

UNESCO

WORLD HERITAGE CONVENTION
WORLD HERITAGE COMMITTEE

31st ordinary session
(23 June – 2 July 2007)
Christchurch (New Zealand)

EVALUATIONS OF CULTURAL PROPERTIES

Prepared by the
International Council on Monuments and Sites
(ICOMOS)

The IUCN and ICOMOS evaluations are made available to members of the World Heritage Committee.
A small number of additional copies are also available from the secretariat.
Thank you



2007

(Cultural and Mixed Properties)
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by the World Heritage Committee at its 31st Session**

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WORLD HERITAGE LIST

Nominations 2007

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New nominations

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- Ecosystem and Relict Cultural Landscape
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- Samarra Archaeological City 24

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- Archaeological Site of Volubilis

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C Asia – Pacific

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- Bam and its Cultural Landscape
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Czech Republic – [C 1235]	
- Hand Paper Mill at Velké Losiny	129
Finland – [C 1251]	
- Paimio Hospital (former Paimio sanatorium)	137
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- Bordeaux, Port of the Moon	146
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- Bahá'í Holy Places in Haifa and the Western Galilee	173
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Italy – [C 91 bis]	
- Historic Centre of Rome	See Addendum WHC- 07/31.COM/INF.8B1.Add

Creation of Buffer Zones

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Properties deferred or referred back by previous sessions of the World Heritage Committee

Albania – [C 568 rev]	
- The Historic Centre of Berat (City of 25 Centuries Cultural Continuity and Religious Coexistence)	229
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INTERNATIONAL COUNCIL ON MONUMENTS AND SITES (ICOMOS)

World Heritage List Nominations 2007

I 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* (17 January 2006), a document which brings together a variety of practices and decisions that have been previously adopted by the Advisory Body in the context of its work with the evaluation of nominations to the World Heritage List, and other aspects of implementation of the World Heritage Convention. This document is available on the ICOMOS web site (www.international.icomos.org).

This policy makes public the existing procedure, and sets out how ICOMOS approaches its world heritage remit in a fair, open and credible manner, in order to avoid conflicts of interest.

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

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

The ICOMOS World Heritage Panel, which brings together some thirty persons, is made up of members of the ICOMOS Executive Committee and of experts who are invited each year depending on the specific types of heritage represented in the nominations (rock art, 20th century heritage, industrial heritage, etc.). It is representative of the various professional and geo-cultural sensibilities present at international level. It meets at a statutory meeting of ICOMOS and prepares the ICOMOS recommendations for each nomination.

This evaluation process calls for the widest possible collaboration and consultation both in terms of specialist knowledge and in geographical terms, within the expert network of ICOMOS.

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 has no equivalent on the World Heritage List;
 - 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.

This year, ICOMOS has begun an external review process of the principles, methods and procedures used in evaluating nominations. The results of this review should be available at the next session of the World Heritage Committee in June-July 2008.

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).

b. Consultations: Experts are consulted to obtain their opinion about 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* (2 February 2005), § 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.

c. Technical evaluation missions: ICOMOS, when choosing its experts, as a rule calls on a person from the region in which the nominated property is located. The missions are required to study the criteria relating to authenticity, integrity, protection, conservation and management (*Operational Guidelines*, § 78).

Experts are sent photocopies of the complete dossiers (or only relevant parts of them, when the dossiers are extensive), a note based on a preliminary examination of the dossiers, documentation on the Convention and detailed guidelines for evaluation missions.

Experts have a duty of confidentiality, and their opinion about the nomination does not necessarily reflect that of the organisation.

Missions were sent to all the nominated properties except the property in Iraq and the nominations referred back. The experts were drawn from Argentina, Australia, Bangladesh, Belgium, Bulgaria, Canada, Croatia, Finland, France, Georgia, Germany, India, Italy, Japan, Kazakhstan, Malaysia, Mali, Netherlands, Norway, Poland, Russian Federation, South Africa, Spain, Sweden, United Kingdom, Zambia and Zimbabwe.

Evaluation missions were carried out jointly with IUCN for the nomination of one mixed property and two cultural landscapes.

2. Evaluations and recommendations

a. ICOMOS World Heritage Panel: Draft evaluations and recommendations (in either English or French) were prepared on the basis of the information contained in the nomination dossiers, mission reports, consultations and research and examined by the ICOMOS World Heritage Panel at a meeting in Paris on 20-21 January 2007.

b. Additional information request: Additional information requests for some of the nominated properties were sent to the State Parties by 31 January 2007. All documents received by 28 February 2007 were examined by the World Heritage Working Group at its meeting on 10-11 March 2007.

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 for its 31st session in June-July 2007.

Recommendations concerning the nominated properties will be presented to the World Heritage Committee by ICOMOS advisers in PowerPoint form.

Decisions are the responsibility of the World Heritage Committee, which debates the recommendations until a consensus emerges. The process relies on the Committee members and their knowledge of the nominations and the evaluations published by the advisory organisations.

3. Dialogue with State Parties

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

4. Referred back nominations, requests for minor modifications and examination of buffer zone

On 1st February preceding the World Heritage Committee meeting, ICOMOS also receives supplementary information on nominations referred back during previous sessions of the Committee. ICOMOS does not organise technical evaluation missions for the evaluation of this supplementary information. It is examined by the World Heritage Working Group, which this year met on 10-11 March 2007.

ICOMOS also examines requests for minor modifications, including buffer zones and names for some properties already inscribed on the World Heritage List. There is no procedure or deadline governing the examination of buffer zones and in view of ICOMOS's very tight schedule, the resources of the organisation can be sorely tried.

II ANALYSIS OF NOMINATIONS

In 2007, ICOMOS was called on to evaluate 46 nominations, being 2 mixed properties and 44 cultural properties.

They consisted of:

27 new nominations (including 1 mixed property),
5 deferred nominations,
2 referred back nominations (including 1 mixed property) and
12 minor modifications.

The *geographical spread* is as follows:

<i>Europe and North America</i>	25 nominations 19 countries (7 minor modifications, 2 deferred and 1 referred back) (25 cultural properties)
<i>Latin America Caribbean</i>	2 nominations 2 countries (2 cultural properties)
<i>Arab States</i>	2 nominations 2 countries (1 minor modification, 1 deferred) (2 cultural properties)
<i>Africa</i>	6 nominations 6 countries (2 minor modifications, 1 referred back) (4 cultural properties, 2 mixed properties)
<i>Asia-Pacific</i>	11 nominations 10 countries 2 deferred (11 cultural properties)

Furthermore, ICOMOS examined the confirmation and creation of buffer zones for a certain number of properties already inscribed on the World Heritage List.

III GENERAL REMARKS

1. ICOMOS evaluation report

This year, ICOMOS has adapted the *format of its evaluations* to take into account the new format of nominations and to make the ICOMOS recommendations clearer. New sections have been added. Slight modifications may be made next year.

In most nominations, the *section on monitoring* remains weak, but ICOMOS hopes that this shortcoming will soon be overcome with the publication of the *Guideline Handbook for the Preparation of Nominations*.

In its recommendations, ICOMOS clearly distinguishes between nominations which are *referred back* and those which are *deferred*. For referred back nominations, outstanding universal value has been demonstrated; supplementary information must be supplied, but no further technical evaluation mission will be required. For deferred nominations, the very nature of the information requested means that a new mission is necessary to evaluate the nomination again.

In formulating its recommendations, ICOMOS aims to be as helpful as possible to State Parties.

ICOMOS appreciates that it cannot please everyone. Despite being under considerable pressure, not only from State Parties, its first duty remains the preservation of properties.

2. Quality 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 over legal questions and over the finalisation or adoption of plans and the carrying out of research, before moving on to the evaluation process.

3. Deadline of 28 February for submission of additional information

ICOMOS recommendations concerning the nominated properties are adopted during the session of the ICOMOS World Heritage Panel, which is combined with a statutory meeting of ICOMOS at the end of January each year, and for which members are not paid expenses. It provides access to a large network of expertise which is representative of the whole world both in professional terms and in terms of geo-cultural awareness.

ICOMOS is fully aware that the change of the deadline, from 31 March to 28 February, for the receipt of additional information requested by 31 January, leaves the State Parties little time to answer and thus penalises them in a sense. ICOMOS is not satisfied with this situation, but any change in the schedule of its meetings would require a complete work reorganisation, with financial implications.

4. Conclusion

The opinion of ICOMOS is both independent and institutional. The opinion of one of its members is not binding on the organisation. ICOMOS represents the five continents and is working to protect the entire cultural heritage. The organisation 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 2007

STATE PARTY	ID NUMBER	NAME OF THE PROPERTY	FIELD MISSION	DATE
MIXED PROPERTIES				
New Nominations				
South Africa	C/N 1265	The Richtersveld Cultural and Botanical Landscape	Donald Chikumbi (Zambia)	October 2006
Deferred or Referred back Properties				
Gabon	C/N 1147 rev	Ecosystem and Relict Cultural Landscape of Lopé-Okanda	Mamadi Dembélé (Mali)	September/October 2004
CULTURAL PROPERTIES				
New Nominations				
Argentina	C 979	Foundational City Area of La Plata	Christiane Lefebvre (Canada)	September 2006
Austria	C 1228	Bregenzerwald Cultural Landscape	Klaus von Krosigk (Germany)	October/November 2006
Bosnia and Herzegovina	C 1260	Mehmed paša Sokolovic's Bridge in Višegrad	Werner Lorenz (Germany)	September 2006
Cambodia	C1224	The Sacred Site of the Temple of Preah Vihear	Divay Gupta (India)	October 2006
Canada	C1221	The Rideau Canal	Michel Cotte (France)	September 2006
China	C 1112	Kaiping Diaolou and Villages	Laurence Loh (Malaysia)	September 2006
Czech Republic	C 1235	Hand Paper Mill at Velké Losiny	Jozef Dabrowski (Poland)	August/September 2006
Finland	C 1251	Paimio Hospital (former Paimio Sanatorium)	Natalya Dushkina (Russian Federation))	August 2006
France	C 1256	Bordeaux, Port of the Moon	Alvaro Gomez-Ferrer Bayo (Spain)	November/December 2006
France / Spain	C 1261	The Mediterranean Shore of the Pyrenees	Luisa De Marco (Italy)	September 2006
Greece	C 978	The Old Town of Corfu	Teresa Coletta (Italy)	September 2006
Israel	C 1220	The Bahá'í Holy Places in Haifa and the Western Galilee	Goran Niksic (Croatia)	October 2006
Italy	C 1254	The Valnerina and the Marmore Cascade	Katri Lisitzin (Sweden)	September 2006
Japan	C 1246	Iwami-Ginzan Silver Mine Site and its Cultural Landscape	Duncan Marshall (Australia)	October 2006
Kenya	C 1231	The Sacred Mijikenda Kaya Forests	Edward Matenga (Zimbabwe)	October 2006
Kyrgyzstan	C 1230	The Sulamain-Too Cultural Landscape	Yelena Khorosh (Kazakhstan)	September 2006
Mexico	C 1250	Central University City Campus of the <i>Universidad Nacional Autónoma de México</i> (UNAM)	Alfredo Conti (Argentina)	September 2006
Namibia	C 1255	Twyfelfontein or / /Ui-//aes	Janette Deacon (South Africa)	September 2006
Philippines	C 1184	The Batanes Cultural Landscape	Nobu Kuroda (Japan)	November 2006
Poland	C 1241	Gdansk – The Site of Memory and Freedom	Margareta Ersthörn (Finland)	October 2006

STATE PARTY	ID NUMBER	NAME OF THE PROPERTY	FIELD MISSION	DATE
Romania	C 1238	Sibiu, the Historic Centre	Werner Desimpelaere (Belgium)	August 2006
Serbia	C 1253	Gamzigrad – Romuliana, Palace of Galerius	Willem Willems (The Netherlands)	August 2006
Switzerland	C 1243	Lavaux, vineyard terraces overlooking the lake and the Alps	Henry Cleere (United Kingdom)	August 2006
Tajikistan	C 1141	Sarazm	Can Binan (Turkey)	September 2006
Turkmenistan	C 1242	The Parthian Fortresses of Nisa	Nato Tsintzabadze (Georgia)	January/February 2007
United Kingdom	C 1247	Darwin at Downe	Mette Eggen (Norway)	September 2006
Deferred or Referred back Properties				
Albania	C 568 rev	Historic Town of Berat (City of 25 Centuries Cultural Continuity and Religious Coexistence)	Todor Kretev (Bulgaria)	September 2006
Australia	C 166 rev	Sydney Opera House	Shin Muramatsu (Japan)	September 2006
Azerbaijan	C 1076 rev	Gobustan Rock Art Cultural Landscape	Reidun Laura Andreassen (Norway)	November 2006
Germany	C 1173 rev	Heidelberg Castle and Old Town	Nils Ahlberg (Sweden)	August 2004
India	C 231 rev	The Red Fort Complex	Sharif Shams Imon (Bangladesh)	September 2006
Iraq	C 276 rev	Samarra	No mission	

Richtersveld (South Africa)

No 1265

*Official name as proposed
by the State Party:*

The Richtersveld Cultural and
Botanical Landscape

Location:

Northern Cape

Brief description:

The Richtersveld Community Conservancy covers 160,000 hectares of dramatic mountainous desert in the north-west part of South Africa. Communally owned and managed, this harsh, dry landscape, with extremes of temperature, affords a semi-nomadic pastoral livelihood for the Nama people, reflecting seasonal patterns that may have persisted for as much as two millennia in Southern Africa. It is the only area where the Nama still construct portable rush-covered, domed houses, */haru oms*.

Category of property:

In terms of the categories of cultural property set out in Article 1 of the 1972 World Heritage Convention, this is a *site*. In terms of the *Operational Guidelines for the Implementation of the World Heritage Convention* (2 February 2005) paragraph 47, it is also a *cultural landscape*.

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

1. BASIC DATA

Included in the Tentative List: 2 February 2002

*International Assistance from the World Heritage Fund for
preparing the Nomination:* 4 December 2004

*Date received by
the World Heritage Centre:* 1 February 2006

Background: This is a new nomination.

Consultations: ICOMOS has consulted its International Scientific Committee on Historic Gardens – Cultural Landscapes.

Literature consulted (selection):

Barnard L, Strauss J & DuPlessis E, *Land of Destiny – The Livestock Farmers of the Richtersveld*, Kimberley, 2005

Denyer, Susan, *Traditional African Architecture*, 1978

Webley L, *Beskerming vir lewende kultuur, Restorica*, No 30, 1998

Webley L, *Pastoralist Ethnoarchaeology in Namaqualand, Prehistoric Pastoralism in Southern Africa, The South African Archaeological Society Goodwin Series*, Vol 5, 1986

Webley L, *Settlement Studies Among Descendants of Nama Herders: an Ethno-Archaeological Approach, Khoisis Occasional Papers*, No 3, 1982

Technical Evaluation Mission: A joint ICOMOS/IUCN mission visited the site from 2 to 8 October 2006.

Additional information requested and received from the State Party: ICOMOS sent a letter to the State Party on 29 September 2006, and the State Party submitted information on 15 January 2007. ICOMOS sent a letter for request of supplementary information on 31 January 2007 and the State party submitted supplementary information on 22 February 2007.

Date of ICOMOS approval of this report: 11 March 2007.

2. THE PROPERTY

Description

The dramatic, dry mountainous desert of the Richtersveld Community Conservancy is confined in the east by the deep canyons of the Orange River and Nababiep mountains, and to the north by the largely impenetrable Vandersterrberg Mountains. To the south and west, the Conservancy merges with grazing land.

The nominated area covers 160,000 hectares. A remote wilderness, with few passable roads and sparsely populated by sheep and goat herders, it is nominated as a natural site for its high plant diversity, and as a cultural landscape shaped by the semi-nomadic Nama pastoralists, one of the last transhumance cultures in Southern Africa. Prior to the southern migration of Bantu peoples the indigenous Nama were more extensively spread across the sub-continent; now they live in the northern part of South Africa and Namibia, but only practice pastoral transhumance in and around the nominated area.

The nominated property is 'buffered' by the following protected areas: the Richtersveld National Park to the north, Nababiep Provincial Nature Reserve to the east, and designated communal grazing areas to the south and west owned by the *Sida !hub* Community Property Association: Richtersveld 'Coloured' Reserve, Korridor 21 consisting of the former farm units and Korridor Wes 2 consisting of nine former farm units.

The Nama live in three small villages, established as mission settlements, outside the nominated area: Kuboes to the north, Lekkersing to the south-west and Eksteenfontein to the south. Many men work as migrant labourers elsewhere in the country. Those that keep grazing animals tend to be the elderly and are few in number, no more than 300 people at certain times of year.

The nominated property consists of the following:

- Seasonal migrations and grazing grounds
- Stockposts

- Nama /haru oms rush mat houses

These are considered in turn:

Seasonal Migrations and Grazing Grounds

Following long-standing traditions extending back over many centuries, the graziers move between stockposts, inhabiting different posts at different times of the year to optimise the grazing for their animals. In the winter they graze at higher levels and in the summer they graze on lower lying land. The number of animals grazing the Conservancy is not given but grazing is said to have been reduced as a result of the development of the Conservancy (for environmental reasons and because grazing is now restricted to 'traditional' farmers). The pastoralists collect medicinal and other plants and there is said to be a strong oral tradition associated with different places and attributes of the landscape. These traditions have not been well documented.

Stockposts

Within the Conservancy are around forty kraals or stockposts, located along the roads. These are the bases used by the herders as they move with their herds of sheep and cattle on a seasonal basis. They are joined by other members of their family at holidays and weekends. Generally each family possesses three or four grazing camps in both summer and winter pastures. The camps consist of small houses (see below) and kraals for penning up animals at night, now often enclosed by corrugated sheet fences rather than traditional rush stockades. Beyond the camps are areas where the owners' animals are grazed together with other animals which he is paid to look after. Technically, grazing posts are allocated by a grazing committee; in practice however sites are occupied according to tradition.

Nama /haru oms, rush mat houses

Traditional Nama rush mat houses, /haru oms, are found in the camps. The houses are small hemispherical portable structures, consisting of a wooden frame of intersecting wooden hoops, covered over with fine mats of braided local rushes. In the wet season two layers of mats were used, in the summer a single layer. Each house served as a single room used for sleeping, or for cooking. Currently few /haru oms are covered entirely with mats; most now also have Hessian, or plastic outer sheeting. Traditionally the houses were dismantled and moved with their owners from camp to camp. Some of the buildings are still moved from one camp to another, but a few are now permanent

A survey of the traditional architecture of the Nama was carried out in 2001. The survey included areas inside and outside the nominated property. In the villages outside the nominated property /haru oms are found in conjunction with houses built of modern materials and the structures are all permanent in the sense that they are not dismantled and moved.

Today, knowledge of mat making and /haru oms is confined to the Richtersveld area. There are at least five competing teams of mat-makers in the villages and most of the women living in the stockposts make mats for their

houses. Of the /haru oms made entirely from traditional materials most seem to be used for tourism purposes.

History and development

The Khoi-Khoi people, ancestors of the Nama, once occupied lands across southern Namibia and most of the present-day Western and Northern Cape Provinces of South Africa. Over a century or more, those in the south were pushed north by the spread of European farms north from the Cape. This influx of refugees into the middle reaches of the Orange River in the 18th century led to turmoil in the area with predatory bands of brigands at large. In the 19th century, missionaries moved into the area. The mix of peoples together with the influence of outsiders led to a rapid dilution of traditional Khoi-Khoi culture. In the 1940s another group of people, the Bosliu Basters were moved into the Richtersveld by the Apartheid regime: there they joined the Nama and after an initial uneasy relationship they have formed a partnership for land ownership in the Conservancy. Since 2003 the farmers have held the title to their lands.

The Khoi-Khoi and the San are considered to be the original indigenous inhabitants of southern Africa and thus custodians of ancient cultures. The Khoi-Khoi migrated with herds of sheep and cattle on a seasonal basis and lived in portable houses. Their legacy is, like the San, manifest in rock art. The earliest written records for the Khoi-Khoi were set down by explorers from Europe in the late 15th century, and from the late 17th century to the late 19th century many other missionaries and officials added to the record. During the 20th century the Khoi-Khoi have been written about extensively.

At the time of the first description, the Khoi-Khoi lived in clans, each with their own territory. Early Dutch settlers in the Cape began to buy livestock from the Khoi-Khoi in order to supply meat for the Dutch fleet. This led to stock shortages amongst the Khoi-Khoi and resulted in conflicts between the Europeans and the local communities. Within only a few years of the establishment of Cape Town, the Khoi-Khoi began to migrate north and in order to fill the gap of cattle supplies, the settlers created a system of freehold farms. Environmental conditions did not permit intensive agriculture; and extensive agriculture, meant that vast areas of land were taken over by the colonists as the frontiers of the colony spread rapidly to the east and north, often out of official control. The Khoi-Khoi were forced into military or mission service, or became labourers on settler farms. Many also succumbed to newly introduced diseases. Within a few generations the Khoi-Khoi had all but disappeared from many parts of their ancient homeland.

In the 20th century the existence of the Khoi-Khoi was denied under the Apartheid policy and they were subsumed into the coloured racial category. Since 1994 and liberation there has been a re-emergence of Khoi-Khoi identity and the emergence of the Nama, the last of the Khoi-Khoi to still practice traditional pastoralism. The Richtersveld, due to its remoteness, now remains the only place that reflects this way of life. Elsewhere, for instance in Namibia and other parts of South Africa, the Nama have mostly abandoned transhumance and the skills of traditional house building have almost disappeared.

The Richtersveld Community Conservancy was established in 2002, evolving out of the Richtersveld Community Heritage Area that was set up in 2000 to protect both the environment and culture of the area.

3. OUTSTANDING UNIVERSAL VALUE, INTEGRITY AND AUTHENTICITY

Integrity and Authenticity

Integrity

The cultural landscape comprises all the elements linked to the transhumance lifestyle of the Nama pastoralists. The traditional grazing areas and stockposts with traditional houses still exist and many are in use at any one time as part of a seasonal grazing tradition in which herds move between summer and winter grazing. Although many of the graziers are elderly, and few families reside together at the stockposts, the grazing regime reflects a wider system involving the support of families living in villages outside the Conservancy.

The cultural landscape extends beyond the nominated boundaries to include the grazing lands of the Nama people to the south-west and in the Richtersveld National Park. In particular the area in the Richtersveld National Park forms part of the same cultural unit as the nominated property. It has not been included in the nominated property because of mining activities.

Authenticity

The authenticity of the grazing areas and stockposts is incontrovertible. The authenticity of the traditional domed houses is mainly intact, despite the incorporation of some new materials along with the finely braided traditional mats. There are increasing numbers of young people interested in continuing the traditions.

ICOMOS considers that the cultural pastoral traditions of the Nama are authentic and that the nominated property has integrity. ICOMOS further considers that both are potentially vulnerable and require management arrangements which support the continuing lifestyle of the Nama pastoralists.

Comparative analysis

The nomination dossier compares the pastoralism of the Richtersveld Conservancy with other cultural properties on the World Heritage List in Europe and Asia and concludes that none of the other properties demonstrate a type of pastoralism practiced in the Richtersveld – where the Nama people are said to be the area's indigenous inhabitants and distinctive through their unique material culture and click language that bears similarities with the Hadza and Sandawe in Tanzania. Although mention is made of the Masai pastoralists, comparisons are not made with other pastoral communities in Africa who share some similar cultural elements, such as the use of portable houses.

In Africa south of the Sahara, pastoralism is still practised in many areas such as Nigeria, Niger, Senegal and Mali in West Africa, and in Northern Kenya, Tanzania, Somalia

and the Sudan in East Africa. Although there are now restrictions on the movement of people across national boundaries and into enlarged mixed agricultural settlements, distinctive pastoral landscapes still exist.

In terms of the wider geo-cultural area, the Nama pastoralists are not unique. However ICOMOS considers that the Nama pastoralists in the Richtersveld are exceptional as the last practitioners of a form of transhumance developed by the Khoi-Khoi branch of the San, the indigenous people of the area and represent a distinctive culture that was once much more widespread.

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

Justification of the Outstanding Universal Value

Statement 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 Richtersveld Cultural and Botanical Landscape is the only place in South Africa where the Nama people:

- have lived a transhumance lifestyle for the past two thousand years;
- reside in traditional rush roofed houses, /haru oms;
- live in large communal grazed lands, a testimony to land management processes which ensured the protection of the succulent Karoo vegetation; and,
- preserve their spiritual expression through Nama graves and oral traditions.

Criteria under which inscription is proposed

The property is nominated on the basis of cultural criteria iv and v, and natural criteria ix and x.

Criterion iv: This criterion is justified by the State Party on the grounds that the pastoral way of life of the Nama and their distinctive traditional houses are unique and demonstrate a longstanding association with the landscape which has contributed to the botanical value of the grazing lands.

ICOMOS supports this and considers that this criterion is also justified on the grounds that the rich diverse botanical landscape, shaped by the pastoral grazing of the Nama, represents and demonstrates an outstanding type of landscape which illustrates a significant stage in human history.

ICOMOS considers that this criterion has been justified.

Criterion v: This criterion is justified by the State Party on the grounds that the Nama represent a way of life that was once much more widespread in Southern Africa but has been lost, except in the groups of Nama remaining in the Richtersveld Conservancy.

ICOMOS considers that the pastoral way of life of the Nama is certainly vulnerable and the Richtersveld one of the few areas in South Africa where transhumance pastoralism is still practiced, reflecting long-standing and persistent traditions.

ICOMOS considers that this criterion has been justified.

4. FACTORS AFFECTING THE PROPERTY

Impact of climate change

A weather station has been set up at Basterfontein in the core area. A funder has offered to conduct a project to measure the impacts of climate change on the property and discussions are underway to determine areas and potential impacts to be measured.

Developmental threats

The development threats are minimal in the nominated property and in the buffer zone.

Tourism

Tourism is seen as a source of revenue for the Conservancy and there are plans, to encourage mountain biking/ climbing, donkey rides and hiking, and to introduce river activities such as rafting, fishing, canoeing and kayaking. To support tourism, there are intentions to create eight camp-sites, develop airstrips and helipads and upgrade of roads. Environmental impact assessments for the camp sites have been carried out. A Tourism Plan is in the process of preparation which will identify zones that can accommodate tourists.

The Richtersveld Conservancy is located in one of the most remote and sparsely populated regions of South Africa. The small towns near the property do not have any developed tourism infrastructure except two guest houses at Eksteenfontein and one at Kuboes. There is also a small museum at Eksteenfontein. The easiest access to the area is by road usually four wheeled. At the time of the evaluation there were no records/statistics of visitors. The Provincial authorities though the Department of Environment Tourism and Department of Sport, Art and Culture are trying to revive cultural tourism through music and dance, folklore and cultural tours. Revival of old craft making, leather working and mat making are also currently the subject of development programmes.

ICOMOS considers that caution must be exercised in relation to some of the planned activities related to tourism, due to the fragility of the environment. Activities such as mountain biking, donkey rides, and road infrastructure should not accelerate the erosion which is already a serious problem in a number of areas of the property. Other activities, such as improving accessibility for the local communities and emergency services, need to be planned with care in order not to destroy the values the State Party aims to preserve. ICOMOS considers that helicopters should only be used for essential access.

Overgrazing or decline of grazing traditions

Both overgrazing and the decline or extinction of the grazing practices are key threats to the property. Overgrazing is mentioned as a serious problem in a few areas, particularly near the stockposts. As mentioned above, plans to control grazing have been identified, based on environmental indicators that assess its impact on species. Clear means of monitoring the impact of grazing are essential if the symbiotic relationship between grazing and the protection of species is to be sustained. The alternative, to remove grazing to the communal grazing areas in the Buffer Zone in order to protect endangered species in the nominated property would remove the cultural value of the grazed areas and should be strongly resisted.

What has so far not been put in place are plans to actively encourage grazing traditions in the longer term and this presumably will be included in the Management of Cultural Assets Plan. ICOMOS considers that this needs to be developed and supported as a matter of some priority.

Mining

Mining is not a threat within the nominated property or its Buffer Zones due to the protection afforded in the municipality's Integrated Development Plan and by various conservation restrictions. The National Protected Areas Act prohibits mining and prospecting in areas that are under protection. This is specifically referred to in the Regulations under the National Heritage Resources Act. (See Section 6(2)h).

ICOMOS considers that the main threats to the property are tourism activities, that could damage the fragile environment, and diminution in the number and activities of graziers in the nominated area. Tourism activities could be sensitively managed to avoid damage and the proposed Tourism Plan is crucial in this respect. More active measures are needed to support the pastoral way of life of the Nama people.

5. PROTECTION, CONSERVATION AND MANAGEMENT

Boundaries of the nominated property and buffer zone

The current boundaries encompass the Richtersveld Conservancy. However the Nama pastoral way of life extends out beyond those boundaries. In particular, communal grazing areas exist to the south and west. There are also Nama graziers in the Richtersveld National Park to the north, and across the border into Namibia. The Orange River, now the international border, was formerly the cultural centre of the Nama community. Although it is said that traditional house building is not practiced anymore in Namibia, pastoral traditions are still extant.

The current pastoral community in the Richtersveld Conservancy is small. For this reason, ICOMOS considers that it would be desirable for the State Party to examine the potential to enlarge the property to encompass part of the Richtersveld National Park. As noted above, the nominated property current excludes the Richtersveld National Park as there are mining operations in the north of the Park. The southern part of the Park is proposed to form part of the Buffer Zone.

ICOMOS considers that the nominated property boundary encompasses a distinctive pastoral community. Because this community extends beyond the nominated boundary to the north into the Richtersveld National Park, ICOMOS considers that it would be desirable for the State Party to examine whether extending the nominated area into the south of the Park would better support management arrangements aimed at sustaining the values of the cultural landscape. ICOMOS considers that proposed buffer zone effectively protects the Richtersveld conservancy.

Ownership

The Richtersveld Conservancy is owned by the local community through a Community Property Association.

Protection

Legal Protection

The Richtersveld Cultural and Botanical Landscape has full legal protection. The process of declaring the property as a Heritage Area was initiated by the Provincial Authorities and the Richtersveld Municipality and was completed in early 2007. Heritage Areas define what needs to be protected in terms of environmental and cultural interest, and the legislation sets out how the protection will be achieved in practice. The legislation covers both the core area and its Buffer Zones (although some of these are already protected, see below) and 'converts' the existing Management Plan into regulations as well as recognising the Management Committee. It also ensures that the local community continues to own and manage the property and that there is participation of local people in management decisions.

The Buffer Zones to the North (the Richtersveld National Park) and to the East (the Helskloof Provincial Nature Reserve) are both protected by the Protected Areas Act for their natural values. The Buffer Zone to the South (Communal Grazing Area) is not protected although additional protective status is being considered.

The traditional land-use system of the Nama should be seen as part of the protection system, their grazing practices overall having the capacity to be in harmony with the natural landscape.

ICOMOS considers that the legal protection in place is adequate.

Conservation

History of Conservation

No documented history of conservation projects has been provided for the property. However, the traditional land management system is of very long standing.

Present state of conservation

The current state of the grazed pastures is variable with some areas suffering from over-grazing. Because of the relatively small size of the population, the current state of traditional practices (including house building) is

vulnerable, dependent on older people passing on the traditions to the younger people.

Active Conservation measures

The two key areas for conservation measures are sustaining the grazing areas and sustaining the tradition of building portable mat-roofed houses. The regulations under the National Heritage Resources Act address this second issue and only traditional buildings may be erected at stockposts in the core zone.

The dossier does recognize the fact that unsustainable grazing can lead to irreversible damage to the property and that parts of the property have suffered from over-grazing. Overall, the management plan, if strictly implemented with availability of trained personnel to monitor the state of conservation, could reduce threats to the property from overgrazing as well as excessive harvesting of certain types of succulent plants. During the evaluation mission the provincial Premier assured the evaluators that the provincial Cabinet had resolved to support two posts to monitor and police the core area and to provide an operational budget. It is understood that these posts will be implemented in the new financial year, that is from 1 April.

What the Management Plan does not specifically address is how the grazing community of the cultural landscape is to be actively sustained and thus how the cultural practices of the property will continue into the future. ICOMOS recommends that the values of and benefits for the grazing community and the need to sustain their relationship with the landscape be given an even higher profile in the Management Plan.

ICOMOS asked for assurances from the State Party that there would be a commitment to a management regime that aims to sustain a viable pastoral community within the nominated area: the State Party responded to confirm that the stock-farmers are central to the management of the site both through their traditional land management and as part of the Management Committee. It further confirms that traditional grazing will not need to be restricted for nature conservation reasons.

ICOMOS considers that adequate conservation of the cultural landscape and its cultural traditions relies heavily on the community of graziers and that actively sustaining the relationship between people and their environment should be given an even higher profile in the Management Plan

Management

Management structures and processes, including traditional management processes

The Richtersveld Community Conservancy (RCC) is managed by a Communal Property Association (CPA) with a Management Committee (company without profit) and a participative Management Plan is in place to manage the identified Heritage Area. An environmental consultancy firm EcoAfrica, contributed to the transfer of skills, empowerment and capacity building needed for the development of the management processes. Conservation International has funded the Community Based Natural Resources Management Programme (CBNRM) which has

facilitated the development of the RCC. This support will continue until 2007. The Site Manager is an experienced nature conservationist with many years of experience working in the Richtersveld National Park. He is a Nama person from the village of Kuboes.

Management plans, including visitor management and presentation

The Management Plan is fairly comprehensive and quite ambitious, but it outlines a strategic approach rather than setting out how its objectives might be achieved. The intention is that it should provide support to the traditional management system rather than replacing it.

The Management Plan was developed over a period of two years and addresses management structure, infrastructure development, awareness raising, tourism development and monitoring and evaluation. The Management Plan also proposes development projects for the property such as a number of new camps for visitors, possible helipads, upgrading roads and the reintroduction of game. Some of these activities could conflict with the fragility of the desert environment. Further supplementary plans are being developed including a Management of Cultural Assets Plan which will address both tangible assets such as petroglyphs, and the intangible 'habits' that relate to traditional uses of the land.

The current management arrangements would seem to focus on managing the land for nature conservation while respecting the farmers' needs. Given the importance of the grazing traditions and their value to the cultural landscape, ICOMOS considers that ultimately it would be more appropriate to give priority to the grazing traditions and the graziers, while respecting nature conservation. This could emphasize the need for strategies to optimize the returns the graziers may get from their livelihood. To achieve this shift, ICOMOS considers that the completion of the Management of Cultural Assets Plan is crucial for identifying effective ways to sustain the grazing traditions in the Conservancy in the face of the identified threats.

Involvement of the Local Community

The local community was involved in the development of the Management Plan and is closely involved in its implementation. The community successfully managed to have the Richtersveld Community Conservancy included in Local Government Integrated Development Plan, which contributes greatly to the social and economic uplift of the region.

ICOMOS commends the Management Plan for its conservation aspects but considers that there is a need to detail and phase the implementation of the Management Plan, and to prioritize its recommendations. ICOMOS is also concerned that some of the development aspects of the Management Plan could conflict with the values of the cultural landscape. ICOMOS further considers that the development of the proposed Management of Cultural Assets Plan is crucial to underpin and support the management arrangements.

Resources, including staffing levels, expertise and training

Considerable funds have been attracted from major donors such as the *Deutsche Gesellschaft für Technische Zusammenarbeit* (GTZ) and the Norwegian Agency for Development Cooperation (Norad) for the development of the nomination and the operation of the Conservancy Council. One million US dollars has also been made available by the Department of Environment Affairs and Tourism for infrastructure projects and tourism facilities. What is less clear is how recurring funds will be allocated to implement the cultural aspects of the Management Plan. Much of the expertise and funding secured so far is related to nature conservation and environmental management rather than the management of cultural landscapes.

A major grant has been made available by the Global Environment Facility for the development of an Environmental Management System but no funds have yet been committed or even identified for the cultural aspects of the landscapes.

It appears to be envisaged that much needed funds will come through tourism activities but these are yet to be put in place. Stakeholders have already started sourcing funding and there is now a commitment to funding two posts in the Conservancy to monitor and police the area. (see above)

ICOMOS considers that the resources for environmental and cultural aspects of the landscape need to be adequate and balanced to ensure that environmental considerations do not over-shadow the cultural significance of the property. It would be desirable for staff expertise to reflect cultural heritage as well as nature conservation experience.

ICOMOS does not consider that the current resources allocated to the implementation of the Management Plan will be sufficient to address the cultural heritage aspects. A property of this magnitude and complexity requires an assured and sufficient budget for both cultural and environmental aspects.

6. MONITORING

Although monitoring of the natural environment is included in the Management Plan, it is not clear how it will be carried out as most of the monitoring issues are highly scientific and require specific competences. It is suggested in the dossier that external experts will supplement the efforts of the Communal Property Association as there is lack of needed skills and competence among its members to monitor environmental issues. Unlike a national park or provincial nature reserve, the Richtersveld Conservancy cannot draw on head office specialists. The Management Committee has been structured in such a way that it includes specialists from outside institutions who either have such expertise or can draw on it from their institutions. ICOMOS considers that it would be desirable to continue to develop these skills amongst the community itself.

ICOMOS also considers that further monitoring indicators need to be developed to monitor the cultural attributes of the property, particularly the continuing pastoral activities, and the health of the communal grazing lands. Although not mentioned in the dossier, it is understood that an upsurge in Nama culture is being monitored in a variety of

ways such as the increasing use of the Nama language, the revival of traditional crafts and art forms including traditional architecture in villages, dance forms, and traditional music.

ICOMOS considers that further monitoring indicators for the cultural attributes of the property need to be developed. These should relate to aspects of Nama culture, and to grazing activities and traditional house building skills. ICOMOS recommends that local people should be trained and assisted to carry out the monitoring through the management structures and the Communal Property Association. ICOMOS considers that the monitoring indicators identified in the Management Plan are appropriate for the natural environment as part of the cultural landscape.

7. CONCLUSIONS

The property has been nominated as a mixed site: as a natural site and as a cultural landscape. ICOMOS considers that these two categories can potentially conflict. On the one hand the characteristics of the natural site, as outlined in the dossier, stress minimum intervention from grazing and the need to reduce grazing or to remove it in some places in order to sustain the plant species. On the other hand the two thousand year old traditions of the pastoralists are valued as part of the cultural attributes of the landscape, particularly in the way the interaction between people and nature has sustained the succulent karoo.

ICOMOS sought commitment from the State Party that this inter-relationship between people and nature, in the form of seasonal grazing patterns, will be the main management tool for conserving the 'natural' landscape and are reassured by the response that the graziers will be central to the management of the site.

ICOMOS considers that the area should be managed as a cultural landscape with active programmes developed to support the continuing way of life of the Nama pastoralists. ICOMOS also considers that attention should be paid to facilitating the continuation of traditional house-building by Nama pastoralists.

While ICOMOS supports the need to encourage tourism, it suggests that caution must be exercised in relation to some of the planned activities related to tourism, due to the fragility of the environment.

