion (iv): The Route of Santiago de Compostela has preserved the most complete material registry of all

Christian pilgrimage routes, featuring ecclesiastical and secular buildings, large and small enclaves, and civil engineering structures.

Criterion (vi): The Route of Santiago de Compostela bears outstanding witness to the power and influence of faith among people of all social classes and origins in medieval Europe and later.

As a point of information, "The Routes of Santiago de Compostela in France" (France, 1998) was also inscribed on the World Heritage List on the basis of criteria (ii), (iv), and (vi):

Criterion (ii): The Pilgrimage Route of Santiago de Compostela played a key role in religious and cultural exchange and development during the later Middle Ages, and this is admirably illustrated by the carefully selected monuments on the routes followed by pilgrims in France.

Criterion (iv): The spiritual and physical needs of pilgrims travelling to Santiago de Compostela were met by the development of a number of specialized types of edifice, many of which originated or were further developed on the French sections.

Criterion (vi): The Pilgrimage Route of Santiago de Compostela bears exceptional witness to the power and influence of Christian faith among people of all classes and countries in Europe during the Middle Ages.

Integrity and authenticity

Integrity

The State Party considers that the proposed serial extension stands out for the excellent conservation of its rich intangible and tangible heritage, which makes it a unique example of a medieval pilgrimage route that has survived to the present day. Moreover, it states that ever greater efforts have been made to improve, protect, and maintain the Route of Santiago after its long decline.

While the nomination dossier does not provide a logical, scientific basis for the selection of all the components that make up this proposed serial extension or for the selection of the nominated area, as required in the *Operational Guidelines* (paragraphs 87-89), ICOMOS considers that the additional information provided by the State Party in February 2015 satisfies this requirement, particularly as regards the 16 built components proposed for inclusion in this serial extension.

ICOMOS considers that the integrity of the whole series has been justified; and that the integrity of the individual components that comprise the series has been demonstrated.

Authenticity

The State Party asserts that the Northern Routes benefit from a rich and varied documentation, supplemented by a large number of recent studies and research. The State Party concludes that, compared to other known Christian pilgrimage routes, the Route of Santiago, a living and magnificent example of integration in its environment, is the one that has best been able to retain its original layout.

According to additional maps and summaries provided by the State Party in February 2015, 60.08 percent of the total length of the four routes retain their historical characteristics; 29.52 percent have been converted into main roads; and 10.39 percent are new layouts. By way of comparison, the French Route entails an authenticity of about 80 percent. The inscribed Jacobean routes in France incorporate only the segments of the Chemin du Puy (Via Podiensis) whose authenticity has been scientifically demonstrated.

ICOMOS considers the degree to which authenticity is present in or expressed by each of the significant attributes of the proposed serial extension to be variable. The credibility of the related information sources is not questioned. ICOMOS considers that the cultural value of the proposed serial extension and of the individual components, as recognized in the nomination criteria proposed, has for the most part been demonstrated to be truthfully and credibly expressed through attributes such as their locations and settings, forms and designs, and materials and substances.

ICOMOS considers that the authenticity of the whole series has been justified; and that the authenticity of the individual components that comprise the series has been demonstrated.

In conclusion, ICOMOS considers that the condition of integrity for the whole series and for the individual components has been justified; and that the condition of authenticity for the whole series and for the individual components has been justified.

Criteria under which inscription is proposed

The extension is nominated on the basis of cultural criteria (ii), (iv), and (vi). The same criteria are justified for the proposed extension as for the existing World Heritage property.

Criterion (ii): *exhibit and 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;*

The State Party, according to additional information submitted in February 2015, now justifies this criterion on the same grounds as the revised justification for the existing World Heritage property adopted by the World Heritage Committee in 2014:

“The Route of Santiago de Compostela played a crucial role in the two-way exchange of cultural advances between the Iberian Peninsula and the rest of Europe, especially during the Middle Ages, but also in subsequent centuries. The wealth of cultural heritage that has emerged in association with the Camino is vast, marking the birth of Romanesque art and featuring extraordinary examples of Gothic, Renaissance, and Baroque art. Moreover, in contrast with the waning of urban life in the rest of the Iberian Peninsula during the Middle Ages, the reception and commercial activities emanating from the Camino de Santiago led to the growth of cities in the north of the Peninsula and gave rise to the founding of new ones.”

ICOMOS considers that the proposed serial extension as a whole should fulfil the criterion. The existing justification stresses that the Route of Saint James played a fundamental role in the bi-directional exchange of cultural developments between the Iberian peninsula and the rest of Europe. Information provided by the State Party largely substantiates the claim of the Northern Routes' importance in this two-way interchange of cultural developments.

ICOMOS considers that the proposed extension has been demonstrated to reinforce this criterion.

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 State Party, according to additional information submitted in February 2015, now justifies this criterion on the same grounds as the revised justification for the existing World Heritage property adopted by the World Heritage Committee in 2014:

“The Route of Santiago de Compostela has preserved the most complete material registry of all Christian pilgrimage routes, featuring ecclesiastical and secular buildings, large and small enclaves, and civil engineering structures.”

ICOMOS considers that there is a substantial and important material record related to the proposed serial extension.

ICOMOS considers that the proposed extension has been demonstrated to reinforce this criterion.

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

The State Party, according to additional information submitted in February 2015, now justifies this criterion on the same grounds as the revised justification for the existing World Heritage property adopted by the World Heritage Committee in 2014:

“The Route of Santiago de Compostela bears outstanding witness to the power and influence of faith among people of all social classes and origins in medieval Europe and later.”

ICOMOS considers that the proposed serial extension, through its attributes, reinforces this criterion as an outstanding witness to the power and influence of faith.

ICOMOS considers that the proposed extension has been demonstrated to reinforce this criterion.

ICOMOS considers that the serial approach has been justified.

In conclusion, ICOMOS considers that the condition of integrity for the whole series as well as for the individual components has been justified; that the condition of authenticity for the whole series as well as for the individual components has been justified; and that the proposed extension to the serial property has been demonstrated to reinforce criteria (ii), (iv), and (vi).

4 Factors affecting the property

The factors that are most likely to affect or threaten the proposed Outstanding Universal Value of the proposed serial extension include development pressures, particularly related to the large number of industrial zones and sizeable factories that exist in the vicinity of the Northern Routes. Some parts of the Routes have disappeared or been significantly modified by the infrastructure of the industrial sector, in particular in the environs of Bilbao and Portugalete, the area from Veriña to Gijón, the Caudal coalfield, and the outskirts of Avilés. The State Party notes that the declaration of the Route of Santiago as a Site of Cultural Interest in 1985 allows the competent authorities responsible for cultural heritage to have a voice in new industrial zone projects, and to adopt measures to protect the historic values of this route. Nevertheless, the State Party also notes that the proliferation of industrial areas continues, with a very negative impact on the environment of the Routes, and sometimes on the Routes themselves.

The State Party identifies the development of communications corridors, such as the national network of roads and highways, as having had the most profound impact on the Routes of Santiago from a historical point of view. The Routes are still being affected by new road infrastructure, including Autoroute A-8, the construction of which continues in Asturias, sometimes directly overlaying sections of the historic Routes of Santiago.

Open-pit mines located near the Northern Routes have a negative visual, environmental, and acoustical impact, and some sections of the Routes are used as service roads for the mines. The growth of urbanized cities and towns along the Routes also has a negative impact; and in rural areas, the abandonment of farms is a serious problem because

of the resultant degradation and deterioration of the landscape surrounding the Routes. The State Party notes that the Site of Cultural Interest declaration allows the negative effects to be controlled and reduced, though detailed plans showing the locations of all these risks are not provided, nor are the planned corrective measures.

The State Party indicates that the Northern Routes are not threatened by environmental pressures, and that this region is one of the least exposed in the world to the potential risks of natural disasters. In terms of responsible visitation, the Routes included in this nomination are not currently overcrowded, and the State Party believes that any future increases in visitation can be accommodated.

ICOMOS recommends that heritage impact assessments be carried out in accordance with its *Guidance on Heritage Impact Assessments for Cultural World Heritage Properties* before any developments such as renewals, demolitions, new infrastructure, land-use policy changes, or large-scale urban frameworks are approved and implemented.

ICOMOS considers that the main threats to the property are industrial and urban growth and development, new transportation infrastructure, and rural depopulation.

5 Protection, conservation and management

Boundaries of the nominated property and buffer zone

The area of the four pilgrimage routes of the proposed serial extension is not provided; their combined length is 1498.91 km. The area of the 16 built components of the proposed extension totals 14.58 ha. The nomination dossier does not provide an explicit rationale or explanation for the chosen boundaries. In October 2014, the State Party clarified that the approach adopted 20 years ago for the boundaries of the French Route has been maintained for the present proposed extension. The boundaries of the four Northern Routes are therefore evidently limited to their actual surface areas; the boundaries of the 16 built components included in the proposed serial extension are, generally speaking, defined by their footprints.

In terms of buffer zones, the principle of a generic 30-m band of protection for the Routes, as was accepted for the French Route in 1993, has also been maintained, according to an explanation provided by the State Party in October 2014. In Cantabria, La Rioja, the Principality of Asturias, and the Basque Country, the buffer zone is a 30-m-wide strip on either side of the Routes in rural areas. In urban areas, however, it is 3 m wide in Cantabria and the Basque Country, 15 m wide in La Rioja, and 30 m wide in Asturias. In Galicia, the buffer zones are contextual, between 30 and 100 m wide. Buffer zones for the Routes of Santiago are regulated independently by each Autonomous Community.

In February 2015, the State Party modified the buffer zones originally proposed for 7 of the 16 built components in order to better take into account the particularities of each component and its environment, including views to and from the component. These modifications affect the buffer zones for the church and monastery of San Salvador (component P2); the cathedral of Saint James the Apostle (C2); San Salvador church (C5); Santa María de Soto de Luiña church (C6), which has also evidently been expanded to include its presbytery; the San Adrián tunnel and roadway (I1); the cathedral of Vitoria-Gasteiz (I2); and the Santo Toribio de Liébana monastery (L1). In some cases these buffer zones overlap, in whole or in part, the buffer zone for the adjacent pilgrimage route.

ICOMOS considers that the boundaries of the proposed serial extension, while less than optimal as concerns the four routes and 16 built components, are adequate; and that the proposed buffer zones, as revised in February 2015, while minimal in certain urban areas, are adequate for the purpose of giving an added layer of protection to the proposed serial extension.

Ownership

The four Northern Routes of Santiago within the proposed extension are Crown property and therefore in the public domain and inalienable. The 16 individual components are owned by the Catholic Church of Spain, the Archdiocese of Oviedo, the Catholic Church in Galicia, the Xunta (Government) of Galicia, the Monastery of the Olive, the Community of Cistercian Monks of Sobrado dos Monxes, the General Coparcener of Gipuzkoa and Alava, the Bishopric of Lugo, the Bishopric and Diocese of Bilbao, and the Bishopric and Diocese of Vitoria. The buffer zone is under a mixture of private, institutional, and public sector ownership.

Protection

Legal protection of the proposed serial extension at the national level is assured by means of Decree 2224/1962 of 5 September, which in 1962 designated the Route of Santiago as a Historic and Artistic Ensemble; and Law 16/1985 on Spanish Historical Heritage, designating the Route of Santiago in 1985 as a Site of Cultural Interest and a Classified Historical Monument. Responsibilities for cultural heritage have been decentralized by Spain to the Autonomous Communities, each of which has its own law on cultural heritage: Law 1/2001 of the Principality of Asturias on Cultural Heritage; Law 11/1998 on the Cultural Heritage of Cantabria; Law 7/1990 on the Basque Cultural Heritage; Law 8/1995 of 30 October on the Cultural Heritage of Galicia, and Law 7/2004 of 18 October on the Cultural, Historical, and Artistic Heritage of La Rioja, as well as sectoral regulations on the protection of cultural property. These laws represent the highest level of protection available in Spain.

Proposed interventions to the Routes require prior approval from the competent authority on cultural heritage, or from the local government if the corresponding instrument of territorial planning has been adopted. The Autonomous Communities have established obligatory

environmental impact assessments that include cultural heritage. Risks are classified as compatible, moderate, severe or critical. The assessments also establish corrective or protective measures, depending on the type of impact, ranging from preventing the problem by modifying the project, to full documentation before destruction.

The various laws on cultural heritage contain provisions to incorporate heritage protection into land use planning and management. Currently, municipalities have been charged with adapting their development standards to a new legal framework established by recent laws on land use and urban planning. All municipalities will therefore soon have a general plan, drafted within the context of the requirements of these new standards.

The buffer zones are protected under Law 16/1985 on Spanish Historical Heritage, and under the cultural heritage laws in the Autonomous Communities of Galicia, Asturias, Cantabria, the Basque Country, and La Rioja.

ICOMOS considers that the legal protection in place for the proposed serial extension and the buffer zones appears adequate.

Conservation

The four routes and 16 individual built components (cathedrals, churches, monasteries, etc.) have been inventoried during the preparation of the nomination dossier. A description, history, and present state of conservation is provided for each of the 16 individual built components, and active conservation measures are briefly summarized, though maintenance regimes are not. ICOMOS considers that an equivalent level of information on the present state of conservation of the four Routes themselves would have been appropriate.

ICOMOS considers that the general state of conservation of the proposed serial extension is adequate.

Management

Management structures and processes, including traditional management processes

Management of the proposed extension takes place within the framework of Spain's system of decentralized powers, including those relating to cultural heritage, which have been transferred to the Autonomous Communities. There is no management structure or unified supervisory and executive body for the entire extended property currently in place for the coordinated management of the 20 individual components that make up the proposed serial extension (paragraph 114 of the *Operational Guidelines*). In the event the Northern Routes are approved as an extension of the Route of Santiago de Compostela, it is intended that representatives of the Autonomous Communities of the Basque Country, Cantabria, and Asturias would be added to the Jacobean Council's existing Cooperative

Committee for the Management of the World Heritage Property. The Committee was created in 2009 and is currently comprised of senior personnel from the Ministry of Education, Culture and Sport and the Autonomous Communities traversed by the French Route. The Jacobean Council was established in 1992, in the context of the original nomination of the “Route of Santiago de Compostela,” to coordinate and collaborate on planned programs and interventions for the French Route.

There exists a Working Group on the Routes of Santiago in the Northern Iberian Peninsula, chaired by the Director General of Cultural Heritage of Asturias and including representatives of the other Autonomous Communities as well as the federal state administration. Created in 2006-2007 by the Executive Committee of the Jacobean Council, its functions relative to the Northern Routes include coordinating the preparation of the World Heritage nomination, sharing management systems, management experiences and joint promotional activities, and mapping the infrastructure of the four routes.

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

There is no overall management plan for the proposed serial extension, nor have management plans for any of the four individual pilgrimage routes or 16 individual built components been provided. Regarding an overall management framework for all components in the proposed serial extension, ICOMOS considers that the State Party has not fully documented specifically how the cooperative management system preserves the potential Outstanding Universal Value of the proposed extension, nor how it ensures its effective protection for present and future generations. ICOMOS recommends that the elements typically included in an effective management system be included and documented, such as a shared understanding of the property by all stakeholders; a cycle of planning, implementation, monitoring, evaluation, and feedback; involvement of stakeholders; allocation of resources for staffing and training; capacity-building; and risk preparedness. Neither an accountable, transparent description of how the current (or proposed) management system actually functions, nor its effectiveness, is discussed in the nomination dossier.

An action plan for the next four years has been established. This plan acts on the policies for protection, rehabilitation, and dissemination that various authorities concerned with the management the Northern Routes have developed during the past ten years. The State Party advised in October 2014 that the Jacobean Council is developing a work plan for the seven-year period 2015-2021, subject to approval by a majority of all jurisdictions in the management and conservation of the French Route and Northern Routes.

The State Party has provided a compendium of interventions undertaken by the Autonomous Communities in recent years, including the amounts invested in specific projects – many of which appear to be outside the proposed extension. The State Party advised in October 2014 that the level of funding available to the proposed extension is adequate. A summary of the specialized skills and qualifications that exist to manage the proposed extension has been provided, though in a generic fashion and without reference to the actual staffing levels that currently exist. Existing or proposed management plans, such as visitor management and presentation plans, have not been provided or summarized.

Involvement of the local communities

The State Party notes that the promotion of the Northern Routes as a potential World Heritage site has involved governments, private operators, and most local communities. It further highlighted in October 2014 the constant involvement of the Association of Friends of the Way of Santiago.

ICOMOS recommends that the management system for the proposed serial extension (and for the already inscribed property) be fully documented, particularly concerning how it preserves the potential Outstanding Universal Value of the serial property and ensures its effective protection for present and future generations.

6 Monitoring

Six key indicators have been chosen as the measures of the proposed serial extension’s state of conservation. Two relate uniquely to the Route in Asturias. All indicate the periodicity of review. None, however, relate particularly closely to the proposed Statement of Outstanding Universal Value, and none express a benchmark that indicates a desired state of conservation.

Concerning the results of previous reporting exercises on the state of conservation of the proposed serial extension, the State Party has presented a list, with brief summaries, of ten earlier studies and analyses. Regrettably, eight of these concern the French Route and not the nominated Northern Routes. Of the remaining two, only one refers to the state of conservation of the proposed extension, and this single reference is to unspecified “various studies” analyzing the state of conservation that were carried out by each of the Autonomous Communities, the results of which, the State Party advises, are included in the present nomination dossier “in their corresponding paragraphs.”

In conclusion, ICOMOS considers that the key monitoring indicators need to be revised and augmented to relate more directly to the proposed Statement of Outstanding Universal Value, and should include specific indicators, periodicity, and institutional responsibilities.

7 Conclusions

The nomination dossier for Routes of Santiago in Northern Spain effectively illustrates this vast proposed extension, which at 1498.91 km long is more than twice the length of the already inscribed Route of Santiago de Compostela. The mapping in particular is exemplary.

ICOMOS considers that the State Party has demonstrated how the attributes of the already inscribed Route of Santiago de Compostela are exemplified, extended, complemented or amplified by the attributes of the Routes of Santiago in Northern Spain proposed extension, while bearing the same Outstanding Universal Value.