ICOMOS further considers that there the difference between the Richtersveld Community Conservancy and the Richtersveld National Park may not be readily apparent to those unfamiliar with the areas and suggests that the State Party consider clarifying the name of the nominated property in order to define more clearly its distinctiveness from the Park.

Recommendations with respect to inscription

ICOMOS recommends that the Richtersveld Cultural and Botanical Landscape, South Africa, be inscribed on the World Heritage List as a living, evolving cultural landscape on the basis of *criteria iv and v*.

Recommended Statement of Outstanding Universal Value

The Richtersveld Cultural and Botanical Landscape demonstrates Outstanding Universal Value:

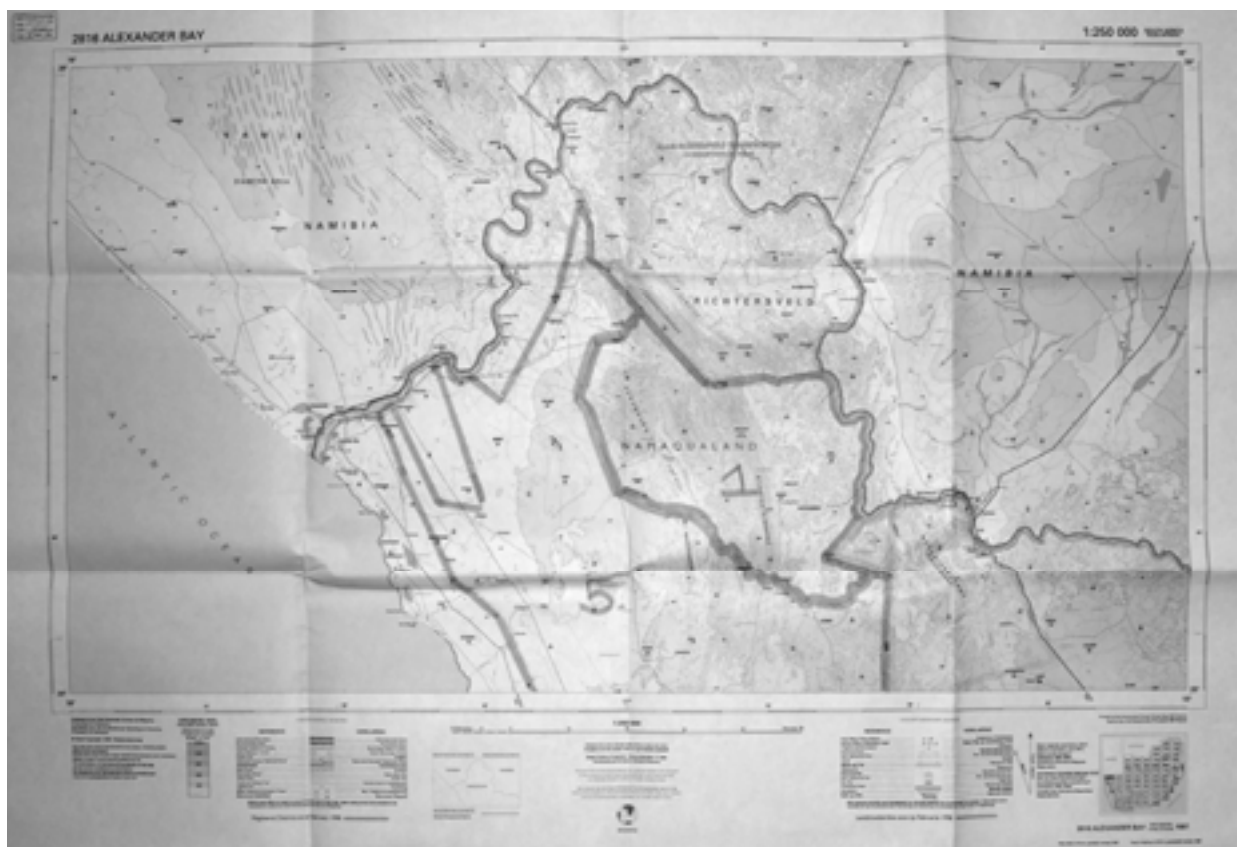
- The extensive communal grazed lands are a testimony to land management processes which have ensured the protection of the succulent Karoo vegetation and thus demonstrates a harmonious interaction between people and nature.
- The seasonal migrations of graziers between stockposts with traditional demountable mat-roofed houses, */haru oms*, reflect a practice that was once much more widespread over Southern Africa, and which has persisted for at least two millennia; the Nama are now its last practitioners.

Criterion iv: The rich diverse botanical landscape of the Richtersveld, shaped by the pastoral grazing of the Nama, represents and demonstrates a way of life that persisted for many millennia over a considerable part of southern Africa and was a significant stage in the history of this area.

Criterion v: The Richtersveld is one of the few areas in southern Africa where transhumance pastoralism is still practiced; as a cultural landscape it reflects long-standing and persistent traditions of the Nama, the indigenous community. Their seasonal pastoral grazing regimes, which sustain the extensive bio-diversity of the area, were once much more widespread and are now vulnerable.

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

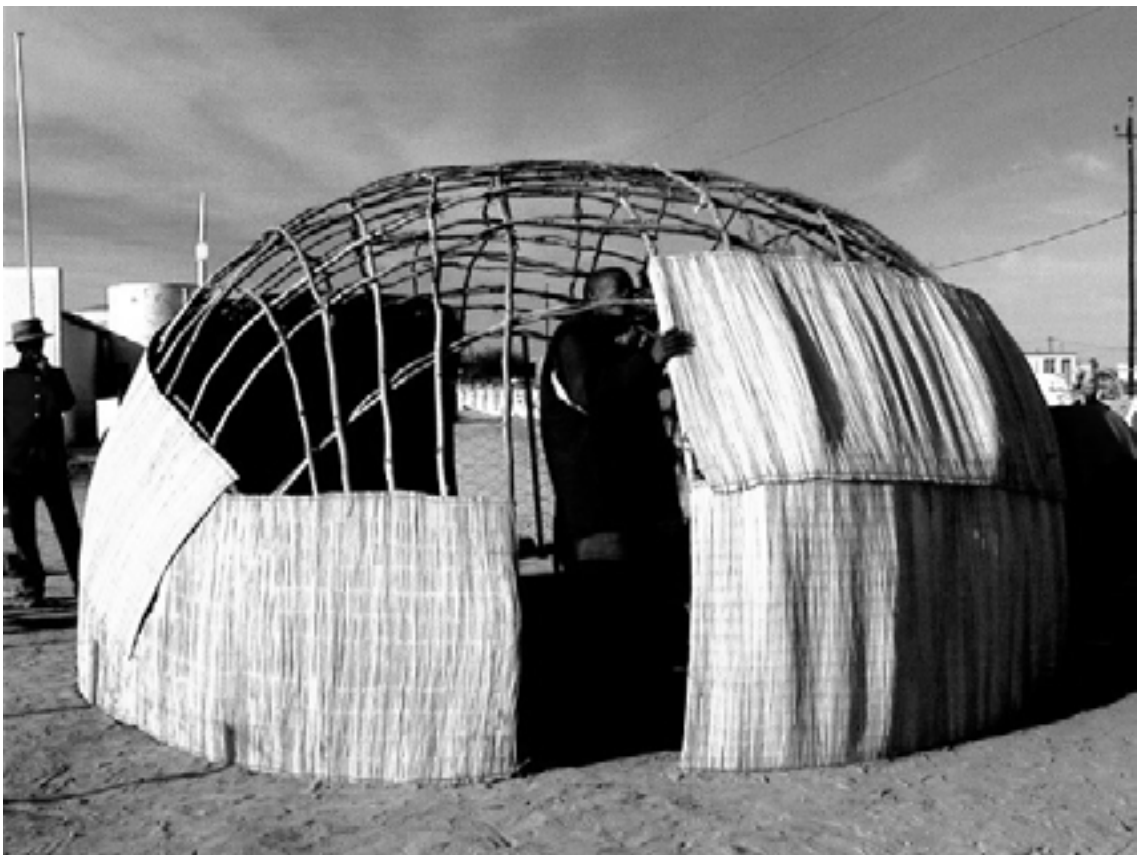
- Extend the boundary of the nominated area into the south of the Richtersveld National Park if this would facilitate sustaining the values of the cultural landscape.
- Ensure that the proposed Tourism Plan adequately recognises the vulnerable character of the cultural and natural elements of the property in any future developments and activities.
- Develop the proposed Management of Cultural Assets Plan in order to identify effective ways to sustain the grazing traditions of the Conservancy, to give cultural matters an even higher profile in the Management Plan, and to allow grazing and traditional management systems to underpin the management arrangements.
- Allocate a sufficient recurring budget for conservation and management of the cultural aspects of the landscape to ensure an appropriate balance between management of the cultural and natural attributes of the Conservancy.
- Develop cultural monitoring indicators related to Nama culture and the long-standing grazing and house building traditions.
- Consider re-naming the property to distinguish it more clearly from the Richtersveld National Park.



Map showing the boundaries of the nominated property



Orange River



Nama Architecture: attachment of rush mats



The “Nama Step” Dance



Ancient Nama gravesite

The Mijikenda Kaya Forests (Kenya)

No 1231

Official name as proposed

by the State Party: The Sacred Mijikenda Kaya Forests

Location: Coast Province

Brief description:

Spread out along around 200km of the coast province are 36 separate forested sites, mostly on low hills, ranging in size from 10 to 400 ha, in which are the remains of fortified villages, *kayas*, of the Mijikenda people. Tradition tells how the *kayas* were created from the 16th century as the Mijikenda migrated south in response to marauding attacks on agriculturalists by pastoralists. Archaeological investigation at some sites provides evidence of earlier occupation.

The *kayas* began to fall out of use in the early 20th century and all were abandoned by the 1940s after their occupants, in response to settled times, moved to lower ground. Little remains of the *kayas* settlements apart from graves. These are now seen as the abode of ancestors and are of symbolic significance and revered as sacred sites. The patches of forest around the graves have been nurtured by the Mijikenda community to protect the sacred graves and are now almost the only remains of the once extensive coastal lowland forest.

Surrounded by large-scale farming enterprises, and in some places dense urban settlements, the forested *makayas* are conspicuous and highly vulnerable to a range of development, poaching and extractive threats.

Category of property:

In terms of the categories of cultural property set out in Article 1 of the 1972 World Heritage Convention, this is a *site*. In terms of the *Operational Guidelines for the Implementation of the World Heritage Convention* (2 February 2005) paragraph 47, it is also a *cultural landscape*.

1. BASIC DATA

Included in the Tentative List: 28 September 1999

International Assistance from the World Heritage Fund for preparing the Nomination: 3 June 2002

Date received by the World Heritage Centre: 1st February 2006

Background: This is a new nomination.

Consultations: ICOMOS has consulted its International Scientific Committees on Historic Gardens – Cultural Landscapes and on Intangible Cultural Heritage. IUCN has provided an evaluation of the natural attributes of the site.

Literature consulted (selection):

Spear, Thomas, *The Kaya complex: a history of the Mijikenda peoples of the Kenya coast to 1900*, PhD thesis, 1974.

Tinga, Kaingu Kalume, *The Presentation and Interpretation of Ritual Sites: the Mijikenda Kaya case*, Museum International, vol 56, 2004.

Willis, J, Mombasa, *The Swahili and the making of the Mijikenda*, 1993.

Willis, J, The northern Kayas of the Mijikenda: A gazetteer, and an historical reassessment, *Azania*, vol 31, 1996.

Technical Evaluation Mission: A joint ICOMOS-IUCN mission visited the site from 1 to 7 October 2006.

Additional information requested and received from the State Party: None

Date of ICOMOS approval of this report: 21 January 2007

2. THE PROPERTY

Description

The serial nomination consists of 36 forested sites, once fortified villages and now protected by the Mijikenda community as the sacred abode of their ancestors. All the sites are botanically diverse residual patches of once-extensive Zanzibar-Inhambane lowland forests of East Africa, on knolls rising to not more than six hundred metres and all within sixty kilometres of the Indian Ocean. The sites are spread out in a chain along the coastal province of Kenya, ranging in size from 10 to 400ha.

The sites all contain remains of *kayas* (or *makaya*), fortified villages inhabited by the Mijikenda people from around the 16th to the 19th century until their gradual abandonment between the early to mid 20th century as people dispersed to the plains during more settled times. Tradition records that the forested sites were settled by Mijikenda agriculturalists migrating south in the face of pressure from pastoralists such as the Akwavi Maasai, Orma or Galla, from their homelands, north of Tana in present day Somalia.

A typical *kaya* consisted of a circular stockade in a clearing in the forest, with gates of dry stone walling and a wooden door-frame, approached by well defined paths through the dense surrounding forest, part of the defensive system of the village. Houses were arranged around the edge of the stockade and within the centre of the village there would be either a grove of trees or a large thatched structure called a *moro*, places for meetings of the council of elders. Certain protective objects, *fungo*, brought from the original homeland in Singwaya were buried in the centre of the villages (and are still believed to be in one or two sites).

A small numbers of elders continued to live in the *makaya* for many decades after the bulk of the population moved

out. And the *kaya* forests came to be used as communal ceremonial areas, burial grounds and as places of prayer and for the collection of fruits, medicinal herbs, lianas etc.

Little now remains of the villages apart from grave sites, a few of which are still actively used as the resting places of the fathers of the Mijikenda society. Carved memorial posts called *vigango* were placed at the head of the graves of elders. These graves and their surrounding forests have now assumed a symbolic significance and are revered as sacred sites. The sacredness attributed to them is a means of protection – controlling access and conduct through strength of spiritual beliefs and taboos rather than policing of the sites. The penalty for infringement would vary according to the magnitude of the transgression, but usually fines of livestock or fowl, would be sacrificed to appease offended spirits.

All the community including women, are entitled to visit the site if they so wish, as well as using the site under the elders' guidance for ritual and ceremonial purposes.

The rituals that take place at some of the *kayas* reflect a religion which is rooted in the reverence of ancestral spirits and a monolithic deity (*Mulungu*), a pre-Islamic and pre-Christian belief system found in eastern and southern Africa. *Kaya* ritual prayers are performed in the local vernacular language and thus also serve as a medium for preserving the local languages and dialects. The preservation of the Mijikenda sacred forests is therefore linked to sustaining their religious traditions and languages.

The communal protection of these sites by the Mijikenda elders and descendants of those who used to live there, through forbidding the cutting of trees around the sacred sites, has had the effect of protecting almost all that remains of the once extensive coastal lowland forest in Kenya. These remnants of forests are now surrounded by intensive plantations of cashew, mango and coconut and in places by some of the fastest growing coastal development areas.

The nominated sites, found mainly on hills but also in the coastal lowlands, are spread over some 200km from just north of the border with Tanzania. In total the nominated sites cover 5056 ha. There are no buffer zones. Many of the sites are near to intensively cultivated agricultural land, and growing urban developments and a subject to a wide variety of threats (see threats below).

The nominated property consists of 36 separate sites which can be grouped into nine, reflecting nine clans of the Mijikenda who speak different dialects of the same language and all claim descent from one ancestral area of Singwaya, thought to be in present-day Somalia. Within each clan group, the *kayas* can be further separated into primary *kayas*, settled by the first representatives of the various clans and secondary *kayas* settled by those who split away from the earlier villages, sometimes considerable distances away. For instance the five *kayas* in Malindi in the north are secondary *kayas* of three primary sites around 100km away in Kilifi District. The A-Digo clan spawned the largest number of secondary sites, (fifteen), and had two primary sites whereas other clans only has one each. Some clans had no secondary settlements.

The nine clan groups are as follows: (the number in parentheses is the number of secondary or in some cases tertiary sites): A-Giriama (0), A-Kambe (2), A-Ribe (0), A-Rabai (3), A-Chonyi (1), A-Digo (15), A-Duruma (2), A-Jibana (0) and A-Kauma (3).

The nominated *kayas* are part of a larger group of 44 identified in Kenya. Some are also known in Tanzania to the south and one has been identified even further south in Mozambique.

The nominated property consists of ten primary sites and 26 secondary or tertiary sites as follows. Little description of individual sites is given in the dossier.

Kaya Singwaya: founded according to oral tradition around 1890 and destroyed by the British in 1914. Archaeological evidence has yielded ceramics from the 16th century.

Kaya Dagamura: founded according to tradition at the end of the 19th century; abandoned on 1914 and the reoccupied and abandoned in the 1930s. Near to dense population.

Kaya Bura: founded according to oral tradition in the 1890s.

Kaya Bate: founded according to oral tradition in the 1890s. Part of the site was destroyed in 1961 when a river changed course. Archaeological evidence from the landslip indicates earlier occupation.

Kaya Maiowe

Kaya Kivara: founded with the involvement of five clans.

Kaya Fungo: a primary *kaya* of the second group to leave Singwaya; this apparently was the third location of the *kaya*. Named after a leader who repelled raiding Maasai in the mid 19th century.

Kaya Chonyi: Primary *kaya* inhabited until the early 20th century and now much reduced in size.

Kaya Mudzimuvia

Kaya Jibana: primary *kaya*

Kaya Kambe: documented as a large village in 1844 and also in 1913-4 when it was still flourishing.

Kaya Kauma: primary *kaya* apparently replacing a settlement on an earlier site that suffered from lack of water. Still used as a burial site by local people.

Kaya Ribe: primary *kaya* said to have been founded by Mwamaya Nyoka.

Kaya Bomu: According to oral tradition the second *kaya* Aravai to be settled after Mudzi Mwiri. By the 1840s this *kaya* served as a burial place and for rain making ceremonies.

Kaya Mzizima: It is the starting point for processional ceremonies.

Kaya Mwidzi Mwiri: the first primary *kaya* to be established by the Aravai. Archaeological excavations

yielded 14th century imported pottery and local pottery believed to be of the 10th century, the finds thus extending the date of occupation beyond oral tradition.

Kaya Gandini

Kaya Mtswakara: primary kaya of the A-Duruma clan said to be established in the late 1700s or early 1800s. Believed to be the site of initiation rituals, rain making ceremonies and the place where ceremonial drums were kept. Damaged by troops of the Sultan of Zanzibar in the late 19th century.

Kaya Chonyi: much reduced from its size three decades ago.

Kaya Kwale: primary kaya of the A-Digo clan whose trees and graves are still used for traditional ceremonies. This site is believed to contain a *fingo*.

Kaya Bombo: much of the forest has been degraded by tree cutting or road cutting.

Kaya Teleza

Kaya Chombo: the valley site is littered with pottery indicating a long occupation.

Kaya Waa: subject to a wide range of threats.

Kaya Tiwi: near to a medieval Swahili mosque.

Kaya Diani: forests threatened by cultivation and property development.

Kaya Ukunda: forests threatened by cultivation and construction.

Kaya Muhaka: subject to poaching of trees, seasonal fires and tsetse flies.

Kaya Dzombo: Oral tradition records that the founder of this kaya, Mwakikonga, is buried in this site. Forests threatened.

Kaya Kinondo: primary kaya now an eco-tourist site.

Kaya Chale: On Chale Island, now much reduced by hotel development.

Kaya Mrima: tertiary kaya said to be established by Mwasangombe who traded arms and acquired runaway slaves, built up a settlement of 4,000 people and controlled the trade route from Digo to Usambara in present day Tanzania. Vulnerable to tree poaching.

Kaya Sega

Kaya Gonja

Kaya Jogo: the monkeys and baboons in the forest are seen as a threat to farmers.

Kaya Shonda: threatened by suburban development from Mombasa.

History and development

The Mijikenda people of the Kenyan Coast have been well-researched but comparatively little historical material is provided in the nomination dossier. There are some gaps in the documentation, notably the absence of direct reference to more recent archaeological and historical assessment of Mijikenda settlement claims and the antiquity of various *kayas*.

Oral tradition relates that the Mijikenda migrated south from a homeland known as Singwaya, thought to be north of Tana in present day Somalia, sometime in the 16th century. Their migration was prompted by the expansion of pastoralists particularly the Akwavi Maasai, Galla or Orma. Tradition further relates that the original settlers founded six individual fortified villages known as *makaya* on the ridge running parallel to the Kenyan Coast. Three more *kayas* were added at some time later.

The A-Digo clan are said to be the first group to leave the Singwaya ancestral homelands. There are several oral traditions related to their migration, but all report that they settled in places on the way and in time split into two groups, founding Kaya Knondo and Kaya Kwale. At the beginning of the 17th century further dispersal took place from the two main centres and secondary *kayas* were established.

Oral tradition presented in the nomination dossier throws light on some of the *kayas* but not all. Dates suggested for the foundation of the *kayas* span from the 16th to the end of the 19th century. There has been some archaeological investigation of the *kayas* and these have revealed evidence of occupation at an earlier date than suggested by oral traditions. For instance at Kaya Mwidzi Mwiru excavations yielded 14th century imported pottery and local pottery believed to be of the 10th century. What is not clear from either excavations or oral traditions is whether the *kaya* settlements established by the Mijikenda displaced other groups of people from at least some of the sites – as they are often strategically sited and therefore desirable for settlement.

The history of the Swahili settlements of the Kenyan coast has revealed flourishing trading towns from the 12th to the 14th centuries with the traders from the coast intermixing with people in local settlements. The imported 14th century pottery reflects this prosperity. After the demise of the Swahili towns in the later 14th century there were periods of disturbance and the raids of the Galla are well documented but in general rather than specific terms.

What underpins the nomination is the claim that all the nominated *kayas* are Mijikenda settlement sites. Further documentation to support these claims could helpfully have been supplied in the dossier.

ICOMOS therefore considers that the selection of sites for nomination to the World Heritage List has not been sufficiently justified by reference to research and documentation. The selection of the 36 nominated sites out of the total of 44 is not a straightforward process, especially considering the present state of conservation of some *kayas* and the threats affecting them. (see following sections)

In recent times, an increasing disregard for traditional values and a rising demand for land, fuel wood, iron ore,

and construction and carving wood materials have put severe pressure on the *kaya* forests. Over the last 50 years, many of the *kayas* have been drastically reduced in size, and land that was communal property has been registered under individual title and sold to nationals or foreign speculators.

In the last ten years efforts to protect the *kayas* have stemmed largely from initiatives to protect the biodiversity of the forest remains through the use of traditional practices.

3. OUTSTANDING UNIVERSAL VALUE, INTEGRITY AND AUTHENTICITY

Integrity and Authenticity

Integrity

The dossier acknowledges that the *kaya* forests have come under threat over the past few decades in the face of a decline in knowledge about, and respect for, traditional values, due to economic, social, cultural, and other changes in society. There has also been a rising demand for forest products and land for agriculture, mining, and other activities due to increasing population. These factors have resulted in the destruction and loss of the small *kaya* forests and groves. By the time an active conservation programme began to be implemented for the *kayas* in the early 1990s, the sacred forests had suffered considerably. As an extreme example, local agricultural encroachment has reduced forest cover in Kaya Chonyi, to a fifth of its original area and Kaya Chale has been much reduced by hotel development.

The forests now nominated do not have integrity in terms of the forest areas associated with *kayas* half a century ago. A case can only be made for their integrity in terms of what now remains – that the areas are still reasonably intact in terms of forest cover. However in a few cases, ICOMOS considers that this integrity can be questioned, for instance where poaching and illicit tree cutting has had a major impact on the forest cover (e.g. Kaya Bombo) and where it is not certain that the natural forest will regenerate.

From the documentation so far provided ICOMOS does not consider that the integrity of all the sites has been established. ICOMOS recommends that further consideration be given to the justification for the selection of the sites to be nominated, and that the State Party might wish to nominate a smaller number of *kayas* based on documentation of cultural and natural features and the state of conservation of each *kaya*.

Authenticity

The remains of the *kayas* and their forest surroundings have authenticity in terms of their relationship to the relict settlements and in terms of the traditional practices and knowledge systems still in place. However, the continuation of the intangible practices is vulnerable, and the authenticity of the archaeological remains is also vulnerable to thefts and illegal removal of remains.

During the mission, a proposal was mooted by the elders of Kaya Fungo for a partial reconstruction of the *kaya* to recreate the timber palisade, gates and 17 houses with grass thatch representing the 17 clans that evolved from the *kaya*. ICOMOS considers that such a project would require wider consultation as it could impact on authenticity.

ICOMOS considers that the nominated sites demonstrate authenticity but that aspects associated with traditional practices are highly vulnerable.

Comparative analysis

The comparative analysis in the dossier states that the *kayas* are unique when compared to sacred sites around the world. Mention is made of sacred sites in India, China, Nepal, and Madagascar, and within Africa in East Africa, Cote d'Ivoire, Nigeria and Ghana. The case is made that the *kayas* in evolving from living fortified settlements to sacred spaces are unique and this facet is not recorded in other sites.

ICOMOS considers that further comparison could have been made with other landscape sites in Africa where graves, or former habitation sites are considered as sacred and where sacredness had had the effect of preserving biodiversity. For instance the Dogon, communities in Northern Togo and many settlements in the north of Tanzania (e.g. Handeni) where communities moved down from the hills in the early years of the 20th century.

Research by Leach and Fairhead (1996, and references therein) on the historical ecology of forests and sacred groves in Guinea, as well as providing another example of the kind of human:landscape:nature relationships that prevail in Mijikenda society, provides a fuller account of how such landscapes emerge than is currently available for the Kenya *kayas*.

If the former habitation use of the *kayas* is considered as crucial to establishing their uniqueness, ICOMOS considers that more historical evidence is needed to support the association of the Mijikenda with the sites.

In conclusion, ICOMOS considers that the Comparative Analysis could benefit from further exploration.

Justification of the Outstanding Universal Value

The State Party has justified the outstanding universal value of the property based on the following points.

The *kayas*:

- reflect the way the collective attitudes and beliefs of a rural society have shaped the landscape in response to prevailing needs;
- are an aesthetic symbol of the interaction of man and nature; and,
- are forests transformed by spiritual and psychic associations.

Criteria under which inscription is proposed

The serial nomination of 36 sites is nominated on the basis of criteria iii, iv and v (although the numbers of these are not specifically mentioned in the dossier).

Criterion iii: The State Party justifies this criterion on the grounds that the *kayas* have been inhabited since the 16th century and thus have been shaped by the history of the Mijikenda people.

ICOMOS considers that *kayas* provide focal points for Mijikenda religious beliefs and practices, are regarded as the ancestral homes of the different Mijikenda peoples, and are held to be sacred places. As such they have metonymic significance to Mijikenda and are a fundamental source of Mijikenda's sense of 'being-in-the-world' and of place within the cultural landscape of contemporary Kenya. They are seen as a defining characteristic of Mijikenda identity. In order to justify fully this criterion, ICOMOS considers that more definite attribution needs to be produced to underpin the specific association between the Mijikenda and each of the nominated *kayas*.

ICOMOS considers that this criterion has not been justified

Criterion iv: The State Party justifies this criterion on the grounds that the *kayas* serve as a vivid record of past societies.

ICOMOS considers that *kayas* are unique within the immediate area in that they comprise a combination of features of human construction (houses, fences, gateways, paths, etc.) that are fused organically with elements of the surrounding natural, indigenous forest. Although there is some disagreement among scholars as to precisely when *kayas* first originated, all agree that the oldest must be at least 400 years old, and may in fact be of even greater antiquity. However without further historic attribution, ICOMOS does not consider that this criterion can be justified in terms of the *kayas* demonstrating a significant stage in human history.

ICOMOS considers that this criterion has not been justified

Criterion v: The State Party justifies this criterion on the grounds that the *kayas* illustrate a settlement which was a response to the social, political and economic forces of a particular period.

ICOMOS considers that since their abandonment as preferred places of settlement, *kayas* have been transferred from the domestic aspect of the Mijikenda landscape to its spiritual sphere. As part of this process, certain restrictions were placed on access and the utilisation of natural forest resources. As a direct consequence of this, whether intended or unintended, the biodiversity of the *kayas* and forests surrounding them has been sustained. The *kayas* are under threat both externally and from within Mijikenda society through the decline of traditional knowledge and respect for practices.

ICOMOS considers that what has not been established sufficiently is the link between each of the nominated sites and the traditional knowledge and practices of the Mijikenda that sustain the places.

ICOMOS considers that this criterion has not been justified

Criterion vi was not suggested by the State Party but ICOMOS is of the opinion that it should be considered.

The *kayas* are now the repositories of spiritual beliefs of the Mijikenda and are seen as the sacred abode of their ancestors. As a collection of sites spread over a large area, they are associated with beliefs of local and national significance, and possibly regional significance as the sites extend beyond the boundaries of Kenya.

ICOMOS considers that the nominated sites have the potential to satisfy criteria iii, v and vi if further justification can be provided for specific association between the *kayas* and the Mijikenda people.

4. FACTORS AFFECTING THE PROPERTY

Overall the *kayas* have been and remain under a wide variety of threats. There is substantial pressure on and acquisition of coastal lands and *kaya* forests, being trust lands, are at risk from both national and international developers. Stronger systems of protection, based on a combination of the formal legal framework and traditional systems of protection and community empowerment, are needed to withstand the identified risks to the *kaya* forests and their associated traditions and culture.

Impact of climate changes

The dossier does not address this issue, but because of the important natural values of the sites, ICOMOS considers these issues to be an added aspect of risk to the conservation of the sites.

Risk preparedness

Response to disasters, particularly fire, is not addressed in the dossier.

Decline of traditional knowledge and practices

Traditional systems of protection of sacred sites rely heavily on the presence of a homogenous ethnic or cultural community sharing similar values and experiences, on a strong shared belief in the spirit world and its pervasive influence in people's lives, and on a common acceptance of religious and cultural authority figures associated with the sites. For the Mijikenda, this system is not as strong as it was a generation ago. There is a need for formal acknowledgment of the key role of the elders in protecting the *kayas* to strengthen traditional practices and give respect to traditional knowledge.

Encroachment

Property development and the building of individual houses has had a marked impact on the size of several of the *kayas* some of which have had their forest cover drastically reduced over the last two decades.

Theft of forest produce

In the absence of guards and the relative decline in a homogenous local community caring for the *kayas*, theft of forest produce for building poles, carving wood, planks,

charcoal burning and firewood, is a major issue for certain *kayas* such as Kaya Kauma, Kaya Ribe and Kaya Bombo.

Theft of cultural property

Grave markers have been stolen from some *kayas* such as Kaya Kauma. More details could have been provided of the continuing theft of *viganga*, carved wooden memorial posts erected at or in the vicinity of *kayas*. The apparent complicity of some Western museums in this process is of serious concern.

Quarrying and mining

Low key manual iron quarrying has affected the outskirts of Kaya Kauma, lead mining Kaya Kambe and coral quarrying the surroundings of Kaya Waa. Of more concern are threats reported in the dossier for the issuing of mining licences for recently discovered titanium in or near the *kayas*. A licence has apparently already been granted to a Canadian company in central Kwale District and this could impact on the *kayas* in that area. The company has now agreed to undertake an Impact Assessment Study. The National Museums of Kenya fear that unless urgent measures are undertaken, the mining may impact negatively on the *kayas*.

Considerable progress had been made in the last decade to protect the *kayas* and to raise awareness of their significance. Nevertheless countering the threats remains a daunting task. Strengthened community involvement and raised public awareness of the value of the forests and local traditions will help. This needs to be supplemented by a national commitment and legal protection.

In conclusion, ICOMOS considers that there are substantial threats to the property particularly from the illegal harvesting of wood, quarrying and mining, development and the decline of traditional practices.

5. PROTECTION, CONSERVATION AND MANAGEMENT

Boundaries of the nominated property and buffer zone

The *kayas* stand out in the landscape as distinct patches of well preserved forests with the forest edges clearly visible. The nominated boundaries follow the forest limits. As a prerequisite for national monument proclamation, and with the involvement and concurrence of respective local *kaya* elders the boundaries of most forests have been marked by concrete beacons. As such the gazetted boundaries are not only recognised in the relevant legislations, but they are also respected by local communities. Prohibition signs have been erected at the sites.

Although there are no nominated Buffer Zones, the communal lands immediately outside the forests are regulated by customary laws/taboos and practices shaped by longstanding association between the local communities and the *kaya* forests. It was pointed out to the mission by the elders of the *kayas* at Rabai that there is a 'buffer' zone surrounding each *kaya* called *chanze* in the local Mijikenda language. This strip of relatively depleted forest 800 to 1000m wide runs round a *kaya*. The 'buffer' zone is defined in terms of taboos prohibiting cultivation, while

the practice has been to allow villagers in small numbers to site their homesteads there. This rule appears to be generally observed at the *kayas* north of Mombasa, as in the case of the Rabai *Kayas* and Kaya Kauma for instance.

However the settings of the *kayas* are not protected from large scale interventions such as mining and infrastructure development.

ICOMOS considers that the boundaries of the core zone need defining; and the settings of the *kayas* need protecting through protection of formal and/or traditional buffer zones from adverse large-scale development.

Ownership

Most of the *kayas* are part of Local Authority land held in trust for local people. Some are Government Forest Reserves or parts of reserves and some have been 'appropriated as part of settlement schemes or urban plot allocation inadvertently or otherwise'. The extent of this latter category is unclear.

Protection

Legal Protection

Since lodging of the nomination, the *National Museums Act* (1984) and the *Antiquities and Monuments Act* (1996) have been revised and conflated into the *National Museums and Heritage Act* 2006. This Act is at the core of legislation concerning the protection of cultural aspects of the Mijikenda Kaya Forests.

Section 2(d) of the *National Museums and Heritage Act* (2006) brings heritage practice in line with current international thinking in redefining "cultural heritage" to include cultural landscapes as "works of humanity or the combined works of nature and humanity, and areas including archaeological sites which are of outstanding value from the historical, aesthetic, ethnological or anthropological point of view".

Under the new Act the responsible government Minister may "make or authorise the National Museums to make bylaws for controlling access thereto, ... and the conduct therein of visitors thereto" (Section 34(d)).

With respect to the involvement of local communities Section 40(1) of the new Act provides that "The National Museums may enter into a written agreement with the owner of a monument [by implication local communities] and any other person or persons for the protection or preservation of the monument". Section 43(3) provides for the performance of religious functions at National Monuments.

In principle this legislation is adequate, and in the past implementation has been generally effective as in respect of the subdivision and purchase of land adjacent to and on Kaya Diani for private property development in the 1990s. The purchases were rescinded with the proclamation of the forest as a National Monument in 1996, and to date the developers have not challenged the gazetting.

However, currently not all the *kayas* are designated as national monuments. 28 of the 36 *kayas* are designated as

National Monuments, 4 are designated as Forest Reserves and the remainders are double designated. However ICOMOS understands that disputes have arisen over some sites such as Kaya Chale as to whether the site is designated, and this doubt has allowed support by some authorities for development in the *kaya*.

In conclusion, the regulatory framework for the protection of *kaya* forests is generally adequate but its teeth are in the implementation and given the number of *kayas* and the threats to them, the resources to enforce these laws are not entirely adequate. (see Resources below)

ICOMOS considers that it is essential that all the *kayas* are designated as National Monuments. ICOMOS also considers that it is essential for the National Museums of Kenya (NMK) to develop the capacity to monitor property developments along the coast, where speculation on landed property is rife, to ensure compliance with the law and to protect the forests from illegal extraction. There is also a need to define the significance of the settings of the *kayas* in order to address threats from mining and development activities.

Conservation

History of Conservation

Apart from traditional practices, no details are provided of active conservation of the cultural aspects of the *kayas* nor active intervention in forestry management.

Present state of conservation

As no surveys have been carried out of the cultural attributes of the various *kayas*, it is not clear precisely what exists and what condition the cultural remains are in. Similarly no overall picture emerges of the health of the forest cover in the *kayas*. It is therefore difficult to assess the present state of conservation of the *kayas*.

Active Conservation measures

At present resources are mainly directed to preventative conservation measures to prevent further damage to the sites. In a few *kaya* the WWF has been active in encouraging regeneration of trees.

There has been no cultural or archaeological survey of the *kayas* and therefore there is no inventory of cultural remains, such as gates, paths, grave sites, grave markers and the location of *moro*. While such information exists in oral form, there is a need for it to be recorded in order to allow informed monitoring of the sites and to demonstrate the effectiveness of preventative conservation.

ICOMOS considers that the preventative conservation of the *kayas* needs underpinning by more knowledge of the cultural attributes of each site gained through recording of the remains at each *kaya*.

Management

NMK is the statutory body charged with the management of immovable cultural heritage including the Kaya Forests. NMK administers the Kaya Forests through the Coastal Conservation Unit (CFCU) with the main office in Kilifi

on the coast north of Mombasa and a second office in Ukunda on the south coast. The Unit is not only responsible for the conservation programme, it also coordinates multi-disciplinary research on various aspects of the *kayas* in collaboration with other departments within NMK and external parties such as WWF and Nature Kenya. Each office has a fieldwork vehicle donated by WWF.

NMK works in collaboration with a number of NGOs including WWF Eastern Africa Programme Office and Nature Kenya. The WWF Regional Office which is based in Nairobi launched an East African Coastal Forest Programme focusing on the sustainable management of Kaya Forests. It has an office at Ukunda.

The dossier states that there is currently no integrated strategic framework for the *kayas* within the heritage sector or the forestry sector.

A draft Management Plan was submitted with the nomination. This document sets out the need for a conservation plan to provide a strategy for both the cultural and natural aspects of the *kayas*, and support for traditional management. It also points to the need for a better management of resources to allow local communities to benefit from the *kayas* and to minimise human/environmental conflicts. The draft Management Plan indicates intentions to designate all the *kayas* as national monuments, to update the inventory and documentation of cultural monuments, and to develop an integrated marketing strategy to promote eco-tourism of the sites.

While the plan does not provide details of how all of this will be achieved, all of these initiatives are considered worthwhile by ICOMOS. ICOMOS therefore considers that the preparation of the proposed conservation plan for all the *kayas* is urgently needed, with genuine participatory community conservation, coupled with schemes aimed at widening sustainable economic activities for the local population, thereby reducing poverty and pressure on local forest resources.

Traditional management

Each *kaya* has its own Committee of Elders and this committee is wholly and exclusively comprised of male elders. *Kaya* elders are responsible for selecting *kaya* forest guards for each village. The forest guards are responsible for warning the Kaya Elders Committee and CFCU if any trees are cut. Efforts exerted by the elders are recognised by conservationists, and the elders are required to encourage the youth, middle aged and women of all age groups of their community to participate in the decision making processes of *kayas*. Through CFCU's education and extension programme, some success has been already noted in involving younger members of the community in protecting the *kayas*.

NMK has adopted a collaborative approach with the *kaya* elders. The elders are an integral part of *kaya* institutions since they are custodians of rituals, the esoteric practices and burials, and continuing efforts by NMK to strengthen partnership with *kaya* elders is commendable. A high level of involvement by the elders was noticed at Kayas Kauma, Fungo, Diani and Kinondo.

ICOMOS considers that within the framework of an overall strategic management system, it would be desirable for formal arrangement to be made for each *kaya* to establish working arrangements with the elders and to further empower local communities to take control of the forests.