ICOMOS also considers that the authenticity and integrity of the proposed serial extension and of its individual components, as articulated in the cultural value recognized in the nomination criteria proposed, have for the most part been demonstrated to be truthfully and credibly expressed.

And finally, as prescribed in paragraph 114 of the *Operational Guidelines*, ICOMOS considers that it would be highly beneficial for the management system of the already inscribed serial property and its proposed extension to be fully documented, particularly concerning how it preserves the potential Outstanding Universal Value of the property and ensures its effective protection for present and future generations.

8 Recommendations

Recommendations with respect to inscription

ICOMOS recommends that the proposed extension of the Route of Santiago de Compostela to include the Routes of Santiago in Northern Spain and thus become the Route of Santiago de Compostela: French Route and Routes of Northern Spain, Spain, be **approved** on the basis of **criteria (ii), (iv), and (vi)**.

Recommended Statement of Outstanding Universal Value

Brief synthesis

The Route of Santiago de Compostela is an extensive interconnected network of pilgrimage routes in Spain whose ultimate destination is the tomb of the Apostle James the Greater in Santiago de Compostela, in Galicia. According to Saint Jerome, the apostles were to be interred in the province where each had preached the gospel. The tomb believed to be that of James the Greater was discovered in Galicia in the 9th century, a period when Spain was dominated by Muslims. Its discovery was of immense importance for the Christian world, and Compostela soon became a place of Christian pilgrimage comparable in importance to Jerusalem and Rome.

The almost 1500-km-long network of four Northern Routes (Primitive, Coastal, Interior of the Basque Country-La Rioja, and Liébana) are at the origin of the Jacobean pilgrimage. They are directly linked to the discovery of the Apostle's tomb, and to its promotion by the Kingdom of Asturias. It was not until the 11th century that the Northern Routes were surpassed by the 738-km-long French Route, which was less difficult to traverse and became the primary Way of Saint James across the Iberian peninsula to Compostela.

The Route of Santiago has been a meeting place for its pilgrims ever since it emerged some eleven centuries ago. It has facilitated a constant cultural dialogue between the pilgrims and the communities through which they pass. It was also an important commercial axis and conduit for the dissemination of knowledge, supporting economic and social development along its itineraries. Constantly evolving, this serial property includes a magnificent ensemble of built heritage of historical importance created to fill the needs of pilgrims, including churches, hospitals, hostels, monasteries, calvaries, bridges, and other structures, many of which testify to the artistic and architectural evolution that occurred between the Romanesque and Baroque periods. Outstanding natural landscapes as well as a rich intangible cultural heritage also survive to the present day.

Criterion (ii): The Route of Santiago de Compostela played a crucial role in the two-way exchange of cultural advances between the Iberian Peninsula and the rest of Europe, especially during the Middle Ages, but also in subsequent centuries. The wealth of cultural heritage that has emerged in association with the *Camino* is vast, marking the birth of Romanesque art and featuring extraordinary examples of Gothic, Renaissance, and Baroque art. Moreover, in contrast with the waning of urban life in the rest of the Iberian Peninsula during the Middle Ages, the reception and commercial activities emanating from the *Camino de Santiago* led to the growth of cities in the north of the Peninsula and gave rise to the founding of new ones.

Criterion (iv): The Route of Santiago de Compostela has preserved the most complete material registry of all Christian pilgrimage routes, featuring ecclesiastical and secular buildings, large and small enclaves, and civil engineering structures.

Criterion (vi): The Route of Santiago de Compostela bears outstanding witness to the power and influence of faith among people of all social classes and origins in medieval Europe and later.

Integrity

The property contains all the key elements necessary to express the Outstanding Universal Value of Route of Santiago de Compostela: French Route and Routes of Northern Spain, including the routes themselves and the ecclesiastical and secular buildings, large and small

enclaves, and civil engineering structures necessary to sustain the act of pilgrimage. The serial property is of adequate size to ensure the complete representation of the features and processes that convey the property's significance, and it does not suffer unduly from adverse effects of development or neglect. An added layer of protection for this extensive serial property is provided by buffer zones.

Authenticity

Route of Santiago de Compostela: French Route and Routes of Northern Spain is substantially authentic in its forms and designs, materials and substances, and use and function. The majority of the routes themselves follow their historic trajectories, and many retain their historical characteristics; along the five itineraries, the various built components included in this serial property are characterized by a high level of conservation. The property's function and use as a pilgrimage route has continued for more than a millennium. The links between the Outstanding Universal Value of the routes and their attributes are therefore truthfully expressed, and the attributes fully convey the value of the property.

Management and protection requirements

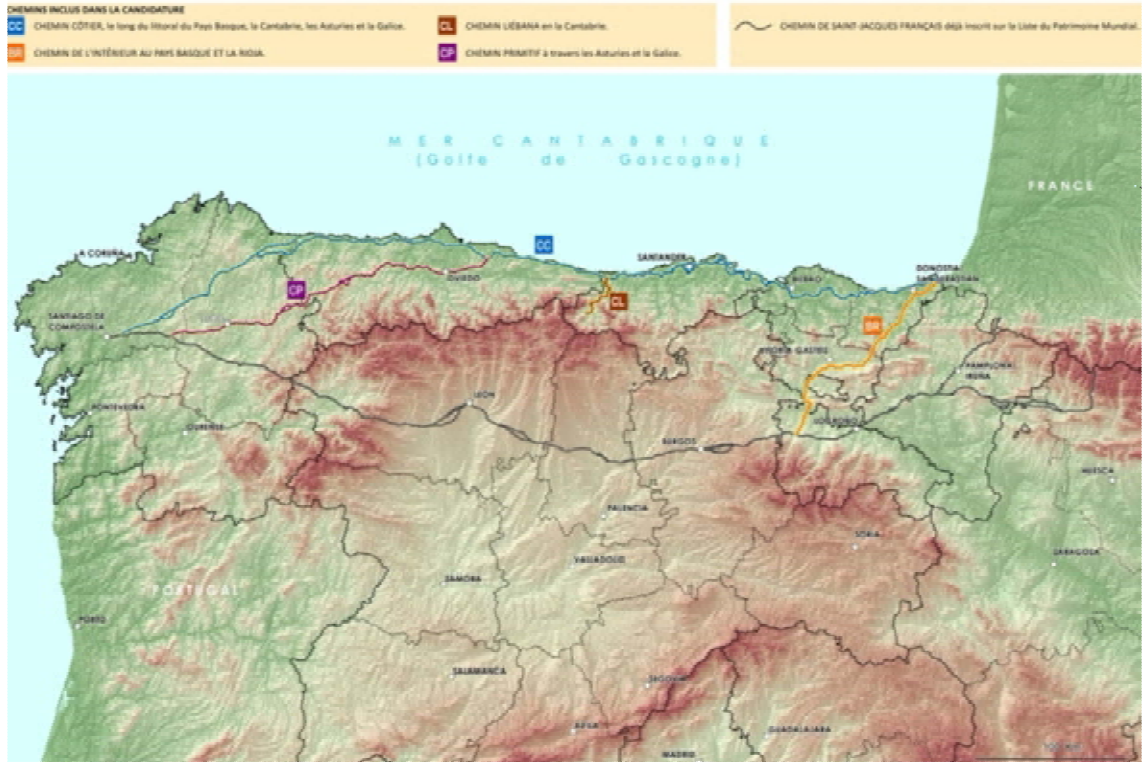
Pursuant to the First Additional Provision of the Spanish Historical Heritage Act, Law 16/1985 of 25 June 1985, the *Camino de Santiago* was registered in the category of Historical Complex as a Property of Cultural Interest (*Bien de Interés Cultural*), the highest level of cultural heritage protection in Spain. In exercise of their competences, the Autonomous Communities through which the routes pass have each defined the protection of this serial property in their respective territories. The routes are Crown property, and the built components are under a mixture of private, institutional, and public sector ownership, as are the buffer zones. The serial property is managed by the Jacobean Council (*Consejo Jacobeo*), which was created for the purpose of collaborating on programmes and actions to protect and conserve it; to further its promotion and cultural dissemination; to conserve and restore its historical-artistic heritage; to regulate and promote tourism; and to assist pilgrims.

Notwithstanding these arrangements, systematic actions will be needed to address the potential threats posed by industrial and urban growth and development, new transportation infrastructure such as motorways and railways, pressure from increased tourism and the number of pilgrims, and rural depopulation. Enforcement of regulatory measures and legislation will be crucial, as well as the development of environmental and heritage impact studies for new construction. In addition, urban development schemes of the municipalities along the routes will need to ensure protection of the attributes that sustain the Outstanding Universal Value of the property.

Additional recommendations

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

- Fully documenting the management system for the proposed serial extension and for the already inscribed property, particularly concerning how it preserves the potential Outstanding Universal Value of the serial property and ensures its effective protection for present and future generations;
- Revising and augmenting the key monitoring indicators to relate more directly to the proposed Statement of Outstanding Universal Value, and adding specific indicators, periodicity, and institutional responsibilities;
- Carrying out heritage impact assessments in accordance with ICOMOS Guidance on Heritage Impact Assessments for Cultural World Heritage Properties before any developments such as renewals, demolitions, new infrastructure, land-use policy changes, or large-scale urban frameworks are approved and implemented.



Map showing the location of the nominated routes



Primitive route, A Fonsagrada



Coastal route, Gipuzkoa



Internal route, Basque country



Liebana's route, Cabanzón

IV Cultural properties

A Africa

New nominations

B Arab States

New nominations

C Asia – Pacific

New nominations

D Europe – North America

New nominations

Extensions

Nominations deferred by previous sessions of the
World Heritage Committee

E Latin America and the Caribbean

New nominations

Ephesus (Turkey) No 1018rev

Official name as proposed by the State Party

Ephesus

Location

Province of Izmir
Aegean Region

Brief description

Located within what was once the estuary of the river Kaystros, Ephesus comprises successive settlements formed on new sites as the coastline retreated west forming an extensive silt plain. Little remains of the famous Temple of Artemis, one of the 'seven wonders of the world' which drew pilgrims from all around the Mediterranean until it was eclipsed by Christian pilgrimage to the Church of Mary and the Basilica of St. John in the 5th century CE. Excavations and conservation over the past 150 years have revealed grand monuments of the Roman Imperial period lining the old processional way through the ancient city including the Library of Celsus and the Great Theatre.

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 four *sites*.

1 Basic data

Included in the Tentative List

1 February 1994

International Assistance from the World Heritage Fund for preparing the Nomination

None

Date received by the World Heritage Centre

30 January 2014

Background

This is a deferred nomination (25 EXT BUR, Helsinki, 2001).

The Bureau of the World Heritage Committee adopted the following decision (Decision WHC-2001/CONF.205/10):

The Bureau decided that further consideration of this nomination be deferred, in order to enable the State Party to prepare and implement a comprehensive management plan; this should be accompanied by a

map that clearly indicates the areas nominated for inscription and the buffer zone.

On 30 January 2014, the State Party submitted a revised 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 23 to 27 September 2014

Additional information received by ICOMOS

A letter was sent to the State Party on 21 August 2014 requesting additional maps, information regarding justification of the series as a whole, and clarification as to whether the Management Plan had been approved and if not a timetable for its approval. A response was received on 21 October 2014 together with additional information provided in response to the mission and further information was received on 1 November 2014. A second letter was sent to the State Party following the ICOMOS Panel in December 2014 regarding removal of Component 4 (House of Virgin Mary); extension of the property boundaries to include the harbours; further justification of criterion (ii) and extension of the Management Plan to cover a number of issues. A response was received on 28 February 2015. The information has been incorporated below.

Date of ICOMOS approval of this report

12 March 2015

2 The property

Description

In the years since this nomination was deferred the site has been further excavated and the extent of the nominated property as now submitted includes the Cukurici mound with its evidence of occupation going back to the 7th millennium BCE. Located within what was once the estuary of the river Kaystros, the serial property comprises successive settlements formed on new sites as the coastline retreated west forming a silt plain. It consists of four nominated components totalling 662.62ha, three of which – the Cukurici Mound (Component 1); the Ancient City of Ephesus (Component 2); and the area of Ayasuluk Hill including the Basilica of St John, the Medieval Settlement and the Artemision (Component 3) are surrounded by a buffer zone of 1165.96ha. The House of Virgin Mary (component 4) is surrounded by its own buffer zone of 83ha.

Cukurici Mound (Component 1)

The long history of this settlement at the base of mountains reaching into Central Anatolia reflects its position as the junction of a fertile hinterland with the

Mediterranean world. Prehistoric remains at Cukurici Hoyuk located 200m south-east of Ephesus testify to the earliest occupation from the 7th millennium BC. Settlement remains of five periods, one on top of the other have been excavated to reveal houses of stone and mud brick; evidence of domestic life including animal husbandry, ceramic vessels and utensils made from obsidian imported from Melos. Later finds include evidence of metal-working and marble idols dating from the 5th and 3rd millennia BCE.

Ancient City of Ephesus (Component 2)

Now located several kilometres inland from the Aegean coast of Turkey, Ephesus was a thriving harbour city in the Roman period, and a capital of the wealthy province of Asia Minor. The city's remains today provide a remarkably intact Roman townscape whose main street follows an earlier processional way connecting major architectural monuments such as the Library of Celsus and the Great Theatre as well as an excavated residential complex of houses with murals and mosaics. Harbour remains demonstrate the constant shifting of the port from east to west as it gradually silted up.

Ayasuluk Hill, the Artemision and the Medieval Settlement (Component 3)

Remnants of the Artemis temple, famed as a marvel of the ancient world testify to the Hellenistic period. The temple and its temenos have been studied extensively but there is little to see now but the paved altar area (when the site is not flooded) and one reconstructed column. The extensive remains of the Basilica of St John on Ayasuluk Hill and those of the Church of Mary in Ephesus are testament of the city's importance to Christianity. Two important Councils of the Early Church were held at Ephesus in 431 and 449 CE, initiating the veneration of Mary in Christianity, which can be seen as a reflection of the earlier veneration of Artemis and the Anatolian Cybele. The subsequent Selçuk and Ottoman development around Ayasuluk Hill from the 14th century is represented by the Isa Bey Mosque, bath buildings, tombs and the Citadel.

House of Virgin Mary (Component 4)

The domed cruciform chapel known as the House of the Virgin Mary at Meryemana is located 7km from Ephesus. It marks the place located in accordance with the vision of a German nun in 1891, where St. John is said to have built a house for Mary in the first century CE, on the ruins of which a chapel was built in the 4th century. The shrine is a focus of Christian pilgrimage particularly on 15 August, the festival of the Assumption of Mary.

History and development

Settlement in the Neolithic, Chalcolithic and Early Bronze Age is evident on Cukurici Mound, after which surface finds of Middle Bronze Age ceramics indicate it moved to Ayasuluk Hill. Core drillings in a nearby lake indicate that the volcanic eruption at Thera in 1675 BCE left traces in Ephesus and resulted in significant climate and vegetation

change. The name Ephesus is thought to derive from Apasas, mentioned in Hittite and Egyptian sources as a settlement on Ayasuluk. This moved to the sea shore below the hill with the building there of the temple to Artemis, which cult can be traced back to the early first millennium BCE. Excavated finds indicate that the first Greek colonisers arrived c 1000 BCE. The temple of Artemis was burnt in 356 BCE and rebuilding was not complete when Alexander the Great visited in 323 BCE.

The city of Ephesus in its current location was founded by Lysimachos, one of Alexander's twelve generals. The old harbour was abandoned and a new one was established west of the city. The city area of 2.5 sq km was enclosed by a wall over 9 km in length which included the northern slopes of Mount Bulbul and parts of Mount Panayir. It comprised the lower city with commercial market, theatre and stadium in the harbour area and the upper city on an elevated plateau containing the upper market, prytanium and bouleuterion. They are connected by Curetes Street following the course of the old processional way. Ephesus became part of the Pergamene Kingdom from 188 BCE and expanded into a metropolis when Asia Minor was incorporated into the Roman Empire in 133 BCE. The primary buildings of which ruins exist today date from the Roman Imperial period beginning with the reign of Augustus (27 BCE-14 CE). The city became a leading political and intellectual centre, with the cult of Artemis resulting in the Artemision becoming a major economic enterprise. In the first century CE St. Paul made three missionary visits to Ephesus. His companion Timothy became the first bishop of Ephesus and was martyred there in 96 CE. In the second half of the first century CE, St John the Theologian is recorded as having died in Ephesus.

The third century CE was a period of devastation due to the plague, invasions and an earthquake. With the imperial acceptance of Christianity the Artemision was closed by the emperor Theodosius in 381 CE, subsequently abandoned and quarried for building materials. Ecumenical Councils were convened by the emperor in Ephesus in 431 and 449 CE. The church built above St John's burial on Ayasuluk Hill in the 4th century was subsequently expanded into a major basilica under the emperor Justinian in the 6th century, surrounded by defensive walls. Following some destruction during Arab raids in the 7th century the city re-established itself further west as the harbour silted up. Occupation continued under Byzantine rule with development around the Basilica of St John on Ayasuluk Hill until the area was captured by the Selçuks in 1304.

Mosques, prayer halls, baths and tombs were built around Ayasuluk Hill and the city became the capital of the Aydin Empire before being taken by the Ottomans in 1425. By the 17th century the city was in ruins and the sea had withdrawn a further 5km due to the silt carried down by the Kaystros River. Eastern Orthodox Christians are thought to have moved from Ephesus to the village of Sirince in the 15th century and visited the ruined chapel on Bulbuldag known as the House of Mary on the feast of

Assumption (15 August) each year. Since the site's re-identification in the late 19th century several Catholic popes have visited Ephesus and affirmed the House of Mary to be a place of pilgrimage for Christians.

Cornelis De Bruyn (1652-1726) wrote an antiquarian description of the site of Ephesus, and a description of Ayasuluk in the mid-17th century was written by the Ottoman traveller Evliya Çelebi. The remains of Ephesus have attracted European and other travellers since the 18th century. Investigations by English engineer John Wood under the auspices of the British Museum discovered the remains of the Artemision in 1869. Excavations from 1893 by Austrian archaeologists resulted in the establishment of the Austrian Archaeological Institute in 1898 which has since investigated most of the site of the Ancient City and Ayasuluk Hill. After 1956 work included anastylosis of monuments of the Roman Imperial period including the Temple of Hadrian (1957-8); the Library of Celsus (1970-8) and the Gate of Mazaeus-Mithridates. Excavation activities reduced from the mid-1980s and since 1995 there has been a focus on publication, non-destructive investigation and ongoing conservation/maintenance. The excavated remains of Terrace House 2 were partially roofed for preservation purposes in the 1980s but various problems led to the decision to cover the whole area with a new steel roof that followed the gradient of the slope. This was completed in 2000. Wall paintings in the Cave of St. Paul were conserved 2000-2010, and the Church of St Mary was consolidated 2011-13. Conservation works were carried out at the Basilica of St John and the Castle area in 2010-12. The House of Mary was repaired and reconstructed in 1940.

3 Justification for inscription, integrity and authenticity

Comparative analysis

The nomination dossier includes an extensive analysis of comparable sites, some of which were considered in the evaluation leading to the 2001 decision by the World Heritage Committee that Ephesus was distinguished by a unique combination of qualities. The analysis does not include Pergamon and its Multi-layered Cultural Landscape, Turkey added to the World Heritage List in 2014 ((i), (ii), (iii), (iv) & (vi)), primarily for its Hellenistic Attalid remains and role as a cultural centre. Nor does it include the Archaeological Site of Laodikeia (Laodicea), added to Turkey's Tentative List in 2013, which also covers a long settlement history at the crossroads of major trade routes including founding as a city in the Hellenistic period. It reached its apogee in the Roman Republican period and had importance for Christianity as one of the Seven Churches of Asia. Destruction by earthquake c.610 CE led to abandonment and the resettlement of its citizens nearby at Denizli. Archaeological investigations since 2012 have revealed numerous buildings including 2 theatres, 4 bath complexes, 5 agorae, 5 fountains, 2 monumental gates, a bouleuterion, peristyle houses, temples, churches,

water supply and monumental colonnaded streets. This ancient city is located inland on a spur between two rivers about 10 km from Pamukkale so lacks the palaeo-estuary location and its consequences as demonstrated at Ephesus. Another property on Turkey's Tentative List is Aphrodisias, which became famous for its Temple to Aphrodite from the 2nd century BCE and developed under the auspices of Augustus and successive Roman emperors to become the prosperous capital of the Roman province of Caria. It is well known for the marble sculptures created from nearby quarries ranging from grave reliefs of the 2nd century BCE to statues of the last Roman emperors of the 6th Century CE, many of which are said to occupy key positions in the history of ancient art.

Like Aphrodisias Ephesus reached its apogee in the Roman Imperial period but is also particularly important for Christianity not only as one of the Seven Churches of Asia but also for its association with the Ecumenical Council of 431CE. It exceeds Laodikeia in reflecting a long settlement history at the crossing of migratory and trading routes and exceeds Aphrodisias as centre of pilgrimage.

The selected components testify to the long settlement history of the nominated property and its development in response to the silting up of the estuary; its particular importance in the Roman Imperial period, its importance to Christianity and its importance as a pilgrimage centre as demonstrated by the comparative analysis.

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:

- It represents a long period of occupation covering all periods from the 7th millennium BCE to the 15th century CE attested by Cukurici Mound, the Ancient City and Ayasuluk Hill;
- The Artemision was a famous pilgrimage destination from 1000 BCE to the 4th century CE;
- Remains of the Roman imperial period of the Ancient City reflect its major importance as the capital of the Roman province of Asia Minor;
- Remains of the Church of Mary, Byzantine palace and Basilica of St John reflect the city's importance to Christianity, while the House of Virgin Mary is the focus of Christian pilgrimage today;
- Selçuk monuments reflect the last flourishing of the city under the Aydinogullari.

The serial approach is justified by the State Party as a complementary collection of sites containing attributes which demonstrate the above. However ICOMOS notes that not all components can be justified by these

reasons. ICOMOS considers that the first point can be applied to components 1-3, and the fourth point can be applied to components 2-4. ICOMOS considers that Ephesus was one of the greatest cities of Antiquity, particularly in the Hellenistic and Early Roman periods and is distinguished by its long settlement history determined by its location on an ancient estuary which gradually silted up.

Integrity and authenticity

Integrity

Nominated serial components 1-3 contain sites which demonstrate the long settlement history of the place. Components 1-3 each make a significant contribution to the overall potential Outstanding Universal Value (OUV). Cukurici Mound (C1) contains remains from the Neolithic to the Bronze Age; Ayasuluk Hill (C3) contains remains of the Later Bronze Age; the Archaic, Hellenistic and Roman periods are represented at the Ancient City (C2) and the Artemision (C3); the Early Christian and Byzantine period is represented at the Basilica of St. John on Ayasuluk Hill (C3) and at the Church of Mary in the Ancient City (C2); the Medieval periods are represented at the Citadel, Isa Bey Mosque, hamams and tombs around Ayasuluk Hill (C3). These nominated components include all elements necessary to express OUV in relation to criteria (iii) & (iv).

ICOMOS considers that Component 4 (House of Virgin Mary) lacks integrity in relation to criteria (iii) and (iv).

Regarding the individual components 1-3, Cukurici Mound has been encroached by fruit farming to north and east to the extent of almost 50% of the mound; however it retains a full chronology of settlement deposits from Early Bronze Age down to Neolithic. Part of the medieval settlement containing mosques, hamams and tombs on the south-east slope of Ayasuluk Hill is not included within Component 3 but is a designated Urban Conservation Area within the buffer zone, and the skirt of the Citadel is excluded from the property but within the buffer zone. Not all identified harbours are included in Component 2. However with the changes to the property boundaries proposed by the State Party in response to ICOMOS's second letter, ICOMOS considers that the individual components C1, C2 and C3 adequately represent the values required to complete the OUV of the property as a whole.

Parts of the Ancient City and Ayasuluk Hill are encroached by vegetation and not all areas are maintained to the same standard in terms of conservation and maintenance. View lines are maintained to and between the component properties except for the intrusion of the airfield between the Ancient City and the Western approach.

ICOMOS considers that with the additional property area now proposed by the State Party, the integrity of the series comprising components 1, 2 & 3 has been justified; and that the integrity of the individual sites that

comprise the series has not been demonstrated for component 4.

Authenticity

ICOMOS considers that the component properties retain authenticity in terms of location and setting, form and design. The remains at Cukurici Mound (C1) retain authenticity in terms of materials and substance. The other three component properties have all been subject to stone robbing in the past and subsequently to varying degrees of anastylosis, reconstruction and stabilisation using modern materials including concrete, iron, steel, and acrylic resin. ICOMOS notes that there is a general view that Ephesus represents a laboratory of conservation techniques as they developed over time. Of particular note is the reconstruction of the standing column at the Artemision, conceived by the architect Anton Bammer as a piece of Austrian cubist art and made of entirely mismatching fragments of a number of different columns.

ICOMOS also notes that recent interventions have rectified damage caused by earlier inappropriate materials where possible and now make use of reversible techniques. In terms of function some elements of the Ancient City (C2) including the Bouleuterion, the Great Theatre, the plaza in front of the Library of Celsus, the Atrium Thermarum and the Arkadiane are used for cultural events and banquets, the Citadel and Church of St. John are open to the public as tourist sites; the Isa Bey Mosque continues in use as a mosque. The House of Virgin Mary continues as a pilgrimage site, but the degree of authenticity is unclear.

ICOMOS considers that the authenticity of the whole series has not been justified, but could be justified if component 4 is excluded from the series; and that the authenticity of the individual sites that comprise the series has not been demonstrated for component 4.

ICOMOS considers that the conditions of integrity and authenticity of the whole series could be justified if component 4 is excluded from the series; and for individual sites, the conditions of integrity and authenticity have not been met for component 4.

Criteria under which inscription is proposed

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

Criterion (i): represent a masterpiece of human creative genius;

This criterion is justified by the State Party on the grounds that the Artemis Temple was one of the seven wonders of the ancient world and a milestone in the development of Greek architecture. Its foundation construction in marshy ground was a masterful technical achievement.

ICOMOS considers that historical and archaeological records are evidence that the temple was widely known,

extensive, with many columns and decorative features. However very little now remains of the structure on site; stones from the temple have been taken and reused elsewhere or placed in museums abroad in the distant past and the reconstruction that has been undertaken of column drums does not reflect any phase of the temple. The foundation construction has not been substantiated as a technical achievement. This criterion has also not been demonstrated for the other nominated components and for the property as a whole.

ICOMOS considers that this criterion has not been demonstrated.

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 cross-cultural interchanges are evident in the Ionian style columns of the Artemision; the western-Italian influenced temple at Curetes Street, Library of Celsus and Residential Unit 6 in Terrace House 2, and the adoption in the Turkish buildings of Byzantine building and decorative techniques.

ICOMOS considers that the monuments exhibit many stylistic influences reflecting the location of Ephesus at the crossing of migratory and trading routes between Anatolia and the Mediterranean. However this is not unusual and there is no evidence of what these influences signify in terms of an important exchange of human values.

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

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

This criterion is justified by the State Party on the grounds that the property testifies to the long history of civilisation at the site, bearing witness to many cultural traditions including Greek, Roman, Byzantine and Turkish. In particular it is exceptional testimony to the cultural traditions of the Roman Imperial period as reflected in the monuments in the centre of the Ancient City of Ephesus and in Terrace House 2, with its wall paintings, mosaics and marble panelling showing the style of living of the upper levels of society at that time.

ICOMOS considers that the nominated components 1, 2 & 3 bear exceptional testimony to ancient civilisation at Ephesus.

ICOMOS considers that this criterion has been demonstrated by components 1, 2 & 3.

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 there are numerous outstanding examples of architectural ensembles and monuments in the Ancient City, which is also an outstanding example of a Roman harbour city, with sea channel and harbour basins along the Kaystros River. The Artemision is an outstanding example of a pilgrimage centre of its time, which was also a large commercial enterprise with inland agricultural resources. The Church of St John in its turn was similarly an outstanding example of a Christian pilgrimage site as an imperial foundation.

ICOMOS considers that the property as a whole is an outstanding example of a settlement landscape determined by environmental factors over time, as the estuary silted up and sites were settled then abandoned, and in the case of Ayasuluk Hill, re-settled. Cukurici Mound contributes as the earliest settlement on the estuary, demonstrating its extent at that time. The property is exceptional testimony to the Hellenistic, Roman Imperial and early Christian periods.

ICOMOS considers that this criterion has been demonstrated by components 1, 2 & 3.

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 associated with religious beliefs and pilgrimage from the earliest Anatolian goddess cults at Cukurici Mound and Cybele/Meter on Panayirdag to the Mediterranean Artemis at the Artemision through early Christianity in ancient Ephesus and then Islam on Ayasuluk Hill to modern day veneration of the Virgin Mary at the Meryemana. The cult of the Ephesian Artemis was one of the most significant and influential in the Mediterranean world. The importance of Ephesus as the place of the third Ecumenical Council of the Christian Church in 431CE where the doctrine of Mary Theotokos, Mother of God was established is emphasised by the Church of Mary which together with the Basilica of St. John on Ayasuluk Hill created one of the most important Christian pilgrimage destinations in the Mediterranean world.

ICOMOS considers that there is no direct or tangible evidence of association with religious beliefs and pilgrimage of outstanding universal significance except at component 4.

ICOMOS considers that this criterion has not been demonstrated for the whole series.

ICOMOS considers that the serial approach is justified but ICOMOS considers that the selection of sites is not appropriate in that component 4 does not meet criteria (iii) and (iv). ICOMOS recommends that component 4 be removed from the series.

ICOMOS considers that the nominated property could meet criteria (iii) & (iv) and conditions of authenticity and integrity if component 4 is removed from the series.

Description of the attributes

The attributes are the settlement layers and female idols at Cukurici; the Ancient City of Ephesus including the rock sanctuary of Cybele/Meter, Hellenistic city walls, Magnesian Gate, the processional way along Curetes and Marble streets, the Hellenistic rectangular city blocks, the harbour and necropolis-lined channel leading from the city, the Roman monuments of the Imperial period, the remains of the Church of Mary and Byzantine palace; the Artemision, the Basilica of St John, the Citadel, Isa Bey Mosque, bath buildings and tombs.

4 Factors affecting the property

The property is not considered to be subject to development pressure. According to the additional information provided by the State Party in response to the ICOMOS technical evaluation mission, cultivation and building activities of private owners within the buffer zone are being countered by controls on the type of plants that can be used and permit requirements for works to buildings in the Urban Conservation Area. The heavy use of fertilizers is being mitigated by controls on the type of fertilizer being used. The additional information also clarifies that the looting of necropolis occurred outside the property and is being countered by policing, fines and educational activities. Climate conditions in Ephesus accelerate the process of decay. The location of the Ancient City in the saddle between the Panayirdag and Bulbuldag hills induces large scale slope erosion which particularly affects Curetes and Marble Streets, the main visitors' route through the Ancient City, and had caused partial collapse. This has now been countered by construction of a revetment of traditional dry stone walling aimed at hindering erosion processes.

There are no inhabitants within the property boundaries but the population in the buffer zone area adjacent to the Ancient City is approximately 2000; within the buffer zone area adjacent to the medieval settlement on Ayasuluk Hill the population is approximately 500; within the buffer zone area south of the Artemision it is approximately 500. These settlement areas are controlled by being declared Third Degree Archaeological Sites and an Urban Conservation Area. The population in the remainder of the buffer zone is around 2,000.

The property is in an area of seismic activity and earthquake risk has been countered by introducing structural reinforcement as part of the conservation of

standing remains and the application of safety protocols for visitors and staff. The property, particularly the Meryemana is at risk of forest fire. The Artemision area is subject to rising ground water levels and flooding. Ephesus is the most visited site in Turkey and visitor pressure is already a problem with numbers up to 1.8 million annually. It is stated in the Management Plan that the Selçuk-Ephesus airport located in the buffer zone north of the ancient canal is used only for training purposes. Most visitors arrive at the site by car or coach. Tourist congestion is a major issue within the Ancient City which is being countered by plans for additional tourist entries and routes. Tourism pressure is less of an issue at the Artemision and Ayasuluk Hill. Cukurici Mound is not yet open to visitors.

ICOMOS considers that the main threats to the property are environmental and tourism.

5 Protection, conservation and management

Boundaries of the nominated property and buffer zone

The property boundaries have been established following geophysical research to establish areas of buried remains and generally coincide with the boundaries of the designated First Degrees Archaeological Site.

Additional information provided by the State Party in response to ICOMOS' first letter includes maps showing the property boundaries in relation to all the nominated features together with maps showing areas of geophysical survey results. These show that some features in the area of the ancient channel and harbours are outside the buffer zone, and the skirt of the Citadel mound on Ayasuluk Hill is not included in the property boundary. In response to ICOMOS' second letter, the State Party submitted revised property boundaries which include all identified harbours (classical to medieval) in Component 2, and the skirt of the Citadel in Component 3, with the boundary of the buffer zone adjusted accordingly.

In conclusion, ICOMOS considers that the revised boundaries of the nominated property components 1, 2 & 3 and of their buffer zone are now adequate.

Ownership

The key sites within nominated property components 2 and 3 are owned by the State (Ancient City; Artemision; Basilica of St. John, Ayasuluk Citadel). The Isa Bey Mosque, Hamam 3, Hamam 4 (Garden Hamam), and the Tribune at the Artemision are owned by the General Directorate of Foundations (Vakıflar Genel Müdürlüğü). The House of Mary is owned by the House of the Virgin Mary Foundation. Cukurici Mound is privately owned as are some other areas within the property and buffer zone. The House of Virgin Mary's buffer zone is forest owned by the State.

Protection

The nominated property is protected by Decisions of the Izmir Regional Conservation Council as empowered by the National Law for the Conservation of Cultural and Natural Property no. 2863, 23 July 1983, as amended. No actions likely to impact adversely on the property may be taken without authorisation by the Izmir Regional Conservation Council for Cultural Property and the Ministry of Culture and Tourism.

Cukurici Mound is protected by the Izmir Regional Conservation Council's Decision no. 10702, 29 May 2002. The Ancient City of Ephesus was first registered on the national inventory in 1976 and subsequently protected as a first degree archaeological site by the Izmir Regional Conservation Council's Decision no. 2809 in 1991. The site boundaries were defined most recently by the Izmir Regional Conservation Council's Decision no 5827 in 2010. Ayasuluk Hill, the Artemision and Medieval Settlement were first registered on the national inventory in 1976. The boundaries of the first degree archaeological site and natural and conservation boundaries were subsequently amended by a number of decisions of the Izmir Regional Conservation Council, most recently in 2012. The House of Virgin Mary was first registered on the national inventory in 1976 and subsequently protected as a first degree archaeological site by Izmir Regional Conservation Council Decision nos. 2809 and 3116 in 1991. Most of the buffer zone is protected as a first degree archaeological site but the built up area below Ayasuluk Hill is protected as an Urban Conservation Area.

ICOMOS considers that the legal protection of the property and buffer zone is adequate but protection of the buffer zone would be improved by raising protection of the entire buffer zone to the highest level. ICOMOS considers that the protective measures for the property are adequate.

Conservation

Excavations have taken place in Ephesus over the past 150 years. Published records of research at the site (as listed in the Bibliography) date from 1906 to 2010. Annual reports and documentation are kept in the archive of the Ministry of Culture and Tourism and the archives of the Austrian Archaeological Institute, Vienna and Pamukkale University, Denizli. A variety of conservation processes have occurred, reflecting the changes in philosophy and techniques over time. These are detailed in additional information provided by the State Party: 'Strategies for the Conservation of the Archaeological Site of Ephesus' prepared by the Head of the Ancient City of Ephesus Excavation Team.