Indigenous knowledge systems

Several studies initiated by NMK in collaboration with the Kenya Centre for Indigenous Knowledge (KENRIK) have documented knowledge held by the elders on the utilisation of plant species in the Kaya Forests as herbicides, medicines and edible plants, fruits and mushrooms. This includes knowledge about exploitation of the forest resources and the regulation of uses for sustainability.

Tourism

A pilot eco-tourism programme has been launched at Kaya Kinondo with funding and technical assistance by WWF. The aim is to partially open the *kaya* forest to visitors, while making sure that the site retains its spiritual integrity. The targeted beneficiaries are local communities, through employment, and the sale of crafts and souvenirs. The profits would be invested into community projects such as the establishment of clinics.

Interpretation and presentation

There is a small static permanent exhibition of the Mijikenda Kaya Forests in the Museum at Fort Jesus. At Kaya Kinondo a site manager gives an orientation lecture in a reception room before he takes visitors into the *kaya*. There are no interpretive materials such as guidebooks or leaflets. Interpretive facilities need to be developed within the framework of the Management Plan.

Resources, including staffing levels, expertise and training

The dossier sets out funds for staff costs and also the lack of funds for operations. Currently the \$20,000 operating budget comes from other sources, mainly projects funded by donors. However most of the donors seem to have been providing funds for nature conservation rather than cultural activities.

ICOMOS considers that the management framework is adequate for the purposes of monitoring and provides a physical presence in the area and a link between NMK and the *kaya* elders. However, it will be necessary to employ more field staff to address the key conservation issues and serious developmental pressures of the sites and to further develop the Management Plan.

In conclusion, ICOMOS considers that there is a need to supplement the current staff in order to actively address conservation needs and development threats. ICOMOS also considers that revision and further development of the Management Plan is needed, integrating the conservation and management of both cultural and natural resources, and traditional and non-traditional management practices, working towards a thriving cultural landscape underpinned by traditional practices.

ICOMOS further considers that there is a need to formalise arrangements with *kaya* elders in order to further empower local communities.

6. MONITORING

As mentioned above, there are no surveys of the nominated areas nor detailed descriptions of the forest or the cultural remains of each *kaya*. Such documentation needs to be put in place as a baseline for further conservation and management. The histories of the individual *kaya*, from written, oral and archaeological evidence have not so far been collated.

The dossier includes monitoring indicators related to the area of forest, number of species, meetings of elders, traditional ceremonies, and community projects – all of which are useful and very relevant.

ICOMOS considers that basic documentation and surveys are needed for all the sites in order to provide a baseline for monitoring both cultural and natural attributes of the site.

7. CONCLUSIONS

The nominated property is a complex fusion of traditional cultural and natural attributes reflecting a change in value for the 36 *kayas* from fortified dwelling sites to the spiritual repositories of Mijikenda cultural identity. The sanctions put in place to protect the forest surroundings of the *kayas*, underpinned by traditional beliefs and taboos and overseen by Mijikenda elders have had the effect of sustaining the last remnants of lowland forests along the Kenya coast.

ICOMOS considers that the nomination raises three main issues.

The first is the justification for the identification of the 36 *kayas*. Although research has been undertaken on the history and archaeology of the sites, the justification for the selection of sites has not been underpinned by reference to this research. Furthermore no surveys have been undertaken of the *kayas* to document their cultural attributes and this might demonstrate cultural similarities between the sites. ICOMOS considers that the nomination needs to be underpinned by further more detailed justifications and facts related to the sites – baseline surveys and collation of historical evidence form all sources. These could then be used to substantiate the application of the criteria.

The second issue is related to management practices. ICOMOS considers that a strategic conservation and management approach to the sites is needed to draw together initiatives for both natural and cultural values. The property is not nominated for its natural attributes although the forests are a significant part of the value of the sites. Even though the forests may not be considered as outstanding for their biodiversity, ICOMOS considers that adequate management arrangements should be put in place to sustain the forest cover and ensure that this is maintained for its natural qualities. The present nomination has not provided sufficient details as to how this will be achieved.

The third issue is to ensure that the *kayas* are protected from development, extractive and poaching threats. ICOMOS considers that in the short term effective physical protection of the sites may be necessary in advance of more comprehensive sustainable development plans being put in place to allow local communities to participate fully in the management of the forests and benefit from them. The structural and legal capacities currently available for ensuring the sustainability of the *kaya* forests seem inadequate to face the tasks needed.

Given this situation, ICOMOS considers that consideration could be given to the selection of *kayas* in the nomination, possibly reducing the total number depending on the outcomes of the needed surveys and historical assessments. This could enable identification of a representative selection where protection, management and local community committees may all combine to sustain the forests.

Recommendations with respect to inscription

ICOMOS recommends that the examination of the nomination of The Sacred Mijikenda Kaya Forests, Kenya, to the World Heritage List be *deferred* in order to allow the State party to:

- Carry out documentation and surveys of the cultural and natural aspects of the *kayas*, and historical research from oral, written and archaeological sources, in order to reconsider and justify the inclusion of the selected sites in the nomination and to justify the application of the criteria.
- Designate all *kayas* as National Monuments.
- Further develop the draft management plan to integrate the conservation of cultural and natural resources and traditional and non-traditional conservation and management practices, and to support sustainable development initiatives which allow full participation of, and benefit to, local communities.
- In the short term, consider how further protective measures may be put in place to ensure no further erosion of the *kayas* in the face of threats from development, extraction and poaching.
- Consider ways to identify and protect the settings of the *kayas* from major developmental threats, particularly mining.



Entrance to Kaya Fungo



Hut of the spirits (Kaya Ribe)



Protective charm (fingo) at Kaya Chonyi



Burial site at Kaya Mudzimuvya

Twyfelfontein (Namibia)

No 1255

*Official name as proposed
by the State Party:*

Twyfelfontein or /Ui-//aes

Location:

Kunene

Brief description:

Twyfelfontein has one of the largest concentrations of rock petroglyphs in Africa. Over two thousand individual figures have been documented to date. These well preserved petroglyphs are depicted on flat sandstone boulders. The diversity of images includes rhinoceros, elephant, ostrich, human and animal footprints with giraffe predominating. The property also includes six painted rock shelters with motifs of human figures in red ochre. The material culture excavated from two parts of the property, including stone artefacts, ostrich eggshell beads, and schist pendants, has been related to the Late Stone Age, suggesting that some of the rock art represents the final flourishing of then dominant hunter-gathers in the face of the rapid expansion of nomadic pastoralism.

Category of property:

In terms of the categories of cultural property set out in Article 1 of the 1972 World Heritage Convention, this is a site.

1. BASIC DATA

Included in the Tentative List: 3 October 2002

*International Assistance from the World Heritage Fund for
preparing the Nomination:* No

*Date received by
the World Heritage Centre:* 30 January 2006

Background: This is a new nomination.

Consultations: ICOMOS has consulted its International Scientific Committee on Rock Art.

Literature consulted (selection):

Lewis Williams, J D & Dowson T, *Images of Power*, 1989.

Woodhouse B., *The Bushman Art of Southern Africa*, 1979.

Technical Evaluation

Mission: 21-25 September 2006

*Additional information requested and received from the
State Party:* None

*Date of ICOMOS approval
of this report:* 21 January 2007

2. THE PROPERTY

Description

The rock art is found on a dramatic weathered and fragmented sandstone hills some 90 kilometres west of Khorixas, in the centre of Damaraland, which stretches between the Erongo and the Etosha Pan in the north-west of Namibia. The sedimentary and volcanic rocks are disjointed and break up along fault lines into flat boulders of Etjo sandstone on which the rock art is found. Along one of the fault lines is an aquifer that feeds the spring after which the site is named. This flows into the Aba Huab River, which drains to the Atlantic Ocean. Twyfelfontein lies within a transitional zone between semi desert and savannah and receives less than 150mm annual rainfall.

The rock art is found in loose clusters on boulders on the lower slopes of the scarp. The paintings and engravings have been recorded on 235 separate surfaces on which have been found 2,075 identifiable images.

The nominated property encompasses the rock art and associated archaeological remains on a west facing slope below high sandstone cliffs. The extensive buffer zone encloses both sides of the valley and a significant part of the surrounding hills. Both the core area and the buffer zone fall within the Twyfelfontein Uibasen Conservancy.

The nominated property consists of:

- *Petroglyphs*
- *Painted rock art*
- *Archaeological sites*

These are considered separately.

Petroglyphs

The images were produced by two separate techniques: pecking with a harder stone or a hammer and punch, and secondly grinding or polishing. The pecked images vary from a simple design of lines and infill to much more complex subjects. Most of the sites show a variety of techniques and levels of refinement suggesting cumulative compositions over time. Unlike many painted rock art sites, the images do not overlap one another.

The two main techniques are considered separately in terms of sites where they are dominant.

- *Pecked images:*

The Etjo sandstone beds are extremely hard rocks and as a consequence some of the pecked engravings are comparatively shallow and are quite fresh looking. Others are cut much deeper and have weathered edges and a restored surface patina.

The most developed or refined examples of peck engraving are animal depictions where a type of shading was used - lighter etching within a deep, precisely etched outline and often with the rock cortex left intact in the middle of the animal image or slightly reduced by polishing. A large number of giraffe were executed with this technique. Their heads are emphasised as are the chest and rump in a

manner that may be termed the 'Twyfelfontein manner' or style. The pecked technique was also used as a type of false relief engraving. This involved the removal of the rock cortex in the centre of the image with a rounding of the body towards the outline.

These refined pecking techniques only account for a small proportion of the overall images. Simpler geometric images seem to have been produced throughout the history of the property.

- Polished images:

The most refined, but rare, examples of images where the main technique was polishing include naturalistic engravings such as the Dancing Kudu created by polishing the area within a simply defined shape.

Rubbing has also created numerous examples of 'cupule' depressions. 'Cupules' are small, semi-hemispherical hollows that seem to have been produced by rotating a smooth pebble against the inner surface of a depression. The meaning of cupules is, as yet, unclear, but they seem to represent a way to mark certain categories of space and place.

Rubbing was also used near images to smooth the surface without any decorative design. One rock is highly polished over a four metre square area. These areas could indicate the location of rituals associated with the engraved images.

One clear feature of the images is their apparent deliberate siting in relation to the terrain. Engravings of human footprints and animals tracks are found on inaccessible surfaces or near the sharp broken edges of rock faces. A higher number of engravings and paintings are also found near the spring or 'fontein' with a gradual dispersal further away and this is typical of similar sites in Namibia.

An analysis of the animal images reveals that giraffe account for 40%, rhinoceros 19%, zebra 12%, oryx 8%, ostrich 6% and cattle 5%. Flying birds hardly appear and human figures account for only 0.5% of all subjects.

The images of animals have been interpreted as representing not their occurrence in the wild but rather their significance in rituals. It is also suggested that the animals depicted might in fact be illustrating the ritual transformation of humans into animals. For instance, the ostriches are shown walking in line with wings extended in an 'arms back' posture as in a ritual dance and some giraffes are juxtaposed with human footprints. The most celebrated example is the 'Lion Man' a lion with five toes on each claw.

The imagery suggests the rock art was linked to the belief system of hunter-gathers who dominated the area until the arrival of pastoralists around 1000 AD. They could well have used the area around the spring as a ritual centre associated with rainmaking, initiation and other ceremonies. The rock art tradition persisted until after the arrival of the pastoralists as some engravings depict cattle that were introduced by the Damara people.

In addition to the rock art in the core area, there are approximately 500 more individual images at 8 sites in the buffer zone. Some particularly significant engraved sites

occur in the Buffer Zone. They are not included in the nominated area as their integrity has been severely damaged by the construction of the Twyfelfontein Country Lodge (see below).

Painted rock art

There are six shelters with painted images. In distinct contrast to the petroglyphs sites, human figures are dominant in the painted shelters. The paintings are carried out in red ochre. Human figures are depicted in a variety of stances including on 'all-fours', a pose representing a classical stance in ritual dances.

Archaeological sites

Three shelters associated with the rock art have been excavated since 1968. Affenfelsen site, noted for its painted figures revealed 19,000 stone artefacts – stone tools and ostrich egg beads - and a date of 3,450 BP +/- 40 years. Zwei Schneider another painted shelter produced similar artefacts and a date of 5,850 BP +/- 70 and Hasenbild a date of 370 BP +/- 50 suggesting very recent use of the area.

There have been no excavations near the engraved sites. Some of these have a striking feature of semi-circular stone windbreaks, often associated with scatters of quartz flake debris.

History and development

In the 1940s the Twyfelfontein land was granted on licence to a settler. At that time a few Damara people lived close to the spring in 32 huts. The land was transferred to communal use for Damara farmers in 1964 on the recommendation of the Odendaal Commission. But no farmers came forward to make use of it and it lay abandoned for 20 years. Following Namibian independence in 1990, the land became State Land under the Ministry of Lands, Resettlement and Rehabilitation.

Before the 1940s, there is little evidence for the use of the area by the Damara; it is likely that as nomadic pastoralists, they used the area on a seasonal basis congregating near the spring after rains. However nomadic pastoralism had been almost completely destroyed in the preceding 100 years by the *Rinderpest* epidemic of 1897 and by ensuing government policies which encouraged people to leave the land.

Interviews with local residents in 2004 failed to collect oral evidence for living cultural association with the rock art, although the rock art sites were seen as powerful places and the rock art the work of 'ancestors'. The imagery of the art suggests it is part of the belief system of hunter-gathers, the San, who lived in the area until partly displaced by Damara herders about 1,000 years ago and finally displaced by European colonists within the last 150 years. No San now live in the area, although the beliefs of present-day San who live some 800km away in the north-eastern part of Namibia, give insight into the meaning of the rock paintings and engravings at Twyfelfontein.

3. OUTSTANDING UNIVERSAL VALUE, INTEGRITY AND AUTHENTICITY

Integrity and Authenticity

Integrity

The integrity of the property is generally intact.

By most standards, Twyfelfontein is in a remote location in a country that has fewer than 2 million inhabitants, yet it currently attracts some 40,000 visitors a year. Busloads of tourists, mainly from Europe, stop there as tour operators have found it convenient to include it in their itineraries on a route from the Namibian desert and the coastal town of Swakopmund to the well-known game park at Etosha Pan. The large number of visitors has the potential to affect the integrity of the property.

However, the number of rock art panels open to the public is limited and they are in guided routes. This helps to retain the integrity of the property.

The Twyfelfontein Country Lodge was permitted by the Conservancy in 1999/2000 within the Seremonienplatz rock engraving site in the buffer zone. This has severely compromised the integrity of the rock engravings in this area.

Authenticity

All the rock engravings and rock paintings within the core area are without doubt the authentic work of San hunter-gatherers who lived in the region long before the influx of Damara herders and European colonists. In the buffer zone, there is one recent rock engraving by the late E.R. Scherz who made it deliberately in the 1960s to test the rate of patination in comparison with the San engravings. He recorded the event photographically and it is quite clear even today that it is a recent addition.

The setting of the Twyfelfontein rock art is also authentic as other than one small engraved panel which was removed to the National Museum in Windhoek in the early part of the 20th century, no panels have been moved or re-arranged.

ICOMOS is satisfied with the integrity and authenticity of the nominated property.

Comparative analysis

Twyfelfontein is one of a set of sites identified in 1998 by the Southern African Rock Art Project to represent the full range of rock art in the sub-continent on the World Heritage List. Others in the set that have already been inscribed are the uKhahlamba/Drakensberg Park mixed site in South Africa, the Matobo Hills in Zimbabwe, Tsodilo in Botswana, the Chongoni Rock-Art Area in Malawi and Kondoa Rock-Art Sites in Tanzania. The Mapungubwe Cultural Landscape in South Africa also includes rock art, but was nominated mainly for other values. All these sites have rock paintings (with a few engravings at Mapungubwe and Tsodilo) that relate to the spiritual beliefs of San hunter-gatherers, Khoekhoe herders and indigenous farming communities.

ICOMOS considers that Twyfelfontein is unique in its large number of rock engravings and their high quality and

diversity. None of the other Southern African sites, either on tentative lists or already inscribed, can match this number. The /Xam Heartland in the Northern Cape in South Africa, on the tentative list because of its association with 19th century /Xam San people and their oral history, has a wide range of rock engravings, but they are of variable quality and are not concentrated in one relatively small area as at Twyfelfontein. Sites of similar diversity and quality are known in South Africa (for example Rooipoort near Kimberley and Kinderdam near Vryburg), but they have not been proposed for World Heritage listing.

North of the Equator, there are outstanding rock engraving sites in the Sahara at Tadrart Acacus in Libya and Tassili n'Ajjer in Algeria that might surpass those at Twyfelfontein for their size and individual impact, but the quality and variety at Twyfelfontein remains significant and distinctive.

Beyond the African continent, there is a generic similarity with rock engravings at sites such as Rock-Art of Alta in Norway, Rock Carvings in Tanum in Sweden, Prehistoric Rock-Art Sites in the Côa Valley in Portugal, Petroglyphs within the Archaeological Landscape of Tamgaly in Kazakhstan, and Uluru-Kata Tjuta National Park and Kakadu National Park in Australia. However in each of these cases the underlying significance of the property is related to the local communities that created the art, and their way of life, as well as to their superficial manifestations.

ICOMOS considers that Twyfelfontein can be seen as an outstanding example in a relatively confined area of a remarkable concentration of high quality engravings as well as good quality rock paintings that reflect hunter-gatherer communities before the arrival of pastoralists.

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

Justification of the Outstanding Universal Value

The State Party considers that the property has outstanding universal value for the following reasons:

- Twyfelfontein has the largest single concentration of rock art sites in southern Africa.
- With 2,000 engravings the site is larger than any other rock arts sites in Namibia.
- The engravings are exceptionally well preserved and show a wide repertoire of subjects.
- The property represents the final florescence of ritual art under the combined impact of environmental stress and the rapid expansion of nomadic pastoralism.
- The engravings show deliberate positioning in the landscape and exemplify the integration of culture and nature.

Criteria under which inscription is proposed

The property is nominated on the basis of criteria iii and v.

Criterion iii: The State party justifies this criterion on the grounds of the number of engravings, their good state of conservation, and their wide ranging subject matter relating to the hunter-gatherer tradition.

ICOMOS considers that the rock art engravings and paintings in Twyfelfontein form a coherent, extensive and high quality record of ritual practices relating to hunter-gather communities in this part of southern Africa over at least two millennia and can justify the use of this criterion.

ICOMOS considers that this criterion has been justified.

Criterion v: The State Party justifies the use of this criterion on the basis that the rock art is an excellent example of links between ritual and economic practices. The State Party also asserts that the collection of art is an eloquent statement of human strategy in increasingly inimical conditions due to the apparent sacred association of the land adjacent to the aquifer reflecting its role in nurturing communities over many millennia.

ICOMOS considers that this criterion has been justified.

4. FACTORS AFFECTING THE PROPERTY

Impact of climate change

This is not addressed in the dossier. The already hot dry climate does not adversely affect the rock engravings. Violent and unpredictable weather might have an adverse effect on the geology but this is unlikely. The rock paintings are much more vulnerable to changes in climate and particularly wind.

Risk preparedness

This is not addressed.

Development

Without adequate protection of the Buffer Zone, the setting of the property remains vulnerable to development pressures related to tourism.

Environment

The quality of the rocks on which the painted images are found is poor and the paintings show extensive spalling due to the wind.

Tourism

The large number of visitors to the property and the fact that they currently arrive in large groups provide the potential for damage to the rock art. However some 75% of the rock art – some 50% of the overall property is currently out of bounds to visitors for conservation reasons. In those areas that are open, active visitor control is now being practiced through the provision of viewing platforms and paths laid out to facilitate one way circulation systems, and keeping vulnerable areas free from traffic.

Since the dossier was prepared, several further changes increase the chances of retaining the integrity of the core

area despite the addition of new facilities. The Namibian roads authority has de-proclaimed the last 500m of the road leading to the visitors centre so that an intrusive road sign could be removed. A satellite dish that will enable the staff to receive bookings and communicate with the outside world has been installed and will be camouflaged with suitable paint so that it is not visible from the tourist routes. A well-designed interpretation center with solar panels for electricity, eco-toilets, a refreshment counter, information boards and a craft outlet, has been constructed of natural stone gabions and re-cycled materials. This blends in well with the surrounding landscape.

Their challenge is not to attract more visitors as the carrying capacity of the property could be exceeded, but rather to develop capacity to manage the current visitor numbers and a modest increase. This can be done as suggested in the management plan by opening new routes and carefully monitoring the impact on existing routes but it will need advice from a professional rock art conservator.

In addition, the tourist guides need to be managed so that their duties are rotated. They could become involved in conservation and documentation projects to increase their understanding of the art, and/or in the collection and analysis of visitor behaviour patterns and perceptions. In spite of the positive work carried out locally, as noted in the dossier and management plan, formal linkages with the national tourism authority are weak and ICOMOS considers that it would be highly beneficial to improve these.

The policy of the Ministry of Environment and Tourism in the past has been to promote wildlife rather than cultural heritage sites. It is understood that a concerted effort to jointly promote tourism at cultural heritage sites with the Ministry of Youth, National Services, Sport and Culture would be greatly enhanced with the inscription of a major cultural attraction such as Twyfelfontein as a World Heritage property.

An official guide book for the site is planned.

One major factor affecting the property is the construction of the Twyfelfontein Country Lodge in the Buffer Zone which incorporates one of the key rock art sites, the Seremonienplatz. Guests pass through a natural gap amongst high rocks with numerous rock engravings which seriously disrupts the sense of place of the rock art. The nomination dossier states that the construction of this lodge was against the National Heritage Act and demonstrates the weakness of local authorities in the face of booming entrepreneurial tourism.

Currently there is no plan to re-direct traffic and create a different entrance to the Lodge. However the dossier and management plan indicate that this scale of impact will not be allowed in future without a full environmental impact assessment. The Lodge generates income for the Conservancy and is a major player in the Joint Management Forum. Over a 30-year period, ending in about 2030, ownership of shares in the Lodge will be gradually transferred to the Conservancy. It is the most important single employer of local people with a staff of 80 and for this reason alone is important in the economy of the region.

ICOMOS recommends that serious consideration should be given to changing the entrance to the Lodge in order to better conserve and manage this rock art site.

ICOMOS considers that the main risks to the property are from the lack of effective enforcement of legal protection of the buffer zone and recommends that special attention is given to ensuring that this is addressed.

5. PROTECTION, CONSERVATION AND MANAGEMENT

Boundaries of the nominated property and buffer zone

The boundaries of the nominated property encompass the majority of the key rock art that still possesses integrity. The buffer zone is large enough to enable the protection of the setting, but needs adequate protection – see below.

ICOMOS considers that the boundaries of the core and buffer zone are adequate.

Ownership

The entire core area belongs to the State of Namibia.

Protection

Legal Protection

The core area was designated a national monument in 1948 and is now protected by the National Heritage Act 2004. This offers adequate legal protection which will be further enhanced once the process of declaration of the Conservation Area in terms of s.54 of the National Heritage Act is completed for the core and buffer zone.

By-laws for the Conservation Area have been drafted and approved by the National Heritage Council and were discussed at a meeting of the Joint Management Forum on 18 October 2006. Once agreement has been reached, the document will be forwarded to the Ministry of Justice and it is expected that final approval will be forthcoming early in 2007.

Agreement has been reached with the Ministry of Mining, which typically grants exclusive prospecting licenses for blocks of 1,000 ha. Three applications were received for the Twyfelfontein area recently and were referred to the National Heritage Council for clearance. The buffer and core were excised from the licensed blocks and may therefore not be prospected. There is no mining currently in the area and the nearest operation is a tin mine some 150km to the south that has been worked out and is no longer in commission.

Two security guards have been appointed at the property, one for the parking area and one for the information center. If any contraventions of the National Heritage Act occur, they will be reported to the Site Manager for action.

In size, the buffer zone adequately protects the core area. However there are currently no protective measures in place for the buffer zone to control development, protect archaeological sites, and regulate environmental activities.

Its boundaries coincide with the former Twyfelfontein Reserve which completely surrounds the core area and is almost 20 times larger. The buffer and core areas together comprise the soon-to-be established Conservation Area. This will lie within the boundaries of the even larger Twyfelfontein-Uibasen Conservancy Area.

Conservancies were established after Namibian independence in 1990 to allow registered indigenous communities and individuals to use the land and to lease portions to others for a fee that is distributed amongst the registered communities. It is therefore essential that the by-laws that establish the Conservation Area under the National Heritage Act make provision for the National Heritage Council to assist the Conservancy if the authenticity and integrity of the values of the potential World Heritage sites are threatened. This could be achieved through the establishment of a Joint Management Committee that has representatives from the Conservancy, the National Heritage Council, the Tour Guide Association and the lodge and camp owners.

ICOMOS considers that the protective measures for the nominated property are adequate but recommends that special attention is given to ensuring that protection of the buffer zone is put in place and enforced. ICOMOS further recommends that the Conservancy is represented on a Joint Management Committee in order to afford adequate protection to the Buffer Zone. (See Management below.)

Conservation

History of Conservation

In the last few years there has been a concerted effort to give the property formal management and to control visitor impact and put in place preventative conservation measures. Paths have been repaired or re-routed and viewing platforms have been constructed at vulnerable sites to keep visitors out of direct contact with the sites. There are now also properly trained guides on site and the management plan identifies preventative conservation measures.

Present state of conservation

The current state of conservation of the property is adequate.

Active Conservation measures

Some of the conservation measures proposed in the nomination dossier and management plan are in place and are being monitored.

Conservation measures related to the maintenance of paths, visitor facilities, security and waste removal have been outsourced by the National Heritage Council. Viewing platforms have been erected at several engraved panels to prevent visitors from walking on the engravings. The raised platforms do intrude to some extent, but have been designed to blend with the rocky slopes and are certainly necessary to protect the art.

Repairs undertaken in the low season (January) in 2006 have highlighted the effectiveness of some conservation interventions and problems with others. Elevated viewing

platforms work very well, as do the shaded seating areas along the guided routes. As guided groups are limited to 8 people at a time, parties are sometimes required to wait their turn and shade and seating are very welcome. Some pathways have not needed repair, but those subjected to erosion on unstable slopes have needed damage control and will be watched to identify the major causes. Minor problems have been experienced with the welded metal frames for steps on one of the paths.

Conservation tasks related specifically to the documentation and monitoring of rock engravings and paintings have not yet been given the same level of attention as those dealing with day-to-day visitors and maintenance, but are a medium-term priority at this stage. They will need to be budgeted for both by the National Heritage Council and the Ministry. (see management below)

ICOMOS considers that the overall state of conservation of the property has improved over the past few years, particularly in terms of the way visitor are managed. ICOMOS considers that a higher priority needs to be given to regular documentation and monitoring as a means of ensuring the state of conservation of the property continues to improve.

Management

The property is managed directly by the National Heritage Council.

A Management Plan for the property was drawn up and implementation begun in 2005. As the management plan and implementation structure is relatively new, there is a strong sense of enthusiasm. The hierarchy of decision-making starts with the Ministry of Youth, National Services, Sport and Culture that sets budgets according to its annual strategic plan. An annual grant allocated to the National Heritage Council provides for staff salaries at the head office and at satellite sites such as Twyfelfontein. The Board of the National Heritage Council makes policy decisions and these are executed by the Director and his staff. The Twyfelfontein site manager, who is responsible for two other sites besides Twyfelfontein, reports to the head office of the National Heritage Council in Windhoek. Matters specific to Twyfelfontein and the surrounding area are discussed by a Joint Management Forum. The tour guides report to the Conservancy. Contracted maintenance staff report to the site manager.

All the current tour guides are Damaran, as are most of the members of the Conservancy community. No spokespersons from the San community in Namibia have been included amongst the stakeholders in the nomination process, although the Working Group for Indigenous Minorities in Southern Africa (WIMSA) has been informed of the nomination. The San will thus not benefit directly from development of Twyfelfontein. ICOMOS suggests that ways should be considered to allow San participation in the site (even though they now live far from the area).

Resources, including staffing levels, expertise and training

The National Heritage Council appoints and pays the salary of the site manager. The NHC receives a gross

income of about N\$1 million, or US\$160,000 a year from visitors to Twyfelfontein. The two cashiers are paid out of this income from visitors, as are the contracted service providers for maintenance and security. Tour guides, who must be members of the Twyfelfontein Tourist Guide Association, are employed on contract by the Conservancy and receive 35% of the visitor fees. This sum is distributed amongst about 25 guides, depending on their working hours.

At present none of the local members of the Joint Management Forum or the Conservancy have experience in heritage site management. ICOMOS recommends that in the short and medium term, professional heritage managers and archaeologists are involved in planning and decision-making.

Part of the reason for the slow start in conservation is the general lack of suitably qualified people in Namibia. It is understood that a target is to establish a degree course for heritage site managers in the departments of history and geography at the University of Namibia. In the short term, ICOMOS considers that it would be desirable to consider on-site training with contracted specialists to teach recording techniques and monitoring methods to tour guides who could contribute to documentation and monitoring during off-peak months.

It would clearly also be desirable to appoint a rock art conservation manager at the site who could be responsible for conservation, documentation and monitoring at other rock art sites in the general region.

ICOMOS commends the State Party on the Management Plan. ICOMOS considers that further consideration should be given to setting up a joint Committee with the Reserve; to involving professional heritage managers and archaeologists in decision making; to appointing a rock art specialist who could have a monitoring role at this and other similar sites in the Region; and to finding ways to allow San participation in the property.

6. MONITORING

All the rock art sites have been documented and an inventory has been produced with the basic documentation linked to a GIS system.

ICOMOS understands that ongoing documentation and monitoring of rock engravings and paintings are only a medium-term priority at this stage. ICOMOS considers that higher attention should be given to these processes.

ICOMOS considers that although the basic documentation for the property is adequate, the monitoring measures for the property should be enhanced to ensure that the outstanding universal value of the property and its authenticity and integrity are sustained over time.

7. CONCLUSIONS

Recommendations with respect to inscription

ICOMOS recommends that Twyfelfontein or /Ui-//aes, Namibia, be inscribed on the World Heritage List on the basis of *criteria iii and v*.

Criterion iii: The rock art engravings and paintings in Twyfelfontein form a coherent, extensive and high quality record of ritual practices relating to hunter-gather communities in this part of southern Africa over at least two millennia.

Criterion v: The rock art reflects links between ritual and economic practices in the apparent sacred association of the land adjacent to an aquifer as a reflection of its role in nurturing hunter-gather communities over many millennia.

Recommended Statement of Outstanding Universal Value

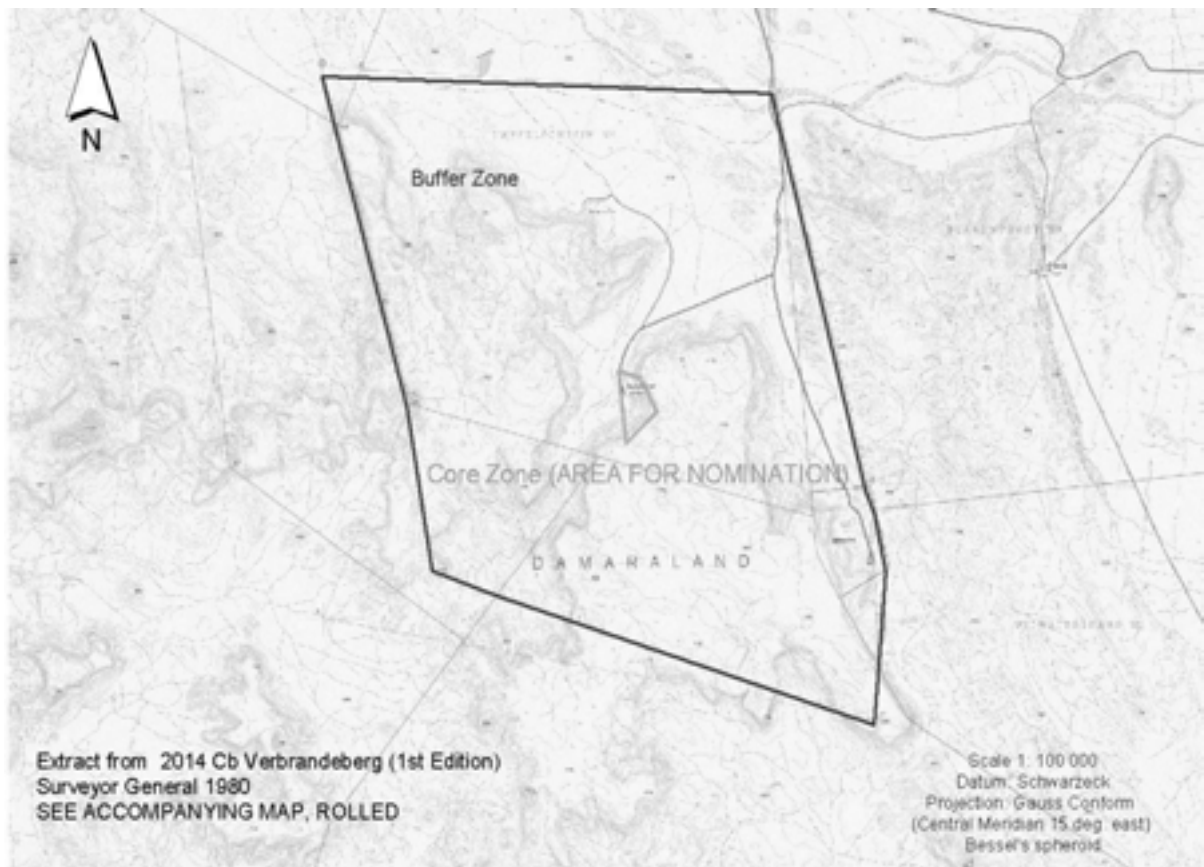
The Twyfelfontein rock art engravings and paintings demonstrate Outstanding Universal Value.

The rock art:

- forms a coherent, extensive and high quality record of ritual practices relating to hunter-gather communities in this part of southern Africa over at least two millennia; and,
- eloquently reflects the links between ritual and economic practices of hunter-gatherers in terms of the value of reliable water sources in nurturing communities on a seasonal basis.

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

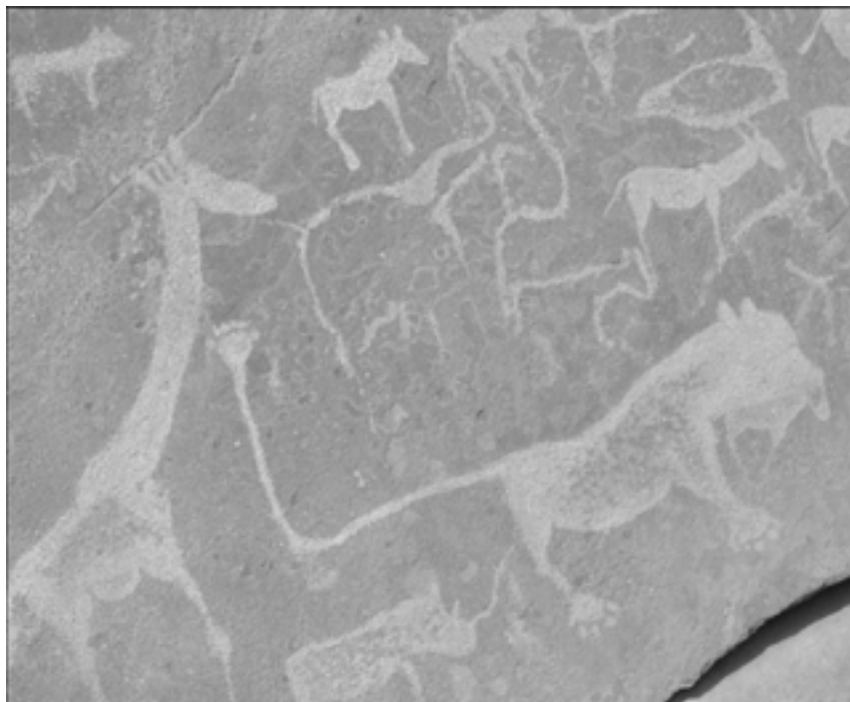
- Providing adequate protection for the buffer zone.
- Setting up of a Joint Management Committee for the Conservation area and the Conservancy that has representatives from the Conservancy, the National Heritage Council, the Tour Guide Association and the lodge and camp owners.
- Giving higher priority to monitoring and documentation as a means of sustaining the OUV of the property.
- Considering the possibility of appointing a rock art specialist to the site who could have a monitoring role at other similar sites in the Region.
- Exploring ways to allow San participation in the site.
- Giving serious consideration to ways of changing the entrance to the Twyfelfontein Lodge in order better conserve and manage the nearby rock art.



Map showing the boundaries of the nominated property



Shaded antelope



Lion, giraffe and other animals



Dancing kudu



Zwei Schneider

Samarra Archaeological City (Iraq)

No 276 rev

Official name as proposed
by the State Party:

Samarra Archaeological City

Location:

Samarra Township, Salah al-Din
Governorate

Brief description:

Samarra is the site of a powerful Islamic capital city which ruled over the provinces of the Abbasid empire extending from Tunisia to Central Asia for a century. The Samarra Archaeological City testifies to the architectural and artistic innovations that developed there and spread to the other regions of the Islamic world and beyond.

Category of property:

In terms of the categories of cultural property set out in Article 1 of the 1972 World Heritage Convention, this is a site.

1. BASIC DATA

Included in the Tentative List: 7 July 2000

International Assistance from the World Heritage Fund for preparing the Nomination: No

Date received by the
World Heritage Centre: 17 December 1982
1st February 2006

Background: This is a deferred nomination (7th session, Paris, 1983).

A first nomination dossier was examined by the Bureau of the World Heritage Committee at its 7th session (Paris, 1993). At the time, ICOMOS recommended that: “the inscription of the cultural property on the World Heritage List be deferred.”

The Bureau of the World Heritage Committee approved the following recommendation:

“A revised file should be presented which would precisely indicate the perimeter of protection and which would include a safeguarding plan for the area. The Bureau strongly recommends that a zone non aedificandi be foreseen to afford protection to all of the vestiges of the ancient city, including the pottery kilns”.

A new revised nomination dossier was submitted to UNESCO on 1 February 2006.

Consultations: ICOMOS consulted its International Scientific Committee on Archaeological Heritage Management.

Literature consulted (selection):

Seton Lloyd, *The Archaeology of Mesopotamia from the Old Stone Age to the Persian Conquest* (London, revised edition 1984).

Robinson, C (ed), *A Medieval Islamic City Reconsidered, An Interdisciplinary Approach to Samarra, Oxford Studies in Islamic Art* 14, Oxford, 2001.

Technical Evaluation Mission: Owing to the circumstances, ICOMOS has not been able to organize a technical evaluation mission.

Additional information requested and received from the State Party: None

Date of ICOMOS approval of this report: 21 January 2007

2. THE PROPERTY

Description

[Note: This section is based entirely on the nomination dossier. Since ICOMOS was unable to send a site evaluation mission, it has been impossible to provide an up-to-date report on the present condition of the site and its monuments.]

Samarra Archaeological City is located on both sides of the River Tigris 130km north of Baghdad. The length of the city from north to south is 41.5km; its width varies from 8km to 4km.

Samarra was not surrounded by walls because it was protected by the Tigris River from the west, the Nahr al-Rasasi canal from the north and east, and the Nahr al-Qaim and Nahr al-Sanam canals from the south. Caliph Al-Mu'tasim billah combined military and civil quarters in planning his new city. This is shown by the separation of the mosque from the Caliphal Palace and the division of the residences into sectors, each destined for military commanders and their followers, and by the straight roads and streets organised in an orthogonal plan perpendicular to the Tigris. Crossing them is the main street, the Grand Avenue (maximum width 80-100m).

The city was built in a single layer, 80% of which is unexcavated. The main building materials are fired brick, mud-brick and adobe, with gypsum or mud mortar. After Samarra ceased to be the capital of the Abbasids, a more recent city continued to exist on part of its remains around the shrine of the two Imams Ali al-Hadi and Al-Hasan al-Askari.

The major architectural monuments of the city are:

- *The Great Mosque and its Spiral Minaret*

Built of fired brick and gypsum mortar, at 264m x 159m, it was the largest mosque in the Islamic World when it was built between 849 and 852. Its walls are reinforced by regularly spaced semi-circular towers. The walls are 10.5m high and there are sixteen gates. The mosque consists of four parts surrounding the open courtyard. The Spiral Minaret (*Al-Malwiya*) is the most unusual in the Islamic world. The sides of the square base are 32m long, and above five circular layers rise forming a huge spiral tower 54m high.

- *Abu Dulaf Mosque*

This mosque, situated to the north of the city, was similar to the Great Mosque but smaller, consisting of an open courtyard surrounded on its four sides by porticoes. The walls of the mosque are reinforced by semi-circular towers. The minaret is similar to that of the Great Mosque but smaller.

- *The Caliphal Palace (Qasr al-Khalifa)*

This palace, built on the orders of Caliph Al-Mu'tasim billah, is situated on the Grand Avenue (*al-Shari' al-A'zam*), overlooking the Tigris. It is one of the largest Arab Islamic Palaces (125ha), and includes living quarters, halls, administration rooms, *diwans*, guards' barracks, and facilities for rest and recreation. It is the only example of an imperial palace from later antiquity, the plan of which completely preserved. Excavations have been carried out in the Palace since 1910, but about three-quarters of the area remains unexcavated and the western garden has been flooded.

- *Al-Huwaysilat Palace*

Al-Huwaysilat, which is identified with the Qasr al-Juss in the medieval Arabic chronicles, stands on the West Bank of the Tigris. It was built by Caliph Al-Mu'tasim billah as a palace for relaxation. There are two buildings: the Lower and Upper Palaces. The Lower Palace, the larger and more important of the two, is a square building inside an outer enclosure surrounded by a wall reinforced by a series of towers. The palace includes a number of halls, rooms, and courtyards.

- *Balkuwara (Al-Manqur) Palace*

This palace on the Tigris south of the city was built by Caliph Al-Mutawakkil 'ala Allah for his son Abdullah Al-Mu'tazz around 854. It is rectangular in plan, with its corners oriented to the cardinal points. The building survives as mounds of unfired brick.

- *Al-Ma'shuq Palace*

The remains of this palace look out over the west bank of the Tigris. Built by Caliph Al-Mu'tamid 'ala Allah in 876, it is the best preserved of the Abbasid palaces at Samarra. The plan is rectangular and it is sited on an artificial barrel-vaulted platform, with many courtyards and a number of rooms and halls opening on to the central spaces. The internal division is tripartite. The walls of the palace are all reinforced by round towers on rectangular bases.

- *Bayt al-Zakharif*

This house, one of the important private residences, is noted for its carved stucco panels which form revetments about 1m high. Fifty houses from the 9th century city have been excavated, out of a total of c.15,000 (including small housing units).

- *Husn al-Qadisiyya*

The plan of this unfinished city of octagonal shape, built in mud-brick and still unexcavated, was based on a circle 1.5km in diameter. It was built by Caliph Harun al-Rashid on the model of the Round City of Baghdad and abandoned in 796 before the city of Samarra was built.

- *Al-Musharrahat Palace*

Al-Musharrahat is about 6km to the east of the modern city of Samarra. It is one of the palaces built by Caliph Harun al-Rashid when he excavated the Nahr Abu al-Jund canal. Debris from the canal excavation was deposited to form a high mound. It was occupied by Caliph Al-Mu'tasim. Caliph Al-Mutawakkil demolished it and built the present palace (*Al-Musharrahat*) in its place, with the Birkat al-Buhturi basin in front, named after the poem by the Abbasid poet al-Buhturi.

- *Al-Istablat*

The area of al-Istablat is on the west bank of the Tigris 15km south of the modern city of Samarra. The plan consists of a small rectangle containing the palace, connected to a large rectangle with blocks of houses, each surrounded by a massive enclosure wall. This enormous monument is a military camp; it has been identified as the palace of al-'Arus, built by Caliph al-Mutawakkil in 851.

- *Tell Al-Alij*

Tell Al-Alij is an artificial mound for the Caliph to view horse-races, probably built by al-Mutawakkil.

- *Qubbat al-Sulaybiyya*

This domed structure was probably a mausoleum for three of the Caliphs who ruled in Samarra – Al-Muntasir, Al-Mu'tazz, and Al-Muhtadi. It is an octagonal building in the middle of which there is a square hall surrounded by an octagonal ambulatory with a hemispherical dome.

- *Al-Ja'fari Palace*

Al-Ja'fari was the new caliph's palace built by al-Mutawakkil in 859-61 at the north end of the site. It is the largest palace ever built in the Islamic world (211ha). Never excavated, it is well preserved.

Many other buildings are also known at Samarra, either from historical sources or from the archaeological survey. Forty-two palaces, four congregational mosques, and about 7,000 other buildings have been recorded in a database.

History and development

The area of Samarra was only lightly settled in antiquity. It underwent an upturn in its fortunes with the excavation of the Qatul al-Kisrawi, the northern extension of the Nahrwan canal which drew water from the Tigris, attributed to the Sassanian king Khusrau Anushirvan (531-78). To celebrate this project, a commemorative tower (*Burj al-Qaim*) was built at the southern inlet (*Nahr al-Qaim*) south of Samarra, and a palace with a walled hunting park at the northern inlet (*Nahr al-Rasasi*) near to al-Dur. A supplementary canal, the Qatul Abi al-Jund, excavated by the Abbasid Caliph Harun al-Rashid, was commemorated by a city in the form of a regular octagon (*Husn al-Qadisiyya*), called al-Mubarak and abandoned unfinished in 796 AD.

In 834-35, Caliph al-Mu'tasim left Baghdad in search of a new capital. He sought a residence for the court and an army base outside Baghdad, and was attracted by a region known for its hunting but otherwise poor in natural resources. The caliph's city was formally named Surra Man Ra'a ('he who

sees it is delighted'), later shortened in popular usage to Samarra.

Surra Man Ra'a was laid out in 836 on the east bank of the Tigris around the pre-Islamic settlement, with the main palace on the site of a monastery to the north. This palace complex, called in the sources Dar al-Khilafa, Dar al-Khalifa, Dar al-Sultan, and Dar Amir al-Mu'minin, had two major sub-units, the Dar al-'Ammah, the public palace where the caliph sat in audience on Monday and Thursday, and al-Jawsaq al-Khaqani, the residence of the Caliphs and their families, where four are buried.

It is not easy to reconstruct the plan of the original Surra Man Ra'a because of later rebuilding. From the palace an avenue extended south 3.5km to the markets, the mosque of al-Mu'tasim (both now under the modern town), and beyond. Army cantonments flanked this road and others were located outside Samarra. The area east of the city was walled as a hunting park (*al-Hayr*).

With the death of al-Mu'tasim in 842 came a point of decision: would Samarra be abandoned on the death of its founder or would it become a more permanent Abbasid capital? Al-Wathiq (842-47) chose to stay, and what was called a camp (*'Askar al-Mu'tasim*) became a real city. Al-Wathiq concentrated on the economic development of the city. He built a new palace, al-Haruni, on the banks of the Tigris at al-Quwayr, and this continued to be the residence of al-Mutawakkil, later occupied during the 860s by Turkish units.

The reign of al-Mutawakkil (847-61) changed the appearance of the city, for he was a lover of architecture. In a list of his building projects the new Congregational (Great) Mosque and up to 20 palaces are mentioned, costing 258-294 million dirhams. The new al-Malwiya Mosque, built between 849 and 851, formed part of an extension of the city to the east, extending into the old hunting park. Two new palaces with hunting parks were built in the south, at al-Istablât and al-Musharrahât (the Palace of al-Shah). A further palace, Balkuwara was built on the Tigris bank surrounded by a military cantonment for a new army corps under al-Mutawakkil's second son, al-Mu'tazz.

Three racecourses were built east of the main city. Two have an out-and-back course 80m wide and 10.42km long with a spectators' pavilion at the start and the third a pattern of four circles around a central pavilion (5.3km).

Under al-Mutawakkil the city centre reached its greatest extent, and was described in its heyday by al-Ya'qubi after the death of al-Mutawakkil in 861. There were seven parallel avenues; the one adjacent to the Tigris, Shari' al-Khalij, accommodated quays for the river transport, the principal means of supplying the city, and the cantonments of the Maghariba. In 859, al-Mutawakkil began a new project to replace Surra Man Ra'a with a new caliphal city to the north, called, according to its coinage, al-Mutawakkiliyya, although written sources also call it al-Ja'fariyya. A canal was dug from a point 62km north to supply the new city, crossing the Qatul by an aqueduct, and running on both sides of the avenue, but the levelling was badly calculated, and little water flowed. The main palace, Al-Ja'fari, is located at the inlet to the Nahr al-Rasasi. The city plan is organised around a central avenue leading south past the Abu Dulaf mosque to the cantonments

of al-Karkh, thus similar to that of Surra Man Ra'a. The Sassanian hunting park north of the canal was reworked with a viewing platform at Tell al-Banat close to modern al-Dawr. After the assassination of al-Mutawakkil in 861 the city was abandoned.

The drain on the treasury played a role in the decade of troubles following al-Mutawakkil's death, which led to the making and unmaking of four caliphs, and military action in Samarra in 862-63, 865-66, and 870. More significant was the isolation of the Caliph with his army in Samarra, leaving him exposed to attempts by the soldiery to improve their lot. In the decade after the accession of al-Mu'tamid in 870, the army was removed from Samarra by Abu Ahmad al-Muwaffaq, although it continued to be the official residence of the Caliph until 892, when al-Mu'tadid re-established Baghdad as the capital.

The area around the markets continued to be occupied. The two imams Ali al-Hadi and Al-Hasan al-Askari had a house on the Shari' Abi Ahmad, near the mosque of al-Mu'tasim, and were buried there. The twelfth imam disappeared nearby in a cleft commemorated by the Sardab al-Mahdi in 874. The tomb was first developed in 944-45.

When Samarra was abandoned by the Caliphs at the end of the 9th century, occupation continued in a few areas, including the modern city of Samarra. Most of the rest of the site was left as it was until the beginning of the 20th century since the land lacks water and the soil is poor. At the present time some 80% of the buildings of the ancient city remain unexcavated (estimated to be *circa* 80% of the archaeological area).

3. OUTSTANDING UNIVERSAL VALUE, INTEGRITY AND AUTHENTICITY

Integrity and Authenticity

Because ICOMOS has not been able to conduct an evaluation mission, the consideration of the integrity and authenticity of this property has necessarily relied on the nomination dossier and the desk evaluations.

According to the nomination dossier, apart from some minor exceptions, Samarra archaeological city may be described as fully authentic. After its abandonment by the Caliphs, occupation continued in a few areas, such as what was to form the nucleus of the modern city. Most of the remaining area was left untouched until the beginning of the 20th century since the land lacks water and the soil is poor. The west bank of the Tigris was an exception, and the land there was cultivated.

Foreign archaeological missions had been interested in eastern civilizations, and Samarra in particular, since the mid 19th century. The German excavations of 1911-13 included exploration of the Caliphal palace, Balkuwara palace, Al-Ma'shuq palace, the Great Mosque, Abu Dulaf mosque, Tell Al-Alij, and seventeen residential houses. The Iraq Directorate-General of Antiquities excavated in 1936-40, and again from 1965 onwards. Starting in 1980, a considerable investment was put into the excavations. Starting in 1983 a map and database of the monuments was prepared by the Samarra Archaeological Survey. However, only a small part

of the site has been excavated: complete excavation would take centuries.

The State Board of Antiquities and Heritage is working to preserve the excavated and standing buildings by conserving those in danger of collapse and restoring parts destroyed by climatic and time factors, working with modern materials to the same specifications as the original materials, so as to distinguish the original from the restored parts. More extensive restorations have been undertaken at the Great Mosque and al-Ma'shuq.

On the matter of integrity, according to the nomination dossier, the site, like almost every archaeological site, is partially preserved, but it is possible to measure the degree to which loss has taken place in relation to the probable original extent of the city. At Samarra that loss is low by comparison with many other archaeological sites. Much of the loss is due to ploughing and cultivation, and to the growth of the modern city of Samarra.

To the extent that it is possible for ICOMOS to evaluate this property without the benefit of an evaluation mission, ICOMOS considers that the conditions for integrity and authenticity of the nominated property are met.

Comparative analysis

According to the nomination dossier, although eroded by recent events, Samarra has the best preserved plan of an ancient large city. Nowhere else in the world is the semi-complete plan of a large capital city preserved in all its details, extending from public buildings (mosques and palaces) to the smallest workman's or soldier's houses, sports facilities (racecourses, polo pitches, hunting reserves), cantonments and industrial buildings.

In comparable great capitals of that time such as Baghdad, Rome, Cordoba and Constantinople, comparatively little is preserved, in spite in some cases of long histories of excavations. They have continued to be flourishing cities with continual reconstruction over the centuries. However Samarra was abandoned after a relatively short time and so it retains much of its early plan.

For example, Cordoba, which became the capital of the Umayyad Emirate (later Caliphate) in Andalusia in 786, had no authority over other regions of the Islamic world. It continued to develop up to the present day, leading to the loss of many of its ancient monuments, apart from the mosque, transformed into a cathedral, and the palace complex of Madinat al-Zahra' outside the city. It is not possible to get a clear picture of the planning of the city and its buildings at the time of its prosperity as a capital. The same applies to Baghdad, built by Abu Ja'far al-Mansur in 762 as the capital of the Abbasid Caliphate: the course of history and modern development have destroyed all its remains.

There are many other examples around the world where imperial cities have not retained their original pattern because of continuous occupation and change: Tang Dynasty Chang'an and Yuan, and Manchu Beijing in China, Edo (Tokyo), Kyoto, and Nara in Japan, and the successive cities of Delhi in India.

In terms of monumental architecture, Samarra is distinguished by its mosques and palaces. The Great Mosque,

with its spiral minaret al-Malwiya, is one of the best known and largest ancient mosques in the Islamic world, and marks a new stage of mosque development by using a spiral minaret and a secondary outer enclosure with covered porticoes (Arabic *ziyada*), to provide shelter for Muslims unable to find a place in the mosque for the Friday prayer. Samarra is also the earliest site where archaeological evidence has been found of the *musalla*, the prayer ground outside the city intended for the holiday prayers.

The two caliphal palaces, Qasr al-Khalifa (Caliphal Palace) and al-Ja'fari, are among the largest ancient imperial palaces in the world whose plan is preserved.

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

Justification of the Outstanding Universal Value

According to the nomination dossier, Samarra is the second capital, after Baghdad, of the Abbasid Caliphate, which extended from Tunisia to Central Asia, and it is the only surviving Islamic capital that preserves all its elements. After the loss of the monuments of Baghdad, Samarra represents the physical trace of the Caliphate at its height. It is the only Islamic capital which retains its original plan, architecture, and arts.

The city preserves two of the largest mosques (Al-Malwiya and Abu Dulaf) and the most unusual minarets, as well as the largest palaces (the Caliphal Palace Qasr al-Khalifa, al-Ja'fari, al-Ma'shuq, and others) in the Islamic world. Various kinds of carved stucco, which spread to other parts of the Islamic world at that time, were developed there and are known as the Samarra style. A new type of ceramic known as Lustre Ware, which imitated utensils made of precious metals such as gold and silver, was also developed in Samarra.

Criteria under which inscription is proposed

The property is nominated on the basis of criteria ii, iii, and iv.

Criterion ii: According to the nomination dossier, Samarra represents a distinguished architectural stage in the Abbasid period by virtue of its mosques, its development, the planning of its streets and basins, its architectural decoration, and its ceramic industries.

ICOMOS considers that the architecture and layout of Samarra show clear evidence of influences from elsewhere in the Muslim world and beyond, whilst later Muslim architecture from this region illustrates the influence of Samarra.

ICOMOS considers that this criterion is justified.

Criterion iii: According to the nomination dossier, Samarra is the finest preserved example of the architecture and city planning of the Abbasid Caliphate, which extended from Tunisia to Central Asia and was one of the world's great powers of that period. The physical remains of this state are usually poorly preserved since they are frequently built of unfired brick and reused bricks.

ICOMOS recognizes that Samarra is an outstanding example of Abbasid architecture and urbanism.

ICOMOS considers that this criterion is justified.

Criterion iv: According to the nomination dossier, the buildings of Samarra, such as the Malwiya and Abu Dulaf mosques, represent a new artistic concept in Islamic architecture by comparison with those that preceded and succeeded it. In their large dimensions and unique minarets these mosques demonstrate the pride and political and religious strength that correspond with the strength and pride of the state at that time.

ICOMOS is in full agreement with this analysis of the architectural and structural significance of the site.

ICOMOS considers that this criterion is justified.

ICOMOS considers that the Outstanding Universal Value has been demonstrated and that the nominated property meets criteria ii, iii, and iv.

4. FACTORS AFFECTING THE PROPERTY

The Present Situation (2006)

Following the 2003 war the archaeological area was occupied by the multi-national forces, who used it as a theatre for military operations. The State Board has sent many letters to the parties concerned in order to limit these violations.

ICOMOS is obliged to point out that, because of the continuing unsettled state of Iraq, it was unable to send a site evaluation mission to Samarra. This is regrettable since it means that the Advisory Body cannot supply professional advice and comment based on site evaluation. The information given below is derived solely from the nominations dossier, which in the light of the adverse constraints on the professional personnel of the State Party, which must of necessity be out of date in some particulars.

At the time of submission of the nomination (2006), all forms of activity and control are reduced to a low level because of the political situation. While the present situation continues, the principal danger is increasing intrusion of agricultural activities. The multi-national forces have at times occupied the Malwiya, which was also slightly damaged by a small bomb in April 2005. In August 2005 multi-national forces excavated an earth mound across the archaeological site north and south of the modern city. In February 2006, a bomb destroyed the Tombs of the Imams in Samarra; this monument lies outside the core zone of the protected area.

The present hostilities have had a disastrous impact on the local population, and also on the Samarra Archaeological City. In common with most of the other important archaeological sites in Iraq, Samarra has been exposed to the widespread problems of looting and the illicit trade in antiquities, activities that the State Party has been unable to stop owing to the present conditions in the country.

Development Pressure

The property has in recent years been subject to transgressions by neighbouring farmers. Solutions to these problems were provided by the Archaeological Law, and

action was taken before the outbreak of hostilities to remove the transgressions that happened before the enactment of the law. Claims were filed at the legal department of the State Board against the transgressors.

Expansion of construction was remedied by means of the law in two ways: at the local level and conducted by the Samarra Inspectorate of Antiquities in collaboration with relevant bodies such as the Department of Agriculture, the Municipality of Samarra, and others, in order to study the projects and grant or refuse consent. The second approach is by using a committee consisting of representatives of the ministries (including the State Board of Antiquities and Heritage), which studies the proposed projects. The State Board of Antiquities and Heritage has the decisive opinion in giving consent or otherwise. The application of this procedure has been in abeyance since 2003.

Environmental pressures

Climatic factors have a negative impact on the archaeological zone. Winds and rain bring with them dust, leading to the burial of the buildings, and particularly the restored parts.

There is an environmental problem from the dumping of garbage and debris. Up to 2003 the State Board of Antiquities and Heritage was working to prevent these activities and to punish the transgressors

Natural disasters and risk preparedness

The State Board provided fire-fighting equipment as a precaution against emergencies, but this is no longer operational. The height of the site above the level of the basin of the Tigris makes it safe from the risk of floods. It also lies outside the earthquake and seismic zone.

Visitors/tourism pressures

Tourism has come to a complete standstill at Samarra because of the political situation. The following comments relate to the period up to the outbreak of war in 2003.

Visitors and tourists in the past have been responsible for graffiti and defacing the walls of the buildings. Protection was provided by intensifying surveillance of the movement of visitors, the provision of tourist guides, and increasing the number of guards at all the main sites of the city, but these actions are no longer viable. An archaeological police department was formed to watch for vandals and stop pillage or violation of any kind, but it no longer has any function on the site.

Because of the large size of the city and the abundance of archaeological remains, the site is theoretically able to accommodate large numbers of visitors and tourists, and these were estimated before 2003 to be c 5,000 daily. There is no non-military access to the site at the present time.

ICOMOS considers that the main risk to the property arises from the inability of the responsible authorities to exercise control over the management and conservation of the site, owing to the present political situation. ICOMOS therefore recommends that, should the World Heritage Committee determine to inscribe this property on the World Heritage List at this time, the property should be also be inscribed

immediately on the List of World Heritage in Danger (see below).

5. PROTECTION, CONSERVATION AND MANAGEMENT

[Note: This section is based entirely on the nomination dossier. Since ICOMOS was unable to send a site evaluation mission, it has been impossible to discuss the extent to which statutory protection and management provisions are being implemented, if at all, at Samarra.]

Boundaries of the nominated property and buffer zone

Study of the detailed maps and plans provided by the State Party in the nomination dossier indicates that the area proposed for inscription is logical in that it covers the known caliphate city of Samarra. The buffer zone also appears to have been delineated with careful attention to the physical and visual protection of the nominated site. It should be stressed, however, that ICOMOS has been unable to ascertain the relevance of these boundaries in the field.

Although there has not been an opportunity to carry out an evaluation mission to check the adequacy of the boundaries of the core and buffer zones, ICOMOS considers that these are likely to be realistic and adequate.

Ownership

According to Article 7 of the 2002 Iraqi Archaeological Law No 55, Samarra Archaeological City is considered to be public property in which no dealings are allowed. Ownership is delegated to the State Board of Antiquities and Heritage, and registered officially in the name of the Iraqi Ministry of Finance.

Protection

As the property of the State of Iraq, the archaeological buildings in the city are open in times of peace all the year round to receive visitors and tourists. Iraqi Law punishes those who vandalize or trespass on this property in accordance with Article 7 of the 2002 Antiquities and Heritage Law No. 55.

A strict Government decision was promulgated in 1995 which stipulated detention, imprisonment, and large financial penalties for interventions on the Iraqi archaeological heritage by agriculture, building, or digging. The Samarra Archaeological Inspectorate has in the past brought many cases before Iraqi courts which have resulted in imprisonment and fines on transgressors.

Iraqi archaeological law is considered to be among the strictest in the region. No public and private projects may be executed without the consent of the State Board of Antiquities and Heritage.

It is forbidden by law to build modern constructions in the protected area. In the buffer zone, coordination and consultation takes place between the State Board of Antiquities and Heritage and the municipal, agriculture, irrigation, and environment departments, and any other relevant parties before every project. Once consent is given by the State Board, conditions are laid down, covering environmental concerns, preservation of specified spaces, and

height limitations. The State Board wrote shortly before the start of the 2003 war to departments concerned for information about any future projects within the buffer zone. The replies received from those departments are not yet being considered.

ICOMOS considers that in theory the protective measures for the property are adequate. However, it is conscious that the present situation in Iraq means that they cannot be adequately enforced, leaving the property with little actual protection. ICOMOS therefore recommends that, should the World Heritage Committee decide to inscribe this property on the World Heritage List, it should also be inscribed immediately on the List of World Heritage in Danger (as discussed below).

Conservation

According to the nomination dossier, all the buildings of Samarra Archaeological City are original and most are still unexcavated (estimated to be c.80% of the archaeological area).

A scientific method was followed up to 2003 in conserving standing remains: modern building materials were used in the work but to the same specifications and dimensions as the original materials (fired brick, mud-brick, and stucco). In this way it was possible for the observer to distinguish between original and restored parts. Consolidation of parts about to collapse was carried out without affecting the original form. Another method consisted of completing parts where the condition constitutes a danger to the building as a whole, without affecting the original form. Buildings where parts have been restored are about 20% of the city:

- *The Great Mosque and the Malwiya:* The external wall and the Malwiya minaret have been restored.
- *Abu Dulaf Mosque:* The arches of the prayer hall and the spiral minaret have been restored.
- *The Caliphal Palace:* The Bab al-Amma (Public Gate), the al-Hayr palace, and the Circular Basin have been restored.
- *Al-Ma'shuq Palace:* Only the facades of the palace and the upper floor of the palace have been restored.
- Restoration work was carried out on the walls of most of the excavated houses and the stucco decorations of the palaces.

These works were executed according to an annual plan prepared by the State Board based on the archaeological law.

Without the benefit of an evaluation mission, ICOMOS cannot provide comment on the state of conservation of this property. Based on the nomination dossier, ICOMOS considers that the overall approach to conservation at Samarra is likely to be acceptable. However, ICOMOS is concerned that some of the use of modern materials in restoration work is not fully consistent with contemporary conservation principles.

Management

Management structures and processes, including traditional management processes

The chain of responsibility passes from the Minister of State for Tourism and Archaeological Affairs to the State Board of Antiquities and Heritage, its Museums Department, the Department of Investigations and Explorations, and the Salah al-Din Archaeology Directorate to the Samarra Archaeology Inspectorate.

Since its establishment at the beginning of the 20th century the State Board has followed a working management plan for the property by distributing the responsibilities. This is done centrally through the State Board in Baghdad, through the Inspectorate of Antiquities, or through coordination with other departments in Samarra.

Management in Samarra is divided between the Salah al-Din Directorate and specialised missions in the fields of exploration and maintenance, under the supervision of the State Board. The antiquities inspector at Samarra delegates responsibilities such as the movement of visitors and guides, supervision of guards and security to his staff. Because of the existence of a number of traditional buildings in the modern city constructed around the shrines of the two Imams, Ali al-Hadi and Al-Hasan al-Askari, one of the officials of the inspectorate is responsible for the management of these buildings.

Management plans, including visitor management and presentation

The budget is appropriated for maintenance, excavation, and management by the state centrally and it is spent through the sequence of management described above. The power of the State Board of Antiquities by virtue of its laws is the guarantee for the implementation of any central administration plans, and it is not considered necessary to create plans for each site separately. There is also a project being carried out by an American organisation in coordination with the State Board of Antiquities to prepare plans for the management of the archaeological sites in Iraq.

Involvement of local communities

The involvement of the local communities in the management of the site is minimal, although according to the nomination dossier, there are excellent informal relationships between the site staff and local authorities.

ICOMOS cannot adequately evaluate the management system without the benefit of an evaluation mission. ICOMOS considers that the management system for the property is not adequate at the present time, as a result of the political situation in Iraq, and cannot adequately assess the management system without the benefit of an evaluation mission. ICOMOS considers that it would be desirable to formulate and implement a more formal management plan and structure.

6. MONITORING

[Note: This section is based entirely on the nomination dossier. Since ICOMOS was unable to send a site evaluation mission, it has been impossible to provide an up-to-date report on the application of the

procedures outlined below at the present time. It appears highly likely that these are all currently in abeyance.]

According to the nomination dossier, the State Board of Antiquities and Heritage is responsible for adopting standards and criteria in the conservation of the property through priorities. Priority in conservation is given to buildings at greatest risk (e.g. at the Great Mosque, where bricks from its walls were being robbed by local people to build their houses). It is also responsible for conserving buildings of historical importance the remains of which are no longer visible in order to shed light on them and restore their architecture, such as the works performed in the Caliphal Palace (Bab al-Amma).

It is the responsibility of the Samarra Inspectorate of Antiquities to perform daily monitoring of all the buildings to check for any emergency or change. Standard techniques of monitoring and observation are in use, leading to the preparation of periodic reports on the state of the property and changes as a result of natural factors or the effect of visitors.

There is an annual photography programme for the monuments carried out by a specialised section at the Board which maintains a photographic archive.

Administrative arrangements were put in place shortly before the outbreak of hostilities in 2003 to monitor the property, both centrally by the State Board in Baghdad and on site by the Samarra Inspectorate of Antiquities. These measures included the establishment of the central security force (archaeological police), who are responsible for any emergency to which the sites are subjected.

ICOMOS considers that the monitoring measures for the property are in theory adequate, although this cannot be fully assessed without an evaluation mission.

7. CONCLUSIONS

ICOMOS considers that evaluation missions are an essential component of its capacity to advise the World Heritage Committee regarding proposals for inscription of properties in the World Heritage List.

In the case of Samarra, without the benefit of an evaluation mission, the ICOMOS evaluation and recommendations has been confined to reviewing the nomination dossier and consulting experts about this property. Such a procedure can resolve the question of whether the property demonstrates outstanding universal value, and the application and justification of criteria, but is unacceptably limiting to ICOMOS in commenting on the adequacy of boundaries and buffer zones, threats and the responses to them, protection, conservation, and management.

In the absence of an evaluation mission, ICOMOS has also not had the opportunity of forwarding specific questions to the State Party regarding these matters or of ascertaining for itself the efforts being made to mitigate harm to the property.

ICOMOS also notes that this property is but one on the Tentative List for Iraq which might be at owing due to the present situation. ICOMOS is very concerned about Iraq's cultural heritage and the fact that it is extremely difficult for

the State Party to utilise its heritage protection structures generally.

ICOMOS therefore notes that this is an unusual set of circumstances within the context of its role in providing expert advice to the World Heritage Committee on the evaluation of nominations to the World Heritage List.

Recommendations with respect to inscription

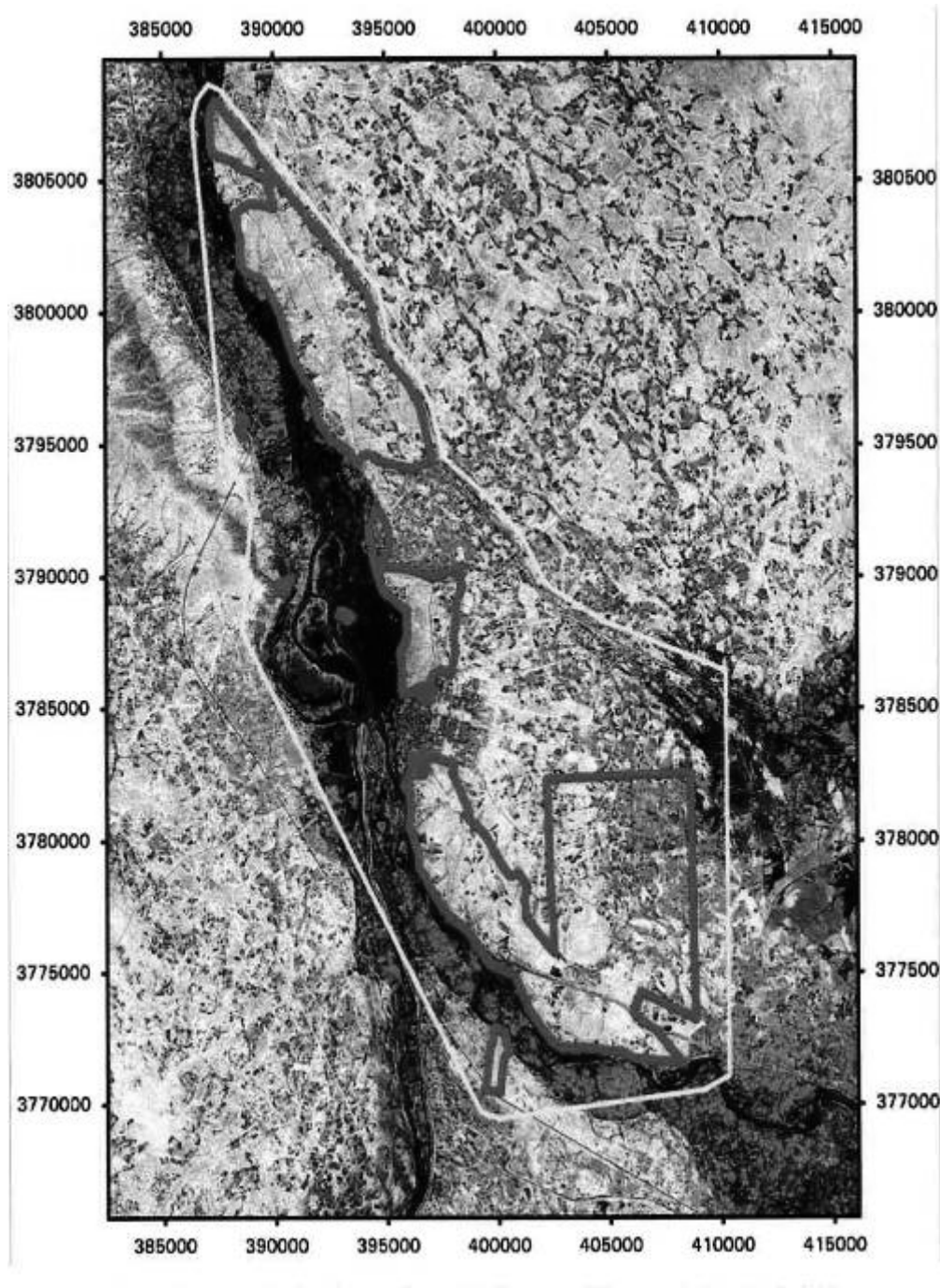
In terms of its specific findings, ICOMOS considers that Samarra Archaeological City, Iraq, demonstrates Outstanding Universal Value, and that the application of criteria ii, iii, and iv is justified, as summarized above.

In the absence of an evaluation mission, ICOMOS has no choice but to recommend to the World Heritage Committee that the examination of this nomination be *deferred* in order to allow for a future time when the State Party can reassert its protection of this and other heritage properties, and an evaluation mission can occur.

However, if the World Heritage Committee were to decide to inscribe the property now due to exceptional circumstances, ICOMOS would recommend that it also immediately be inscribed on the List of World Heritage in Danger.

Should the World Heritage Committee decide to take this form of decision, ICOMOS recommends that it should subsequently also consider the need to examine the situation of other properties on the Tentative List of Iraq.

In any event, ICOMOS recommends to the World Heritage Committee that it use all possibilities offered by the World Heritage Convention to engage immediately in preventive measures and, when the situation makes this possible, in conservation work for Iraq's cultural heritage generally and for all properties inscribed on Iraq's Tentative List in particular.



Map showing the boundaries of the nominated property



Great Mosque and its Spiral Minaret



Abu Dulaf Mosque



Caliphal Palace



Interior of House no.5

Preah Vihear (Cambodia)

No 1224

Official name as proposed

by the State Party: The Sacred Site of the Temple of Preah Vihear

Location:

Kantuot Commune, Choam Ksan District, Kingdom of Cambodia

Brief description:

The buildings that make up this sanctuary dedicated to Shiva, located on the edge of a plateau that dominates the plain of Cambodia, were built in the first half of the 11th century AD and form the most important sanctuary built during the reign of King Sūryavarman I (1002–50), who seized power at Angkor around 1006.

Category of property:

In terms of the categories of cultural property set out in Article 1 of the 1972 World Heritage Convention, this is a site.

1. BASIC DATA

Included in the Tentative List: 1 September 1992

International Assistance from the World Heritage Fund for preparing the Nomination No

Date received by the World Heritage Centre: 30 January 2006

Background: This is a new nomination.

Consultations: ICOMOS has consulted its International Scientific Committee on Archaeological Heritage Management.

Literature consulted (selection):

Jacques, C, *L'empire khmer, cités et sanctuaires*, Paris, 2004

Technical Evaluation Mission: 23–29 October 2006

Additional information requested and received from the State Party: ICOMOS sent a letter to the State party on 15 December 2006, and the State party submitted information on 3 January 2007.

Date of ICOMOS approval of this report: 21 January 2007

2. THE PROPERTY

Description

The architecture

The property is situated on a promontory of the Dangrek Range, 547m above the Cambodian Plain, known as Phnom Preah Vihear (Sacred Hermitage Mountain), close to the modern border with Thailand. It is roughly triangular in shape, defined by steep cliffs. The southern extremity of the promontory juts out to form a natural recess that is a sacred place, commanding a vast panorama, the wide expanse of land lying to the south up to Mount Koulên, the cradle of the Khmer civilisation.

The northern part of the property is an almost horizontal sandstone platform, c.100m long north–south and 50m wide, which gives access to the Temple and to the village of Phnom Kulên.

Like many Cambodian monuments, this sanctuary consists of a succession of courtyards on a common axis (though the north–south axis here is somewhat unusual). The sandstone blocks that were used posed enormous handling problems, and there is some indication that the entire south–west part of the property was in effect worked as a quarry.

Access is now by means of a steep, recently constructed track through the forest from the village, which houses soldiers and their families, as well as some Buddhist monks living at the pagoda, which also serves as a school. From here two paths lead to the temple, one passing through a village (Pjum Prasat), wholly dedicated to shops and other facilities for visitors; some 550 people live there.

Preah Vihear shares certain characteristics with other monuments in the north and east of Cambodia:

- It has an axial plan 800m long in which *gopuras* (gateway towers) and streets succeed one another on the way to the temple.
- It comprises outer buildings that are much larger than the sanctuary itself.
- There is considerable use of light materials such as tiled timber roofs.

To the north a 54m monumental stairway with 159 steps leads to a 25m long pavement flanked by enormous rampant *nâgas* (snakes). From here three steps reach the first of the *gopuras* (No. 5). This is cruciform in plan and originally had a pitched wooden roof supported on pillars. Two paths join here – one from Thailand, by means of the monumental stairway, and one from the Cambodian plain, by means of the rock-cut eastern stairway (10m wide, dropping some 400m steeply on the eastern flank of the promontory).

From *Gopura* No. 5 another long pavement rises to *Gopura* No. 4 (similar in form to No. 5), with a large rock-cut water tank with steps around. There is another, smaller tank beside the pavement leading to *Gopura* No. 3. This, too, is cruciform in plan. On either side of the main gateway there are symmetrical U-shaped galleries ending in a long hall of a type known from other sites. Their function is unknown; the custom has grown up of calling them ‘palaces,’ although they were in all probability monastic.

Gopura No. 2 is reached at the end of another pavement, also lined with *nāgas*. It is similar in form to No. 3, but without the ‘palaces.’ It opens on to a large rectangular hall with rooms on either side, designated ‘libraries’, built in sandstone with a brick vaulted roof.