ICOMOS notes that no inventory of the site as such is apparent, but the Action Plan in the Draft Management Plan lists databases to be prepared in 2013 including an inventory of 'Ephesus-Selçuk heritage that has been taken out of the country'. Key monuments have been surveyed and are recorded on geodetic surveys and drawings. Current ongoing research includes:

- extensive palaeographical surveys, including borings and associated dating and palaeo environmental studies;
- detailed geodetic land surveys and identification of sites;
- continuing historical studies;
- targeted and limited excavations aimed at understanding and consolidating features at the site;
- remote sensing surveys, with Ground Probing Radar, which is proving particularly effective in establishing the nature and extent of the orthogonal layout of the city of Ephesus.

In response to ICOMOS' second letter, the State Party has provided a revised Management Plan and a research programme for the next five years. However ICOMOS notes that the revised boundaries of the nominated property have not been incorporated into the revised Management Plan.

The Cukurici Mound has been excavated by the Austrian Archaeological Institute. Walls have been consolidated with mud and protected with a textile skin, sand and a temporary stabilising timber construction after the annual excavation season. Additional information provided in the State Party's response to ICOMOS' second letter states that further investigation is being considered at this component and the area that has been encroached by private ownership will be expropriated. ICOMOS considers that conservation proposals for this component should form part of the Conservation Programme for the property overall.

Past conservation work in the Ancient City of Ephesus was aimed at presentation of the ruins and included anastylosis of the Temple of Hadrian (1957-58), the Library of Celsus (1970-78), the Gate of Mazaeus-Mithridates, Terrace House 2, the Memmius monument, the Pollio monument, Fountain of Domitian, Heracles Gate and the upper agora. Current conservation in the Ancient City of Ephesus includes ongoing consolidation works deriving from an erosion monitoring program established in 2008 covering the streets and lanes, Terrace House 1 and the Tribune; restoration of the marble hall and conservation of wall paintings and decorative surfaces in the Terrace Houses; assessment of previous restoration at the Temple of Hadrian and the Great Theatre and consequent consolidation and conservation works; and anastylosis of the Serapis Temple. The work at the Great Theatre is a major project with a budget exceeding 3 million euros and is sponsored by the Austrian Archaeological Institute, the Ephesus Foundation, Austrian Academy of Sciences and the Association of Turkish Travel Agencies. Proposed future work includes evaluation of all past anastylosis projects; ongoing monitoring for maintenance and consolidation; investigation and conservation of the Isa Bey Hamam and the Garden Hamam in conjunction with the Vakıflar. Further work is also proposed at the Basilica of St John involving restoration of mosaic floors in St John's tomb and some anastylosis.

The Ayasuluk Citadel walls are currently being consolidated and restored and further work is proposed

including restoration of the monumental gate, towers and frescos located in the upper part of the arch. A goal of the Ayasuluk restoration project is to invigorate knowledge and presentation of the Aydin period. Archaeological research is being undertaken in the area between the Artemision and the Isa Bey Mosque.

ICOMOS notes that conservation actions listed in the Action Plan of the Draft Management Plan do not appear to correlate to any overall conservation master plan for the property. ICOMOS considers that conservation of the overall property is a deeply challenging task and recognises the conflicting priorities of dealing with pressing structural stabilisation and deterioration of monuments not on the immediate visitor routes while making major monuments such as the Great Theatre accessible to visitors and useable for public functions. These priorities seem now to be coming together to some extent with the realisation that alternative visitor routes need to be promoted in the Ancient City, which in turn may require stabilisation/maintenance of neglected elements along those routes. In response to ICOMOS' second letter the State Party has provided a conservation programme for the next five years.

ICOMOS considers that the Research Programme and Conservation Programme for the property overall should be incorporated into the Management Plan.

Management

Management structures and processes,
including traditional management processes

The Izmir Regional Conservation Council of the Ministry of Culture and Tourism through the General Directorate of Cultural Heritage and Museums has overall responsibility for the urban, archaeological and natural sites within the property and buffer zone. Management of the property is shared by the Izmir metropolitan municipality and Selçuk municipality. Izmir No. 2 Conservation Council is responsible for the archaeological sites and Selçuk municipality for the Ephesus Management Area. Other agencies with input to management include the Ministry of Urbanisation and the Ministry of Forests. ICOMOS notes that it is stated in the Management Plan attached to the nomination dossier that the management system was problematic and required co-ordinated organisation and direction. As part of the process of developing the Management Plan the director of the Ephesus Museum was appointed as the Site Manager in accordance with the protocol signed between the Ministry of Culture and Tourism and the Municipality of Selçuk, and an Advisory Board/Council was created which determined that there should be a Coordination and Supervisory Board (Supervision and Coordination Council) to oversee management of the serial property.

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

The Draft Management Plan 2012-2017 covers the nominated property and buffer zones to the boundaries approved by the Minister for Culture and Tourism on 8 September 2010. It was developed following passage of the necessary legislation (2004) and procedural regulations (2006) with input through workshops and meetings from specialists and professionals within the national and local community. It includes visitor management strategies and plans, and risk and crisis management planning. According to the response by the State Party to ICOMOS' letter, it was subsequently improved and then approved by the Supervision and Coordination Council on 11 September 2014. The revised version has been included as part of the State Party's response to ICOMOS' second letter. However ICOMOS notes that it still doesn't incorporate the research and conservation programmes, or visitor management, and the plans do not reflect the changes made to the boundary of the nominated property.

Staff assigned by the Municipality to fulfil and coordinate implementation of the Management Plan includes an archaeologist, art historians, a restorer, conservator, epigrapher, anthropologist, cartographer, architect, guard, accountant, archivist, librarian and a photographer. The Ministry of Culture and Tourism provides 75 technical, professional and administrative staff personnel as well as guards and cleaners at the Directorate of the Ephesus Museum. Ephesus as a site of active archaeology and conservation also accommodates more than 200 scientists and workers annually. Expertise and training are provided by Austrian and Turkish institutions.

Financial resources are provided by the government through allocation to the Ministry of Culture and Tourism for specific projects and staff; from the Municipality of Selçuk for specific projects and from private sources including several Austrian institutions, the European Research Fund and the Ephesus Foundation, which promotes the site at an international level to attract sponsorship. Current funding for the property amounts to around US\$7.5 million for various works plus 2.3 million euros for Ephesus excavations.

Visitor management is a major challenge for the property, particularly in the Ancient City, where most visitors follow the main route through the site from the northern entrance at the Upper Agora along Curetes and Marble streets to the southern gate, often in large numbers arriving via coach from cruise ships. Visitors are deposited at a large coach park at the upper, southern gate and are picked up at the lower northern gate. Interpretation is provided by means of Information boards at key monuments within the property and audio guides are available at the ticketing booths. The Ephesus Museum in Selçuk provides interpretation of the monumental and figurative sculpture and finds from the site, particularly interpretation of the

eneration of goddesses from prehistory to the Christian period and the veneration of the Virgin Mary.

ICOMOS considers that proposals to handle increasingly large numbers arriving from cruise ships involving more coach parks distributed around the proposed additional entries to the Ancient City using existing gateways in the fortified wall in the vicinity of archaeological remains need careful impact assessment. Further efforts need to be made to regulate the arrival of cruise liner coach loads. With the re-opening of the Citadel area providing more to interest visitors at Ayasuluk Hill, coaches could be encouraged to alternate the order in which they visit the three components so as to avoid all arriving at the same place at the same time. Landscape plans associated with the proposed new visitor routes through the Ancient City also need impact assessment. Similarly development plans to accommodate large numbers of visitors to the Meryemana need to consider archaeological remains known to exist at the site.

Involvement of the local communities

Staff are engaged locally for ticketing, guiding, labouing, conservation and maintenance. Local engagement with the site has been encouraged through the "Museum of Memory" displaying the town's history including the archaeological sites since the arrival of the railway at Selçuk in the late 19th century and particularly since the town started to develop after the 1930s. The museum's meeting room is used by the area management personnel; files are kept there and a schools programme is run from there.

ICOMOS notes that while research and conservation at each component is carried out by different institutions, coordination appears to be occurring under the new management system. The only exception observed by ICOMOS was the transportation master plan's proposals for delivery of visitors to the site, which are yet to be discussed with the Advisory Board and will require modification to take account of archaeological remains.

ICOMOS considers that the management system for the overall serial property is adequate; the Management Plan should be extended to include the Research Programme and Conservation Programme for the overall property and provision for impact assessments of all new management planning proposals including visitor management, landscaping and transport/coach park proposals. Furthermore, ICOMOS recommends that special attention be given to the timing and control of cruise liner coach arrivals.

6 Monitoring

Monitoring indicators are set out in the nomination dossier together with periodicity and location of records. The site is monitored by staff of Selçuk Municipality, Ephesus Museum, Izmir Regional Conservation Council and related excavation teams. ICOMOS considers that this needs to be expanded to itemise each monument/site within

Property Components 2 and 3. The Draft Management Plan Action Plan lists databases to be prepared in 2013 and the monitoring system should relate to these.

ICOMOS considers that the monitoring system needs to be extended to relate to the inventory of the property.

7 Conclusions

ICOMOS considers that the nominated property could meet criteria (iii) & (iv) if component 4 was removed from the series, and conditions of authenticity and integrity. The boundaries of the nominated property and of its buffer zone are now considered to be adequate, but with the exclusion of Component 4. ICOMOS considers that the legal protection of the property and buffer zone is adequate but protection of the buffer zone would be improved by raising protection of the entire buffer zone to the highest level. Protective measures in place are adequate.

The reason for deferral of the nomination in 2001 was that a comprehensive Management Plan was required which "should be accompanied by a map which clearly indicates the areas nominated for inscription and the buffer zone". Tourism was already an issue at that time and the World Heritage Committee requested that the Management Plan "should pay special attention to the management of tourism at this sensitive site". ICOMOS considers that the management system for the overall serial property is now adequate but tourism is still a major issue, particularly in relation to visitors arriving in several coach loads at once from increasing numbers of cruise ships. ICOMOS considers that proposals to handle these increasingly large numbers involving more coach parks distributed around the proposed additional entries to the Ancient City, using existing gateways in the fortified wall in the vicinity of archaeological remains, need careful impact assessment. Further efforts need to be made to regulate the arrival of cruise liner coach loads. With the re-opening of the Citadel area providing more to interest visitors at Ayasuluk Hill, coaches could be encouraged to alternate the order in which they visit the different components. Landscape plans and infrastructure associated with the proposed new visitor routes through the Ancient City also need impact assessment. Similarly development plans to accommodate large numbers of visitors to the Meryemana need to consider archaeological remains known to exist at the site.

ICOMOS considers therefore that the Management Plan should be extended to include impact assessments of all new management planning proposals including visitor management, infrastructure, landscaping, and transport/coach park proposals in line with Paragraph 110 of the *Operational Guidelines for the Implementation of the World Heritage Convention*. It should also include the Research Programme and Conservation Programme for the overall property and the monitoring system should be extended to relate to the inventory/database of the property. The maps/plans in the revised Management

Plan should be modified to reflect the boundaries of the nominated property.

8 Recommendations

Recommendations with respect to inscription

ICOMOS recommends that Ephesus, Turkey, be inscribed on the World Heritage List with the exclusion of Component 4, on the basis of **criteria (iii) and (iv)**.

Recommended Statement of Outstanding Universal Value

Brief synthesis

Located within what was once the estuary of the river Kaystros, Ephesus comprises successive settlements formed on new sites as the coastline retreated west forming an extensive silt plain. The Neolithic settlement of Cukurici Hoyuk marks the southern edge of the former estuary, now well inland. The Hellenistic and Roman settlement followed the retreating shoreline to the west. Excavations and conservation over the past 150 years have revealed grand monuments of the Roman Imperial period lining the old processional way through the ancient city including the Library of Celsus and the Great Theatre. Little remains of the famous Temple of Artemis, one of the 'seven wonders of the world' which drew pilgrims from all around the Mediterranean until it was eclipsed by Christian pilgrimage to the Church of Mary and the Basilica of St. John in the 5th century CE. The Mosque of Isa Bey and the medieval settlement on Ayasuluk Hill mark the advent of the Selçuk and Ottoman Turks.

Criterion (iii): The Ancient City of Ephesus is exceptional testimony to the cultural traditions of the Roman Imperial period as reflected in the monuments in the centre of the Ancient City and in Terrace House 2, with its wall paintings, mosaics and marble panelling showing the style of living of the upper levels of society at that time.

Criterion (iv): Ephesus as a whole is an outstanding example of a settlement landscape determined by environmental factors over time. The ancient city is an outstanding example of a Roman harbour city, with sea channel and harbour basin along the Kaystros River. Earlier and subsequent harbours demonstrate the changing river landscape from the Classical Greek to Medieval periods.

Integrity

The nominated serial components contain sites which demonstrate the long settlement history of the place, each making a significant contribution to the overall Outstanding Universal Value. Together the nominated components include all elements necessary to express OUV and the property is of adequate size to ensure the complete representation of the features and processes which convey the property's significance.

Authenticity

The component properties retain authenticity in terms of location and setting, form and design. The remains at

Cukurici Mound retain authenticity in terms of materials and substance. The other two component properties have all been subject to stone robbing in the past and subsequently to varying degrees of anastylosis, reconstruction and stabilisation using modern materials. Recent interventions have rectified damage caused by earlier inappropriate materials where possible and now make use of reversible techniques.

Management and protection requirements

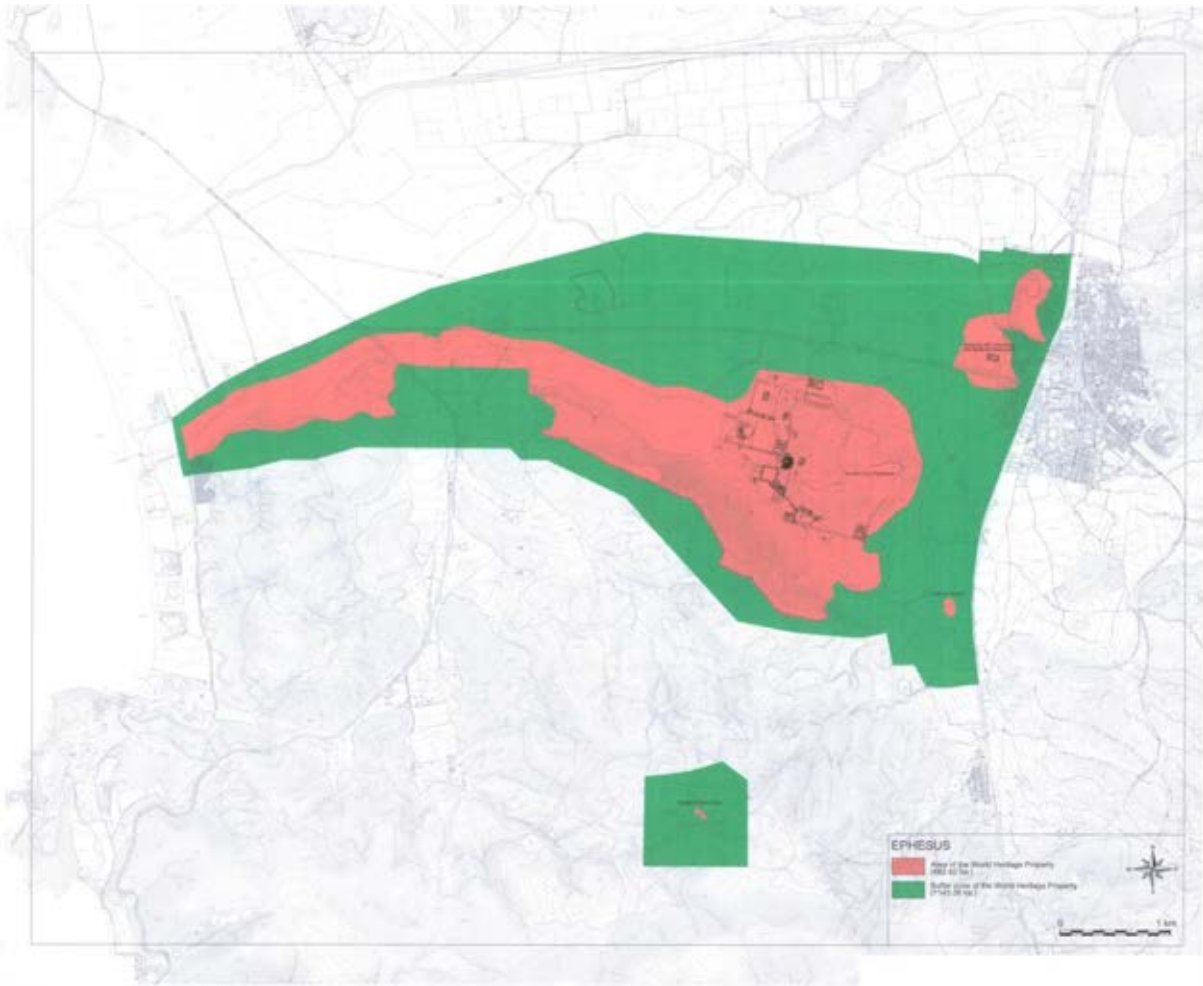
The nominated property is protected by Decisions of the Izmir Regional Conservation Council as empowered by the National Law for the Conservation of Cultural and Natural Property no. 2863, 23 July 1983, as amended. The Conservation Council has overall responsibility for the urban, archaeological and natural sites within the property and buffer zone that are declared First Degree Archaeological Sites. Some areas within the buffer zone are protected as a Third Degree Archaeological Site and others are protected as an Urban Conservation Area.

The Supervision and Coordination Council oversees management of the serial property by the Izmir metropolitan municipality and Selçuk municipality with input from the Advisory Council. The Management Plan includes an Action Plan covering conservation, visitor management and risk and crisis preparedness among other activities.

Additional recommendations

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

- Raising the legislative protection of the entire buffer zone to the highest level;
- Completing the Management Plan as proposed to include:
 - the research programme and conservation programme for the overall property with provision for findings to be integrated into future management, education and interpretation;
 - extension of the monitoring system to relate to the inventory/database of the property.
- Carrying out impact assessments of all new management planning proposals including visitor management, infrastructure, landscaping, and transport/coach park proposals in line with Paragraph 110 of the *Operational Guidelines for the Implementation of the World Heritage Convention* and accordance with ICOMOS Guidance on Heritage Impact Assessments for Cultural World Heritage Properties;
- 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 41st session in 2017.



Revised map showing the boundaries of the nominated property



Aerial view of Ephesus Ancient City



Celsus Library and Mezus Mitridites Gate



Temple of Hadrian



Artemision - view towards St John Basilica and the Citadel



Ayasuluk Citadel Aerial View



Terrace Houses

IV Cultural properties

A Africa

New nominations

B Arab States

New nominations

C Asia – Pacific

New nominations

D Europe – North America

New nominations

Extensions

Nominations deferred by previous sessions of the
World Heritage Committee

E Latin America and the Caribbean

New nominations

Aqueduct of Padre Tembleque (Mexico) No 1463

Official name as proposed by the State Party

Aqueduct of Padre Tembleque, Renaissance Hydraulic Complex in America

Location

Districts of Tepeapulco, Zempoala and Otumba
State of Hidalgo, State of Mexico
Mexico

Brief description

The aqueduct of Padre Tembleque, named after the friar Francisco de Tembleque, was constructed between 1554 and 1571 and constitutes an hydraulic system located between the states of Mexico and Hidalgo in the Mexican Central Plateau. The heritage canal system encompasses a water catchment area, springs, main and secondary canals, distribution tanks, arcaded aqueduct bridges, reservoirs and other auxiliary elements, which extend over a maximum distance of 48.22 kilometres. The aqueduct structures were built with supporting structures of earthen adobes in the Mesoamerican construction tradition, and reference European models of water conduction developed during the Roman period.

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 16 February 2015. The property accordingly remains a nomination of 1 site.

In terms of the *Operational Guidelines for the Implementation of the World Heritage Convention* (July 2013), Annex 3, the property is also nominated as a *heritage canal*.

1 Basic data

Included in the Tentative List

20 November 2001

International Assistance from the World Heritage Fund for preparing the Nomination

None

Date received by the World Heritage Centre

2 October 2013

Background

This is a new nomination.

Consultations

ICOMOS has consulted its International Scientific Committee on Earthen Architectural Heritage, TICCIH and several independent experts.

Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the property from 9 to 12 September 2014.

Additional information received by ICOMOS

ICOMOS sent a letter to the State Party on 22 August 2014 requesting additional information with regard to the exact location of features described in the nomination dossier, the description of all features proposed for nomination, the justification for the serial contribution as well as the history and development of components 02 and 03, the justification of criterion (v), future conservation plans and operation of the aqueduct, ownership details as well as the protective designation of the property. The State Party provided additional information in response to the questions raised as well as further aspects on 24 October 2014

Following its World Heritage Panel, ICOMOS sent a second letter on 22 December 2014 recommending a reduction in number of the serial properties and requesting additional information with regard to management and monitoring. ICOMOS and the State Party further arranged an online conference call to have some dialogue with the technical experts concerned on 13 January 2015 and a meeting on 22 January 2015. The second additional information letter sent by the State Party on 16 February 2015 responded to some of the aspects discussed during this online meeting.

The additional information has been included under the relevant sections below.

Date of ICOMOS approval of this report

12 March 2015

2 The property

Description

Nominated as a heritage canal, the property presents the key components of an hydraulic system of water aqueducts located in the Mexican Central Plateau. The property was initially composed of three site components comprising an overall property area of 6,560.3 ha. These have been reduced by the withdrawal of site components 02 and 03, which are described below, which reduces the size of the property to 6,540 ha.

The first component, indicated as 01 Aqueduct of Padre Tembleque Hydraulic Complex and associative sites, covers these 6,540 ha and includes the key elements of the hydraulic system along a distance of 48.22 km. It is surrounded by a buffer zone of 34,820 ha. Component 02,

Town, Convent, Aqueduct and Water Tank of Tepeapulco, initially designated the second site component, was 17.7 ha in size. It shared a mutual buffer zone of 555 ha with the third site component entitled 03 Archaeological Site of Xihuingo, which covered an area of 2.6 hectares. The currently proposed and the two withdrawn components remain described separately below:

01 Aqueduct of Padre Templeque Hydraulic Complex and associative sites

The key elements of the hydraulic system are located in this largest site component, which includes to the north the water source of the system in the form of the volcanic mountain El Tecajete, which acts as a water catchment area. In its vicinity are a series of springs, so-called *ojos de agua*, which are diverted into a main water canal. This main water canal covers the first 3.37km of the system up to the diverter or slit tank of El Tecajete, which divides the canal into two main branches, the branch to Zempoala of 5.98km length, and the branch towards Otumba which extends furthest south for 38.87km.

One of the key architectural features on the initially shared main canal is the aqueduct of the Hacienda el Tacajete, an arcaded structure carrying the water across 55 round arcades over a distance of several hundred meters. The branch towards Zempoala is frequently an underground canal cut to a depth of 1.2 meters into the hilly landscape. In Zempoala this branch splits again into two terminal 16th century square cisterns, which provided water to the key complexes in Zempoala, such as the Main House or the Todos los Santos Convent.

The branch towards Otumba heads largely south-west, passing by a number of haciendas, which are provided with water through smaller diverter tanks along the course. To reach the Hacienda of Guadalupe de Arcos an aqueduct of 14 round arches carries the water across the lake at Guadalupe de Arcos. Between the southern borders of the municipality of Zempoala and the northern borders of the municipality of Nopaltepec, one finds the key structures which facilitate the functioning of the southern hydraulic system, the monumental arcade which bridges the Tepeyahualco Ravine and the Papalote River. The aqueduct bridge is constructed of 68 round arches of stone masonry with lime-sand mortar, the tallest of which reaches to a height of 38 metres.

In the central section of this branch a number of haciendas are connected to the water canal before the hydraulic system enters the municipality of Otumba, such as the Hacienda of Santa Inés and the Haciendas of San Miguel Ometusco and Zoapayuca in the municipality of Axapusco. The town of Otumba marks the southern end of the hydraulic system, once more integrating several diverter tanks and water storage tanks. Their provision can still be understood in some architectural structures, such as the House of Culture, the House of Viceroy or the Convent of La Purísima Concepción.

02 Town, Convent, Aqueduct and Water Tank of Tepeapulco (withdrawn by letter of 16 February 2015)

The second site component is entirely located in the Town of Tepeapulco, about 12 kilometres east of the first site component. It contributes fragments of an antecedent to the aqueduct of Padre Templeque, the aqueduct of Tepeapulco completed in 1545. In contrast to the first site component, this structure is limited to its urban and somewhat fragmented features and includes a small arcade, a water tank, a reception pond and communal laundries as well as an atrium and the terminal cistern. Of the previous 27km extension of the aqueduct of Tepeapulco, only around 600 meters of water canal and structures are included in this site component.

03 Archaeological Site of Xihuingo (withdrawn by letter of 16 February 2015)

This third site component, Xihuingo Archaeological Site, is located 5 kilometres north of the second and likewise circa 12 kilometres east of the first site component. The archaeological site comprises a walled settlement built for astronomical and calendar observation and contains several rock art petroglyphs. It has a number of occupation layers, all prior to Spanish contact, dating to the Tzacualli phase (0-200 CE), the Teotihuacan culture (200-600 CE) and Mazapa phase, and later complex Aztec phases. This site component does not contain any elements typical for water distribution systems.

History and development

After a shorter early presence in the years 1527-1540, the Franciscan friars settled in Otumba in 1553 under their guardian Francisco de Templeque, who committed to assist the community of Zempoala and pay 20 annual pesos in exchange for water to be transported to Otumba via an aqueduct. The construction was commenced at a time during which Bernardino de Sahagún was collecting material for an anthropological text, which is considered an indispensable source for our knowledge of Mesoamerican cultures. This climate allowed local workers in the construction of the aqueduct to share their tangible and intangible expressions of local culture with the supervising friars.

Already a decade earlier, a smaller aqueduct had been built under the supervision of Andrés de Olmos in Tepeapulco between 1541 and 1545. This structure consisted of a rather simple sewage pipe, covered by lime and stone, predominantly underground with one visible arcade, located in the site component of Tepeapulco. However, only fragments of this earlier structure have survived until the present.

From 1553 onwards 17 whole years were dedicated to the construction of the aqueduct bringing water to Zempoala and Otumba. The construction was executed in close cooperation and with more than 400 stone masons and workers from the communities of Zacuala, Tlaquilpa, Zempoala and Otumba, working solely on the basis of their ancestral tradition of social work organization known as *tequio*. In particular the

construction of arcades was also based on local knowledge and techniques of the so-called Mestizo System, first building supporting structures of adobe and gradually raising the stone constructions, which allowed workers horizontal movement, rather than working with scaffolds or formworks. The local workers also left their signature on the structure by decorating keystones and spandrels with symbols corresponding to Mesoamerican cosmogony.

Following the hydraulic system's completion in 1571, regular maintenance and conservation works had to be coordinated among the four concerned communities as canals continued to clog or fracture over the centuries. Whilst initially the canal was intended to provide drinking water to the urban inhabitants, the demand for water for agricultural needs in the haciendas rose significantly in the 18th century, leading to conflicts over distribution rights. Following the independence of Mexico in the early 19th century further conflicts lead to the partial abandonment of the aqueduct, in particular of the Otumba branch. In 1851 the engineer Francisco Garay travelled along the canal system and pointed out the need for urgent conservation, which was finally decreed by the Emperor in 1865. However, conservation works were not carried out until the heritage value of the aqueduct was acknowledged in the early 20th century. Only in the last years of the 20th century, has a project to recover and restore the historic canal been initiated by the National Institute of Anthropology and History (INAH), funded by resources provided by the World Monuments Fund, the Ambassadors Fund and the US Congress. As the conservation works are only partially completed, the aqueduct is not yet once more operational along its full course.

3 Justification for inscription, integrity and authenticity

Comparative analysis

The property has been identified as best comparable in the typological framework of water management systems and in the chronological context of the Colonial period of Mesoamerica, whilst recognizing some cross-references to the European Renaissance and Roman period with regard to hydraulic architectural achievements. The comparative analysis accordingly aims to compare the property with hydraulic complexes of similar character – in particular examples already recognized on the World Heritage List or tentative lists –, with other aqueducts at a national or regional level, and with the most important European achievements of aqueduct construction from the Roman through to the Renaissance period.

Among the aqueducts already inscribed on the World Heritage List or located within larger contexts of some World Heritage Sites, the comparison highlights earlier structures such as the Pont du Gard, France (1985, (i), (iii) and (iv)), the Aqueduct of Segovia, Spain (1985, (i), (iii) and (iv)), the aqueducts of Los Milagros and San

Lázaro in the Archaeological Ensemble of Mérida, Spain (1993, (iii) and (iv)), the Amoreira Aqueduct in Elvas, Portugal (2012, (iv)), the Agua da Prata Aqueduct in Évora, Portugal (1986, (ii) and (iv)), or the Los Pegões Aqueduct in Tomar, Portugal (1983, (i) and (vi)).

However, also later structures which have been inscribed as important examples of hydraulic water systems have been compared including the Pontcysyllte Aqueduct, United Kingdom (2009, (i), (ii) and (vi)), the Carolina Aqueduct of Vanvitelli in the 18th century Royal Palace at Caserta, Italy (1997, (i), (ii), (iii) and (vi)) or three Mexican examples, the Aqueduct of Morelia (1991, (ii), (iv) and (vi)), the Aqueduct of Querétaro (1996, (ii) and (iv)) or the Aqueduct of Zacatecas (1993, (ii) and (iv)).

ICOMOS considers that this part of the comparison is unfortunately exclusively focused on the height of single arches in aqueducts to prove the point that the aqueduct at Tepeyahualco provides the highest elevation for a single arch. As a result the larger features of the water distribution system, its preservation of functional elements or construction details, have not been compared to other examples of water management systems, although some are briefly mentioned, such as the Shustar Historical Hydraulic System, Iran (2009, (i), (ii) and (v)), the Dujiangyan Irrigation System, China (2000, (ii), (iv) and (vi)) or the *Aflaj* Irrigation Systems of Oman (2006, (v)).

Other examples of aqueducts in France, Italy, Portugal, Turkey and Spain are likewise reduced to the comparison of height and illustrate that the Aguas Livres Aqueduct in Lisbon, Portugal is indeed a single level arch structure of about double the height of the aqueduct of Tepeyahualco and accordingly referred to as the highest historic aqueduct built in stone masonry. It dates to about two centuries later than the Padre Tembleque hydraulic system and was constructed from 1748 onwards.

In the regional chronological analysis, it is recognized that at present three Mexican aqueducts from the Colonial period in Mesoamerica have been included in the World Heritage List. However, all three have not been nominated as hydraulic water systems but were components of a city or archaeological site that was inscribed.

ICOMOS notes that the comparative analysis does not discuss the selection of serial components. ICOMOS further notes that all comparisons discussed are focused exclusively on the features in component 01 Aqueduct of Padre Tembleque Hydraulic Complex and associative sites of the property and do not reference the features included in the two other components, which have in the meantime been withdrawn at the recommendation of ICOMOS. However, even with regard to the first component, ICOMOS considers that the comparative analysis falls short of comparing the water distribution system of the Aqueduct of Padre Tembleque with relevant

similar examples of hydraulic systems and likewise lacks comparison with other structures created using similar adobe techniques merging local and European building traditions. Nevertheless, ICOMOS was able to confirm the exceptionality of the hydraulic water system included in the first serial component initially proposed by consulting its expert networks across the region.

ICOMOS considers that despite several gaps in the comparative analysis the first serial component proposed qualifies to be considered 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 hydraulic system is an outstanding example of a heritage canal because its main arcaded aqueduct at Tepeyahualco reaches a total height of 39.65m with its central arch of 33.84m height, which is the highest aqueduct ever constructed at that time with a single level of arches;
- The heritage canal initiated by Padre Templeque and built with support from the local communities is a unique representation of the ingenious fusion of Mesoamerican and European construction traditions, combining the mestizo tradition with the tradition of Roman hydraulics;
- The hydraulic complex is directly associated with the maguey landscape, an ancestral landscape of unique character, as well as to the birth of American anthropological sciences following the work of Bernardino de Sahagún, which is considered an indispensable source of knowledge of the old Mesoamerican cultures.

ICOMOS considers that this justification exclusively refers to component 01 of the three serial components presented in this nomination and identifies a justification for Outstanding Universal Value which components 02 and 03 make no distinctive contribution towards. In consequence, ICOMOS recommended excluding components 02 and 03 from the nomination proposal. These were subsequently withdrawn by the State Party.

In ICOMOS' view component 01 Aqueduct of Padre Templeque Hydraulic Complex and associative sites demonstrates Outstanding Universal Value as an early and unique example of an hydraulic system in the Mesoamerican context which is exceptionally well preserved, as well as an example of a unique fusion of ingenious Mesoamerican and European construction traditions. However, ICOMOS considers that this potential does not apply to the surrounding maguey landscape in the context of this nomination proposal and consequently cannot accept the landscape approach to justification of Outstanding Universal Value provided by the State Party.

Integrity and authenticity

Integrity

The initial component 01 Aqueduct of Padre Templeque Hydraulic Complex and associative sites retains the complete hydraulic system over a distance of approximately 48 kilometres. Its landscape setting is predominantly rural characterized by distinctive maguey plantations, with the canal system either historically buried and enclosed in stone with fired tile pipework in some sections, or built on the ground surface, either open or covered by stone. The six sections of aqueduct with 137 visible arches represent less than five percent of the total hydraulic system. All elements of the system are included in the component 01, which illustrates a high degree of integrity in reference to the historic extension and functionality of the hydraulic system. Components 02 and 03 did not seem to add to this completeness.

Extremely few threats of development or land-use seem to affect the Aqueduct of Padre Templeque. The rural landscape setting provides a high level of integrity with only occasional interruption by roads or power lines. The historic urban centres of Zempoala and Otumba have been encroached upon by some unsympathetic new constructions but these have little impact on the attributes of the hydraulic system. ICOMOS considers that component 01 includes all elements which are necessary to illustrate the Outstanding Universal Value proposed by the State Party.

ICOMOS considers that the integrity of component site 01 has been justified.

Authenticity

The physical manifestations of the hydraulic system are well preserved in its various elements, including *ojos de agua* (springs), *apantles* (water canals), *aljibes* (cisterns), arches, fountains, water tanks, and other water features. They retain authenticity in form and design, material and substance as well as location and setting. The hydraulic system also partially retains authenticity of use and function in the six-kilometre segment of Zempoala, which currently carries water supporting non-potable uses such as washing clothes, irrigation, etc. It is intended to regain completely authenticity of use and function by re-enabling the passage of water through the other branch of the system that connects to the town of Otumba, at a distance of 39 km. ICOMOS recommends that any measures to regain usability of this branch should be carefully supervised by heritage professionals and evaluated in terms of their potential negative impact to the authenticity of the property by means of Heritage Impact Assessments (HIAs).

Authenticity in traditions, techniques and management system is illustrated by the continuing maintenance and management by the local communities, during which repairs are undertaken in traditional construction techniques and materials. To a certain extent, the site still evokes feelings which could be related to its original time

of construction. This applies in particular where arches of the system exist and where one can see the hundreds of visible glyphs that were incorporated in the aqueduct's construction by the indigenous populations, underscoring that the spectacular engineering work was a collaborative effort between the indigenous population and the Spanish clergy.

ICOMOS considers that in regard to Outstanding Universal Value the authenticity of site component 01 has been demonstrated.

In conclusion, ICOMOS considers that the conditions of integrity and authenticity have been justified for component 01 of the initially submitted series.

Criteria under which inscription is proposed

The property is nominated on the basis of cultural criteria (i), (ii), (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 aqueduct is a masterpiece of Renaissance hydraulics in the New World which represents the realization of the ideal perfection proposed by Renaissance doctrines in American lands. It further integrates the highest single-level arcade ever built in aqueducts from Roman times until the middle of the 16th century, achieved as a result of the ingenious use of an adobe formwork as alternative to scaffolding.