The sanctuary is enclosed by two groups of galleries laid out in cloister form, foreshadowing the ‘cruciform cloisters’ of Angkor Vat. The central enclosure is accessible only by the three passages coming from *Gopura* No. 1 and two small openings to east and west. The southern side is closed by *Gopura* No. 1 and the northern side by a structure which is in effect a false gate. Instead of opening out on the vast spaces of the Cambodian plain, it presents a blank face. The layout thus presents an increasingly closed aspect, until at the end all that is visible is the sky.

The architectural decoration

The finest decoration is to be found on the *gopuras*, many of which are in an excellent state of conservation and clearly visible. The compositions of the sculptures on the lintels, pillars, pilasters, and elsewhere are varied, complex, highly detailed, and harmonious, representing Hindu gods and other religious figures such as Shiva, Vishnu, Indra, and Krishna.

Constructional techniques and materials

The principal material of all the buildings at Preah Vihear is sandstone from the site itself. Structurally they have load-bearing outer walls integrated with alignments of monolithic columns linked by monolithic lintels that are decorated with religious or mythical scenes.

Laterite blocks faced with sandstone are used where foundations were needed for columns. Where the ground had to be raised because of the steep slopes, sandstone rubble was used.

Brick was also used at Preah Vihear because it was easier to bring up from the plains on the Cambodian side than the sandstone from the site itself. Small bricks were used for the construction of corbelled vaulting.

Apart from the central sanctuary, all the buildings had wooden roofs covered with fired tiles.

History and development

At the outset Preah Vihear housed an eremitic community. On the cliffs some caves in which the hermits lived, a feature of the Khmer landscape, can still be seen there. The foundation of the hermitage is often associated with the erection of a sanctuary by Prince Indrāyudha, son of King Jayavarman II, at the command of Shiva at the beginning of the 9th century. He installed there a portion of the great *lingam* from Vat Phou. However, the origins of Preah Vihear were probably earlier. Indrāyudha’s building was a modest wooden structure, on the site of the existing stone building, and only minor modifications were made by successive Khmer rulers in the 10th century.

There are four Khmer and Sanskrit inscriptions from the property that provide valuable dating material, confirming

the close association of King Sūryavarman I with the erection of the present complex. He erected engraved pillars (*lingams*) at various points in his extensive lands, bearing his name and title, *Sūryavarmeshvara* (Lord Sūryavarman), and one of these was raised at Preah Vihear at the beginning of the 11th century, again at the command of Shiva. This was sited next to the earlier temple, which was soon rebuilt in sandstone as part of the overall campaign of extension and improvement of the temple.

By around 1050 new construction had reached *Gopura* No. 3, but it then proceeded more slowly, partly because of the difficult nature of the land and frequent landslips. The complex was not completed until the 12th century, when King Sūryavarman II entrusted the work to one of his best architects, Divākrapandita.

Ownership of the property was the subject of considerable negotiation in the 19th and early 20th centuries between the French and Thai Governments. A treaty of 1904 assigned it to France, of which Cambodia was at that time a protectorate. It was reclaimed by Thailand in 1934 and occupied six years later. It was not until 1962 that the International Court of Justice in The Hague confirmed ownership by the newly independent state of Cambodia.

The site was closed from the 1970s because of the troubled history of Cambodia during more than two decades. Fortunately, its remoteness meant that Preah Vihear suffered very little damage over that period, even though it had been mined by the Khmer Rouge, who did not move out until 1998.

3. OUTSTANDING UNIVERSAL VALUE, INTEGRITY AND AUTHENTICITY

Integrity and Authenticity

Integrity

The original plan of the Temple of Preah Vihear developed in the 9th–12th centuries, and all its component parts have survived to the present day so that it is possible to trace its complex history. The nominated property includes all elements that express the values of the property. Some parts, such as the Sanctuary, have partially collapsed as a result of natural phenomena, especially erosion by water, but the architecture has retained all its original characteristics. The natural panorama has not changed from what the hermits saw a thousand years ago.

ICOMOS considers that the property has survived almost without change and that the conditions of integrity are met.

Authenticity

The evolution of the buildings and the techniques used in their construction are reflected in the materials used – wood, then sandstone, brick and laterite. No restoration of any magnitude has taken place at Preah Vihear since the clearance work of Henri Parmentier in 1929–30.

ICOMOS considers that the authenticity of the property has survived intact.

Comparative analysis

According to the State Party, the monumental ensemble of Preah Vihear, which is inseparable from its surrounding landscape, can be differentiated from other Khmer monuments already on the World Heritage List.

The site of Angkor (Cambodia), which in fact is a series of cities, symbolises the high point of the civilisation of which it was the capital from the 9th to the 14th century. Preah Vihear differs from Angkor by virtue of the way in which it is inextricably linked with its landscape. Preah Vihear also has some unique structural features, notably the use of tiled timber roofs.

The temple of Vat Phou (Laos) and its associated structures within the Champassak landscape bears exceptional witness to the formation of the pre-Angkor and Angkor civilisations in political and social as well as religious terms, whereas Preah Vihear is exclusively religious in nature.

ICOMOS considers that this analysis is valid. Preah Vihear vividly demonstrates the intimate link between site and landscape and between spiritual and natural values that is to be found at other property on the World Heritage List such as Mont-Saint-Michel (France) or Meteora (Greece). All these properties illustrate the strong relationship between a religion and the material world by means of a powerful integration of architecture and its natural environment.

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

Justification of the Outstanding Universal Value

The State Party considers that the property is of outstanding universal value for the following reasons:

- The Sacred Site of the Temple of Preah Vihear is distinguished by its exceptional natural environment, which is difficult of access and far away from major traffic arteries. This has permitted its 'natural' conservation up to the present time.
- This sacred ensemble is a rare example of the close relationship between a monument and its setting. In the 9th century it was a sheltered hermitage built in the caves of sheer 500m cliffs overlooking the plain of Cambodia. From the beginning of the 11th century, when it became a Royal temple, until at least the mid 12th century, it developed progressively into a long series of sanctuaries linked by over 800m of staircases and pavements.
- The Preah Vihear group is exceptional for three reasons. First, the natural site exhibits many contrasts – a promontory, sheer cliffs, a vast plain, a mountain range, and a natural environment stretching out of sight. Secondly, the quality of its architectural composition is adapted both to the constraints of the site and to religious traditions. Finally, the property is exceptional in terms of the quality of its carved stone ornamentation, which is based either on vegetation motifs or sometimes on scenes from Hindu mythology.

Criteria under which inscription is proposed:

The property is nominated on the basis of criteria i, iii, and iv:

Criterion i: The State Party justifies this criterion on the basis that The Temple of Preah Vihear is a unique architectural ensemble made up of a series of sanctuaries linked by a system of pavements and staircases on an axis c.800m long.

The site of the Temple and its environment today represent a particularly significant example of the Khmer genius for adapting monuments to their environment.

ICOMOS concurs with the view that this ensemble, the broad composition of which is still especially clear, testifies to the Khmer genius for domesticating vast territories and adapting to the landscape. The property offers the visitor a magnificent landscape embracing nearly 360° of the plain below, a landscape opening out in front of the hermits' grottoes in the cliffs. Furthermore, ICOMOS considers that Preah Vihear is an outstanding masterpiece of Khmer architecture. It is very 'pure' both in plan and in the detail of its decoration.

ICOMOS considers that this criterion is justified.

Criterion iii: The State Party justifies this criterion on the basis that the promontory at the end of the Dangrek Range dominating the plain is exceptional testimony to the cultural traditions of the hermitages. The caves in this 500m high cliff, which are accessible without too much danger from the crest of the promontory, enabled the hermits to settle there. Their presence led to the foundation of a sanctuary at the beginning of the 9th century on the promontory, from which the sacred ensemble visible today developed.

ICOMOS concurs with the view that the Preah Vihear ensemble bears exceptional witness to the capacity of the Khmer civilisation to make use of a difficult site over a long period as a settlement site and as a source of materials. In this way the mountain was levelled over a considerable area to permit the building of the temple. The sandstone extracted for this purpose was used as the building material for the temple. Also, Preah Vihear demonstrates an important interchange in human values and developments in art, architecture, planning, and landscape design.

ICOMOS considers that this criterion is justified.

Criterion iv : The State Party justifies this criterion on the basis that the Preah Vihear ensemble consists of the integrally connected temple and its environment: a natural landscape which is exceptional by virtue of its topography and the boundless view that it gives over the Cambodian plain. From whichever direction the temple is approached and viewed, the temple is indissolubly linked with the cliff upon which it sits and of which it is the expression.

ICOMOS concurs with the view that the property should be understood at the different levels of its components: the temple, and in particular its delicately carved ornamentation of plant motifs and classical mythology, the

sloping layout of the promontory jutting out from the steep slopes of the Mount Dangrek Range, the cliff and its profiles, and the plain with the natural panorama that it offers. The architectural ensemble is exceptional in its representation of Buddhist geometry; and in a sense it is *feng shui*. The position of the Temple on a cliff edge site is particularly impressive. Stairs and historical access surviving for over a thousand years show a sophisticated technological understanding. The whole historic structure demonstrates the high point of a significant stage in human history.

ICOMOS considers that this criterion is justified.

ICOMOS considers that the Outstanding Universal Value has been demonstrated and that the nominated property meets criteria i, iii, and iv.

4. FACTORS AFFECTING THE PROPERTY

Development pressures

Because of the fact that the property is located in a remote and lightly populated area of Cambodia, there are no pressures related directly to development. It is also a national protected site.

However, there is a village within the nominated property devoted to servicing tourists, an activity which is of considerable economic importance to the villagers.

Anti-personnel mines

The property was heavily mined during the Khmer Rouge period. The Cambodian Mine Action Centre has nearly finished clearing the area proposed for inscription. Some pockets remain to be dealt with on the north-east of the perimeter and close to the eastern stairway. After a short break this work began again in June 2006.

Disputed frontier

The frontier between Cambodia and Thailand at this point passes alongside the northern boundary of the nominated property. According to information provided to ICOMOS by the World Heritage Centre, the precise location of this frontier is currently the subject of a dispute between the two States Parties. The nominated property lies entirely within an area presently claimed to be Cambodian territory, but the area to the north of the property lies within territory recognized to form part of the territory of Thailand.

ICOMOS considers that issues reflecting the security of property boundaries, especially in respect of close co-operation with the neighbouring Government of Thailand, require that recent agreements concluded between the States Parties at the 5th meeting for Bilateral Co-operation between the Kingdom of Cambodia and the Kingdom of Thailand be implemented, especially in respect of continued open border agreements.

Environmental pressures

The region where Preah Vihear is located is in a tropical climate zone which experiences monsoons. The main part

of the property is in a balanced vegetal environment, in particular in the eastern part, which is a Thai national natural and archaeological park.

However, the site of the temple at the top of a steep cliff is a very exposed one, subject to the rigours of a mountain climate exacerbated by monsoon conditions. Annual rainfall is around 1500mm, coming mainly in July–September. This causes erosion and some subsidence. Attention is being focussed on rehabilitating drainage systems or introducing new ones. It should be noted that evaporation is roughly equal the rainfall, and so there is a risk of water shortages. This is being taken account of by constructing reservoirs on the property.

Siting on a high promontory also favours wind erosion, as well as the filling of sheltered areas. Changes in pressure can give rise to powerful erosion conditions during monsoons.

There can be temperature differences of as much as 40°C between sunny and shaded areas, a phenomenon made worse by the movement of sunny areas during the course of the day. These cycles lead to surface spalling on sandstone elements.

Natural disasters and risk preparedness

Cambodia is not in a seismic zone. Because of its altitude, the property is not at risk from flooding. However, its location in a wooded area exposes it to danger from forest fires in the dry season.

Visitor pressures

The number of visitors is low, averaging 185 a day. This is not considered to constitute a threat at present, even though the annual visitor numbers have risen from 14,719 in 1999 to 67,843 in 2004. However, once the property has been cleared from landmines, the State Party should ensure that visitor pressures do not adversely impact on the values of the property.

ICOMOS considers that the main risks to the property are environmental and climatic. It recommends that special attention is given to these in management planning.

ICOMOS also recalls that, in order to ensure the sound long-term management of the property, the processes to resolve the relationships between the boundaries of this property and the relevant national borders should continue.

5. PROTECTION, CONSERVATION AND MANAGEMENT

Boundaries of the nominated property and buffer zone

As noted above, the boundary of the nominated property coincides on the north with the existing frontier between Cambodia and Thailand. The area beyond this segment of the boundary lies entirely within what is currently the territory of Thailand.

Three protected zones of the Sacred Site of the Temple of Preah Vihear which cover both the cultural property and its

environment have been defined by the Royal Decree NS/RKM/0303/115 of 11.03.2003 :

Zone 1: The Central Zone, which extends over the entire upper part of the mountain on which Preah Vihear is situated (i.e. the nominated core area).

Zone 2: The Buffer Zone, corresponding to the landscape around the property and the natural environment.

Zone 3: The Satellite Zone, reserved for economic and social development that preserves the traditional way of life.

ICOMOS considers that the proposed boundaries of both the core and the buffer zone are adequate and logical. ICOMOS notes that the adequacy of these boundaries relies on their recognition by both Cambodia and Thailand.

Ownership

Under the provisions of the Cambodian land legislation NS/RKM/0801/14 of 30 August 2001, the archaeological, cultural, and historical heritage and protected natural reserves are public property.

Protection

Preah Vihear is protected under the *Law on the protection of the cultural heritage* (NS/0196/26 of 25.01.1996) against illegal destruction, vandalism, illicit transfer of ownership, illicit excavations, and illegal exports and imports. It applies to both movable and immovable heritage, whether public or private. The interministerial *Conseil Supérieur de la Culture Nationale* (CSCN) is responsible for developing policies, and these are implemented by the Ministry of Culture and Fine Arts.

As mentioned above, the Royal Decree NS/RKM/0303/115 of 11.03.2003 defines the three protected zones of the Sacred Site of the Temple of Preah Vihear which cover both the cultural site and its environment.

A number of other decrees relate to the protection of animal and vegetal resources in the area and the protection and management of natural resources.

ICOMOS considers that the protective measures for the Sacred Site of the Temple of Preah Vihear are adequate.

Conservation

History of conservation

Because of the political situation in Cambodia over recent decades, no conservation work was possible until relatively recently. The work that has been done has been restricted by the inaccessibility of the property and the dangers from mines. There has been no major restoration work carried out at the property since the clearance work of Henri Parmentier in 1929–30.

Present state of conservation

The state of conservation of the monumental stairway and the pavements is variable. Stabilisation is required and a monitoring programme is needed.

The main structure is in good condition, with the exception of *Gopura 5*, where consolidation work is needed to rectify serious problems resulting from water infiltration and erosion. A policy should be developed for reinstating and replacing certain fallen architectural elements in order to retain the spirit of place, and also to preserve the ‘poetry of ruins’.

Systematic survey has produced a conservation inventory detailing the measures needed for each of the components of the property. Proposed actions include the re-erection and stabilisation of columns, insertion of supports, installation of tell-tales, reconstruction of stairways, reinstatement of paving, etc.

Active conservation measures

There are no conservation projects currently in progress, apart from those associated with minefield clearance.

ICOMOS considers that there is an urgent need for a systematic and comprehensive conservation programme and the allocation of financial resources to permit its implementation according to a prioritised timetable.

Management

Management plans, including visitor management and presentation

There is at the present time no formal management plan in force. However, awaiting the formulation of such a plan, an action plan has been prepared. This has involved the creation of an interministerial coordination committee (November 2005), amendment of Royal Decree NS/RKM/0303/115 of 11.03.2003 so as to increase Zone 2 (February 2006), issue of an order (*sous-decret*) implementing the above Royal Decree (July 2006), and establishment of an Authority for the Conservation and Management of Preah Vihear, based on that for Angkor Siem Reap, known as APSARA (December 2006).

The eventual management plan, to be prepared following an exhaustive preparatory study by Cambodian and international specialists in the relevant domains, will include the following:

- Conservation plans for the protected site;
- Tourism and visitor management;
- Public awareness and participation;
- Promotion and presentation;
- New access routes and parking facilities;
- Public access for pilgrimages or other religious activities;
- Population and land use within the buffer zone;
- Construction of buildings (type, size, materials, etc).

Resources, including staffing levels, expertise and training

The proposed Authority for the Conservation and Management of Preah Vihear will initially have a staff of between 35 and 40, comprising administrative, scientific, documentation, security, and labouring personnel. It will be responsible for daily maintenance, field studies, and exploratory excavations preparatory to the formulation of the conservation plans.

ICOMOS considers that a management plan should be prepared and implemented with the minimum delay. This plan should include details and priorities for conservation works. It is desirable that the Management Plan refers to the necessity for the bilateral cooperation in the long-term.

6. MONITORING

Until now the level of monitoring, carried out by the Ministry of Culture and Fine Arts and local authorities, has been minimal, restricted to mine clearance, security and daily maintenance.

It is recognised that there is a need for a dynamic monitoring procedure directed towards the state of conservation of the buildings, stairways, and pavements, so as to produce a plan for conservation interventions over the next 15–20 years.

ICOMOS considers that the existing monitoring measures for the property are inadequate.

7. CONCLUSIONS

Recommendations with respect to inscription

ICOMOS recommends that the Sacred Site of the Temple of Preah Vihear, Cambodia, be inscribed on the World Heritage List on the basis of *criteria i, ii, and iv*.

Recommended Statement of Outstanding Universal Value:

The Sacred Site of the Temple of Preah Vihear is distinguished by its exceptional natural environment, and the close relationship with its setting. A 9th century hermitage developed into a Royal temple, consisting of a long series of sanctuaries linked by over 800m of staircases and pavements. The Preah Vihear group is exceptional for the quality of its architecture, which is adapted both to the constraints of the property and to religious traditions, and also for the quality of its carved stone ornamentation.

Criterion i: Preah Vihear is an outstanding masterpiece of Khmer architecture. It is very 'pure' both in plan and in the detail of its decoration.

Criterion ii: Preah Vihear demonstrates an important interchange in human values and developments in art, architecture, planning and landscape design.

Criterion iv: The architectural ensemble is exceptional in its representation of Buddhist geometry. The position of the Temple on a cliff edge site is particularly impressive. Stairs and historical access surviving for over a thousand years show a sophisticated technological understanding. The

whole historic structure demonstrates the highpoint of a significant stage in human history.

ICOMOS recommends that the World Heritage Committee invite the State Party, in close co-operation with the neighbouring Government of Thailand, to implement recent agreements concluded between the States Parties at the 5th meeting for Bilateral Co-operation between the Kingdom of Cambodia and the Kingdom of Thailand, especially in respect of:

- Joint management agreements;
- Continued open border agreements;
- Mine clearance agreements;
- Protection of the natural forest areas surrounding the property, especially of small areas where burning has been recently observed on the Cambodian territory.

ICOMOS further recommends that the World Heritage Committee invite the State Party to:

- Continue its efforts to urgently remove the threats posed by the presence of minefields.
- Give priority to conservation planning and action within the Management Committee structure, and allocate adequate resources to these according to a prioritised timetable.
- Address environmental and erosion threats, and development of facilities of visitors within that same framework.
- Develop a monitoring programme directed at the state of conservation of the property.



General view



Monumental stair



Gopura no. 2



Large pool



Gopura no. 5

Kaiping Diaolou and Villages (China)

No 1112

*Official name as proposed
by the State Party:*

Kaiping Diaolou and Villages

Location:

Guangdong Province

Brief description:

The Diaolou, or multi-storied defensive villages houses of Kaiping, mainly constructed in the 1920s and 1930s, display a complex and flamboyant fusion of Chinese and Western structural and decorative forms, and reflect the significant role played by émigré Kaiping people in the development of several countries in South Asia, Australasia, and North America, during the late 19th and early 20th centuries, and the close links between overseas Kaiping and their ancestral homes.

The four selected groups of Diaolou in their landscape represent some 1,800 remaining tower houses still surviving in their village settings, reflecting the culmination of almost five centuries of tower-house building and still strong links between Kaiping and the Chinese Diaspora.

Category of property:

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

1. BASIC DATA

Included in the Tentative List: 31 January 2002

International Assistance from the World Heritage Fund for preparing the Nomination: No

*Date received by the
World Heritage Centre:* 13 January 2006

Background: This is a new nomination.

Consultations: ICOMOS has consulted its International Scientific Committees on Vernacular Architecture and Historic Towns and Villages.

Literature consulted (selection):

Hu Shujiong, translated Shirley Xie, *Kaiping Diaolou*, Beijing 2002

Lung, David, *Chinese Traditional Vernacular Architecture*, Hong Kong, 1991

Knapp, Ronald, *Chinese Houses: The Architectural Heritage Of A Nation*, 2005

Technical Evaluation Mission: 15-17 September 2006

*Additional information requested and received from the
State Party:* None

*Date of ICOMOS approval
of this report:* 21 January 2007

2. THE PROPERTY

Description

Kaiping lies in the southern part of Guangdong Province, south-west of Guangzhou, near to the coast. The undulating landscape of many hills and low mountains is well watered by rivers flowing into the wide Pearl River Delta to the east. The warm tropical monsoon climate and good soil encourage prosperous mixed farming with two rice harvests a year on the low ground and ample pasture for animals on the hills. In between are the Kaiping villages with Diaolou houses mostly strung along parallel streets. This comparatively prosperous area has for many centuries attracted bandits from the north and it was as a defence against these intruders that farmers began to construct fortified tower houses, some individual, some communal, during the Ming Dynasty. The final development of these towers was in the 1920s and 1930s when people from Kaiping, who had migrated to South Asia, Australia or North America, prospered and returned to build towers which reflected their wealth and connections. Built of reinforced concrete, these latest towers display a complex and flamboyant fusion of Chinese and 'Western' structural and decorative forms – all set within traditional spatial arrangements of the villages – and were built as much for comfortable living as for defence. Today in most villages the farming community has relatives living overseas and many of the Diaolou are looked after by caretakers for absentee owners.

The villages consist of groups of scattered buildings, mostly aligned along parallel lanes and with formal entrance gates. Immediately outside the gates are areas for communal activity such as rice drying. Usually in line with Feng Shui principles, the villages have a pond or river in front and are fringed by bamboo groves. Within the village, in accordance with a traditional saying 'to the right an ancestral shrine, to the left a shrine to the earth gods', the villages usually have a hall for worship of the ancestors on one side of the village and on the other an altar to the local gods of grain and fertility.

Beyond the bamboo groves on the slightly lower ground are the rice paddy fields with tracks and roads running through and above lightly wooded hills providing grazing for livestock.

Towers take three forms: communal towers built by several families and used as temporary refuge, of which 473 remain; residential towers built by individual rich families and used as residences and for defence, of which 1,149 survive; and watch towers, the latest development, which account for 221 of the towers.

Towers are built of stone, pise (compressed earth), brick or concrete. The stone construction, of field or dressed stone laid in lime mortar, is rare and found in only 10 towers. Pise, an ancient and widespread technique in China where

pounded earth mixed with ash and river gravel and bound with a type of sugar or glutinous rice paste was laid in courses, is extant in 100 towers. Bricks of various types – red Ming Dynasty bricks, blue from the Qing Dynasty and early republican period and imported red bricks – are found in 249 towers. The most common building material is concrete, used in 1,474 towers. The stone and pise towers have the simplest forms. The use of bricks allowed the development of complex window openings and rounded corner turrets, while the full potential of cement and concrete is displayed in the highly complex forms of the latest towers with their arcades, balustrades, stucco decoration and occasional domes.

The nomination is a serial nomination consisting of four properties that together represent some 1,800 tower houses extant in the area. Each of the properties consists of one or more Diaolou surrounded by village houses. The properties have been chosen to reflect the various types of construction and historical development of the Diaolou, for the completeness of their village settings, for their furnishings and because they have the full support of the village communities. In the nomination details are mainly provided of the Diaolou buildings. The property has been nominated as a cultural landscape.

The nominated properties are:

- Sanmenli Village of 14ha with a Buffer Zone of 691ha;
- Zili Village & the Fang Clan Watch Tower of 252ha with a Buffer Zone of 988ha;
- Majianlong Village Cluster of 103ha with a Buffer Zone of 417ha;
- Jinjiangli Village of 61ha with a Buffer Zone of 584ha.

The boundaries are marked by permanent boundary stones.

These properties are considered in turn:

Sanmenli Village

This village is one of the oldest settlements in the area and reflects the longstanding development of the Guan clan for over 450 years. In contrast to the other villages, the lanes within are narrow and winding and run at right angles to the route in, to deflect bad luck moving straight through the village. Only one Diaolou remains, Yinglong Lou within a settlement of 186 homesteads. Originally built in the reign of the Jiajing Emperor (1522-1566), of red brick and two stories high, a third story of blue brick was added to Yinglong Lou in 1920. It is a plain traditional, defensive structure. Many of the single village houses (around 60%) surrounding the Diaolou were rebuilt with two storeys in the 1980s when the overseas Chinese owners were encouraged to return to help build up the 'new economy'.

Zili Village & the Fang Clan Watch Tower

The village consists of three separate sub-villages, constructed between 1821 and 1920. There is a cluster of nine Diaolou and a group of six western style villas (lower and simpler version of the towers). The remainder of the

houses are single storey of blue brick with tiled roofs, laid out mostly in what is known as 'three-sessions-two-gates' plan. Overall there are 60 households. Both the tower houses and the low village houses are built in rows amongst the paddy fields.

The Diaolou are:

- Longshenglou (Worthy of Dragons Tower);
- Yunhuan Lou (Illusory Clouds Tower);
- Zhulinlou (Bamboo Forest Tower);
- Zhenanlou (Protecting Peace Tower);
- Mingshi Lou (Inscribed Stone Tower);
- Anlu (Peaceful Cottage);
- Yinonglou (Leisurely Farming Tower);
- Qianjulou (The World Lives in Peace Tower);
- Juanlou (Peaceful Life Tower).

They were mostly built around the same time, in the 1920s, and in similar circumstances, their owners being prosperous émigrés from Malaya, Chicago, and elsewhere returning to their roots. Although differing in decorative detail, the Diaolou are all built of reinforced concrete and are similar in concept, of five or six storeys, with a ballustraded terrace at low level, and arcaded loggias at the top level to catch the breeze, and often housing an ancestral shrine. At Mingshi Lou, the upper floors are particularly ornate with the ancestral room carved and gilded with images representing traditional cultural values, while the architectural detail incorporates half-enclosed turrets and pavilions decorated with Ionic columns and green glass.

Several of the Diaolou contain well preserved original furniture and fittings as well as ephemera dating from the time of their construction, altogether presenting a very complete picture of the success and aspirations of returning Kaiping émigrés.

Around 1.5km south of the village on a hill is the Fang Clan Watch Tower built communally by the farmers from Zili and several other villages in 1920. The slender five storey concrete tower, which rises to an arched loggia surmounted by a domed pavilion, is a landmark for the surrounding area. It was fitted with searchlights and a siren and manned by an armed militia group, contributed to by each of the villages; their guns are still in the tower.

Majianlong Village Cluster

This cluster consists of five separate villages, Yong'an, Nan'an, Hedong, Qinglin and Longjiang, all alongside the Tanjiang River and fringed on three sides by bamboo groves. They were constructed between the 17th century and the early 20th century. Together they have 176 homesteads housing people of the Huang and Guan clans. When the area was first settled the villagers employed a Feng Shui geomancer to establish the most auspicious

sites. The villages all have similar grid plan layout and include ancestral halls, ponds, banyan trees, gatehouses and communal drying grounds. The one storey village houses are of three-session-two-gates plan and constructed in blue brick with tile roofs, some of which have boat-shaped gables and dragon's back or phoenix-crest ridges (tilting upwards at either end). Although the street facades of the houses are constructed to a uniform plan, under the eaves are stucco panels of birds, animals, flowers and emblems of the Eight Immortals and below brightly painted calligraphic paintings, which reflect the style of individual owners.

There are seven Diaolou, including a communal watchtower and eight villas (of three to four storeys).

The Diaolou are:

- Tianlu Lou (Heavenly Success Tower);
- Baoanlou (Preserve Peace Tower);
- Huianlou (Gracious Peace Tower);
- Qinglin Nanmenlou (Tower at South gate of Qinglin);
- Qinglin Beimenlou (Tower at the North Gate of Qinglin);
- Baozhanlou (Defending Peace Tower);
- Hedonglou (East of River Tower, Hedong).

The architectural details are very similar to towers in other villages with stucco panels, cantilevered balconies, arcaded loggias and small domed pavilions crowning the tops. Many of the Diaolou in this cluster have traces of a red ochre paint finish to the smooth concrete surfaces and traces of multicoloured paint on the stucco panels. Several of the Diaolou have contemporary furnishings.

The Tianlu Lou tower was built by 29 households in 1925. It is seven storeys high and the lower five floors contain 29 small rooms, one for each contributing household. In 1936, 1965 and 1968 disastrous floods engulfed the surrounding villages, but their households survived in the safety of this tower.

Jinjiangli Village

The village is sited on a small rise near to the Tanjiang River. It was founded by the Huang clan in the Qing Dynasty and laid out to an agreed grid plan. It houses 48 households. There are two entrances to the village, to the east and west, guarded by gatehouses, and the whole is surrounded by groves of bamboo. There are three Diaolou sited in a line amidst the bamboo woods, their upper storeys visible above the green fronds of bamboo.

The Diaolou are:

- Ruishi Lou;
- Shengfeng Lou (Tower Reaching the Heights);
- Jinjiang Lou (Embroidered River Tower).

The Jinjiang Lou was a communal tower built by the villagers with the support of the overseas Chinese community. It is of five storeys with a cantilevered balcony at the top supported by caryatid figures. The Shengfeng tower was designed by a French architect in 1919 and has corner pavilions in 17th century European Baroque style and exterior walls finished in a 'French Blue' colour. The Ruishi Lou tower is of nine stories and the tallest tower in the nominated property. All the material used in its construction was imported from Hong Kong. It is a western style building ornamented with Chinese stucco work and its spacious living quarters were furnished with 19th century Guangdong style furniture which still survives.

History and development

In the Han period (255BC-220AD) Han people from the Central Plains of China began to move into the area along the river, and to frequent heavy floods, villagers began to construct fortified towers, known as Diaolou. An example is Yinglong Lou in Sanmenli Village. Following the creation of the Kaiping County in 1649, the security of the area greatly improved and few Diaolou were constructed in the Qing Dynasty: Kaiping means 'Beginning of Peace'.

From the 16th century, in response to increasing raids by bandits from the north coming into the area along the rivers, and to frequent heavy floods, villagers began to construct fortified towers, known as Diaolou. An example is Yinglong Lou in Sanmenli Village. Following the creation of the Kaiping County in 1649, the security of the area greatly improved and few Diaolou were constructed in the Qing Dynasty: Kaiping means 'Beginning of Peace'.

From the mid 16th century, many villagers began to trade from the nearby coast, sailing in wooden junks to south-east Asia. In 1839 a poor farmer left his village and travelled to America. This was the start of a large migration of people drawn on the one hand by work on gold-fields and railroads, and prompted on the other by an increasingly difficult situation at home, brought about by warfare against Hakka migrants from the north and an increase in population which had led to food shortages. Many thousands of Kaiping villagers left the area, travelling to Macao and Hong Kong and then on to USA, Canada or Australia. In North America the immigrants had to take jobs involving hard manual labour. Nevertheless by the end of the 19th century the Chinese community had begun to amass savings, and after the first World War, with rapid economic expansion in many countries, the fortunes of the overseas Chinese steadily improved. What they did not believe they had achieved however, was social recognition for their input into the expansion of the countries they had chosen to live in. Their dreams came to be associated with contributing to the wellbeing of their ancestral villages or returning to live there, and many did just that building conspicuous tower houses.

The influx of wealthy people attracted the attention of the bandits from the north who raided, robbed and kidnapped. Between 1912 and 1930, 71 incidents of banditry were recorded. The new houses needed to be built as defensive towers. The overseas Chinese also contributed to the construction of communal towers and watchtowers in most of the villages. Of the 1833 Diaolou in Kaiping, 1648 were built between 1900 and 1931, just under 90% of the total. In the same period most of the villages were built or rebuilt. In the short space of 30 years the rural landscape of

Kaiping was completely transformed with funds from overseas Chinese.

The Depression of the 1930s, and the war against Japan and the Pacific war of the 1940s brought development to a halt. Between 1943 and 1947 immigration control in the USA and Canada was abolished with the result that many Chinese moved back to North America. After the establishment of the People's Republic of China in 1949, banditry was halted and flood mitigation measures were introduced: the role of the Diaolou disappeared. In the 1980s following the re-opening of China, many villagers moved away. Now many Diaolou are empty, cared for by caretakers, but still regarded by overseas Chinese as their spiritual home to which they return on family occasions or remit money for prayers to be said to their ancestors. Some still contain all their original furniture and fittings.

The surrounding villages and farmland are still part of an active rural economy. The village houses, rice fields, bamboo groves and surrounding grazed hills reflecting rural landscape patterns and practices that may have persisted for over a millennia.

3. OUTSTANDING UNIVERSAL VALUE, INTEGRITY AND AUTHENTICITY

Integrity and Authenticity

Integrity

The wholeness and intactness of the nominated properties are evident insofar as all the elements that express their values are still in place; the size of each of the properties is adequate as the features and processes that convey the significance are fully represented in the towers and their surrounding villages of small houses and farmland.

The nominated Diaolou display well how the returning Chinese displayed their wealth, as well as their allegiance to their home villages, through constructing towers near village houses in a style that reflected both local and Western traditions in a highly flamboyant way. All these elements are present in the nominated property in a highly legible way.

Authenticity

The nominated Diaolou, their surrounding village houses, and the agricultural landscape are all authentic, apart from certain houses in Sanmenli Village. There, only 40% of the original, single-storey, vernacular village houses remain (estimated figure given by the State Party). 60% of the houses were rebuilt with two storeys in the 1980s when the Overseas Chinese owners were encouraged to return to help build up the "New Economy". In terms of colour and materials the new houses blend with the environment, but they are built of modern material and higher than their older neighbours. Generally, the new houses have flat roofs, whilst the single-storey houses have pitched gable roofs.

Although it could be argued that this continues the tradition of expatriate Chinese returning to their homeland and building new, large houses, ICOMOS does not

considers that the houses rebuilt in the 1980s in Sanmenli village demonstrate exceptional qualities.

ICOMOS considers that the conditions for integrity and authenticity of the nominated property are met.

Comparative analysis

The analysis in the nomination dossier considers examples of western style buildings in China, such as the Bund in Shanghai, which are entirely western in concept, and are quite separate from traditional life. In rural areas there are other examples of returning Chinese constructing houses for display, but outside Kaiping, the houses reflect more closely Chinese traditions, being built by people returning from other parts of South East Asia. The Diaolou of Kaiping are unique in being a fusion of Chinese and Western forms from North America and in being built as a continuation of a tower building tradition.

As the nomination dossier points out there are tower houses in many parts of the world, some of which are on the World Heritage List such as San Gimignano, Italy, and parts of Svaneti, Georgia, and many others in China which are not, such as those of the Qiang in Sichuan. However what unites all of these is only the fact that they are towers: their social and economic functions were completely different from each other and from the Kaiping towers.

ICOMOS considers that a case has been made for the exceptional nature of the Diaolou towers as representing the high point of western influence on Chinese traditional architecture of which there are no other comparators.

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

Justification of the Outstanding Universal Value

The Outstanding Universal Value of the Diaolou and Villages is said by the State Party to be stem from how the Diaolou:

- represent a charming and fascinating case of development in which different cultures cross-fertilise into a new harmonious ensemble, in a rural countryside, without outside pressure or urban influence;
- demonstrate a confluence of Chinese and overseas cultures;
- form a harmonious whole with the surrounding countryside;
- are a unique example of cultural fusion in construction, planning, land use and landscape design.

Criteria under which inscription is proposed

The Diaolou are nominated on the basis of criteria ii, iii, iv and v.

Criterion ii: The Diaolou undoubtedly represent in dramatic physical terms an important interchange of

human values - architectural styles brought back from North America by returning Chinese and fused with local rural traditions - within a particular cultural area of the world.

ICOMOS considers that this criterion is justified.

Criterion iii: The building of defensive towers was a local tradition in the Kaiping areas since Ming times in response to local banditry. The nominated Diaolou represent the final flourishing of this tradition, in which the conspicuous wealth of the returning Chinese contributed to the spread of banditry and their towers were an extreme response.

ICOMOS considers that this criterion is justified.

Criterion iv: The main towers and their settings, through their flamboyant display of wealth, are a type of building that reflects the significant role played by émigré Kaiping people in the development of several countries in South Asia, Australasia, and North America, during the late 19th and early 20th centuries, and the continuing links between the Kaiping community and Chinese communities in these parts of the world.

ICOMOS considers that this criterion is justified.

Criterion v: Although the Diaolou were built within traditional villages and are still at the heart of an agricultural landscape that displays long-standing traditions of land management and spatial organisation, their construction in a relatively short time frame did not lead to any new interaction between people and their environment. ICOMOS considers that the value of the towers lies in their architectural structure and stylistic display and that this is enhanced by their visually rural setting.

ICOMOS does not consider that the nominated property is a cultural landscape of outstanding quality or indeed that it is a complete cultural landscape (for reasons outlined below).

ICOMOS does not consider that this criterion has been justified.

ICOMOS considers that the Outstanding Universal Value has been demonstrated and that the nominated property meets criteria ii, iii and iv.

4. FACTORS AFFECTING THE PROPERTY

Impact of climate change

Although not mentioned in the dossier, the agricultural landscape around the Diaolou is vulnerable to climate change – either through floods, droughts or more extreme changes in temperature.

Risk preparedness

Natural disasters such as typhoons, floods and lightning strikes are not uncommon in the area. In 1951 the City Government of Kaiping established the “Three Anti” Supervisory Office for defending the area against the three

threats of floods, typhoons and overflow of water from dams. This involved all Government departments. In the intervening years, six reservoirs have been constructed to mitigate flooding and improve irrigation. In 2002 a lightning protection plan was produced by the Kaiping Protection and Management Office of Diaolou and Villages in collaboration with other departments to protect the Diaolou.

Tourism

A tourism development plan has been prepared and pilot studies undertaken in some villages under which Diaolou have been opened to a restricted number of visitors. ICOMOS considers that the full impact of visitors could be difficult to manage once the properties become better known. The value of the Diaolou lies in the particularly untouched nature of their interiors and the current policy is to protect their faded colours as found. Changes in humidity, brought about by large numbers of visitors, and light levels through opening up the towers more than at present, could bring undesirable changes. ICOMOS considers that more work is needed on the carrying capacity of the buildings and of ways of restricting numbers at any one time as well on preventative conservation.

Cement construction

As mentioned below, the massed concrete construction could cause future problems and it is recommended that approaches are developed in advance of being needed.