ICOMOS considers that the monumental aqueduct arcade which bridges the Tepeyahualco Ravine and the Papalote River could be considered a masterpiece in the sense of criterion (i), and that this allows for its application to the remaining components of the hydraulic system, despite the fact that these combine construction technologies that had previously been developed in Europe or local contexts respectively.

ICOMOS considers that this criterion has been justified for serial component 01.

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 hydraulic system exhibits an important interchange of European tradition in terms of the knowledge of Roman hydraulics evidenced in the canals' gradual slope through the irregular topography, and Mesoamerican culture represented by the use of the traditional social organization of collective working, the utilization and adaptation of local methods of adobe construction as well as the presence of glyphs illustrating preHispanic symbols and cosmology in several arcade structures. Also, the fusing of the humanist ideals of the

Franciscan order with the local collective traditions promoted common wellbeing and an impressive construction achievement over 17 years.

ICOMOS considers that for component 01 the conjunction of the Roman heritage of masonry aqueducts, hydraulic management techniques inspired by Arab-Andalusian know-how and pre-Hispanic indigenous traditions for adobe construction is indeed exceptional, with clear material evidence. Although the use of adobe brick instead of wood was applied elsewhere in Mexico, it wasn't often and certainly not with the same dramatic effect as in the aqueduct which bridges the Tepeyahualco Ravine and the Papalote River.

ICOMOS considers that this criterion has been justified for component 01.

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 aqueduct represents an outstanding example of hydraulic water architecture, based on in-depth knowledge of Roman and Renaissance hydraulic engineering and integrated with local Mesoamerican construction knowledge. This combination created the highest ever single-arch arcaded aqueduct, which, using the same technology, was neither achieved earlier nor reproduced later and reached a surprising scale which continues to lack comparators.

ICOMOS considers that, as in previous criteria, the justification presented applies exclusively to component 01 and cannot be considered relevant for the other two serial components. In relation to the first component, more important than the maximum height of the arches, which is emphasized in the nomination, are the specific techniques and regional materials used in construction which created a unique type of hydraulic system at the time of Mesoamerican-European encounters. ICOMOS considers that a comparative analysis which considers the construction technology provides a basis to justify this criterion for component 01.

ICOMOS considers that this criterion has been justified for component 01.

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 maguey landscape is representative of the interaction with the rural natural environment around the aqueduct and has supported an agave agriculture of

preHispanic origin. The cultivations, which are defined by parallel lines of plots and terraces, are utilized to produce a fermented drink called *pulque*. The ancestral maguey landscape has recently become vulnerable to agricultural and urban economic development.

ICOMOS considers that the boundaries of the site components contain very limited features of the maguey landscape which cannot be said to be of Outstanding Universal Value in comparison to several other agricultural landscapes in the Mesoamerican region. It has also not been illustrated in which way this ancestral landscape is linked or provides support to the hydraulic system presented at the core of this nomination and how its landscape features could be integrated in the wider context of this nomination.

ICOMOS considers that this criterion has not been justified.

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

This criterion is justified by the State Party on the grounds that the aqueduct of Padre Tembleque is directly associated with the birth of ethnographic and anthropological science in America, more specifically with the writing of *Los Primeros Memoriales, Historia general de las cosas de la Nueva España* by Bernardino de Sahagún. The construction elements further illustrate the associations with preHispanic collective memory with regard to religious cosmogony, language and traditions as evidenced in the stones of the hydraulic complex which show various carved symbols.

ICOMOS considers that whilst the works of Bernardino de Sahagún may have had an important impact on the history of Mesoamerican anthropology, the fact that his researches were based in close vicinity to the canal's construction landscape and also coincided with the beginning of the construction under Francisco de Tembleque are not sufficient to illustrate a direct association that could be said to be of Outstanding Universal Value. ICOMOS further considers that while the symbols engraved in the hydraulic architecture do reference the integration of the workers' preHispanic cosmogony, these symbols are not of outstanding character in themselves but rather function as a reference to the integration of different traditions and cosmologies, which is better acknowledged under criterion (ii).

ICOMOS considers that this criterion has not been justified.

ICOMOS considers that the initial serial approach was not justified and recommended reducing the property to just component 01, which was agreed to by the State Party.

In conclusion, ICOMOS considers that criteria (i), (ii) and (iv) have been justified for component 01 and that authenticity and integrity have been demonstrated.

Description of the attributes

The attributes of Outstanding Universal Value comprise all elements of component 01 of the hydraulic system, including springs, main and secondary canals, distribution tanks, several arcaded aqueduct bridges, reservoirs and other auxiliary elements, extending over a distance of 48.22 kilometres. The elaborate techniques and cultural exchanges become specifically visible in the mastery of the monumental arcade bridging the Tepeyahualco Ravine and the Papalote River, which is constructed in 68 round arches the largest of which reaches a height of 38 metres.

4 Factors affecting the property

The Aqueduct of Padre Tembleque is located in a rural landscape dominated by agriculture and at present development pressures are low. However, ICOMOS considers that further gradual expansion of Mexico City can impact the integrity if proper management controls are not adopted. Important view lines could eventually be affected by urban sprawl from Mexico City, a city of over 20 million people located at only one hour's distance (62 km). The same risk could arise from a possible expansion of the industrial complex of Ciudad Sahagún, located at approximately 9 kilometre's distance to the aqueduct and currently shielded from view by a small mountain. New regional and local roads are still being planned in the property and ICOMOS considers that they will need to be controlled in terms of visual impact and construction methods in the vicinity of the hydraulic system.

The property receives few visitors today but given the proximity to the capital visitor numbers may rise considerably. With the majority of the hydraulic system being subterranean, the visitors will likely peak at the few visible and impressive architectural structures, in particular the grand arcaded aqueduct with its 68 arches. ICOMOS considers that it will be important to carefully plan and control the establishment of visitor infrastructure in these areas. Likewise, because large sections of the hydraulic system are underground, and thus are not visible, education and public awareness will be paramount in order to not cause inadvertent damage to these sections. Rows of maguey plants are currently planted alongside all sections to indicate the course of the aqueduct.

Under environmental pressures the State Party indicates the risk of pollution which could lead to contamination of the aquifers of El Tecajete Hill and would reduce the water quality and with it the means of use of the hydraulic system. Few natural risks affect the property but man-made risks can be identified. ICOMOS considers that a key threat is posed by unauthorized access of vehicles in the immediate vicinity of the key architectural structures. These not only adversely affect

the setting but also cause real risks to the physical structures.

ICOMOS considers that the main threats to the property are urban sprawl, vehicular access to the aqueduct, development of inappropriate visitor infrastructure and water pollution.

5 Protection, conservation and management

Boundaries of the nominated property and buffer zone

The boundaries of the remaining property component 01 and its buffer zone seem adequate in both its rural and urban areas. It is obvious that care was taken when establishing the boundaries to take advantage of topographic features (mountains, hills, and ridges) which will help protect the visual characteristics of the surrounding landscape. All boundaries are marked using GIS coordinates and are clearly delineated in the maps provided.

ICOMOS considers that the boundaries of the nominated property component 01 and of its buffer zone are adequate.

Ownership

The majority of land in the property is agricultural fields in the rural areas and residential properties in the urban components. Of these, 96% are in private ownership, 3.8% are communally owned and just 0.2% belong to the public administration. In the additional information that the State Party provided at the request of ICOMOS, it clarified that this 0.2% covers the key architectural structures, such as the Tembleque aqueduct. It was also specified that according to the General Water Act, waterways – including canals – are under federal administration and management, even if they pass through private land.

Protection

In the additional information that the State Party provided at the request of ICOMOS, it affirmed that all elements of the property are covered by the Federal Law on Archaeological, Artistic and Historic Monuments and Areas promulgated in 1972 as Historic Monuments by Determination of Law so that these do not require any specific decree or declaration.

This implies that in order to initiate any changes to the current condition of the property and its immediate setting, permission by the National Coordination of Historic Monuments of the INAH and from the Hidalgo and State of Mexico INAH Centres is required. The immediate setting has been defined as the buffer zone, which aims to preserve the characteristic maguey landscape as the property setting. Concerted efforts made by the federal, state, and municipal authorities to work together to achieve trans-governmental awareness and proper protection for the hydraulic system are still very recent and

ICOMOS considers it difficult to judge the effectiveness of these efforts at the present stage.

ICOMOS considers that the legal protection in place is adequate and that the application of protective measures will be adequate if consistently committed to.

Conservation

The elements and attributes included in component 01 of the property have recently been inventoried and described. The state of conservation of the hydraulic system is impressive, although several canals are not presently operational because they are filled with earth or dirt. The branch to Zempoala has been cleaned and restored and is fully operational to date. According to the additional information provided at the request of ICOMOS, it is planned to further restore the function of the Otumba branch.

Conservation works are currently ongoing in several sections of the aqueduct, including at the main arcade of Tepeyahualco, which is being conserved with funding made available by the US Ambassadors Fund. In ICOMOS' view the conservation is being implemented by well-trained specialists, who are using state-of-the-art techniques to conserve the large aqueduct section, by using time-proven traditional materials and techniques, coupled with modern analytical techniques. High-quality preservation and conservation projects are also being undertaken at other sections of the hydraulic system by Conaculta, INAH, and the Patronato Acueducto Tembleque A.C. Following on from the conservation projects, continuous repair, cleaning and maintenance is undertaken by trained individuals from the local communities. ICOMOS considers that the conservation measures are of high quality and very effective.

ICOMOS considers that the state of conservation is adequate and that conservation measures and maintenance schemes are commendable.

Management

Management structures and processes, including traditional management processes

The property falls into two states and five municipalities which share the administration of the hydraulic system and the development controls for its setting. The nomination dossier highlights that a management unit for inter-institutional coordination and follow up of the management plan, will coordinate federal, state (States of Mexico and Hidalgo) and municipal (Tepeapulco, Zempoala, Axapusco, Nopaltepec and Otumba) levels as well as agricultural and citizen associations. A two-stage approach is envisaged to establish such coordination. At the first stage, all government and other stakeholders shall agree on the implementation of a management plan, which is currently in preparation. Following this first agreement, the management unit will be set up to steer the inter-governmental implementation in September 2015.

In the intervening time, the Interstate Technical Commission for the nomination of the Aqueduct of Padre Tembleque Hydraulic Complex to the UNESCO World Heritage List, which coordinated the preparation of the nomination and management plan, acts as the executive management unit. The required funding for the establishment and operation of a management unit at this stage does not seem to have been estimated or identified. ICOMOS initially noted that risk preparedness measures did not feature prominently in the management mechanisms, although the planting of rows of maguey provides a first protection against risks caused by agricultural and other vehicles. However, in the additional information submitted on 16 February 2015, the State Party highlighted a number of measures undertaken to prevent damage in case of earthquakes and highlighted the national reference frameworks for the development of detailed disaster and risk management plans.

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

A management plan has been submitted with the nomination dossier. The management plan follows a general, and several specific, objectives and introduces guidelines for the specific heritage categories included in the property. It further provides guidelines on how more operational management procedures can be established over the forthcoming years. A few actions/activities – called indicators – have been included under different categories. It is assumed that, as the management plan is considered an evolving document, these will be further detailed and presented with specific timeframes, responsibilities and indicators in a later operational version of the management plan.

At present the aqueduct is not a key visitor attraction and does not yet have considerable visitor infrastructure. However, the Department of Tourism and Culture of the State of Hidalgo and the Department of Tourism of the State of Mexico have teamed up for a promotional campaign to increase visitor numbers to the heritage site and intend to create a suitable visitor infrastructure in the future. The only infrastructure currently in place consists of recently installed interpretative panels placed at the most significant elements of the system. Unfortunately, these have sometimes been placed a little too close to the actual historic property and so negatively impact their setting.

ICOMOS notes that any future visitor infrastructure needs to be carefully selected, as well as be sensitive to the characteristics of the site and its setting. ICOMOS considers that although visitor numbers are low at present, these can significantly increase, as the nearby pyramids of Teotihuacan, a World Heritage Site, which are within view of the hydraulic complex, receive four million visitors a year and tourism officials will seek to capitalize on the proximity to this existing visitor attraction. In ICOMOS' view, visitor management considerations will have to be strengthened to be prepared for such visitor numbers.

Involvement of the local communities

Although the Patronato Acueducto Tembleque A.C. – a civil association supporting the aqueduct – has been involved in the preparation of the nomination dossier, the outreach to the general population seems limited. However, the Patronato itself has undertaken impressive work over the past two decades in not only educating the public, but also in organizing work projects with local inhabitants to restore and maintain various sections of the system under professional conservation guidance. In particular, the Patronato has succeeded in imparting an appreciation of the system to school children through various activities including art projects that depict the large aqueduct and the importance of water to our daily lives.

ICOMOS considers that the management efforts and arrangements are evolving and will likely be effective once the formal management unit and with its cooperation mechanisms with the states and municipalities have been established by September 2015.

In conclusion, ICOMOS considers that, at present, the management system for the overall serial property is still evolving but will be adequate once the management unit is established and the management plan has been reviewed and augmented to include operational management procedures for site management.

6 Monitoring

The management plan foresees that monitoring is undertaken on an annual basis. While it is foreseen to establish detailed qualified indicators for this process, the nomination already identifies some areas in which the indicators need to be established, including the periodicity for monitoring as well as the responsible agencies and location of records. The monitoring processes are divided according to the heritage category concerned, i.e. urban, archaeological, landscape heritage etc.

With the additional information submitted on 16 February 2015, the State Party submitted further indicators and guidelines for the monitoring procedures. The information also indicated how Periodic Reporting processes would be undertaken on site. ICOMOS considers that, whilst the envisaged monitoring procedures might be sufficient, the process of undertaking these exercises has only just started and might have to be fine-tuned over time. However, the hydraulic system has been monitored over centuries by means of regular maintenance procedures which continue in particular in the functional branch to Zempoala.

ICOMOS considers that the monitoring indicators and methodologies presented are adequate.

7 Conclusions

The Aqueduct of Padre Tembleque, Renaissance Hydraulic Complex in America was initially nominated as a serial property of three component sites. However, ICOMOS did not see a consistent theme and approach to Outstanding Universal Value within these three sites and recommended to the State Party to withdraw the submission of component sites 02 and 03 to allow for a stronger case to be made. The State Party followed this recommendation and withdrew the two components by letter of 16 February 2015. ICOMOS considers that the justification for Outstanding Universal Value is adequate when exclusively referring to component 01, the Aqueduct of Padre Tembleque Hydraulic Complex and associative sites.

ICOMOS accordingly considers that component 01 demonstrates Outstanding Universal Value and meets criteria (i), (ii) and (iv). ICOMOS considers that this component represents in an exceptional way the interchange between European hydraulic technologies based on Roman tradition and incorporating Andalusian influences, and the Mesoamerican building tradition. ICOMOS also considers that the specific techniques and regional materials used in construction have created a unique type of hydraulic system at the time of Mesoamerican-European encounters. While these aspects have not been fully supported by an adequate comparative analysis comparing the water distribution system of the Aqueduct of Padre Tembleque with relevant similar examples of hydraulic systems and with other structures created in similar adobe techniques merging local and European building traditions, ICOMOS, based on information from its expert advisers, was able to acknowledge the exceptionality of this property in a global context.

The Aqueduct of Padre Tembleque Hydraulic Complex and associative sites retains the complete hydraulic system over a distance of approximately 48 kilometres and therefore a high degree of integrity. The physical manifestations of the hydraulic system are well preserved in its various elements, and retain authenticity in form and design, material and substance as well as location and setting. The key factors affecting the property are urban sprawl from the capital Mexico City, inappropriate vehicular access to the aqueduct including the underground components, the potential development of inappropriate visitor infrastructure, and water pollution.

With a view to protection and management, ICOMOS considers that both will be adequate and effective once the cooperation between the two federal states and five municipalities concerned is formally guided by the establishment of an official attribution of mandate to the Site Management Unit in September 2015. Active conservation works of high quality are currently ongoing in several sections of the aqueduct, including at the main arcade of Tepeyahualco.

A management plan has been submitted with the nomination. This initial management plan is described as an evolving document and is currently being augmented to include operational aspects of site management. The State Party provided additional information on aspects of risk preparedness, visitor management and quality assessment, which were lacking in the initial draft. The property is currently not extensively visited but authorities have started promotional campaigns envisaging increased visitor numbers. ICOMOS notes that any future visitor infrastructure needs to be carefully selected, as well as sensitive to the characteristics of the site and its setting. With regards to the monitoring system, ICOMOS considers that the necessary monitoring processes and indicators established following the methodology described in the nomination are adequate.

8 Recommendations

Recommendations with respect to inscription

ICOMOS recommends that the Aqueduct of Padre Tembleque, Renaissance Hydraulic Complex in America, Mexico, with the exception of the following site components 02 Town, Convent, Aqueduct and Water Tank of Tepeapulco and 03 Archaeological Site of Xihuingo, be inscribed on the World Heritage List on the basis of **criteria (i), (ii) and (iv)**.

Recommended Statement of Outstanding Universal Value

Brief synthesis

The aqueduct of Padre Tembleque, named after the friar Francisco de Tembleque, was constructed between 1554 and 1571 and constitutes an hydraulic system located between the states of Mexico and Hidalgo in the Mexican Central Plateau. The heritage canal system encompasses its water catchment area, springs, main and secondary canals, distribution tanks, arcaded aqueduct bridges, reservoirs and other auxiliary elements, which extend over a maximum distance of 48.22 kilometres. The aqueduct structures were built with supporting structures of earthen adobes in the Mesoamerican construction tradition, but at the same time referencing European models of water conduction developed during the Roman era.

The hydraulic system is an outstanding example of water conduction in the Americas and integrates along its 48 kilometres' extent impressive architectural structures, such as the main arcaded aqueduct at Tepeyahualco, which reaches a total height of 39.65m, with its central arch of 33.84m height. The system was built by Franciscan friars with support from the local communities and as a result is a unique representation of the ingenious fusion of Mesoamerican and European construction traditions, combining the mestizo tradition with the tradition of Roman hydraulics. As an ensemble of canals and auxiliary structures, the system is exceptionally well-preserved and one branch remains operational up until today.