Development in the landscape

The setting of the selected properties extends beyond the buffer zones to the surrounding agricultural landscape and hills. Both of these could become vulnerable to new development if agricultural land becomes available for building. ICOMOS considers that the protection of this setting should be given high priority.

ICOMOS considers that preventative measures should be reinforced to address the main threats from decay, uncontrolled tourism and development.

5. PROTECTION, CONSERVATION AND MANAGEMENT

Boundaries of the nominated property and buffer zone

The boundaries of the nominated properties encompass Diaolou, villages and parts of the surrounding agricultural landscape. ICOMOS considers that these boundaries are adequate to protect the Diaolou as monuments in their immediate setting.

ICOMOS does not consider that the nominated property is a cultural landscape. The agricultural landscape that supported the Diaolou and continues to support the villages extends beyond the buffer zone and includes further rice fields and grazing in the hills. Each of the villages has a defined boundary which separates it socially and economically from its neighbours. To be considered as a cultural landscape, a much larger area would need to be nominated, including the key aspects of the farming system

and sufficient villages to provide a comprehensive and visually cohesive whole.

ICOMOS considers that the boundaries of the core and buffer zone are adequate to protect the Diaolou as monuments in their immediate setting.

Ownership

The land in the nominated area is owned by the Government. The traditional buildings – Diaolou, villas and village houses – are owned privately.

Protection

Legal Protection

Since 2001, all the Diaolou are protected as national monuments under the Law for the Protection of Cultural Relics, 1982 and also covered by Provincial and Municipal Regulations. This protection also extends to cover all contemporary furniture, furnishings, books, archives and ephemera within the buildings that have commemorative, educational or historical value.

The Diaolou and their surrounding villages are protected under Regulations on Local Customs of Cultural Heritage Protection Zones. These regulations are established by the villagers jointly for common endorsement and observance, and agreed by voting at public meetings. These regulations were established in 2003 for each of the villages. They put all buildings, flood defence facilities, trees, bamboo and grassland under protection and official management of village leaders. Management arrangements for all communal elements of the landscape are to be put in place. Any rebuilding or alteration to buildings needs permission in advance and must comply with agreed design guidance. Non-compliance may bring fines or the destruction of buildings.

The nominated areas are surrounded by buffer zones which include large areas of agricultural landscape. The buffer zone does not however extend to cover what might be considered the entire setting of the Diaolou towers which would include the hills surrounding some of the villages which provide forests and grazing for animals. The wider visual setting of the villages (acknowledged in the nomination as being as beautiful as a painting) thus remains to some extent vulnerable. (see discussion on cultural landscape below)

ICOMOS considers that the protective measures for the property are adequate but that consideration should be given to providing protection for the wider visual setting of the Diaolou and their surrounding villages through sustaining their agricultural, pastoral and forestry uses.

Conservation

History of Conservation

Because the reinforced concrete works in the Diaolou built in the early 20th century were over-specified, the structures remain sound, despite attrition from the weather, coupled with the fact that in most of them there has only been slight wear and tear inside.

No extensive conservation works have been undertaken. Nevertheless minor repair works, such as reinstatement of plaster or decorative stucco works is carried out where necessary, and inappropriate building interventions have been reversed by the Management Office since 2000. Those Diaolou that are occupied show signs of basic fabric maintenance.

Where unoccupied buildings have been recently opened up, everything is left intact, from the faded colours on the walls and ceilings to the external paintwork and washed aggregate finishes on the pillars framing the front doors. Iron grillwork and timber finishes are also left untouched. This reflects the current conservation paradigm, to leave things as they are until conservation intervention is required. If visitor numbers increase, preventative conservation methods will need to be introduced.

In time, reinforced concrete restoration is an area where expertise will have to be sought. Although there are currently no serious problems that need addressing within the nominated property, ICOMOS considers that relevant approaches should be researched and put in place for when the need arises. Such research could be developed in association with other World Heritage properties with similar material conservation issues.

No conservation programmes have been developed specifically for village houses or landscape. However, in one or two cases, unsatisfactory recent additions to houses have been reversed.

Present state of conservation

The overall state of conservation of the Diaolou is good. Although some of the 1833 surviving towers have experienced conservation problems, those nominated have been chosen partly because they are in a stable condition. The state of conservation of village houses and the agricultural landscape is reasonable. Considerable effort and funds have recently been injected into each of the respective properties to upgrade services, dismantle overhead cables and site them underground, improve drainage and pathways and carry out basic conservation of building fabric. Interventions and installations, e.g. electrical switch boxes, have been sensitively incorporated into the environment.

Active Conservation measures

Currently the active conservation measures are directed at the Diaolou towers.

In order to ensure that the towers maintain their setting as part of traditional village houses, ICOMOS recommends that supportive measures are considered to ensure appropriate traditional construction methods for walls, roofs and joinery are maintained in village houses and other communal buildings.

ICOMOS further recommends that preventative conservation measures are introduced within Diaolou open to the public in order to control light, humidity and dust.

In conclusion, ICOMOS considers that conservation measures for the Diaolou should be augmented by a

research project into appropriate repairs for the massed concrete of their construction and the introduction of active preventative conservation measures in towers open to the public. ICOMOS also considers that encouragement should be given to the use of traditional building materials and techniques for village houses.

Management

A Management Plan for the nominated property has been drawn up by Beijing University under the auspices of the People's Government of Kaiping City. It was implemented in 2005. The objectives of the Plan cover the Diaolou, the villages and their setting.

Protective measures are to be put in place for all aspects of the landscape: the spatial layout of the villages, the buildings, rice cultivation, and other agricultural practices, the environment and local customs.

The implementation of the Plan is through the Kaiping Protection and Management Office of Diaolou and Villages established in 2000. It has 15 full-time staff of which 80% are degree holders in the fields of history, architecture, conservation and maintenance. There are 300 Diaolou keepers working in the villages who all received training before starting work. Allied to this Office is the Kaiping Diaolou Research Department established in 2004 to undertake research on the background history and culture of overseas Chinese and to promote the culture of Diaolou and their villages. The Kaiping Protection and Management Office of Diaolou and Villages is fully integrated into, and gets support from, the National protection system through the State Cultural Relics Bureau, the provincial Government through the Cultural Bureau of Guangdong Province, and the city level through the Kaiping Cultural Bureau. It also works closely with Management Offices established at village level who appoint Diaolou Protectors and Security Personnel.

Since 1983, the Cultural Bureau of Kaiping has prepared detailed surveys of all Diaolou and on the state of conservation. In addition data has been collected on environmental, economic and population. Not all village buildings have been surveyed nor the overall cultural landscape patterns.

The Kaiping Protection and Management Office of Diaolou and Villages established in October 2000 is a well-articulated Conservation Unit. There is a very clear understanding of what is envisaged in terms of a heritage-based management system. The State Party is clear that Management will be a key factor in the future, particularly in view of the number of absentee owners and the likelihood of increased tourism. The procedures put in place – and outlined above – are considered by ICOMOS to be adequate to address the needs of building conservation and to encourage sustainable development of the wider landscape.

The Management Plan is visionary, and based on a well thought out analysis of threats and opportunities. It sets out on-going processes to deal with sustaining the villages as living places that reflect local cultural traditions. It is underpinned by a staffing and consultation structure that is already in place and adequately funded.

A separate plan has also just been produced to address the way tourism will be approached for the overall collection of Diaolou. This involves selling farm produce, serving local farm food and making use of under-used traditional buildings. It is also encouraging an appropriate share of tourist income to be gained by local residents.

Training has been offered to civil servants who will be influential in maintaining the villages and buildings. Free training has also been offered to owners of buildings and free teaching material to 130,000 students in schools. Training for local craftsmen and in the value of intangible traditions and recording the memories of those involved in the building of the towers have also all been addressed.

In response to the problems of absentee owners, the Management Office has created a model for "Entrustment of Diaolou" where the owner and the Management Office sign a trust deed assigning the rights to maintain, conserve and operate the Diaolou in question for a period of 50 years, at no cost to the owner. This process has now started. Several documents pertaining to this were shown to the Mission.

Resources

Since January 2000 funding has been provided by the People's Government of Kaiping City as well as from the Provincial and Central Governments. Between 2001 and 2005, the government invested \$8,456,800. The projected investment between 2005 and 2010 is \$2,416,000. Overseas Chinese contribute to a Kaiping Diaolou Protection Fund which currently stands at \$1,812,000. This is managed by the People's Government of Kaiping City.

In conclusion, ICOMOS commends the State Party on its approach to management of the property and considers that the management system for the property and resources made available are both adequate.

6. MONITORING

Monitoring arrangements have been put in place for: cracks (monthly), agricultural land-use and number of visitors (annually), building permits (as needed), and rate of air pollution (constantly).

Although ICOMOS considers that the monitoring measures for the property are adequate, it is recommended that these be expanded to include the capacity to monitor the condition of the building interiors and associated moveable elements, as well as the visual setting of the Diaolou.

7. CONCLUSIONS

ICOMOS does not consider that the nominated property should be inscribed as a cultural landscape as it does not encompass a socio-economic unit of landscape or a geographically coherent entity. Rather what has been nominated is a collection of monuments in their village setting and it is the Diaolou as exceptional building that gives the property its Outstanding Universal Value.

Recommendations with respect to inscription

ICOMOS recommends that the Kaiping Diaolou and Villages, China, be inscribed on the World Heritage List on the basis of ***criteria ii, iii and iv***.

Recommended Statement of Outstanding Universal Value

The Diaolou and their surrounding villages demonstrate Outstanding Universal Value for their:

- complex and confident fusion between Chinese and western architectural styles;
- final flowering of local tower building traditions;
- completeness and unaltered state resulting from their short life span as fortified dwellings and their comparative abandonment; and,
- harmonious relationship with their agricultural landscape.

Criterion ii: The Diaolou represent in dramatic physical terms an important interchange of human values – architectural styles brought back from North America by returning Chinese and fused with local rural traditions - within a particular cultural area of the world.

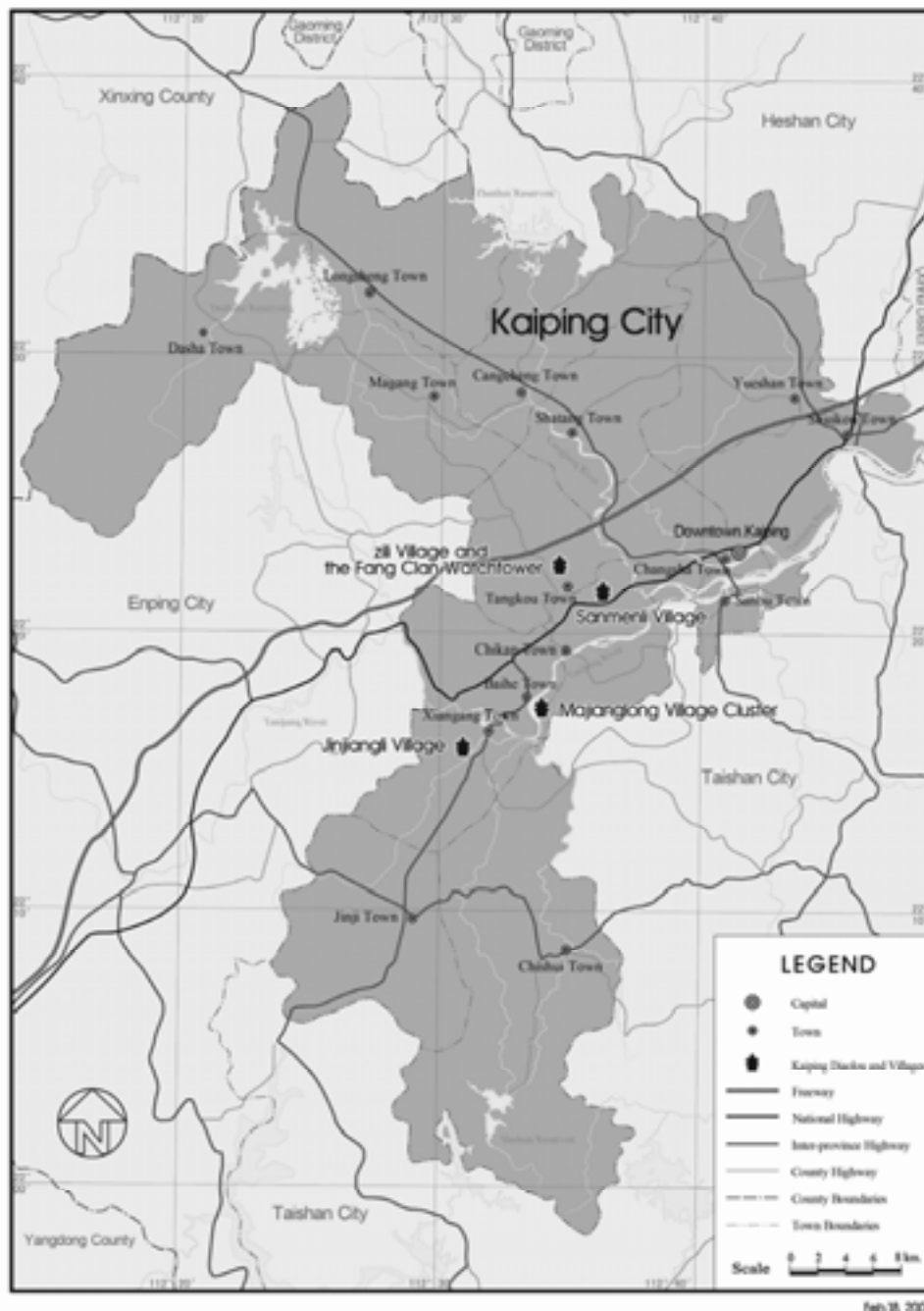
Criterion iii: The building of defensive towers was a local tradition in the Kaiping area since Ming times in response to local banditry. The nominated Diaolou represent the final flourishing of this tradition, in which the conspicuous wealth of the returning Chinese contributed to the spread of banditry and their towers were an extreme response.

Criterion iv: The main towers, with their settings and through their flamboyant display of wealth, are a type of building that reflects the significant role played by émigré Kaiping people in the development of several countries in South Asia, Australasia, and North America, during the late 19th and early 20th centuries, and the continuing links between the Kaiping community and Chinese communities in these parts of the world.

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

- Reinforced preventative measures to address the main threats from decay, uncontrolled tourism and development.
- Protection for the wider setting of the Diaolou and their surrounding villages through sustaining their agricultural, pastoral and forestry uses.
- Research into appropriate repairs for the massed concrete of their construction.
- Introduction of active preventative conservation measures in towers open to the public.
- Proactive encouragement for the use of traditional building materials and techniques for village houses.

- Monitoring of the condition of building interiors and associated moveable elements as well as the visual setting of the Diaolou.



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Map showing the location of the nominated properties



Yinglonglou Diaolou in Sanmenli village



Diaolou in Zili village



Interior view of the Junlu Villa



Jinjiangli village

Iwami Ginzan Silver Mine (Japan)

No 1246

*Official name as proposed
by the State Party:*

Iwami Ginzan Silver Mine
and its Cultural Landscape

Location:

Ohda City,
Shimane Prefecture

Brief description:

To the south-west of Honshu Island, just inland from the Sea of Japan, is a cluster of silver-bearing mountains, rising to 600 metres and interspersed by deep river valleys. The nominated sites include the archaeological remains of large-scale mines, smelting and refining sites and mining settlements on Mount Sennoyama and Mount Yôgaisan worked between the 16th and 20th centuries, parts of *Kaidô* transportation routes across the undulating plain at the foot of the mountains used to transport silver ore to the coast, and port towns from where the ore was shipped to Korea and China. The high quality of the silver resulting from the use of advanced cupellation techniques, and the quantity of silver mined, meant that at the height of their activity in the 16th and 17th centuries, the mines contributed substantially to the overall economic development of Japan and south-east Asia, and prompted the mass production of silver and gold in Japan. The mining area is now heavily wooded.

Category of property:

In terms of the categories of cultural property set out in Article 1 of the 1972 World Heritage Convention, this is a *site*. In terms of the *Operational Guidelines for the Implementation of the World Heritage Convention* (2 February 2005, annex 3) paragraph 47, it is also a *cultural landscape*.

1. BASIC DATA

Included in the Tentative List: 6 April 2001

*International Assistance from the World Heritage Fund for
preparing the Nomination:* No

*Date received by
the World Heritage Centre:* 4 January 2006

Background: This is a new nomination.

Consultations: ICOMOS has consulted its International Scientific Committee on Historic Gardens – Cultural Landscapes and TICCIH. IUCN has provided an evaluation of the natural attributes of the site.

Technical Evaluation Mission: 15-21 October 2006

*Additional information requested and received from the
State Party:* ICOMOS sent a letter of request for additional

information on 7 December 2006. The State party submitted additional information on 12 January 2007.

Date of ICOMOS approval of this report: 21 January 2007

2. THE PROPERTY

Description

The nominated property is a serial nomination of fourteen sites that demonstrate three aspects of silver mining production and transportation carried out on and near Mount Sennoyama and Mount Yôgaisan between the 16th and 20th centuries. The sites consist of archaeological remains of mining and processing of the Iwami Ginzan mine, their associated administration, settlements, and fortresses, shrines, parts of *Kaidô* transportation routes to the coast, Iwami Ginzan *Kaidô* Tomogauradô and Iwami Ginzan *Kaidô* Yunotsu-Okidomaridô, and three port towns, Tomogaura, Okidomari and Yunotsu, from where the ore was shipped. The nominated areas are joined together by the buffer zone. The nominated area extends to 442 ha and the buffer zone 3,221 ha.

Mount Sennoyama and Mount Yôgaisan are part of a chain of mountains rising to between 400 and 600 metres, interspersed with deep river valleys, set around 6 km inland from the Sea of Japan on the west of Honshu Island, the main island of Japan. Several of these mountains had deposits of silver and the seams began to be exploited in the 16th century by a merchant, Kamiya Jutei, working under the protection of the powerful Ôuchi family, a feudal clan who ruled the Iwami Region.

For two centuries, the exported silver had a substantial effect on the economy of Southeast Asia and led to the mass production of both silver and gold in Japan. Such was the importance of the silver mine, that there were several insurrections between clans fighting for its control in the 16th century. In the mid 17th century the Iwami Ginzan mine along with others was placed directly under political control, fenced and guarded.

In its heyday, over 150 villages and towns housed workers for the Iwami Ginzan mine; for most of these only archaeological evidence remains. Refined ore from the mines was transported to the coast along two track ways between the undulating foothills. Three ports were developed to handle the export of the ore to Korea and China and high quality luxury goods, such as Chinese porcelain, timber and spices were imported.

After the 1640s the mines started to decline as deeper and deeper seams had to be exploited, necessitating expensive water drainage, making production less profitable. From a highpoint of 1,000 to 2,000 kg production annually in the 17th century, by the mid 19th century only around 100kg annually were being produced. The mines finally closed in 1923. Since then the area has become largely covered in forest, some natural, part semi-natural and part bamboo, the latter reflecting the location of former settlements. No structures remain on the mountains from the 16th and 17th centuries, but in recent years archaeological excavations of around 1% of the site have revealed evidence for houses, administrative buildings and smelting sites.

The nominated property consists of remains and evidence for several separate facets of the mining and transportation processes:

- *Archaeological remains of:*
 - Iwami Ginzan mine shafts and pits
 - Smelting and refining sites & workers' housing
 - Ōmori Ginzan settlements
 - Sites of three fortresses
- *Shrines, shrine sites, and tombstones*
- *Two Kaidō transportation routes to the coast with wayside shrines:*
 - Iwami Ginzan Kaidō Tomogauradō
 - Iwami Ginzan Kaidō Yunotsu-Okidomaridō
- *Three Port Towns:*
 - Tomogaura
 - Okidomari
 - Yunotsu

These are considered separately:

- *Archaeological remains of:*
 - Iwami Ginzan mine shafts and pits

Within the mining area known as Ginzan Sakunouchi, traces of digging cover almost the entire area of Mount Sennoyama. There is evidence of some 600 mine shafts and pits scattered around the wooded upper slopes of Mount Sennoyama and Mount Yōgaisan. These have all been mapped but not all are marked or in areas where the forest remains have been cleared. These remains can be broadly categorized into two types: traces of open pit digging and mine shafts dug into the ground. The former are distributed mainly in the area from the mountaintop of Mount Sennoyama to the valley to the south, whereas the latter can be seen almost anywhere in the valley.

Large-scale mine shafts that were created at the peak of the prosperity of the Iwami Ginzan Silver are Ōkubo-mabu and Kamaya-mabu on the south slope of Mount Sennoyama and Ryūgenji-mabu in the northern slope. However, most of the other mine shafts are small with an entry measuring on average 90 cm in height by 60 cm in width.

Underground archaeological techniques have not yet been used to investigate these shafts and determine the progress of mining from the earliest extraction pits. It is not entirely clear how far the mining 'landscape' extends; the area is now heavily wooded, with trees invading previously worked areas. From the early 17th century the mining area was enclosed with wood fences over a length of 8 km with up to 10 guard stations. In the mid-17th century, the wood fences were replaced by pine trees. This boundary has not so far been systematically investigated.

- Mineral deposits

The precise nature of the minerals at the Iwami Ginzan mine are not clear. Investigation elsewhere suggests that

they may, in part, be linked to the Kuroko 'black ore' deposits. Clearer information is needed on the deposits worked, and the factors leading to the occurrence of native silver which provided the principal source of the metal prior to the introduction of cupellation.

- Smelting and refining sites & workers' housing

Ore dressing, smelting and refining were carried out in workshops that were constructed on flat man-made terraces very near the mines. Over 1,000 of these have been identified, often accompanied by remains of stone walls and drainage conduits. Workshops were next to the living quarters – the two constituting the unit of production.

In an area near the mountaintop, known as Ishigane Fujita, a few of the 16th to 18th century settlements have been excavated. Some of the flat sites display land divisions measuring 8–10m in width and 20m in depth that were aligned facing onto a 2m wide street. The furnace sites show a simple structure of a depression in the earth floor with a diameter of 1m or less. This type of furnace is called "earth floor type", which is the typical style of furnaces that were used for smelting and refining in Japan. Among the excavated artefacts, is an iron pan that was used in the refining process and cupellated silver and lead, found in Ginzan Sakunouchi, which show that the cupellation-based refining method was used in the Iwami Ginzan mine. This method maximised the amount of silver recovered from the ores.

Excavation at Miyanomae, at the northeast end of Ōmori-Ginzan (see below), has revealed remains of streets and buildings dating back to the period between the late 16th and early 17th century. In one building 24 furnaces in a small floor space indicates its use as a refining workshop.

- Ōmori Ginzan settlements

To the north of Mount Sennoyama, Ginzan town was developed in the 16th and 17th centuries inside the fenced area of the mine. It provided administrative buildings and housing for merchants and some miners. Subsequently Ōmori town was built in the 17th century immediately outside the fenced area. The Ōmori-Ginzan area remains inhabited by local citizens. Two thirds of all Ōmori-Ginzan buildings were lost in a fire in 1800, although many were reconstructed, notably the House of the Kumagai family and the Daikansho Site, the administration office where the magistrate governed the Iwami Ginzan Silver Mine from the 17th to the mid-19th century. The latter was largely dismantled in 1879 but the gatehouse and attached row houses remain.

Ōmori has more historic fabric than Ginzan. Ginzan only retains a modest collection of pre-1926 buildings (i.e. roughly the period of mining), and some from the Edo period (pre-1868). In terms of the peak period for the mine (1530s-1640), there is insufficient data to suggest how many buildings might have survived.

- Sites of three fortresses

In order to protect the new mines in the first half of the 16th century, three fortresses were built on three separate peaks, Yataki-jō and Yahazu-jō to the west of the mine, and Iwami-jō to the north. In the 17th century the silver mine

was fenced and the fortresses fell out of use. Stone terraces and dry moats remain, although the forest has now largely grown over the sites.

- *Shrines, shrine sites, and tombstones*

Four shrines and 63 religious sites, most with no remaining buildings, have been identified in the mining area, remnants of the “100 silver mine temples”, that were said to exist at the peak of the prosperity of the mine. The Sahimeyama-jinja, which enshrines the guardian deities of the mine, is located near the entrance to the mine area in Mount Sennoyama. It was constructed in 1434 and re-built in the early-19th century. It is still used for annual festivals celebrated by local citizens in April and September.

Rakan-ji Gohyakurakan in the Ômori Area is a religious site which enshrines stone statues of Buddha and *rakan* in three alcoves carved in the bedrock, with tripartite Buddha images in the central alcove and 250 *rakan* images each in the right and left alcoves. It was completed in 1766. The *rakan* statues and other stone images are works of the Tsubouchi Family, a school of stonemasons who resided in Fukumitsu Village.

As mining ended some 80 years ago, the main reasons for worship at the shrines such as Sahimeyama have ceased. There are however a few resident priests, and specific songs related to mining survive in the memory of some people, although the extent to which these are being passed on to younger generations is not clear.

In addition, near to the shrines, are a number of cemeteries, with over 6,000 tombstones and memorial monuments built for those who died in these areas.

- *Two Kaidô transportation routes to the coast with wayside shrines:*

- Iwami Ginzan Kaidô Tomogauradô
- Iwami Ginzan Kaidô Yunotsu-Okidomaridô

In the early 16th century as the new mine developed so too was the transportation route some 7.5km in length to Tomogaura port on the coast.. At the end of the 16th century Tomogaura was overtaken as a port by Yunotsu further to the south, and a new route, 12km in length was established. Half a century later again Okidomari immediately across the estuary from Yunotsu was developed and a branch of the route put in place to serve this new main port.

Both routes continued to flourish until the mid 19th century when a new route to Nima Town was established (not part of the nomination) and the rail road begun to take traffic. The old routes continue in use as pedestrian or vehicle routes. Sections of *Kaidô* which have been damaged by subsequent works have not been included as core areas, although the alignment of the routes is included within the buffer zone. The routes are dotted with stone stupas, small shrines, small Buddha halls, etc., which were built by people who passed along the route, or by local citizens praying for safety.

- *Three Port Towns*

The three ports that served the silver mines seem to have been existing ports that were developed to take extra trade. Tomogaura, then Yunotsu and finally Okidomari were in turns the main ports for export of silver and import of luxury goods.

- Tomogaura

The port has mooring devices on the south coast that were carved out of the rock cliff. The sandy beach at the inner end of the harbour is the place where silver ore and silver were loaded onto ships.

Rectangular land divisions, developed in stepped platforms on both sides of the street still remain, now with about 20 wooden houses standing side by side. A place that was used for temporary storage of silver ore still survives as well as the site of a checkpoint to watch over people and goods. There are a handful of Edo buildings and two from the Meiji. The oldest two buildings are from 1854. Seven out of 29 buildings date from before 1923.

- Okidomari

During the approximately 40-year period in the latter half of the 16th century when the silver mine was under the rule of the feudal clan, the Môri Family, the port served not only for the shipment of refined silver but also as the base for marine troops of the Môri Family.

The settlement retains the rectangular land divisions that date back to the 16th century with groups of buildings such as wooden houses and storehouses. There is one building from 1526, a number from the Edo period, and a couple from the Meiji period. Sixteen out of 24 buildings date from before 1923.

- Yunotsu

Currently the buildings that form the townscape consist of some pre-19th century buildings, and 19th and 20th century constructions. Many of the houses of powerful merchants who made their fortune in the cargo shipping business, were found on the western section of the valley, close to the port. Four temples constructed after the 14th century are located at the ends of small valleys that extend from the main valley to the north and south. A number of the shrines which currently stand along the main street used to be located on slopes in the background of the town until they were relocated in the early 18th century.

History and development

According to the dossier, although there is some evidence to suggest that the silver seams were known in the 14th century, the Iwami Ginzan Silver bearing seams were ‘discovered’ in 1526, and almost immediately developed by Kamiya Jutei, a powerful merchant of Hakata, then the largest trading port in Japan. Jutei operated under the protection of the Ôuchi family, a feudal clan who controlled the Iwami region and whose wealth was based on trade with China and Korea. Around 1533 the more efficient ‘cupellation’ smelting technique was introduced to the mines possibly from Korea, and this dramatically increased the output of the mines to the extent that the in the late 1530s, the amount of silver which was offered as

the tribute to the Ôuchi Family increased from 16 to 80 kg per year.

In the 1530s and 1540s, the Ôuchi family's authority of the silver mines was repeatedly challenged by neighbouring land owners who fought for control of the highly profitable mines. The three fortresses around the mines date from this time. In the 1550s the Amago family took control for ten years followed by the Môri family in 1561. The Môri family established their vassals in the surrounding area and created two new routes to the newly developed ports of Yunotsu and Okidomari.

After a series of national wars over the next twenty years, Tokugawa Ieyasu, became the ultimate victor. In 1600 he took over the seat of power, establishing the Tokugawa Edo Shogunate and expropriated gold mines and silver mines throughout Japan. Okubo Nagayasu was appointed to administer the mines and developed new shafts and increased silver production. The mine business was run by mining directors called *yamashi*, who paid silver as commission to the Edo Shogunate. Yasuhara Dembei, the *yamashi* who operated the Kamaya-mabu and other mine shafts under contract with the Tokugawa Family around 1600-1602, paid 13,500 kg of silver in one year to the Edo Shogunate. The digging of silver ore was carried out by miners who were employed under contract to the *yamashi* although few details are available to suggest whether miners were indentured or self regulated.

The early 17th century was the heyday of the mines with as many as ten thousand people employed. The Dutch and English furthered international trade and within Japan relatively settled times led to the flourishing of towns which further increased demand for silver. Silver production was operated by the private capital of the *yamashi*.

In the mid 17th century administration of the silver mine and its surrounding area came under the control of a magistrate deployed by the central national government, the Edo Shogunate, and this further increased output. Few specific silver production figures are provided in the nomination dossier and no quantitative information is available to provide a clearer impression of the impact of the mine on the economies of the wider region.

The silver production at the Iwami Ginzan Silver Mine reached its peak in the 1620s–1640s and started to decline gradually after that. As mine shafts were dug deeper into the ground, it became more difficult to work and more costly to drain out water, making silver production less profitable. In 1691, 63 of a total of 92 mine shafts were closed; in 1729, 74 of a total of 129 mine shafts were closed; and in 1823, 247 of a total of 279 mine shafts were not in operation. The silver production that had averaged 1,000 to 2,000 kg annually in the late 17th century decreased to 100 kg or so in the mid-19th century.

After the Edo Shogunate fell in 1868, the Iwami Ginzan Silver Mine was privatized in 1869 by the new national government. In 1887, a private company named Fujitagumi resumed operation of the silver mine and renamed it Ômori Kôzan (Ômori mine). In 1895, a refinery was constructed at Shimizudani, introducing western technology, but it was closed after little more than one year. In its place, another refinery was constructed at Kôjidani at the western foot of

Mount Yôgaisan, where smelting and refining, mainly of copper but also of gold and silver, was carried out. However, because the price of copper dropped and cheap copper started to be imported after World War I, the mine was forced to close in 1923. Later in 1942, an attempt was made to reopen the mine to meet the demand for metal during World War II, but this failed due to damage from a typhoon in 1943.

Details of the history of the mines in relation to its political context cannot be matched by equivalent detail for the history of technological transfer to the rapidly developing mines in Japan. The transfer of the 'cupellation' to other silver mines in Japan is noted in the dossier but little is available on the impact of other mining and smelting techniques. Evidence for how cupellation was transferred to Japan, how it spread within Japan, the origins of this technique as used in Japan, and its relationship to the cupellation technique known in the west since antiquity, are not available.

The dossier does not relate the technology to archaeological evidence – although as yet very little of the mines have been explored. Thus it is not possible to detail neither how technology developed within Japan in its long period of isolation from Western influences nor whether this was pioneering, as suggested in the dossier. Nor can the history of Iwami Ginzan's role as perhaps the major supplier of newly mined silver in Japan and its impact on its commerce and that of its neighbours, be set down. There appears to be strong evidence that Japanese silver exports in the 17th century increased to compensate for the decline of those in Latin America, but supporting evidence is unavailable.

3. OUTSTANDING UNIVERSAL VALUE, INTEGRITY AND AUTHENTICITY

Integrity and Authenticity

Integrity

Surveys undertaken have shown that all the silver mining sites are within the core zone and there is no evidence in the buffer zone.

The core zone boundary around Ômori-Ginzan is drawn tightly around the town area and does not extend to include the forested valley slopes. The distinctively linear town stretching along the valley floor has developed because of the flanking ranges, which are a dominating feature of the town. Viewed as a landscape, it is hard to consider the town without including the flanking ranges. Accordingly, ICOMOS considers that consideration should be given to including the flanking ranges, to the ridgeline either side, as part of the core area.

The core zone boundary of the harbour at Yunotsu excludes what would have presumably been the historic landing area, now modified, as well as the harbour itself. This boundary treatment contrasts with the other port towns. ICOMOS considers that this issue should be subject to further consideration with a view to including the inner harbour to the high water mark, as well as the presumed historic landing area.

The built fabric of the towns display moderate integrity in terms of the significant period related to mining (1526-1923). Some towns are more intact than others: the Ōmori section of Ōmori-Ginzan displaying much higher integrity than the Ginzan section and Tomogaura for example. In terms of the peak period for the mine (1530s-1640), there is insufficient data to draw many conclusions. Some buildings remain from this period, some are early 19th century reconstructions of earlier buildings lost, for example by fire around 1800, and many seem later. In the case of Tomogaura, there are no buildings earlier than 1854.

ICOMOS considers that the integrity of the silver mining sites is moderately intact; the current boundaries do not fully enclose all the essential elements and settings of the ports and settlements and in the settlements many of the building post-date the period when the mines were active

Authenticity

The silver mining sites (mining/smelter/refining) are largely archaeological sites and are authentic. The transportation routes express their function. They continue in use as pedestrian or vehicle routes. It is noted that those sections of the *Kaidō* which have been damaged by subsequent works have not been included as core areas, although the alignment of the routes are included within the buffer zone. Some sections of the *Kaidō* display apparently early design features and materials such as drains or steps, and these have a high degree of authenticity. However, other sections have been modernised, such as with bitumen paving, and the authenticity in terms of form, design, materials and feeling is reduced.

The ports themselves, (as opposed to their adjoining towns) express their function. There are some features such as the carved stone mooring points which are believed to be very early. There have also been modern changes such as the construction of concrete wharfs and boat ramps which reduce the authenticity in terms of form, design and materials.

The settlements, including the port towns themselves, again express their function but also in varying degrees their form, design, materials, location and setting.

When it comes to individual buildings within the towns, again their state of conservation varies and so too their authenticity. The best examples appear to display a high level of authenticity, such as the Kumagai House in Ōmori-Ginzan or the Ebisu Shrine in Okidomari. But there are other examples where the authenticity has been diminished.

The castle sites are largely archaeological sites although some earthworks are discernible (e.g. moats and terraces). These sites are authentic.

Overall ICOMOS considers that the archaeological sites have authenticity but that authenticity is patchy for the transportation routes and within the ports, where many of the structures post-date the silver mining period.

Comparative analysis

The dossier provided information on other mining sites in Japan and other mining sites already inscribed on the World Heritage list. What was not provided was any comparison with other mining sites outside Japan and in the same geo-cultural area in order to understand more fully the links between the Iwami Ginzan site and those in Korea and Central Asia. A request to the State Party for further information on mines in south-east Asia yielded information on mines in China, Korea and further west in Asia.

In China the development of silver mines is thought to have begun during the Han Dynasty (206 BC – 220 AD). In the Song Dynasty (960 AD – 1279 AD) silver mines were in operation in Jiangxi, Fujian, Henan, Zhejiang, Hunan, Guangdong, and Sichuan Provinces. During the Yuan dynasty new mines were developed in Shandong and Hebei Provinces. The adoption of a silver standard system in the Ming Dynasty (1368 AD – 1644 AD) caused a surge in domestic demand for silver, prompting the development of mines in Hebei, Guangxi, and Yunnan Provinces. There is some evidence for the use of cupellation techniques in China – but different from those in Japan.

It is suggested that by the 16th century many mines were becoming exhausted and thus there was a market for silver in China from Japan and Central and Southern America. Lack of research into the mines in China makes it difficult to draw comparisons or to analyse exchange. However it is suggested that there was no transfer of technologies between China and Japan.

In Korea, silver mines were operated in Hamgyong, Chagang, and Pyeongan Provinces during the 16th century. Hamgyong Province is where it is suggested that the type of cupellation method introduced to Iwami Ginzan Silver Mine originated. The amount of silver produced from those mines was limited and no match for Iwami silver smuggled into the country, an issue of grave concern to the Yi dynasty (1392 AD – 1910 AD), according to historical sources. There is no sign that the Japanese cupellation method was brought back to the Korean peninsula during the 16th and the 17th centuries.

Mention is made of silver mining in Central Asia where large quantities of silver were mined for coins. It is said in the supplementary information that there is no evidence for silver mines in Central Asia. ICOMOS is aware that mines do exist, although few have been investigated.

Mention is also made of other mines in south-east Asia such as in northern Myanmar, where the Bawdwin Mine, Southeast Asia's richest silver mine, was situated. Silver produced from Bawdwin amounted to three tons per year on average during the 15th through 18th centuries. The methods used in silver mining and smelting in this region appear to have come from Yunnan, China.

The complementary research has shown that while silver produced from the Japanese mine had a notable impact on East Asian trade, the principles and techniques developed and used at Iwami Ginzan Silver Mine appear to have had no influence on mining and smelting activities in other parts of Asia. There is thus no evidence for extensive interchange of ideas.

What has not been provided is more evidence from within Japan to enable a better understanding of the way technology transfer was developed and whether this was exceptional, and on the effect of the Iwami-Ginzan silver mines in Japan and on trade with Europe and its relationship with Latin America. It is thus difficult to evaluate the impact the mines had within Japan and across the world.

Justification of the Outstanding Universal Value

The State Party considers that the Iwami-Ginzan Silver mines and their cultural landscape are considered to have outstanding universal value as they:

- produced a large amount of silver in the 16th and 17th centuries, and triggered the mass production of gold and silver in Japan through the spread of its mining techniques to other mines throughout Japan;
- exerted significant influence upon the history of the exchange of goods and communications among civilizations, not only between the nations of East Asia but also between East and West, reaching as far as Europe;
- contain archaeological sites that illustrate how the silver production was begun in the 16th century by applying a cupellation refining technique that had been traditional in East Asia and show how it evolved into a system of labour-intensive small businesses that carried out the full sequence of processes from digging to refining, succeeding in the large-scale production of high quality silver, in an environment now covered with mountain forests and bamboo groves; and,
- demonstrate a land-use system unique to the silver mine and which fully represents the entire scope of the silver mine operations, from silver production to shipment that continued for nearly 400 years from the early 16th century to the early 20th century.

The State Party suggests that the property is not only a “relict mining landscape”, but also in part a “continuing landscape” in which aspects of the original functions of the silver mine operation are still retained in the present lives and livelihoods of the contemporary local citizens.

Criteria under which inscription is proposed

The property is nominated on the basis of criteria ii, iii and v.

Criterion ii: The State Party asserts that during the Age of Discovery, in the 16th and early 17th centuries, the large production of silver by the Iwami Ginzan Silver Mine resulted in significant commercial and cultural exchanges between Japan and the trading countries of East Asia and Europe.

In the broad view, the quest for noble metals was a determining factor for world civilisation. Thus the instance of the Iwami Ginzan Silver Mine can be fitted into this framework. It does not seem, however, that the nominated property is an exceptional case which determined ideas and traditions of an international range. The detailed evidence to

substantiate this has not been produced to justify how the mines exhibit an important interchange of human values on developments in architecture or technology, over a span of time within a cultural area of the world. More work would be needed to establish the precise way in which the silver mines operated as an enterprise and the effect they had on the economy of Japan and on Europe and the wider world.

ICOMOS considers that this criterion has not been justified.

Criterion iii: The State Party considers that the technological developments in metal mining and production in Japan resulted in the evolution of a successful system based on small-scale labour-intensive units covering the entire range of skills from digging to refining. It is further stated that the political and economic isolation of Japan during the Edo Period (1603 to 1868) impeded the introduction of technologies developed in Europe during the Industrial Revolution. This, coupled with the exhaustion of commercially viable silver-ore deposits, resulted in the cessation of mining activities by traditional technologies in the area in the second half of the 19th century, leaving the site with well-preserved archaeological traces of those activities.

In order to justify how the silver mining landscape bears a unique or at least exceptional testimony to a cultural tradition or to a civilization which has disappeared, ICOMOS considers that more detailed research would be needed to show how the mining arrangements at the site were developed and how they reflect an exceptional occurrence of a mining tradition in their geo-cultural area.

ICOMOS considers that this criterion has not been justified.

Criterion v: The State Party considers that the abundant traces of the silver production - such as mines, smelting and refining sites, transportation routes, and port facilities - that have survived virtually intact in the Iwami Ginzan Silver Mine, are now concealed to a large extent by the mountain forests that have reclaimed the landscape. The resulting relict landscape, which includes the surviving settlements of the people related to the silver production, bears dramatic witness to historic land-uses of outstanding universal value.

ICOMOS considers that the mining activities have had a distinctive impact on the landscape and the remains reflect mining, smelting, transportation and associated settlements. However to justify the property as an outstanding example of a traditional human settlement, and interaction with the environment, ICOMOS considers that more research is needed to demonstrate how the mining activities created an outstanding landscape.

ICOMOS considers that this criterion has not been justified.

Criterion iv was not suggested by the State Party. Further research will indicate whether this criterion would be relevant or not.

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

4. FACTORS AFFECTING THE PROPERTY

Pollution

Pollution is a potential problem. The dossier emphasises the contemporary re-use of spoil from the workings, including smelting slag and, presumably, the tailings from ore preparation. The current levels for lead, zinc and other heavy metals such as cadmium are not detailed. The spoil heaps found on other mining sites may not be present but their contents have been dispersed around the site and do present a potential hazard.

Empty town properties

Although this seems to be an issue for many rural towns in Japan, the empty houses in the four towns are an issue in terms of the ongoing conservation of the towns and the vitality and viability of the communities.

In Yunotsu and Ômori 40 out of 200 houses in each are vacant; in Tomogaura and Okidomari 10 are vacant out of 20 each. In Ômori-Ginzan however, there have been some returning people as well as some leaving – resulting in a balance.

Impact of tree roots on archaeological sites and structures

Current or future forest regrowth could result in damage to archaeological sites and to structures such as retaining walls. Currently this is not perceived as an issue by the management authorities. ICOMOS considers that a further review of this issue should be undertaken to ensure the appropriate management policy is in place for the long term conservation of mining features.

Modern development

Modern changes to the ports such as the construction of concrete wharfs and boat ramps could impact on the authenticity of the port remains.

New motorway

The dossier includes details of a new motorway to bypass Route 9 planned to be constructed partly in the nominated area and partly in the buffer zone of Iwami-jô, Iwami Ginzan Kaidô Tomogauradô and Yunotsu-Okidomaridô.

An environmental impact assessment has been prepared which includes a landscape assessment component. Negotiations will take place to reduce any impact. In the case of the Tomogaura Kaidô, dense vegetation shields views of the proposed road. In the case of the Yunotsu Kaidô, the road will be visible (as the existing road is) however trees have been planted to screen these views. Construction started in 2006. Part of the road will be in a tunnel.

Extraction of clay

In the buffer zone to the south of Ginzan Sakunouchi, a project for the procurement of clay for roof tiles is planned. It is stated that this will respect the constraints in place in the buffer zone to protect the OUV of the nominated site. Consideration needs also to be given to the potential archaeological of the site.

Overhead wires

Overhead wires and electricity poles in Ômori-Ginzan are conscious.

Climate change

No details are given in the dossier about the impact of climate change. However the area is already vulnerable to the impact of heavy rain and coastal erosion – both of which could be exacerbated by climate change. The ports in particular would be damaged by a rise in sea levels.

Risk preparedness

The property is vulnerable to earthquakes, typhoons or heavy rains – all of which could cause land-slides, and damage to trees and buildings.

As a preventive measure, earthquake-proof reinforcements have been applied to buildings at the time of other repair work. Part of the area is designated for coastal erosion control area, in which preventive measures to reduce the risk of flood damage are being taken through construction of erosion-control dams and river infrastructure constructions.

For preparedness against damage from fires to buildings, cisterns are available for use by local people and fire brigades have been organized.

In conclusion ICOMOS considers that the main risks to the property arise from the nature of the archaeological remains and the socio-economic forces which are creating empty town properties. ICOMOS considers that further details need to be provided on future road building programmes.

5. PROTECTION, CONSERVATION AND MANAGEMENT

Boundaries of the nominated property and buffer zone

As set out under authenticity above, ICOMOS considers that the core zone boundary around Ômori-Ginzan is drawn too tightly around the town area and consideration should be given to including the flanking ranges, to the ridgeline either side, as part of the core area.

ICOMOS also considers that at the harbour at Yunotsu, further consideration should be given to including the inner harbour to the high water mark, as well as the presumed historic landing area.

Ownership

The site is owned by National, Prefecture and City governments and by private owners.

Protection

Legal Protection

The component features of the property are designated as an Important Cultural Property or a Historic Site under Article 27 and Article 109 of the Law for the Protection of Cultural Properties, respectively, and selected as an

Important Preservation District for Groups of Historic Buildings under Article 142 of the same law. The buffer zone is currently protected under a landscape ordinance of the City.

It is the owners or custodial bodies of the Important Cultural Properties and Historic Sites that manage, repair and open them to the public for promotion purposes in an appropriate manner. Alterations to the existing state of buildings designated as Important Cultural Properties or areas designated as Historic Sites as well as actions that will affect their preservation are legally restricted and require the prior permission of the Commissioner of the Agency for Cultural Affairs.

ICOMOS considers that the protective measures for the property are adequate.

Conservation

History of Conservation

Consolidation of the excavated mine areas was undertaken at Ginzan Sakunouchi in 1977-1978 and 2001.

Conservation work has been carried out on houses with heritage designations in the towns. For instance the House of the Kumagai Family was restored between 2000 and 2005. At the Daikansho Site, repair work with partial dismantlement was conducted on the front gate, the row houses and clay walls in 1969, 1977-1978, and 1991-1992.

Present state of conservation

The silver mining sites (mining/smelter/refining) as archaeological sites appear to be in good condition, although the impact of tree roots is a matter of concern.

Although the transportation routes are in fair to good condition, in at least some cases the track features (drains, steps and track route) are somewhat deteriorated or eroded.

The ports are in fair condition. The settlements and related buildings, including the port towns, are in poor to good condition. In some cases, such as Ômori-Ginzan and perhaps Yunotsu, the condition appears fair to good, although in Yunotsu there are decaying wooden buildings. The best of the buildings, such as the Kumagai House, are in very good condition. However, in such places as Tomogaura, the condition of buildings appears much less satisfactory. These places have only recently received a heritage designation and thus conservation work has only just started and is yet to have much of an impact.

The castle sites as archaeological sites appear in good condition, although the impact of vegetation probably needs monitoring and management to ensure no impact, as for the mining sites.

Overall the dossier may be a little too optimistic in places.

ICOMOS considers that the property would have benefited from more conservation work before being nominated.

Management

In order to manage the fourteen component features as one whole cultural landscape, a strategic preservation and

management plan has been created. If the site is inscribed, a preservation and management system will be implemented in the context of the whole property, and a World Heritage Management Committee will also come into existence. This will be set up by Ohda City in consultation with Shimane Prefecture, and will involve relevant departments. The Management Committee will have the benefit of advice from the Iwami Ginzan Silver Mine Investigation and Maintenance Committee, and will consult with the Shimane Prefecture Council for the Protection of Cultural Properties, the Ohda City Council for the Protection of Cultural Properties, the Ohda City Preservation Council for Preservation Districts for Groups of Historic Buildings, and the Ohda City Landscape Conservation Council. In addition, the Ômori Town Cultural Properties Preservation Association allows collaboration with owners and residents in management issues. Local communities have been involved in the nomination process, and they will be actively involved in the ongoing management of the site components. There appeared to be strong local support for the nomination.

ICOMOS has some concerns over the integration and effectiveness of decision-making given the complexity of administrative, legal, technical and consultative arrangements; it is also concerned that the management system will only come into effect if the property is inscribed.

There are four management plans for the site. A "comprehensive" preservation/management plan for the overall site, as well as plans for the mine site, Ômori-Ginzan and Yunotsu. The plans are general rather than offering specific actions to be taken. However, conservation and maintenance work consistent with these plans has been undertaken or is in progress.

Nevertheless ICOMOS considers that the following aspects of management need greater attention:

- Development of an active periodic monitoring program for the site (rather than just the current proposed opportunistic monitoring).
- Development and implementation of appropriate tourism management strategies, including managing the site carrying capacity, and traffic and pedestrian management. A proposed tourism management plan is due to be completed in March 2007. Currently the site has only minimal interpretation.
- Management of the natural changes to the forest landscape and how this may change an appreciation of the relict mining landscape.
- Development of management approaches to the potential impact of tree roots on the silver mining sites as archaeological sites, as well as on structures (e.g. retaining walls).
- Monitoring of water pollution from the mines.

A GIS system to record the site has been under development for 10 years. It is comprehensive for the core zone and includes both spatial and text data. It is updated

every year; a future task will be to integrate it with the planning database.

Resources, including staffing levels, expertise and training

Ohda City manages the fund for the protection of the Iwami Ginzan Silver Mine, in accordance with its ordinances; private capital is also provided to this fund. For the remainder of the property, conservation and maintenance is the responsibility of private owners who are eligible for grants up to 82.5% from the national government and Shimane Prefecture for designated structures.

In the past 5 years ¥1.8B has been provided to the nominated site. This is expected to diminish a little in future years but continued funding seems to be assured.

However, there appear to be issues about the resources available for conservation compared to the needs/demand. ICOMOS is also concerned that the full implications of the management of the underground remains and the impact of tree growth in the archaeological remains have yet to be fully explored.

ICOMOS considers that the management system for the property could be adequate once implemented if it were supplemented by more specific strategies for the aspects outlined above.

6. MONITORING

Four monitoring indicators have been developed:

1. The state of conservation in terms of the significance and authenticity.
2. The effectiveness of the management system.
3. The impact of visitor and tourism pressures, environmental pressures, natural disasters and development pressures upon the property and its buffer zone.
4. Achievement in developing the property and its buffer zone, as an internationally-oriented resort in harmony with the historic environment.

Each of these has sub-categories. The monitoring is mostly carried out annually by Ohda City.

7. CONCLUSIONS

A unique combination of mining and smelting/refining sites, along with dedicated settlements and mountain-top fortresses, within a defined boundary, plus the surviving lines of shipment to the coast and their cultural links, make the Iwami Ginzan a strong candidate for inscription as a World Heritage property. The role of insular development of technology in the expansion of mining in Japan, and the impact of silver production on a scale comparable with that from Europe and Latin America in the 16th / 17th centuries, make it of potential international importance. However, further research is needed for the reality behind the importance of the site to be fully revealed and presented in support of the nomination.

There are a number of aspects to the property which bear comparison with, and complement, other mining sites on the World Heritage list, particularly in respect of the cultural linkages. Some aspects, like the insular development of mining technology, are perhaps unique at an international level.

Given the overall situation with the property, the impression is that the nomination would have been much stronger if it were made in a few years time. By then, further research could have been carried out and a range of tasks completed, such as the tourism management plan. Tomogaura, as well as other places, could have benefited from several years more conservation effort.

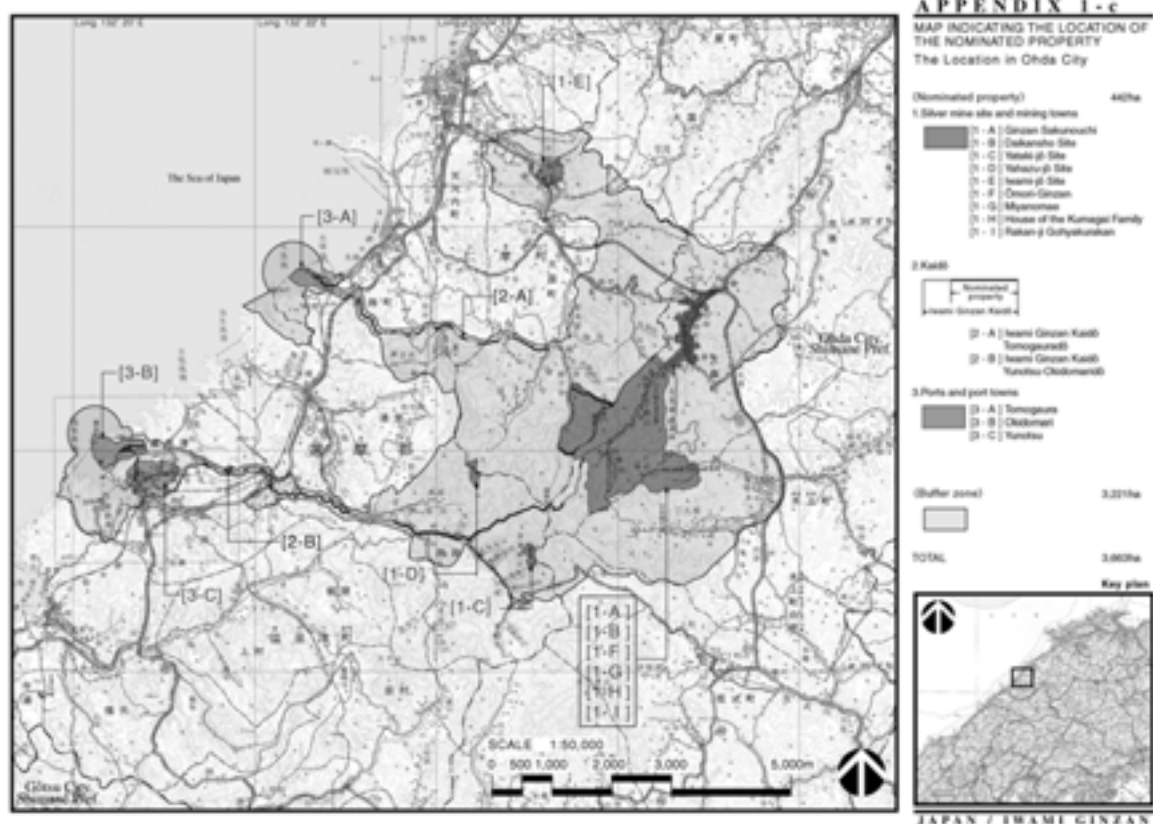
Recommendations with respect to inscription

ICOMOS recommends that the examination of the nomination of Iwami Ginzan Silver Mine and its Cultural Landscape, Japan, to the World Heritage List be *deferred* in order to allow the State Party time to:

- Investigate more fully the development and application of technology at the mines;
- Investigate the overall impact of the mining enterprises in the region and further afield in order to establish whether the property has the potential to demonstrate outstanding universal value as a site that had a substantial impact outside its own area in terms of technological change, economic leverage and cultural exchange.

ICOMOS also recommends that attention is given to putting in place the proposed management arrangements, completing the tourism and interpretation plan, and continuing with conservation work on historic structures.

ICOMOS further recommends that a more detailed archaeological strategy is developed to address the consolidation of underground remains vis a vis the encroaching tree cover, and the investigation of water pollution, and that strategies to address new motorways and possible clay mining are adopted.



Map showing the boundaries of the nominated property



Aerial view of Mount Senoyama



Remains of mine shaft, Kamaya-mabu



Street of Omori-Ginza



Rakan-ji Gohyakurakan



Remains of stone pavement (Iwami Ginzan Kaidô Yunotsu-Okidomaridô)



Aerial view of Tomogaura

The Sulaiman-Too Cultural Landscape (Kyrgyzstan)

No 1230

Official name as proposed

by the State Party: The Sulaiman-Too Cultural Landscape
(Sacred Mountain)

Location: The Osh Oblast

Brief description:

Sulaiman-Too mountain dominates the surrounding landscape of the Fergana Valley and forms the backdrop to the city of Osh, in mediaeval times one of the largest cities of the fertile Fergana valley at the crossroads of important routes on the Central Asian Silk Roads system. For more than a millennia and a half Sulaiman-Too was a beacon for travellers along the Silk Roads.

The mountain has five peaks and these and its slopes contain remains of ancient cult places and several caves with petroglyphs, some with Davan horse images, and all interconnected with a network of still legible traces of ancient paths. Most of the nominated property is a relict landscape little used, although the first peak with some caves, and the lower parts of the southern slopes of the second and third peaks, are ritual sites frequented by pilgrims and tourists. The nominated property also includes some reconstructed Islamic monuments and a museum. At the foot of the mountain, it encloses modern buildings.

Category of property:

In terms of the categories of cultural property set out in Article 1 of the 1972 World Heritage Convention, this is a *site*. In terms of the *Operational Guidelines for the Implementation of the World Heritage Convention* (2 February 2005) paragraph 47, it is also a *cultural landscape*.

1. BASIC DATA

Included in the Tentative List: 29 January 2001

International Assistance from the World Heritage Fund for preparing the Nomination: No

Date received by the World Heritage Centre: 30 January 2006

Background: It is a new nomination.

Consultations: ICOMOS has consulted its International Scientific Committees on Historic gardens and cultural landscapes and on Intangible Cultural Heritage. IUCN has provided an evaluation of the natural attributes of the property.

Literature consulted (selection):

Report on UNESCO International thematic expert meeting on Sacred Mountains, Wakayama, Japan 5-10 September 2001.

Technical Evaluation Mission: 25-28 September 2006

Additional information requested and received from the State Party: ICOMOS sent a letter to the State party on 20 October 2006, and the State party provided supplementary documentation on 15 December 2006.

Date of ICOMOS approval of this report: 21 January 2006

2. THE PROPERTY

Description

The Sulaiman-Too Mountain is located in the eastern part of the fertile Fergana Valley, on the banks of the Ak-Buura River, at the foot of the Kichi-Alai ridge. It is now on three sides surrounded by the city of Osh. It rises to around 200 metres and dominates the surrounding plain. The nominated property extends to a maximum of 1663 metres by 820 metres and on its north-east, east and southern sides, is surrounded by a buffer zone encompassing some of the city. The nominated area is 112 ha and the buffer zone is 183 ha.

The mountain has five peaks. The name Sulaiman-Too first appeared in the 18th century and relates to a Muslim legend of the stay on the mountain by the Prophet Sulaiman, the biblical Solomon. Prior to that the mountain had been known by a variety of different names (see History below).

The mountain was formed during the Pleistocene-Holocene period when pressure from the Indian plate on the Asian continent squeezed and lifted up the Paleozoic basement rocks over the younger rocks. This lifting is still in process with an average annual raise of 6 mm. Some of the peaks are highly fractured slates and schist with long smooth inclines, while others are weathered karst limestone with niches and caves of various forms and sizes which have been used since the Stone Age.

The five peaks and the mountain slopes contain remains of ancient cult places and several caves with petroglyphs dating from the Neolithic to the late Middle Ages, all interconnected with a network of still legible traces of ancient paths. The first peak with caves, and the lower parts of the southern slopes of the second and third peaks, are frequented by pilgrims and tourists, as are three Islamic monuments.

In the Middle Ages irrigation channels from the Ak-Buura River were created along the lower slopes, and one of them is still functioning on the northern side. In Soviet times further active irrigation measures were undertaken with the installation of iron water pipes to support a plantation of non-indigenous *karagach*-trees (a type of elm) on the lower parts of its southern and western slopes.

At the north-east, north and north-west foot of the mountain are modernised vernacular houses, providing accommodation and ritual services for pilgrims. At the

eastern end of the nominated property is a public garden and modern buildings related to the site museum complex, TV centre, and tourist services. There are several new structures related to the ritual services for pilgrims near one of the mosques, the Ravat-Abdullakhan, and a large museum in the main cave. At the western extremity of the nominated property, near the foot of the mountain, there is an active frontier post of barracks and houses established in Soviet times. Also dating from the same period are the modern visitor path (partly overlapping the earlier pilgrim path), an observation platform on the top of the first peak, a TV antenna on the top of the second peak, and still active military barracks and apartment houses near the western foot of the mountain.

The key aspects of the nominated property are:

- Stone & Bronze Age settlements
- Rock engravings - petroglyphs
- Ritual sites
- Network of paths
- Islamic buildings
- Museum

These are considered in turn:

Stone & Bronze Age settlements

The Stone Age remains in the Rusha-Unkur cave on the mountain's third peak, were discovered in the 1940s and 1950s and date to Neolithic times. Further explorations in 2000 and 2004 did not reveal any new early sites, thereby confirming the conclusions of former researchers that habitation by ancient people in the Stone Age was only occasional.

A Bronze Age settlement was located on the steep southern slope of the third peak, a site apparently chosen for its defensive properties. The remains are related to the Chust culture, which extended over large parts of the Fergana valley, and for which over 50 river side sites are known. The Sulaiman-Too settlement of over 2 ha in extent had a terrace lay-out, with fifteen terraces overlaying one another. The remains of thirteen buildings have been found, half dug-out in form with framed walls and a wooden roof. Analysis of the material remains, also confirmed by radiocarbon dates, shows the site belonged to the 15th-7th century BC. The Osh settlement is set apart from other lowland sites by its mountain top location and by the wealth of painted ceramic finds. It has been suggested that this settlement might have had ritual associations.

Rock engravings – petroglyphs

Petroglyphs are found on and around all the five peaks and also in caves, shelters and karstic tunnels, on horizontal, vertical and inclined planes. During 2005, the images were documented and 101 sites indexed.

The petroglyphs were engraved using both stone and metal tools. They can be conditionally divided into three groups: anthropomorphous, zoomorphous and geometrical signs. The most numerous group includes images of solar signs and webs. The animal images are in the minority but include a realistic group of three horses lassoed by a man standing at a distance, snakes with open mouths, predatory

birds and goats with bent horns, some of them with their legs tied. The images of horses bear close similarity to petroglyphs on nearby peaks of Aravan, and Surottu-Tash (8 km to the north-west from Sulaiman-Too), dated to the Iron Age and later and demonstrating a remarkable collection of some 80 images of beautiful horses possibly bearing a resemblance to the “heavenly horses” of ancient Davan, mentioned by Chinese writers in the 2nd and 1st centuries BC as a source for military horses.

Many of the Sulaiman-Too Rock drawings have not been dated; those that have, by stylistic association with other sites, appear to date from around the 15th century BC to the 7th century AD. The majority of images belong to the Bronze Age (circa 1500 BC to circa 500 AD) such as the labyrinths, solar signs, geometrical figures, birds, anthropomorphic and larvae-like images. The Davan horses and some goat images date back to between the end of 1st millennium BC and the beginning of the 1st millennium AD. A considerable numbers of figures were added in the 20th century and include dates and names.

Ritual sites

These seem to have been laid out in three bands (or zones) around the mountain peaks and are strongly associated with the petroglyphs. The lower belt displays engravings on vertical surfaces. Above this are inclined plates with gullies, accompanied by more petroglyphs, and towards the top a third belt that includes religious places with cut footprints, and places for sacrifice. All these sites appear to be linked by paths weaving round the mountain.

The cult places which are still in use are mainly concentrated around the first peak and part of the second and third peaks. The nomination identifies seventeen sites still mostly in use, including gullies, grottoes, seats and caves, many ‘labelled’ with petroglyphs, whose signs cannot be read. On nearly all the sites are found traces of fire, probably for burning aromatic herbs, and some sites are polished smooth by many centuries of pilgrims sliding along or touching the rock surfaces. The cult sites are associated with beliefs in cures of barrenness, headaches, back pain and the blessing of longevity. The most dramatic is a cave with polished sloping floor, down which women would slide to cure barrenness, through simulating a birth delivered from the mountain.

Network of paths

Linking the cult sites is a network of paths. On the main peaks these paths have been partly overlaid by a modern tourist path.

Besides the still well-used paths to the active shrines, there are many relict paths, almost invisible, but still traceable due to polished patches on the natural steps or rock surfaces. There are also some carved ‘footprints’ found here and there, ‘showing the way’ to cult places. These traces of ancient paths, covering all the peaks, have yet to be fully mapped, but the process is underway.

Islamic buildings

There are three standing Islamic monuments within the nominated property, two of them situated near the foot of the mountain. The main Islamic sacred place, the little

Mosque of Takht-i-Sulaiman, is on the top of the first peak. A small domed structure with large portal of burnt brick, it was built originally in the 16th century, but destroyed in 1963. In 1988 the Mosque was re-built using available documentation, on its original foundations, enclosing in its interior an ancient ritual stone with cup-marks and petroglyphs, as a manifestation of the adoption by Islam of the ancient sacrality of the Mountain.

The Ravat-Abdullakhan Mosque was also constructed in the 16th century. Only the main part of the original complex of building survives. Used as a museum in Soviet times, it was returned to religious use in 1990. The Asaf-ibn-Burkhiya Mausoleum of portal dome construction was apparently constructed in the 16th century on the basis of an earlier, possibly 13th century building.

The Islamic monuments are actively used for religious practices and maintained by the local religious community.

Museum

The museum was constructed in Soviet times, as a restaurant, inside the *Rusha-Unkur*, or Eagles cave, the largest two storey cave on the mountain. Its sacred function has been lost by the interventions. In 2000 it was turned into a museum, and is now one of the main attractions for tourists. The 'Cave Museum' with its enormous round 'window' and concrete front staircase is well visible from the southern borders of the property.

History and development

The earliest mention of the mountain is in a Chinese source of the 13th century which refers to 'a town at a highly respected mountain' and one of the Davan towns (i.e. presumably a supplier of Davan horses). The name Barak was recorded in the end of the 13th century and by the 15th century the mountain was known by the Farsi name *Bara-Kukh* meaning 'separately standing' or 'a beautiful mountain'. The modern name relates to an Arabic legend of a stay on the mountain of the Prophet Sulaiman, or the Biblical Solomon, and was first recorded in the early 18th century.

Written references to the religious significance of the mountain do not appear until 19th and early 20th century. In 1812 Mir Izet Ulla, a Pakistani employee of the East Indian Company wrote in his memoirs that 'Every spring crowds of pilgrims of different nationalities come here from all neighbouring countries.' A Russian officer, Nazarov, visited Osh around the same time and mentioned 'two ancient buildings, and there is a big cave below...[the] buildings are called 'Takh-Suleiman', and that every year the Asians travel to this place to worship it, and they believe spirits worshipped Solomon in this place.'

In the middle of the 19th century Valikhanov, relying on the accounts of others wrote: "...Muhammad knew of the existence of this town and precepted every true believer to visit the Osh sanctuaries at least once in their life. ... To worship those places, pilgrims with their families come there every year from Kokand, Margilan, Andijan and other towns of Fergana valley."

And in 1887 Simonov wrote: "...almost on the top of its eastern peak, there is a mulushka (a kind of chapel or

mausoleum) ...[which] serves as an object of worship for lots of pilgrims gathering here from all even remote areas of Turkestan'.

What is clear from all these accounts is the link between the religious significance of the mountain and Islam. Simonov was however the first writer to mention the belief in the curative powers of other shrines on the mountain: 'natives suffering from various illnesses go there because all the area around the mulushka is full of memorials (...), which can heal all possible ailments'.

In the early 20th century Masalskiy, and then Castaniye, both mentioned the curative properties of cult places as did several Soviet era authors.

Work on collecting and analysing legends associated with the mountain was begun in the 19th century by Russian scientists and students. Studies on folklore continued in the Soviet period, and in 1987-1989 a special expedition was organised by the Ministry of Culture to collect information on the Mountain and on the micro-toponymy of its peaks, caves, minor cult places and other features, but also on the worshipping and sacrifice rites practiced there.

Although there is no early documentary evidence for the pre-Islamic ritual practices on the mountain, scholars now consider that the earliest period when it was regarded as a sacred place could be the Bronze Age. There is material to suggest that the earliest cult of Sulaiman-Too could be Mithraism. Mithra, one of the most ancient Indo-Arian gods, was later included in the Zoroastrian pantheon. He was regarded as a God of Light, Union and Agreement. According to myths, he was born from a rock in a cave. The Mithraist rites included libation of *haoma*, the sacred beverage. The cult places of Sulaiman-Too – stones with polished gutters for libations, caves and grottoes (especially those with inclined polished floors, imitating Mithra's birth from the cave) might be related to those cults.

Efforts to eradicate religious practices at Sulaiman-Too in Soviet times led not only to the demolition of several Islamic buildings, but also to the non-authentic use of the mountain, which was turned into a kind of public park. Non-indigenous *karagach*-trees (a type of elm) were planted on the lower slopes with water supplied through iron pipes. In the same period a number of new buildings and structures were introduced including: the modern visitor path (partly overlapping the earlier pilgrim path) the observation platform on the top of the first peak, the TV antenna on the top of the second peak, the frontier post with military barracks and apartment houses near the western foot of the Mountain, the TV-centre, some administrative buildings, including those related to the museum complex, cafés and restaurants, and the memorial stele in front near the eastern foot of the mountain. The most irreversible intervention was the creation of a restaurant in the two-storey natural cave of *Rusha-Unkur*. This is now a museum and one of the main attractions for tourists.

During the same period, considerable changes occurred to the surrounding townscape with the demolition of the major part of the traditional housing areas and the construction of modern buildings in the historic centre of

Osh, added to during preparatory work for the celebration of the 3000-year jubilee of the city of Osh in 2001.

3. OUTSTANDING UNIVERSAL VALUE, INTEGRITY AND AUTHENTICITY

Integrity and authenticity

Integrity

The visual integrity of the mountain relates to its intactness in terms of its relationship to the plain and the town at its foot. The three aspects, mountain, town and surrounding landscape need to co-exist in a harmonious relationship.

ICOMOS considers that the interface between these three currently creates some cause for concern and impacts on visual integrity. The mountain is first and foremost a visual symbol of power, separate from the plain, hosting in its curious geology well-used cult sites and offering spectacular views from its peaks.

ICOMOS considers that the visual integrity of the mountain has been partly compromised by modern interventions and will be compromised further unless there is a clearer differentiation between town and mountain and between town and plain with sufficient unbuilt plain to allow the mountain to be seen to rise from it, at least from some directions. This unbuilt plain needs protection as part of the proposed Buffer Zone.

The cult sites on the mountain and particularly the rock engravings are linked strongly to the sites on neighbouring peaks of Aravan, and Surottuu-Tash. In terms of the integrity of the cultural sites, ICOMOS considers that the cult sites on Sulaiman-Too are part of a wider complex of sites and that in terms of visual images, particularly of Davan horses, some of the more significant images, in number and quality, are to be found on neighbouring peaks. These peaks need protection and linking to the nominated property perhaps through an enlarged Buffer Zone.

In summary, ICOMOS has concerns over the visual integrity of the Sulaiman-Too Mountain unless protection can be afforded to the unbuilt plain at the foot of the mountain. ICOMOS further considers that in terms of cultural integrity the value of the cult sites can be fully appreciated when related to those on neighbouring peaks of Aravan, and Surottuu-Tash. ICOMOS considers that these neighbouring peaks ideally need protection as part of the Buffer Zone.

Authenticity

The sacred associations of the mountain appear to be linked to its dramatic form rising out of the almost flat plain, to the contrast between the smooth rocks and its gullies and caves, and between the bare peaks and the town huddled at its base. In the past fifty years many interventions on the mountain and in the town at its foot have undermined this sense of otherworldliness and of the visual setting of the mountain in the landscape.

The viewing platforms, antennae, cave restaurant/museum and barracks have already been mentioned. The cave

museum in particular is a major scar on the face of the mountain. The new main museum building at the foot closes the view towards the first peak from its eastern foot. From the upper parts of the mountain the modern structures around its foot are all visible. During the last 10-12 years, modern dwellings have been constructed on fields around the northern side of the mountain foot, and these have reduced the visual qualities of the mountain and its relationship with the open landscape of the plain framed by the mountain ranges of Ayrymach-Too and Kerme-Too. Currently, the one-storey houses, constituting a major part of this new built environment of the Mountain, do not close the important distant views towards Sulaiman-Too from the valley. However, there are plans for further extensions of the urban areas to the west and north-west city. ICOMOS considers that protection needs to be put in place for the unbuilt plains which are the remaining authentic setting of the mountain.

Some petroglyphs have been mistreated by inappropriate conservation or graffiti (see below). Nevertheless most of the cult sites retain their authenticity in physical terms and many retain their active cult practices.

ICOMOS considers that the authenticity of the mountain, its cult places, uses and functions are without doubt, even given the numerous interventions over the past 50 years. However since the sacred associations of the mountain are linked to its dramatic form rising from the surrounding plain, it is highly vulnerable to continuing new development around its base. In order to protect its majesty, spirituality, visual coherence and setting and thus the full authenticity and values of the property, ICOMOS considers that further protection needs to be put in place.

Comparative analysis

The comparative analysis in the nomination for the property in relation to its region and from the perspective of similar properties inscribed on the World Heritage List is weak in parts.

The functioning duration of the Sacred Mountain of Sulaiman-Too as a sacred site is said to be comparable with the Tien Shan in China, which for two thousand years had been "the Heavenly Empire's" official symbol, visited by millions of pilgrims. Also mentioned are the Khan Khentei, the Otgon Tenger, and the Bogd Kahn Mountain three worshiped mountains in Mongolia, which since the 13th century have been places of annual worship. The longevity of their ancient sacral traditions, rituals and sacrifice practices is said to make them comparable with those of Sulaiman-Too.

The significations of sacred mountains and shrines in China, India, Iran, Mongolia, Korea, Japan, Indonesia and Afghanistan could have been discussed with more specific examples of sites and ideological systems and evidence for their spiritual values.

The material in the dossier would have benefited from more exploration of the conclusions of the UNESCO expert meeting held in Wakayama, Japan, in 2001, on Asia-Pacific Sacred Mountains where there was a comprehensive analysis of Central Asian sacred mountains, and their classification and beliefs and rituals.

It would also have been valuable to have had more material on other active sacred mountains in Central Asia, where pilgrim paths lead up the mountains to caves and smooth rocks revered for their healing qualities, and where herbs are burnt for their special fragrances by visiting pilgrims.

Although other sites in Central Asia (Kyrgyzstan, Tajikistan, Kazakhstan, Uzbekistan) are not mentioned in the dossier, Sulaiman-Too can be said, on one hand, to be typical of Central Asian sacred mountains, for the way its shrines are laid out and used and have been used over many millennia.

However on the other hand Sulaiman-Too is also unusual in Central Asia for its size, shape and concentration of cult material. Sulaiman-Too mountain can be said to present a vivid evidence for existing, strong and continuous traditions of mountain worship, which has spanned several millennia and been absorbed successfully by Islam. Moreover its traditions survived in spite of severe restrictions in the recent Soviet era.

Sulaiman-Too is also one of those very rare mountains, which corresponds closely to iconic images in the Universe of Avesta and Vedic traditions: a single mountain with a peak dominating four others, standing in the virtual centre of a vast river valley, and surrounded by and related to other mountains in the landscape system.

The rich concentration of material evidence for cult practices preserved on the mountain from pre and post-Islamic times, together with its 'ideal' form, present the most complete picture of a sacred mountain anywhere in Central Asia.

ICOMOS considers that Sulaiman-Too is both typical of Central Asian sacred mountains and also an exceptional example of an 'ideal' mountain with a rich concentration of cult sites that provides evidence of mountain worship. .

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

Justification of the Outstanding Universal Value

The State Party considers that the property is of Outstanding Universal Value for the following reasons:

- The Sulaiman-Too is the only sacred mountain in this part of Central Asia.
- Its location on a crossing of the migratory and trading roads from ancient times until today has led to a symbiosis of various cultures and traditions for more than three millennia, reflected in rock engravings and still active cult places, beliefs and rites.
- The mountain has a dominating position over the surrounding Fergana valley. The clear-cut contours of its five peaks give it a special picturesqueness and attractiveness.
- The mountain's geology and morphology have been skillfully utilised for three millennia. Visible and accessible vertical surfaces and cult grottoes and

crevices have been ornamented with petroglyphs in a triple zoning system matching the ancient idea of the "World Mountain" and the "World Tree".

- The Sulaiman-Too rock paintings have similar images to other parts of Eurasia, and display types of universal images such as solar signs, hands, and footsteps.
- Today, rituals and prayers connected with domestic animal sacrifice, shamanism ideas of fertility, ancestors' cults or magic treatments are still practiced at the cult sites
- The mountain's sacred and cultural qualities appear in early Chinese and mediaeval Arabic and Persian written sources. Western and Russian researchers in the 19th and 20th centuries noted the mountain's sacredness, which attracted the attention of many pilgrims and visitors.

The mountain has been nominated as a sacred cultural landscape. The sacred landscape apparently goes beyond the physical limits of the Sulaiman-Too Mountain, encompassing the neighboring ranges of Orto-Too (eastern spur of Aiymach-Too) and Kerme-Too (eastern spur of Chil-Mayram), the open plain they encircle, and also the separate Aravan Rock. The sites found there are partly described in paragraph 3c of the nomination dossier. All of them possess cult places and petroglyphs similar to those of Sulaiman-Too. The information available allows them to be regarded as parts of a single whole, a cultural landscape with the Sulaiman-Too Mountain standing at its virtual centre.

ICOMOS considers that the location of Sulaiman-Too on one of the cross roads of the Central Asian Silk Roads gives it prominence and influenced the cosmopolitan development of the town of Osh at its foot. On their own the petroglyphs are not outstanding as a collection: their value is related to their specific siting in or near cult places that are still actively used.

ICOMOS considers that the value of the mountain as a single monument is linked to its large spiritual landscape with formal paths, apparent zoning system, and many cult sites, reflecting both Islamic and pre-Islamic beliefs and particularly the cult of the horse, many of which are still in use, together with its dramatic siting in the plain.