Since it is the complexity of the system and the human exchange which created it which contribute to the Outstanding Universal Value, all features of this hydraulic system, including springs, main and secondary canals, distribution tanks, several arcaded aqueduct bridges, reservoirs and other auxiliary elements, are attributes documenting this exceptional construction. The elaborate techniques and cultural exchanges become specifically visible in the mastery of the monumental arcade bridging the Tepeyahualco Ravine and the Papalote River, which is made up of 68 round arches.

Criterion (i): The aqueduct bridge of Tepeyahualco is an architectural masterpiece integrating the highest single-level arcade ever built in aqueducts from Roman times until the middle of the 16th century, achieved as a result of the ingenious use of an adobe formwork as an alternative to scaffolding. Although the use of adobe brick instead of wood was applied elsewhere in Mexico, it wasn't often and certainly not with the same dramatic effect as in the aqueduct, which bridges the Tepeyahualco Ravine and the Papalote River.

Criterion (ii): The hydraulic system of Padre Tembleque exhibits an important interchange of European tradition in terms of the conjunction of the Roman heritage of masonry aqueducts, hydraulic management techniques inspired by Arab-Andalusian know-how, and pre-Hispanic indigenous tradition as well as Mesoamerican culture, represented by the use of the traditional social organization of collective working, the utilization and adaptation of local methods of adobe construction as well as the presence of glyphs illustrating symbols and cosmology in several arcade structures. It is a monument fusing the humanist ideals of the Franciscan order with the local collective traditions, aimed at promoting common wellbeing through an impressive construction achievement over 17 years.

Criterion (iv): The aqueduct of Padre Tembleque represents an outstanding example of hydraulic water architecture, based on in-depth knowledge of Roman and Renaissance hydraulic engineering which was integrated with local Mesoamerican construction knowledge. The specific techniques and regional materials used in the construction created a unique type of hydraulic system at the time of Mesoamerican-European encounters.

Integrity

The Aqueduct of Padre Tembleque Hydraulic Complex retains the complete hydraulic system over a distance of approximately 48 kilometres. Its landscape setting is predominantly rural characterized by distinctive maguey plantations, with the canal system either historically buried or enclosed in stone, either open or covered. The six impressive aqueduct bridges with 137 visible arches represent less than five percent of the total hydraulic system and hence the presence of all auxiliary elements of the system is a key to its integrity.

At present, few threats of development or land-use seem to affect the Aqueduct of Padre Tembleque. The rural landscape setting provides a high level of integrity with only occasional interruption by roads or power lines. It is important that this landscape integrity is retained in the future. The historic urban centres of Zempoala and Otumba have been encroached upon by some unsympathetic new constructions but these have fortunately had little impact on the attributes of the hydraulic system. Any future construction in these historic centres should be reviewed in terms of any potential negative impact which may occur.

Authenticity

The physical manifestations of the hydraulic system are well preserved in its various elements, including *ojos de agua* (springs), *apantles* (water canals), *aljibes* (cisterns), arches, fountains, water tanks, and other water features. These retain authenticity in form and design, material and substance as well as location and setting. The hydraulic system also partially retains authenticity of use and function in the six-kilometre segment of Zempoala, which currently carries water supporting non-potable uses such as washing clothes, irrigation, etc. It is intended to regain completely authenticity of use and function by re-enabling the passage of water through the other branch of the system that connects to the town of Otumba, at a distance of 39 km. However, such reactivation should be carefully supervised by heritage professionals and evaluated in terms of its potential negative impact to the authenticity of the property.

Authenticity in traditions, techniques and management system is illustrated by the continuing maintenance and management by the local communities, during which repairs are undertaken in traditional construction techniques and materials. To a certain extent, the site still evokes feelings which could be related to its original time of construction. This applies in particular where arches of the system exist and where one can see the hundreds of visible glyphs that were incorporated in the aqueduct's construction by the indigenous populations, underscoring that the spectacular engineering work was a collaborative effort between the indigenous population and the Spanish clergy.

Management and protection requirements

The property is protected under the Federal Law on Archaeological, Artistic and Historic Monuments and Areas promulgated in 1972 as an Historic Monument. This implies that in order to initiate any changes to the current condition of the property and its immediate setting, permission by the National Coordination of Historic Monuments of the INAH and from the Hidalgo and State of Mexico INAH Centres is required. The immediate setting has been defined as the buffer zone, which aims to preserve the integrity of the characteristic maguey landscape.

The property falls into two states and five municipalities which share the administration of the hydraulic system. A

Management Unit for inter-institutional coordination and follow-up of the management plan coordinates federal, state and municipal levels as well as agricultural and citizen associations. The management as well as maintenance of the property builds strongly on the cooperation with the local communities and citizen organizations. Any visitor infrastructure planned to be created for the property needs to be carefully selected, as well as be sensitive to the characteristics of the site and its setting.

Additional recommendations

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

- Finalizing the establishment and attribution of mandate to the management unit by September 2015 to guide cooperation between the concerned federal and municipal administrations;
- Augmenting the management plan to include operational management procedures and finalize its operational version, integrating the strategies for risk and visitor management;
- Ensuring that any future visitor infrastructure be carefully selected, as well as sensitive to the characteristics of the site and its setting and be subject to a Heritage Impact Assessment before any approval is granted.

ICOMOS also recommends that the name of the property be changed to "Aqueduct of Padre Tembleque Hydraulic System".



Monumental arcade of Tepeyahualco, aerial view



Monumental arcade of Tepeyahualco



Hacienda Los Arcos, aerial view



Cistern at Zempoala Church

Fray Bentos (Oriental Republic of Uruguay) No 1464

Official name as proposed by the State Party

Fray Bentos Industrial Landscape

Location

Department of Rio Negro
West Uruguay

Brief description

The industrial complex of Fray Bentos located on the Uruguay River west of the town grew out of an initial meat salting works established in 1859 to capitalise on cattle raising on the huge grassland within the river basin of the Uruguay, Parana and Rio de la Plata. Illustrating the whole process of meat sourcing, processing, packing and dispatch, the site includes buildings and equipment of the Liebig Extract of Meat Company which exported meat extract and corned beef to the European market from 1865 and the Anglo Meat Packing Plant which exported frozen meat from 1924. Here German research and technology combined with English enterprise to provide food for a global market including to the armies of two World Wars in the 20th century. Workers' housing and social institutions which accommodated and supported the cosmopolitan workers' community continue in use today.

Category of property

In terms of the categories of cultural properties set out in Article 1 of the 1972 World Heritage Convention, this is a *site*.

In terms of the *Operational Guidelines for the Implementation of the World Heritage Convention* (July 2013), paragraph 47, it is a *cultural landscape*.

1 Basic data

Included in the Tentative List

1 February 2010

International Assistance from the World Heritage Fund for preparing the Nomination

2012

Date received by the World Heritage Centre

15 January 2014

Background

This is a new nomination. An ICOMOS Advisory Mission visited the site from 25 to 28 February 2013 (Stage 1) and from 23 to 26 July 2013 as part of the Upstream Process.

The mission report dated August 2013 is included in the nomination dossier (Annex II). It concluded that in general the property had the potential to constitute a robust nomination to the World Heritage List.

Consultations

ICOMOS consulted TICCIH and several independent experts.

Technical Evaluation Mission

An ICOMOS technical evaluation mission visited the property from 8 to 12 September 2014.

Additional information received by ICOMOS

A letter was sent to the State Party on 21 August 2014 requesting a map showing the relationship of the nominated property boundary to the identified features of the Liebig-Anglo period of the property, clarification regarding the attributes and clarification as to whether the Management Plan had been approved and if not a timetable for its approval. A second letter was sent on 19 September 2014 requesting clarification on the inventory and a deepening of the comparative analysis. A third letter was sent to the State Party following the ICOMOS Panel in December 2014 regarding changing the name of the property; appointment of an overall site manager; representation on the Management Committee; and extension of the Management Plan to cover a number of issues. A fourth letter was sent to the State Party on 13 January 2015 regarding the level of protection of the buffer zone and inclusion of a risk preparedness strategy. A response to the first letter was received on 21 October 2014 and to the second on 5 November 2014. A response to the third and fourth letters was received on 28 February 2015. The information has been incorporated below.

Date of ICOMOS approval of this report

12 March 2015

2 The property

Description

The Fray Bentos industrial landscape covers an area of 273.8ha and is surrounded by a buffer zone of 2127.7ha.

Industrial facilities

Located on land projecting into the Uruguay River, the industrial complex spreads inland from its dock area in a range of saw-tooth roofs punctuated by the higher elements of the enormous cold storage building and tall brick, boiler chimney. Its natural harbour attracted first the Liebig Extract of Meat Company which exported meat extract and corned beef to the European market from 1865 and subsequently from 1924 the Anglo Meat Packing Plant which exported frozen meat. German scientists brought machines and tools from Scotland and developed meat processing technology at the Fray Bentos facility as well as cattle farming research which became a model for other parts of the world.

The industrial complex is located adjacent to prime, fertile land conducive to cattle-raising and agricultural production where the primary products could be obtained. Key buildings illustrating the industrial processes up to the time the factory closed down in 1979 include the Machine Room, Meat Extract Department, Slaughter Yard/Offal-Viscera Handling Area, Rendering Room, Cold Storage and Tinwork Department. These are connected by the internal roads, conveyor lines and aerial tunnels used by the workers and products, and still contain machinery that existed in 1979. Power was provided in the Boiler Room by oil-fuelled, water-tube steam generators, four dating from 1906 and six from 1922. Buildings remaining from the Liebig period are constructed of brick with zinc sheet or tiled (slate) roofing on cast iron or timber structures. Buildings from the Anglo period (1920s) include the large Cold Store and the Machine Room housing the ammonia compressor required to refrigerate it. These were built using pre-fabricated steel structures imported from England with concrete slab floors and walls. The complex is approached from the hinterland by the stock route (Cattle Drive Road) leading to the holding pens and Slaughter Yard area.

Residential area

Workers' housing is located east of the industrial complex and includes the earliest manager's house and administrative offices, technicians' housing and single family housing distinguished by French tiled roofs as well as rows of single men's accommodation distinguished by corrugated sheet roofs. The area is characterised by vegetation comprising indigenous flora merged with exotic plants brought by the English staff of the company from Asia, Africa and Europe. It includes the cafeteria, social clubs, sports clubs including a golf course, hospital and school. To the south of the industrial facilities is the mansion Casa Grande including a large garden on high ground with a good view of the industrial area. This was built by engineer George Giebert, the first manager of the factory in 1868.

Fray Bentos Town

This is not part of the nominated property and is separated from the industrial property by the Laureles Stream which runs into the Uruguay River from the south. However the north-west part of the town reaching back six blocks from the Uruguay River which was the first part of be settled is included in the buffer zone. Founded in 1859 as Villa Independencia, the town developed in conjunction with the industrial enterprises, providing them with human resources and essential services. Laid out on a grid pattern oriented north-west to south-east and including green squares, its urban architecture follows European styles of the period and is still of low scale.

History and development

Before 1865 the land on which the nominated property is located was a large Spanish cattle ranch and was bought by German engineer Georg Giebert in 1863 in order to establish his meat extract enterprise at the natural harbour

where English landowner Richard Hughes had built a meat salting works in 1859.

From 1865 to 1924 Giebert developed the Liebig Extract of Meat Company Limited (LEMCO) producing meat extract and corned beef using the method invented by German chemist Justus von Liebig. This formed an important part of the diet of troops during WWI. Other products exported included organic fertilizer, which replaced Peruvian guano. Immigration was encouraged in order to supply the work force and workers' housing, social and sports facilities were established as well as English language teaching. A workers' cooperative was formed.

In 1924 the Vestey Group from England took over the enterprise, Liebig having given up Fray Bentos in favour of consolidating their activities in Argentina and Paraguay. The period from 1925 to 1950 was characterised by the development of meat packing specifically canning in response to the demands of the European market during WWII. The Anglo meat packing plant provided employment for 5,000 workers at a time when the population of Fray Bentos was 12,000. Immigration increased to include over 50 different nationalities. The English colony included around 70 families and was equipped with a golf course still essentially intact today.

The period 1950 to 1979 following the end of the War era was one of decline for the Fray Bentos enterprise as demand for the product reduced. The population increase in Montevideo attracted industry and workers there and questions raised in Britain following a typhus outbreak about water cooling practices at Fray Bentos and other South American meat works contributed to the reduction in production. ANGLO began to focus its production in Buenos Aires and the Uruguay government intervened to keep the Fray Bentos plant going. Subsequent efforts by other companies to take over were unsuccessful and the site was finally vacated in 1985.

Since then part of the site has become the Museum of Industrial Revolution (in 2005), and part has become the Municipal Industrial Park where buildings have been given new uses by 22 companies. There are also 19 social and cultural organisations accommodated within the property. Some descendants/relatives of workers of the old factory still live in the residential sector and in the town and are sources for the oral history of the site.

3 Justification for inscription, integrity and authenticity

Comparative analysis

The Preface to the nomination dossier points out that the Latin American and Caribbean Group GRULAC agreed that Fray Bentos Cultural-Industrial Landscape was the most representative of a great part of the historical development process in the American continent following a thorough analysis of its viability, characteristics and history. The comparative analysis

provided by the State Party covers several other industrial sites in South America, including meatpacking works such as Pueblo Liebig's factory in Colon, Argentina and Puerto Bories' in Chilean Patagonia, both of which are shown to have been relatively isolated and had much lower production and global reach than Fray Bentos although sharing similar characteristics in relation to the provision of workers' accommodation and facilities. The nominated property is also compared with Conchillas in Uruguay which was a stone and sand extraction enterprise whose products were used for the construction of the port of Buenos Aires at the end of the 19th century. While it also provided workers' housing and facilities it was a relatively short-lived operation.

The property was compared with World Heritage listed properties: Sewell, Chile (2006, (ii)) a copper mining industry and town; and Blaenavon, UK (2000, (iii) & (iv)) steelworks and town. Apart from the different industrial processes represented by these sites, and their contrasting geographical and topographical locations, it is argued that Fray Bentos is significantly different in representing an industry with a wide global market and a cosmopolitan worker community, for which the company provided exceptional social facilities. ICOMOS considers that the nominated property could also be compared with the WH listed Humberstone and Santa Laura Saltpeter Works, Chile (2005, (ii), (iii), (iv)) where the development of saltpetre mines and company towns from 1872 to the mid-20th century had a worldwide market for their production of agricultural fertilizer and involved immigrant workers from South America and Europe with consequent exchange of cultural values and development of workers' unions. However the Fray Bentos site represents another category of early 20th Century industry – food production for a global market which was dependant on the international exchange of research and technology.

ICOMOS notes that there were large scale meat processing and freezing works in Australia and New Zealand in the same period including the British company Borthwicks' Waitara Works in the North Island of New Zealand, Belfast (Canterbury) works in the South Island, and in Australia at Portland, Victoria; Brooklyn, Victoria; and the Moreton Works in Queensland some of which had their own ports, and the company also owned cattle stations (ranches). None of these have been investigated as to what now remains of these establishments. However *Borthwicks A Century in the Meat Trade (1863-1963)* records that South America was the leading supplier of meat to Europe during the early part of the 20th century.

Remains of buildings which housed meat canning and freezing works at Maribyrnong near Melbourne are protected on the Victorian Heritage Register: the Melbourne Meat Preserving Company pioneered meat preserving by the vacuum process, and the Australian Frozen Meat Export Company pioneered bulk freezing and is credited with the first successful frozen meat export in the world. However the site does not

demonstrate the processes to anything like the same extent as at Fray Bentos and does not include cattle raising territory, workers' housing or social institutions.

The Vestey Company had cattle stations in the Northern Territory of Australia, and a large meat works at Darwin which operated only for three years (1917-1920), of which only the water storage tank now remains. Photographs indicate that it had a very similar layout to the Vestey phase of Fray Bentos.

Additional information from the State Party in response to ICOMOS' second letter states that The Australian Meat Company (1823-1914) founded in London by Charles Grant Tindal, a cattle breeder and entrepreneur in the market of canned food in Australia used Liebig's process to produce meat extract at Ramornie, NSW Australia and exported canned meat to England from 1866 in large quantities. ICOMOS notes that the company was subsequently sold to the Kensington Meat Preserving Co. in 1915 and was demolished c.1920.

The State Party also highlights the meat packing enterprise of Phillip Danforth Armour in Chicago, which shared technological information with the Liebig Company in the late 19th century. The Armour Company was part of the industrial complex at the Union Stock Yards, at the centre of the American meat packing industry where animals were slaughtered, processed and packed for rail shipment. ICOMOS notes that decentralisation of the industry resulted in abandonment of the Yards in the 1950s. Part of the area became The Stockyards Industrial Park in 1971 and the area behind it remained home to a thriving immigrant population. The Yards became famous in American literature and popular culture but apart from the main entrance gate, now a Historic Landmark, little remains of the former enormous industrial establishment.

ICOMOS considers that the comparative analysis while not exhaustive has established that Fray Bentos stands out in retaining all the evidence needed to illustrate this global food production enterprise from pasture to processing factory to port.

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:

- Representative of an industry with technological edge and global reach due to the international exchange of technology and research.
- Exceptional exploitation of the natural advantages of the particular location.

- Representative of the cosmopolitan worker community which became the basis for Uruguayan society in general.
- Encapsulates a century of economic and social change due to industry in South America up until the 1970s.

ICOMOS considers that this justification is appropriate because the property stands out in illustrating the whole process of meat sourcing, processing, packing and dispatch on one site in the early 20th century, which only became possible due its location combining prime cattle raising country with port facilities; through the introduction of German expertise and research, and the immigrant worker community.

Integrity and authenticity

Integrity

The nominated property includes all elements related to the history of the site and the period of its operation and is of adequate size to ensure the complete representation of the features and processes which convey the property's significance. In the industrial area, key buildings and complementary facilities are preserved. Some (machine room, meat extract, and viscera, head, tripe, and offal handling area) retain much of the original interior equipment, illustrating the production process and role of facilities. Some buildings are being reused by industrial enterprises and businesses; others have deteriorated badly including the cold storage building and boiler house. Traces of buildings lost during the historical period (hide storage; weaving works; boxing/woodworks and the bonded warehouse) allow a sufficient understanding of the entire system. Housing in workers' neighbourhoods from different periods is preserved, yet typically with several interventions, some of which have impoverished the appearance of some sectors. Some facilities including the clinic and school retain their original use. The landscape setting is appropriate in size and views from the river and town are maintained.

Authenticity

The property is authentic in terms of location and setting, materials and substance and use/function in terms of the buildings which form part of the Museum of Industrial Revolution. The archive contains historical documents with technical information providing a source for repairs and restoration. Other buildings have been adapted for new uses and workers' housing has been upgraded to provide more modern accommodation for families now living there, many of whom have a connection with the property through family members who worked there. ICOMOS considers that authenticity is vulnerable to proposed new development within the property including new uses for buildings and sites as well as new construction. Impact assessment should be undertaken for proposed interventions in accordance with Paragraph 110 of the *Operational Guidelines for the Implementation of the World Heritage Convention*.

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

Criteria under which inscription is proposed

The property is nominated on the basis of cultural criteria (ii), (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 primarily on the grounds that the site is evidence of the interchange of human values between European society and the South American population of the 19th and 20th century which effected social, cultural and economic changes in both places during that period – this being largely due to the immigrant workers who arrived from more than 55 nations.

ICOMOS considers that the bringing together of German research and technology with the natural advantages of the location together with English enterprise was the basis of the important interchange on developments in technology as demonstrated in the buildings and machinery which enabled the production and export of canned and frozen meat on a global scale.

ICOMOS considers that this criterion has been demonstrated.

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

This criterion is justified by the State Party on the grounds that the ensemble of cattle pasture and handling facilities, industrial buildings, mechanical facilities, port facilities, residential fabric and green areas linking the river and agricultural areas to the city stands out as an example of early 20th century industrial development.

ICOMOS considers that the combination of location, industrial ensemble, housing and social institutions enables the whole process of meat production on a global scale to be understood and that the site illustrates the technological, social and cultural factors extremely well.

ICOMOS considers that this criterion has been justified.

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

This criterion is justified by the State Party on the grounds that the site is associated with ideas and

research that enabled the improvement of cattle breeds and technical research that enabled the production of meat extract in particular which in turn influenced diet and nutrition internationally.

ICOMOS considers that these ideas do not justify outstanding universal significance.

ICOMOS considers that this criterion has not been justified.

ICOMOS considers that the nominated property meets criteria (ii) and (iv) and conditions of authenticity and integrity.

Description of the attributes

The attributes expressing the Outstanding Universal Value of the property are its location and setting between the Uruguay River and agricultural hinterland adjacent to Fray Bentos Town; the buildings, sites and machinery that illustrate the complete meat works process from cattle raising to processing to port shipment of the final product; the residential neighbourhood, manager's residence and garden, and the buildings and sites that housed the social institutions.

4 Factors affecting the property

The establishment of Uruguay Pulp Mill facilities to the west of the nominated property in 2009 is mentioned in the nomination dossier as having a possible impact in terms of development and environmental pressures. However these reached their peak in 2010 and are not now considered a threat. The nomination dossier also records pressure from Argentinean developers to increase the urban density within the nominated property, making use of empty and eroded areas for holiday accommodation. Other proposals include locating higher education institutions within the site. Any such proposals are subject to controls relating to the property's designation as a National Historic Landmark.

The property is not subject to flooding, but the possible impact of climate change has not been considered. Nevertheless the Municipality has provided deposit areas to store moveable objects in the case of any flood emergency. No seismic activity has ever been recorded. Precautions are taken in the face of forecast strong winds and squalls, followed by maintenance inspections and repairs in their wake. Fire threats are dealt with by the official fire department located in the city area of the buffer zone, together with volunteer fire-fighters. Investigations are underway with a view to reactivating the historic fire infrastructure within the property. Buildings which currently accommodate industrial activity comply with municipal regulations in terms of fire-fighting equipment.

The number of residents within the nominated property was 785 two years ago. The number of annual visitors is approximately 18,000-20,000. The Local Plan includes

restrictions on expansion of the Beach Resort located to the south of the buffer zone of the nominated property in anticipation of possible increases due to World Heritage inscription if this should occur.

ICOMOS considers that conversion of the industrial buildings to accommodate new uses; alterations to workers' housing and construction of new facilities such as higher education institutions on vacated sites need to be guided by specific standards aimed at minimum intervention and compatibility with Liebig-Anglo structures in order to maintain integrity and authenticity. The archaeology of vacated sites also needs to be investigated. Intervention proposals require impact assessment in accordance with Paragraph 110 of the *Operational Guidelines for the Implementation of the World Heritage Convention*. In response to ICOMOS' third letter, the State Party has agreed to this process.

ICOMOS considers that the main threats to the property are fire and flood.

5 Protection, conservation and management

Boundaries of the nominated property and buffer zone

The property boundary has been drawn to include all areas related to Liebig-Anglo's industrial production including residential areas, cattle pens and roads and areas of possible archaeological interest. The boundaries are clearly defined and enclose the area protected by existing legislation. The buffer zone is of adequate size to protect important views and provides extra protection under the Local Planning Regulations.

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

Ownership

The State owns almost 80% of the nominated property. The remainder is privately owned.

The river area of the buffer zone is State-owned, although under the jurisdiction of different government agencies. The town includes both municipal-owned building and public spaces and privately-owned buildings and land.

Protection

The nominated property is protected as a National Historic Landmark under the Heritage Act No. 14.040, August 1971 as amended in 2008 and the Regulatory Decree 536/72. Properties owned by government agencies and non-state corporations are protected under Act No. 17.473, 9 May 2002. The Acts are administered by the National Cultural Heritage Commission, which is under and chaired by the Ministry of Transportation and Public Works. It comprises representatives of the Ministry of Transportation and Public Works, the University of the

Republic and other institutions including the Boards of the National Library and National History Museum.

The buffer zone in general is not yet legally protected to this level, although some buildings in the foundational area of the City of Fray Bentos are designated as National Historic Landmarks. However it is fully protected by the Local Planning Regulations. In response to ICOMOS' fourth letter, the State Party has advised that the urban area of the buffer zone will be fully protected as a National Historic Landmark by April 2015. The archaeological heritage is protected under Act No. 14.040 and Decree 526/72 on land, and Act No. 14.343 and Decree 692/86 under water.

ICOMOS considers that protection is effective.

ICOMOS considers that the legal protection of the property and buffer zone is adequate. However ICOMOS considers that legal protection of the entire buffer zone would be improved by raising it to the highest level as agreed by the State Party.

Conservation

According to the nomination dossier compilation of an inventory for the nominated property including machinery and equipment is in progress and will be completed shortly. The additional information provided by the State Party in response to ICOMOS' second letter states that 30% of the buildings in the industrial area remain to be inventoried and will be completed by January 2015, and the remaining 80% of the machinery and industrial equipment will be inventoried by March 2015. Sample sheets of the inventory were provided. An inventory of the foundational area of the City of Fray Bentos (part of the buffer zone) is already complete. Underwater archaeological research is underway in the river area of the buffer zone. The rural area of the buffer zone remains to be researched.

ICOMOS notes that the inventory should include the workers' housing, cattle pens, manager's house, weigh station and that a comprehensive data base covering materials, vacated sites, furniture and machinery is needed as a basis for monitoring, conservation and maintenance. Some important buildings, particularly the cold storage room and rendering room require emergency works.

Buildings forming part of the cultural tourist itinerary have been repaired and conserved, with works ranging from cleaning to restoration. Surveys of other buildings within the nominated property are currently being undertaken to establish conservation tasks.

ICOMOS notes that intervention projects are related to new uses of the buildings rather than being planned within an overall conservation strategy of preventative conservation and maintenance. ICOMOS considers that there is a need for a comprehensive conservation management plan related to a complete inventory. In response to ICOMOS' third letter the State Party has

provided further information on the progress of the inventories and stated that conservation and maintenance will be related to these.

ICOMOS notes that inventories are being completed to form a basis for monitoring, conservation and maintenance, and considers that a comprehensive conservation management plan is required as part of the Management Plan.

Management

Management structures and processes, including traditional management processes

The property has been managed at site level by the Anglo Management Committee since 2008 with input from representatives of the Ministry of Culture and Educational Affairs; Ministry of Housing, Land Use Planning and Environment and the Municipality of Rio Negro. This body is responsible for the implementation of the Property Management Plan. Risk preparedness is not specifically covered although measures are in place as noted above under Factors affecting the property. Financial resources are provided through the Five-Year Budget Plan of the Municipality of Rio Negro, currently 2011-2015, which receives funds from the Central Government as well as from its own taxation measures. Expertise derives from staff within the Municipality of Rio Negro, the Cultural Heritage Commission and the University of the Republic. Information provided by the Anglo Management Committee to the ICOMOS mission indicates that the Museum of Industrial Revolution includes technical staff in four departments: Conservation (4); Education and information (3); Administration and cultural investigation (2), and documentation (5). It is proposed to locate the Technological University within the industrial area of the nominated property and that this will incorporate training facilities for staff and volunteers at the site. ICOMOS notes that it is proposed to locate the university on the site of the former Administration building and considers that archaeological investigation of the site and impact assessment is required.

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

The Municipality of Rio Negro's Fray Bentos Local Plan and Influence Zone protects and guides land use and development in the wider area of Fray Bentos to an extent of 26,800ha. This has particular relevance to the upgrade of housing and accessibility within the nominated property. The Property Management Plan 2012-2015 was approved by the National Cultural Heritage commission on 2 January 2014. It includes structural and feasibility studies in relation to new uses for existing buildings; completion of the inventory; condition surveys; oral history project; digitisation of the Liebig-Anglo archive; research; Building Conservation Plan and various visitor interpretation proposals. ICOMOS considers that it should be extended to include a risk preparedness strategy for fire and flood,

and guidelines for archaeological investigations and impact assessments relating to intervention proposals. In response to ICOMOS' third and fourth letters the State Party has agreed to undertake these, and has stated that the risk preparedness strategy will be ready by December 2015.

The Museum of the Industrial Revolution has run tours of the industrial precinct by local volunteers since 1990. It is proposed to expand these to cover other aspects of the site including the cattle handling area and the housing and social life of the workers, possibly also including a Museum of Immigration, as well as covering the landscape and natural features. It is expected that expansion of tourist interpretation will require funds to be sourced from the private sector. ICOMOS notes that the archive section is a valuable resource for research and presentation of the property, but it requires improved accommodation including security and environmental monitoring.

Involvement of the local communities

The local community within the nominated property and the town are involved as volunteers - guiding visitors and contributing to research. Residents are also involved with the industrial enterprises and social institutions accommodated within the property. ICOMOS considers that the volunteers and local industrial enterprises and social organisations should be represented on the Anglo Management Committee. In response to ICOMOS' third letter, the State Party has outlined the process for this.

ICOMOS considers that management of this large property is a challenge for the staff available and notes that there is apparently no overall site manager. In response to ICOMOS' third letter, the State Party has advised that the President of the Anglo Management Committee, who is an architect, is the Site Manager.

ICOMOS considers that special attention is needed for completion of inventories, comprehensive conservation management plan, archaeological investigation, guidelines and impact assessment of proposed interventions; risk preparedness; improved accommodation of the archive and representation of the local community on the Management Committee. In conclusion, ICOMOS recommends that the Property Management Plan be extended to cover the above issues and should include a research plan for industrial and underwater archaeology. In response to ICOMOS' third letter, the State Party has agreed to these actions and has provided a timetable for their implementation.

6 Monitoring

Monitoring indicators have been proposed covering protection, conservation, management and environmental protection. A chart is given in the nomination dossier setting out the indicators, monitoring time scale and responsible authority/agency. ICOMOS considers that

these need to be related to a complete data base of the property, covering all buildings, vacated sites, furniture and machinery. In response to ICOMOS' third letter, the State Party has advised that the data base will be completed by October 2015.

ICOMOS considers that the monitoring system should be related to a comprehensive data base of the property.

7 Conclusions

ICOMOS considers that the nominated property meets criteria (ii) and (iv) and conditions of integrity and authenticity. However given that a number of buildings have been made available for reuse by industrial enterprises and businesses, and alterations have been made to workers' housing, guidelines aimed at minimum intervention and compatibility with Liebig-Anglo structures are required in order to maintain integrity and authenticity. In response to ICOMOS' third letter the State Party has advised that such guidelines are being prepared and will be completed by the last trimester of 2016.

ICOMOS considers that the main threat to the property is fire. The boundaries of the nominated property and of its buffer zone are adequate. Legal protection in place is adequate for the property and buffer zone but would be improved by raising legislative protection of the entire buffer zone to the highest level. Comprehensive inventories need to be completed to form a basis for monitoring, conservation and maintenance, and a conservation management plan is required. ICOMOS notes that it is proposed to locate the Technological University on the site of the former Administration building which was burnt out and considers that archaeological investigation of the site and impact assessment is required (in accordance with Article 110 of the *Operational Guidelines for the Implementation of the World Heritage Convention*). The State Party has advised that this requirement will be included in the Management Plan by the first trimester of 2016. The archive section of the Museum is a valuable resource for research and presentation of the property, but it requires improved accommodation including security and environmental monitoring.

The local community within the nominated property and the town are involved as volunteers - guiding visitors and contributing to research. Residents are also involved with the industrial enterprises and social institutions accommodated within the property. The State Party has advised that the volunteers, local industrial enterprises and social organisations will be represented on the Anglo Management Committee.

ICOMOS considers that management of this large property is a challenge for the staff available and notes that the President of the Anglo Management Committee is the overall site manager. Special attention is needed for completion of inventories, comprehensive

conservation planning, archaeological investigation, guidelines and impact assessment of proposed interventions; risk preparedness; improved accommodation of the archive and representation of the local community on the Management Committee. The Property Management Plan needs to be extended to deal with all these issues and to include a research plan for industrial and underwater archaeology. The State Party has agreed to undertake these actions and a timetable has been provided.

ICOMOS considered that the name of the property should be changed to 'Fray Bentos Industrial Site'. However in response to ICOMOS' third letter the State Party wishes to name the property Fray Bentos Industrial Landscape, to which ICOMOS agrees.

8 Recommendations

Recommendations with respect to inscription

ICOMOS recommends that Fray Bentos Industrial Landscape, Uruguay be inscribed on the World Heritage List on the basis of **criteria (ii) and (iv)**.

Recommended Statement of Outstanding Universal Value

Brief synthesis

Located on land projecting into the Uruguay River west of Fray Bentos town, the industrial complex is marked by the enormous cold storage building and tall brick, boiler chimney which punctuate a range of saw-toothed roofs. Illustrating the whole process of meat sourcing, processing, packing and dispatch, the site includes buildings and equipment of the Liebig Extract of Meat Company which exported meat extract and corned beef to the European market from 1865 and the Anglo Meat Packing Plant which exported frozen meat from 1924. Here German research and technology combined with English enterprise to provide food for a global market including to the armies of two World Wars in the 20th century. Workers' housing and social institutions which accommodated and supported the cosmopolitan workers' community continue in use today.

Criterion (ii): Fray Bentos Industrial Landscape is evidence of the interchange of human values between European society and the South American population of the 19th and 20th century which effected social, cultural and economic changes in both places during that period. This was due the interchange on developments in technology which enabled the production and export of canned and frozen meat on a global scale and to the immigrant workers who arrived from more than 55 nations.

Criterion (iv): The ensemble of cattle pasture and handling facilities, industrial buildings, mechanical facilities, port facilities, residential fabric and green areas linking the river and agricultural areas to the city of Fray Bentos Industrial Landscape stands out as an example of early 20th century industrial development.

Integrity

The property includes all elements related to the history of the site and the period of its operation and is of adequate size to ensure the complete representation of the features and processes which convey the property's significance. The landscape setting is appropriate in size and views from the river and town are maintained. Some buildings are in need of repair and conservation but the site does not suffer from neglect overall.

Authenticity

The property is authentic in terms of location and setting, materials and substance and use/function in terms of the buildings which form part of the Museum of Industrial Revolution. The archive contains historical documents with technical information providing a source for repairs and restoration. Other buildings have been adapted for new uses and workers' housing has been upgraded to provide more modern accommodation for families now living there, many of whom have a connection with the property through family members who worked there. Authenticity is vulnerable to proposed new development within the property including new uses for buildings and sites as well as new construction.

Management and protection requirements

The property is protected as a National Historic Landmark under the Heritage Act No. 14.040, August 1971 as amended in 2008 and the Regulatory Decree 536/72. Objects owned by government agencies and non-state corporations are protected under Act No. 17.473, 9 May 2002. The Acts are administered by the National Cultural Heritage Commission.

The property has been managed at site level by the Anglo Management Committee since 2008 with input from representatives of the Ministry of Culture and Educational Affairs; Ministry of Housing, Land Use Planning and Environment and the Municipality of Rio Negro. This body is responsible for the implementation of the Property Management Plan 2012-2015, which was approved by the National Cultural Heritage commission in January 2014.

Additional recommendations

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

- Raising the legislative protection of the entire buffer zone to the highest level;
- Completing arrangements for representation of the volunteers, local industrial enterprises and social organisations on the Anglo Management Committee;

- Completing the Management Plan as proposed to include:
 - the inventory of the machinery;
 - the inventory/data base as a basis for monitoring and conservation and maintenance;
 - the research plan for industrial and underwater archaeology with provision for findings to be integrated into future management, education and interpretation;
 - the comprehensive conservation plan related to the inventory/database to deal with repair and maintenance needs;
 - provision for impact assessments of all new management planning proposals including new uses for existing buildings and new buildings within the site in line with Paragraph 110 of the *Operational Guidelines for the Implementation of the World Heritage Convention*;
 - guidelines for interventions to industrial and residential buildings;
 - extension of the monitoring system to relate to the inventory/database of 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 41st session in 2017.



Liebig-Anglo industrial complex circa 1930



Aerial view of the industrial complex



Internal view of the meat processing area



Anglo neighborhood – School