Sulaiman-Too is not unique as a mountain with cult sites linked by paths and still actively used; it is however the largest and most prominent mountain in this part of central Asia and its size, scale and location on one of the major arteries of the Silk Roads and the economic importance of the city of Osh, means that it is and for many centuries has been a significant spiritual landmark.

Furthermore Sulaiman-Too corresponds closely to iconic images in the Universe of Avesta and Vedic traditions: a single mountain with a peak dominating four others, standing in the virtual centre of a vast river valley, and surrounded by and related to other mountains in the landscape system.

Criteria under which inscription is proposed

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

Criterion iii: In justifying this criterion, the nomination draws attention to the cult sites on the mountain and their longevity.

ICOMOS considers that the rich concentration of material evidence for cult practices preserved on the mountain from pre- and post-Islamic times, together its 'ideal' form present the most complete picture of a sacred mountain anywhere in Central Asia.

ICOMOS considers that this criterion is justified.

Criterion iv: In the nomination, the justification for this criterion is based on the Bronze Age settlement site.

ICOMOS does not consider that this property, on the basis of present knowledge, can be said to have outstanding value as an individual site or even as part of the wider Chust culture of the Fergana valley.

ICOMOS does not consider that this criterion has been justified.

Criterion vi: This criterion is justified in the nomination dossier on the basis that the mountain is reflected in Kyrgyz, Uzbek, and Tajik historiography and that the mountain's image is used by authors and artists.

ICOMOS considers that this criterion can be justified on the basis that Sulaiman-Too presents the most vivid evidence for existing strong and continuous traditions of mountain worship which has spanned several millennia and been absorbed successfully by Islam, and has had a profound effect over a wide part of Central Asia.

ICOMOS considers that this criterion is justified.

ICOMOS considers that the Outstanding Universal Value has been demonstrated and that the nominated property meets criteria iii and vi.

4. FACTORS AFFECTING THE PROPERTY

Threats

The robust mountain with its fragile cult sites is vulnerable to erosion of its spiritual character and to the impact of intrusive new buildings. Some intrusive elements have been constructed (as detailed above); in the medium term, responses are needed to mitigate their impact on the values of the property as far as possible.

Particularly damaging is the main museum which is a visual scar on the mountain and visible from the plain. It would appear to be impossible to remove this fully without damaging the cave. Moreover, the eventual removal of this structure would not turn the cave back to its original state, as the ground floor has been considerably reconstructed, further spaces excavated and interior surfaces plastered with cement. Measures to reduce the visual impact would be desirable, although these will require careful

consideration to ensure that the authenticity of the property is not further affected.

Urban development

Development plans to extend the town to the north and west would in effect cut the mountain off on all sides from the plain. ICOMOS considers that this would impact adversely on the integrity and authenticity of the mountain. The town plan needs to consider the impact of the town on the mountain and to develop proposals to sustain the special relationships between the town, plain and mountain, and to defend key views.

Tree planting

Currently the lower slopes of the mountain are in part clothed with irrigated *karagach* trees planted in Soviet times. ICOMOS understands that there are plans to renew the watering system and plant more non-native trees around the slopes of the mountain. However no details of the scheme are available. ICOMOS considers that great care in the selection of plantings is needed for this property, and in the medium term, all non-native trees should be allowed to die out and should not be replaced.

Lack of conservation

The preparation of the 3000th anniversary of Osh led apparently to an increase in funding for new buildings and a diminution in conservation funding, as well as some inappropriate conservation work (see below).

Uncontrolled visitor access

Uncontrolled visitor access for many years resulted in a damage to petroglyphs found in the lower parts of the first and second peaks: a number of modern graffiti, mainly painted, but also those engraved and/or pecked, cover many rock surfaces. Most of those graffiti were made before the creation of NIAMK (the Sulaiman-Too National Historical and Archaeological Museum Complex), mainly in Soviet times. However, also during the last six years, after the establishment of a permanent on-site guardianship, quite a few new painted graffiti have appeared on some easily accessible surfaces. As mentioned below, there is currently no local expertise to deal with the conservation of damaged sites.

Many visitors come to the mountain both from within Kyrgyzstan and from other countries. The local municipality is interested in encouraging tourism as a way of gaining income. The current paths and visitor facilities and guarding arrangements are inadequate for a major increase in numbers. The development of a tourism strategy which gives careful consideration to the practical issues and conservation implications of visitor access is urgently needed and should be produced as part of the Management Plan.

In conclusion, ICOMOS considers that the main risks to the property are firstly urban development on the plain that could adversely affect the setting and views to and from the mountain; and secondly insufficiently controlled visitor access.

To address these threats, ICOMOS recommends that further consideration be given to the boundaries of the buffer zone, and that measures be taken to incorporate the protected area into the Town Plan (see below). ICOMOS also recommends the urgent development of a tourism strategy that addresses visitor access issues and protection of the sacred sites and petroglyphs from visitor impacts.

5. PROTECTION, CONSERVATION AND MANAGEMENT

Boundaries of the nominated property and buffer zone

The nominated property includes not only the open mountain, with shrines, rock art and access paths, but also at lower levels, built up areas in the town, plantations, military barracks, TV station and tourist facilities.

ICOMOS understands that some intrusive buildings have already been demolished during the last 5 years, and there are plans to remove other modern structures, replacing them with movable traditional structures (*yurtas*) for seasonal visitor services. For the present however the Kyrgyz authorities consider the problem of transferring the military unit elsewhere and the removal of its buildings from the foot of Sulaiman-Too insolvable, because of its importance as a post in the vicinity of the Uzbek frontier.

On its north-east, east and southern sides, the nominated property is surrounded by a buffer zone encompassing some of the city.

ICOMOS understands that the proposed buffer zone is a reflection of an intermediate result achieved through negotiations with the Osh municipal urban planning office on the future establishment of a planning control zone in the area of the historic city centre, and it is not yet legally approved at either national or municipal level.

ICOMOS considers that this buffer zone is insufficient to protect the nominated property and its setting from physical and visual intrusions. Moreover, there is no buffer zone to the north, north-west and west of the nominated property, as those areas are situated beyond the city boundaries and come under the authority of an adjacent rural district, with whom no agreement had been achieved by the time of submission of the nomination.

ICOMOS understands that work is continuing to improve the scope and effectiveness of the buffer zone and also to include within its boundaries the Kerme-Too and Orto-Too mountain ranges, with their archaeological sites and petroglyphs, situated west and north-west of the city, along with the rural landscape of the valley that they and Sulaiman-Too encircle. Moreover, the buffer zone is also intended to be enlarged to the south and to the east from the nominated property, thus taking in a larger urban area in order to ensure that important views towards the property are preserved and to restrain plans for further extension of the urban areas in the west and north-west directions from the city.

ICOMOS considers that the boundaries of the core zone adequately encompass the main cult areas and paths on Sulaiman-Too, but that consideration needs to be given to

enlarging this area to other key sites on neighbouring peaks or including them in the buffer zone.

ICOMOS does not consider that the proposed buffer zone is adequate to protect the setting of Sulaiman-Too or key views to and from it and recommends that plans for enlarging it are progressed

Ownership

The nominated property is a national property of the Kyrgyz Republic.

Protection

Legal Protection

The nominated property is inscribed within a larger Protection Zone formally established by the Decision of the Kyrgyz Government No 638 of the 08 September 2006. This Zone comes under the responsibility of the Sulaiman-Too National Historical and Archaeological Museum Complex, and any new constructions within its extended boundaries are prohibited, unless a special agreement is obtained from the relevant national authorities responsible for the protection of cultural heritage and natural environment.

The nominated property is also inscribed on the National List of Properties and given a formal status of National Historical and Archaeological Museum Complex. It is also covered by the provisions of:

- i. Use of the Historical and Cultural Heritage, No 91 (with Amendments of 2005)
- ii. 2002 Regulations on the Inventory, Protection, Restoration and Use of the Historical and Cultural Heritage, No 568 (with Amendments of 2006)
- iii. 1999 Law On the Protection of Nature

According to (i) and (ii), in order to provide proper protection and use of the cultural properties, zones of legal protection (*Protection Zone*, *Zone of Planning Control* and *Zone of Protected Natural Setting*) need to be established and incorporated in regional and urban development plans and projects. The Protection Zone for Sulaiman-Too has already been established but the boundaries and regulations for the *Zone of Planning Control* and for the *Zone of Protected Natural Setting* to provide extra physical and visual protection around the property are still at the stage of preparation work. The idea is that the enlarged buffer zone will be inscribed within the boundaries of these two zones, in order to provide its protection according to the international standards, while using existing national legislation.

The Protection Zone, and within it the nominated area, has not yet been incorporated in the regional development plans of Osh oblast, nor in the urban development master plan of the city of Osh. This urban master plan was approved in the Soviet times, but it still serves as formal guidelines for developers. According to this plan, the traditional housing in the area surrounding the Sulaiman-Too Mountain is to be demolished and replaced with new

public and apartment buildings up to 5 storeys in height. This master plan is no longer valid, and a need for its revision has been recognised. ICOMOS understands that the preparation of a new master plan for the city of Osh is in progress and will respect the Protection Zone, providing adequate regulatory tools. However, due to low funding it will not be completed in the near future.

ICOMOS considers that although the nominated area has legal protection, this needs to be incorporated into the city plan to give it effect. ICOMOS also considers that the limited size of the currently proposed buffer zone, its urban character and its lack of effective protection make the nominated area vulnerable to development pressures that could impact adversely on its setting and visual integrity. ICOMOS supports the need to enlarge this buffer zone and give it adequate protection.

Conservation

History of Conservation

During Soviet times although the mountain was de-spiritualised, it was protected. After independence and before alternative systems were put in place some damage was done in the form of new petroglyphs and burials.

Between 1997-2000 a protection programme was begun. Defensive enclosures were put up on the northern-eastern, eastern and partially on the southern mountain sides, conservation of the petroglyphs started, and partial restoration works on the Rafat-Abdullakhana mosque and the Asaf-ibn-Burkhiya Mausoleum were conducted. Work was also undertaken on the main visitors' routes. Since national protective status was gained in 2004, visitor protection and conservation have been funded as on-going activities.

Present state of conservation

In spite of the many negative interventions on the mountain, a large part of it remains unspoiled and still retains its spiritual qualities respected by visitors.

Active Conservation measures

The property is now actively protected and the Management Plan currently being formulated will address the need for on-going preventative conservation measures as well as remedial measures to tackle damage to the petroglyphs at certain sites, and on-going maintenance of the paths. Further details of this will be supplied in the Management Plan.

ICOMOS considers that conservation of the property is stable and awaits further details of conservation approaches in the forthcoming Management Plan.

Management

Management structures and processes, including traditional management processes

The management of the nominated property is the responsibility of the Sulaiman-Too National Historical and Archaeological Museum Complex (NIAMK), which comes under the aegis of the Ministry of Culture, and, from

January 2007, will be financed from the national budget. NIAMK represents one of two exceptional cultural reserves in Kyrgyzstan having not only a status of the National Cultural Heritage Reserve, but also clearly defined and legally approved boundaries. ICOMOS understands that there is an intention to further upgrade the status of NIAMK, through subordinating it directly to the Government which would be highly desirable. The office of NIAMK is situated on the property.

Management plans and arrangements, including visitor management and presentation

A draft five-year Management Plan, consisting of a Master-Plan and three sub-plans, is under preparation by a multidisciplinary Project Team headed by the archaeologist from the National Academy of Sciences and composed of NIAMK staff members and representatives of local stakeholders.

The planned extension of the buffer zone (see above) implies considerable additional work to be done on management planning, and ICOMOS considers that it would not be feasible to submit this plan before the end of March 2007, as suggested. The Plan is being developed in Kyrgyzstan for the first time, with entirely local resources and the input of volunteers, and it clearly would be preferable to allow its creation to take sufficient time to build up a firm basis of support and cover the wider area over which protection is needed.

For the year 2006, there is an Action Plan under implementation. It concerns activities related to the promotion and building of public awareness, repair work to existing roads, visitor paths and site instalments, some improvements to the infrastructure, interpretation facilities and equipment, clearance of rubbish, and the removal of two unsightly structures in the immediate vicinity of the mountain.

The property receives essential support from the municipal authorities. The Mayor of Osh has given the formal status and authority of a Municipal Site Commission to a group of local volunteers devoted to the preservation of Sulaiman-Too, and delegated the Vice-Mayor to take part in their activities. Presently they are actively involved in the work of the Project Team drafting the Management Plan.

Resources, including staffing levels, expertise and training

NIAMK is headed by a Director-General recently appointed by the Governmental Commission for Cultural Heritage with the agreement of the Governor of Osh Oblast. The permanent staff of NIAMK includes two Assistant Directors, clerical staff, several specialists of different professions (including historians and biologists), and also site personnel. Currently there is no expertise available on the conservation of petroglyph sites.

The municipal police have been involved in patrolling the property since July 2006, as a necessary measure against visitors (mainly local teenagers) leaving graffiti on the rocks with petroglyphs.

The annual budget allocations for NIAMK are limited. ICOMOS understands that it is anticipated that the

proposed upgrading of the NIAMK's status will bring benefit in respect of funding, staffing and increased possibilities for capacity building.

ICOMOS considers that the structure in place for the creation of the Management Plan is to be commended and that the management and protection of the nominated property should be adequate once the protected zone is incorporated into the town plan, the buffer zone is enlarged and protected, and the Management Plan has been approved.

6. MONITORING

All archaeological reports from the 1940s to the present are kept in the Institute of History of the National Academy of Sciences. A solid package of documentation of the petroglyphs has been produced during last three years, within the framework of a UNESCO Project on the creation of the Central Asian Rock Art Database. The documentation of petroglyphs and ancient cult places continues at the adjacent sites of Surottuu-Tash (Orto-Too) and Kerme-Too, with the aim of providing the necessary documentation and justification for the establishment of enlarged zones of legal protection.

Detailed mapping of the paths on the property and their relationship to the cult sites has begun. There are no other approved plans for further research work, due to a lack of funding.

A few monitoring indicators have been put in place, including temperature, vegetation, visitor numbers and sedimentation. The most valuable is an annual photographic record of the main archaeological and architectural monuments.

7. CONCLUSIONS

Sulaiman-Too is a spectacular site and one that deserves protection and full understanding.

ICOMOS commends the State Party for its work on putting forward this large and complex site for nomination to the World Heritage List, and for the consultative process in place for the development of a Management Plan.

ICOMOS considers that the property has Outstanding Universal Value for its spiritual landscape with formal paths, apparent zoning system, and collection of cult sites reflecting both Islamic and pre-Islamic beliefs (particularly the cult of the horse), many of which are still in use, as well as for its associations with cult practices that had a profound effect over a wide area of Central Asia.

In order that the integrity and authenticity of the property are sustained, ICOMOS considers that appropriate protection is needed for the mountain and for its wider setting across the plain to its neighbouring peaks.

The sacred landscape goes beyond the physical limits of the Sulaiman-Too Mountain, to encompass the neighboring ranges of Orto-Too and Kerme-Too and, the open plain they encircle..This wide landscape needs to be protected

and linked to Sulaiman-Too, which stands at its virtual centre.

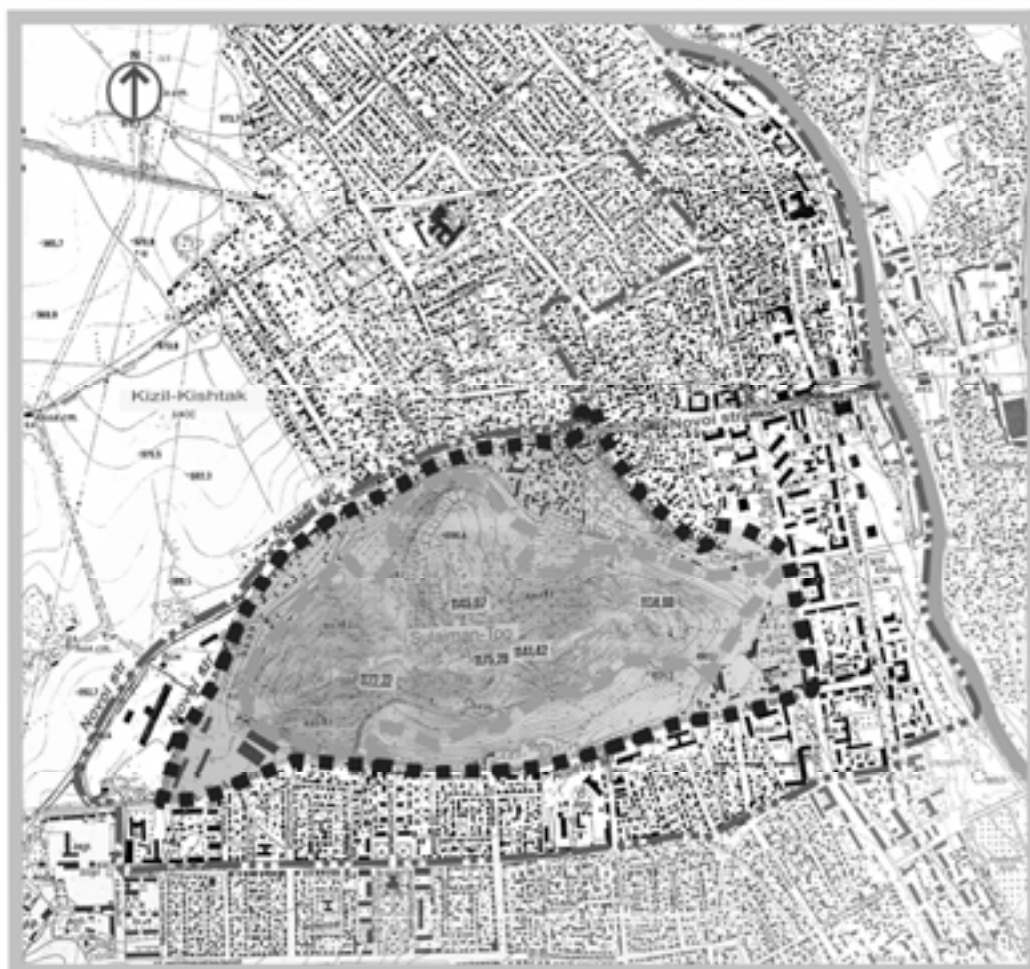
Although ICOMOS considers that the nominated property is a cultural landscape, it considers that its name should reflect its status as a sacred mountain rather than having these words in parentheses. Therefore it considers that the name should be changed to 'The Sulaiman-Too Sacred Mountain'.

Recommendations with respect to inscription

ICOMOS recommends that the nomination of Sulaiman-Too Cultural Landscape (Sacred Mountain), be *referred* back to the State Party of Kyrgyzstan to allow it to:

- Complete the Management Plan.
- Complete the protection of the nominated property by incorporating the zone of planning control and zone of protected natural setting into the city plan to give it effect, and in order to preclude new interventions on the mountain, including tree planting.
- Extend the Buffer Zone to incorporate part of the adjoining unbuilt plain as a means of protecting the setting of Suleiman-Too.
- Consider how sites on the neighbouring peaks might be incorporated in a revised buffer zone.
- Complete the survey of the network of paths around the mountain.
- Put in place a Tourism Strategy which addresses the issues of visitor access.

ICOMOS also recommends that the name of the property be changed to 'Sulaiman-Too Sacred Mountain'.



Signs and symbols:

0 500



Nomination object (conservation zone) - 112 hectares



Including:
Sulaiman-Too geological reserve - 60 hectares



Buffer zone - 183 hectares

Total area - 295 hectares



River

Map showing the boundaries of the nominated property



General view of the Sulaiman-Too Mountain



Stone and Bronze Age site on the 3rd peak



Petroglyph representing a labyrinth



Ancient sanctuary



Gate of the main pilgrim path

Batanes (Philippines)

No 1184

Official name as proposed

by the State Party: The Batanes Cultural Landscapes

Location: Batanes Province

Brief description:

At the northernmost tip of the Philippines archipelago of some 7,000 islands, are four Batanes Islands, Itbayat, Vuhus, Sabtang and Batan, where the North China Sea merges with the northern reaches of the Pacific Ocean, some 190km south of Taiwan.

The islands could have been a stepping off point for the migration of people and species from mainland Asia south-east towards the Pacific, associated with the spread of Austronesian languages prior to 1500 BC. The islands are now lived in by Ivatan people who trace their roots to early immigrants from Formosa (Taiwan), as well as to Spaniards who came to the islands from the 16th century. The landscapes of the islands reflect changes following the arrival of the Spanish: fortified citadels known as *ljangs*, gave way to grid planned dispersed settlements, and the use of stone as a building material was introduced, which contributed to the distinctive nature of vernacular buildings of the Islands. Damaged by an earthquake in 2000, there is community support to restore the houses. In addition to the living cultural landscape of the Islands, there are many archaeological sites which may prove to be of interest in further research relating to the development and dispersal of Austronesian languages through the Pacific.

Category of property:

In terms of the categories of cultural property set out in Article 1 of the 1972 World Heritage Convention, this is a *site*. In terms of the *Operational Guidelines for the Implementation of the World Heritage Convention* (2 February 2005) paragraph 47, it is also a *cultural landscape*.

1. BASIC DATA

Included in the Tentative List: 15 August 1993

International Assistance from the World Heritage Fund for preparing the Nomination: 1st January 2000

Date received by the World Heritage Centre: 30 January 2006

Background: This is a new nomination.

Consultations: ICOMOS has consulted its International Scientific Committees on Historic Gardens and Cultural Landscapes and on Vernacular Architecture. IUCN has provided an evaluation of the natural attributes of the site.

Literature consulted (selection):

Anderson, Atholl, *Crossing the Luzon Strait, Journal of Austronesian Studies*, December 2005.

Bellwood, P & Dizon, E, *The Batanes Archaeological Project and the 'Out of Taiwan' Hypothesis for Austronesian Dispersal, Journal of Austronesian Studies*, June 2005.

Technical Evaluation Mission: 20-29 November 2006

Additional information requested and received from the State Party: None

Date of ICOMOS approval of this report: 21 January 2007

2. THE PROPERTY

Description

The Batanes cultural landscapes consist of four islands, Itbayat, Vuhus, Sabtang and Batan, part of the ten islands of the Batanes archipelago which makes up Batanes Province. Only Itbayat, Sabtang and Batan are inhabited. The islands are at the northernmost tip of the Philippines some 190km south of Taiwan. The climate is harsh with frequent typhoons, monsoon rains and not infrequent earthquakes, the last of which in 2000 damaged many houses.

The islands are remote and isolated, yet could have been on a migration route from mainland Asia, south-east towards the Pacific, one of the possible strategic passages for the movement of people and species, particularly in connection with the development and spread of Austronesian languages prior to 1500 BC. Recent archaeological evidence from some of the many archaeological sites found on the islands has indicated possible links between south-east Asia and Batanes and the possibility of the islands being colonized in around 800 BC or earlier. The islands are now lived in by Ivatan people who trace their roots to early immigrants from Formosa (Taiwan), as well as to Spaniards who came to the island from the 16th century.

The cultural landscape of the islands reflects the impact of the Spanish colonisers who re-planned settlements. The older fortified citadels were abandoned and new grid planned settlements were formed on sites near the coast. The introduction of stone masonry, first on missionary buildings and later in houses, has strongly influenced the local vernacular buildings, which are now a fusion of Spanish and local styles.

Fishing, farming and gathering food were traditionally undertaken under a cooperative system known as *kamañidungan*, but this is now apparently vulnerable. The farmed landscape is characterised by small fields, protected from the wind with reed fences, and on some islands, grazing land for cattle enclosed by stone walls. In pre-Spanish times, the steeply terraced fields clustered beneath fortified citadels were set further inland in mountainous territory.

Although nominated as a cultural landscape, the nomination dossier provides much more information on

specific features such as houses and archaeological sites than on the overall landscape in terms of the relationships between settlements, forests and farmland. Little information is provided on the traditions and beliefs of the Ivatan communities and how they have over time shaped, and continue to shape, the landscape.

The nominated property includes the entirety of the four islands apart from the main settlement sites along the coast which are put forward as small buffer zones.

The nominated property consists of the following features, occurring within the group of the four islands:

- Archaeological sites
- Fortified *ljangs*
- Villages and traditional houses
- Farming landscapes

These are considered in turn.

- Archaeological sites

All the islands are known to have many archaeological sites. No comprehensive survey has been carried out and only a few sites have been researched or investigated archaeologically. These include sites in Batan and Itbayat Islands which have been studied over the last few years as part of the Australian National University's Asian Fore-Arc Project and whose results are still debated (see History below).

The known sites include:

Sunget, Batan Island – perhaps the most important site so far excavated. Discovered while a road was being constructed, it revealed Neolithic pottery similar to that found in Yuanshan and Beinan cultures in Taiwan, dated to around 800 BC or earlier.

Naidi, Batan Island – excavations revealed catastrophic volcanic eruptions between 1,500 and 1,000 BP.

Nakamaya, Batan Island – a rich collection of boat shaped stone burial markers were revealed in 1996. These are stones arranged in the shape of a boat, similar to traditional boats still found on the islands. So far these sites have not been mapped. No human remains were discovered.

Turungun, Itbayat Island – boat shaped grave markers above a cave that could have been an early landing place. Archaeological investigation in the cave produced pottery and decorated shells dated to between 3,400 and 3,700 BP.

Anaru, Itbayat Island – three sites excavated here in 2004 uncovered pottery similar to that found on Batan of a date probably less than 1,000 BC.

- Fortified *ljangs*

These fortified settlements are found in mountainous areas and seemed to have functioned as fortresses against enemy attack. It has been suggested by Dizon (1997) that they could have functioned in a similar way to the *gusukus* of

Okinawa, Japan. Few have been excavated, explored or surveyed. A description by William Dampier in 1687 records settlements on hilltops and ridges and that these were terraced and accessed by ladders.

Remains of *ljangs* include:

San Vicente ljang, Batan Island – this site shows remains of walls between two gullies.

Savidug, Sabtang Island – this was investigated in 1994 when remains of rectilinear stone walls were found on its comparatively inaccessible summit, above a 40m cliff on one side. Presumably access was by a ladder, as described by Dampier. Below the summit on the eastern side were seven terraces cut into the rock, while to the west there were terraces supported by stone walls. These have now been damaged by cattle. Finds which include 12th century Sung ceramic and Chinese beads, indicate a date of occupation no earlier than 1,000 BP. The form of the *ljang* is said to be similar to the foundations of Okinawan castles.

Chuhangen, Vuhus Island – boat shaped burial markers at the site were revealed in 1995 and dated to between 1595 AD and around 1900 AD.

- Villages and traditional houses

The earliest description of village houses is given by a Japanese fisherman who drifted to the islands in 1668. He describes Mahatao on Batan Island as a large village of around 700 people who lived in small houses with walls constructed of wood tied with the bark of trees, and roofs thatched with *cogon* grass. The houses had boards for flooring on which people slept.

Dampier in 1687 described the houses as long and low, on terraces with plank floors and 'posts and boughs' – whether for walls or roofs is not clear.

All present-day settlements reflect the planning carried out by the Spanish. In accordance with Philip II's Law of the Indies, new towns were to be laid out near sea or water, near to sources of building materials, arranged according to Vitruvian principles with central plazas, and near to sufficient land for crops and pasture. Because of the constraints of the topology of the islands, many of the settlements do not have spacious plazas, but most have houses arranged in a grid pattern along straight streets.

Ivatan houses are not typical Filipino houses on stilts to cope with flooding; rather they are set low in response to the heavy winds that prevail in the Batanes during most of the year, from the northeast in winter and southwest in summer, and to the monsoon rains and occasional severe typhoons.

Traditional houses are of single or two storeys with basalt stone and lime mortar walls, and roofs thatched with *cogon*, a type of grass. Roofs are either ridged, supported by stone gables, or hipped. Many of the houses have been modified with new materials such as concrete, in response to the earthquake damage which occurred in 2000, or due to a shortage of grass for roofing. Most of the large settlements are now a mixture of traditional houses, modified houses and new houses built entirely with

modern materials, cement and corrugated iron. There are around nine settlements on each of the three inhabited islands.

- Farming landscapes

Little information is provided in the dossier on the farming systems or on the characteristics of the broader landscape. Most of the following is supplied by ICOMOS. The land-use can be divided into farmland, forest and pasture. More than half of the islands' core zone is used for pasturing of goats and cattle. The uninhabited island, Vuhus, is used as pasture as are four of the seven uninhabited islands which complete the archipelago. The main arable crops are *camote* and other root crops.

There are distinct differences between the landscapes of the four nominated islands. On Batan Island, reed hedgerows border the fields, while on Itbayat Island, stone fences are used to divide the farmland and as pens for buffalos. A large part of Sabtang Island is covered in forest. The traditional way of farming has persisted most strongly on Itbayat Island. People in this island tend to have larger property holdings due to the lower ratio between population and land.

Kamañidungan, a cooperative system of land management, is said to be unique to the archipelago but few details are given.

Apart from some areas of newly planted forest for land conservation, the remaining forests are mostly 'ancient' forests, the wood from which is used to make traditional wooden boats.

The residential areas were moved after Spanish settlement. As the disposition of farmland has not changed, in many cases, the dwellings and farmlands are some way apart. For this reason, some residents choose to build traditional houses known as *jinjin* near their farmlands, where they live temporarily to work in the fields. *Jinjin* are of a lightweight wooden construction which pre-dates Spanish settlement.

The nomination does not relate this landscape to the cultural traditions of the Ivatan people who work the landscape: there is therefore little sense of a dynamic system of longstanding traditions that have shaped the landscape. The reed edged fields display a complex landscape pattern criss-crossing the hills – but how this came into being and what sort of social system it reflects is not brought out in the dossier.

History and development

Linguistic studies on the expansion of the Austronesian languages, suggest that starting 5,000 or 4,000 years ago there was an expansion of agriculturalists from Taiwan whose descendents eventually colonised all the islands of Southeast Asia, the Pacific except for Australia, and much of New Guinea and Madagascar. It is suggested by some scholars that the Batanes are on at least one of these migration routes.

The nomination states that archaeological remains found in the islands prove early occupation of the islands, which it is said justifies the theory that Batanes was settled quite

early in the process of Austronesian dispersal. Pottery dated to around 1500 BC is said to show strong links with those found in the islands of Taiwan.

However more recent analysis of recent excavations in 2005 by Anderson indicates that perhaps settlement did not occur in Batanes until around 800 BC, almost 1,000 years later than Neolithic colonisation of Luzon to the south by people from Taiwan. It is therefore not certain that Batanes was on the route of the earliest migrations. It could have been settled from the south or have been part of a second wave of migration. The water currents past the Batanes flow northwards and it could therefore have been problematic to reach the islands from the north and would have been simpler from the south. Currently therefore, there is no consensus on how the islands were first colonised and when.

Grave sites scattered across the islands, many with boat shaped markers, may reveal further evidence of early occupation. These graves, and the fortified *ljang*, are evidence of the settlement in the islands from around 1000 AD to recent times. So far, dates for these graves have been between 1595 and 1900 AD, but this span is inconclusive and more studies are needed to determine the start of this cultural practice. Similarly, more studies are needed to understand the form and use of the *ljang* constructions.

In the 17th century, Spanish missionaries began to arrive on the islands. It was not until the 1780s that they survived long enough to convert people to Christianity. Subsequently, towns were established on Batan Island and then on Sabtang and Itbayat between 1784 and 1855.

In 1782, Philippine Governor General Jose Basco y Vargas sent an expedition to undertake the formalities of getting the consent of the Ivatans to become subjects of the King of Spain. On June 26, 1783, Joseph Huelva Melgarjo became the first Governor of Batanes.

3. OUTSTANDING UNIVERSAL VALUE, INTEGRITY AND AUTHENTICITY

Integrity and Authenticity

Integrity

As a set of four islands the nominated property possesses integrity in physical terms. However in cultural landscape terms, the geocultural unit would appear to be the entire ten islands of the Batanes archipelago as the remaining islands are all part of the same system of farming, grazing and hunting. Based on further research on the evolution of the landscape, the way the landscape has been shaped by farming, forestry and fishing practices, the way natural resources have been used and the interaction between culture and nature, consideration should be given to including more of the Batanes archipelago

In terms of visual integrity, an antenna tower for the mobile phone, pylons and a water tower do intrude in the landscape. However these support the needs of the Islands' communities and are simple in design.

Authenticity

There are no issues regarding the authenticity of the archaeological ruins. The authenticity of the traditional houses has been affected by recent use of in some cases inappropriate new materials. However as part of the Management Plan there is a commendable programme to support more strongly the use of traditional materials and practices in the core zone. Research on land use, the overall history of the cultural landscape and the cultural traditions of the Ivatan people has not been conducted and it is not therefore possible to evaluate the authenticity of the cultural landscape as an entity.

In conclusion, ICOMOS considers that further survey and research is needed to assess the integrity and authenticity of the nominated property in its context.

In the absence of research into the cultural landscape and local cultural traditions, ICOMOS considers that it is not possible to assess the authenticity of the overall cultural landscape.

ICOMOS considers that integrity of the nominated area is partial and that consideration should be given to including more of the Batanes archipelago.

Comparative analysis

The nomination dossier makes comparisons between Batanes cultural landscapes and those of St Kilda in the United Kingdom, the Ryukyu Islands of Japan, and Lan-yu in Taiwan. It also compares the stone burial markers with those of Viking burials.

The dossier concludes that there are marked physical similarities between Batanes and St Kilda and Lan-yu in terms of house construction and similarities between Batanes and Lan-yu in linguistic terms. It also suggests that there could be similar reasons behind the use of boat shaped markers in Batanes and Scandinavia.

What the comparative analysis does not do is to compare the overall cultural landscape of the Batanes in such a way as to demonstrate why it is different culturally (not just in physical terms) from cultural landscapes already on the World Heritage List or those existing in the same geo-cultural area. Village houses and burials are only part of the Batanes landscape.

ICOMOS considers that a much more detailed comparative analysis needs to be undertaken once the features of the whole cultural landscape are better studied, researched and articulated.

There are already two Spanish colonial towns on the World Heritage List in the Philippines. The historic town of Vigan in north-eastern Luzon (1999) represents the architecture of Spanish colonial commercial outposts in Asia. The architectural influence of Spanish colonialism is also recognized in the “unique architectural style” of four churches as “a reinterpretation of European Baroque by Chinese and Philippine craftsmen” (1993). In contrast, the Batanes landscape reflects the long-standing evolution of the Ivatan culture with the fusion of Spanish influence and strong local traditions being the most recent phase of development.

The dossier does not make comparisons for the natural attributes of the islands although significant portions of the property are in a natural or semi-natural state. IUCN notes that the area falls within Udvardy’s Philippines Province of the Mixed Islands Biome which has one other natural World Heritage property – Puerto-Princesa Subterranean River National Park. The area of the nominated property also falls within an area noted as globally important for biodiversity: the property corresponds to a Conservation International Hotspot, one of WWF’s Global 200 Ecoregions, and a Birdlife International Endemic Bird Area.

None of the current World Heritage properties in the area – the Puerto-Princesa Subterranean River National Park (a karst landscape with underground river system), Tabitha Reef Marine Park (a predominately marine environment, coral reef atoll), and the Rice Terraces of the Philippines Cordilleras (a mountainous cultural landscape), bears relevant comparison with the Batanes Islands from a natural heritage point of view.

ICOMOS considers that the current Comparative Analysis does not adequately demonstrate comparisons between the overall cultural landscape of Batanes and other sites. Such a comparative analysis needs to be undertaken on the basis of a more holistic view of the islands’ cultural landscape features and cultural processes. ICOMOS and IUCN also consider that the natural attributes of the islands should be evaluated and compared.

Justification of the Outstanding Universal Value

The State Party suggests that the property is of Outstanding Universal Value for the following reasons:

The Batanes landscape:

- has outstanding aesthetic, scenic and natural qualities adapted by Ivatan people over the centuries;
- has an isolation that has helped protect its unspoilt character;
- reflects sustainable survival in a harsh climate;
- has traditional land-use practices, based on cooperative systems;
- has traditional villages of great cultural significance; and;
- has a wealth of archaeological sites which demonstrate cultures associated with the Austronesian and Neolithic migrations, therefore providing an understanding of man and his origins.

Criteria under which inscription is proposed

The property is nominated on the basis of criteria i, ii, iii, iv, v and vi.

Similar justifications are given for several of the criteria and the justifications put forward for some of the criteria only apply to certain aspects of the cultural landscape.

Criterion i: This criterion is justified by the State Party on the grounds that the *ljangs* which are unique to the islands are engineering feats that show the genius of the Ivatans in ensuring safety for their people during conflicts. The boat-shaped burial stones are also mentioned.

ICOMOS considers that while the *ljangs* and boat-shaped burial markers of the Batanes Cultural Landscapes give evidence of human ingenuity, the preserved *gusukus* of Ryukyu (inscribed on the World Heritage List in 2000) are much better documented and understood, and that the absence of ethno-historical or historical documentation of the burial markers means that it is not possible to determine how and when they were created.

ICOMOS consider that this criterion has not been justified.

Criterion ii: The State Party justifies the use of this criterion in respect of the technological development of Ivatan architecture prior to the arrival of the Spanish, and the grid-plan planning of post-Spanish towns and settlements.

ICOMOS considers that while the overall landscapes (not just the houses) possibly provide evidence of an interchange of human values over a span of time – relating to the fusion of local and Spanish architectural styles, the comparative context for this and the value of the exchange beyond the islands does not justify international significance.

ICOMOS consider that this criterion has not been justified.

Criterion iii: This criterion is justified by the State Party on the grounds that the Ivatan traditional villages, combined with *ljangs* and boat-shaped grave markers are unique.

ICOMOS considers that the villages, *ljangs* and boat-shaped grave markers relate to each other and the overall history of the Batanes landscape. However, insufficient argument is provided about why this ensemble can be said to be outstanding when compared to many other rural landscapes that similarly reflect the history of people over several millennia.

ICOMOS consider that this criterion has not been justified.

Criterion iv: This criterion is justified by the State Party on the grounds that the villages and *ljangs* are living testimonies to an exchange of values between indigenous peoples and the Spanish colonists.

ICOMOS considers that it has not been substantiated how the Batanes settlements are an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrate a significant stage in history not already manifest in, or complementary to, the two existing World Heritage Properties in the Philippines representing the Spanish colonial influence in the islands.

ICOMOS consider that this criterion has not been justified.

Criterion v: This criterion is justified by the State Party on the grounds that the traditional settlements of Batanes

which reflect cooperative systems and pre-Hispanic and Spanish or American influences are vulnerable to the impact of irreversible change. The way some houses are already being affected by modern influences is highlighted as demonstrating how this is slowly eroding cultural values.

ICOMOS considers that the settlements on the islands and their vernacular buildings do reflect the fusion of Spanish and indigenous Ivatan building technologies, and that these vernacular traditions demonstrate an evolution over four centuries in a way that is representative of the Ivatan culture. What has not been demonstrated is how these settlements relate to the landscape of the wider islands nor how they relate to the social, economic and cultural aspects of Ivatan society in a way that makes them of international significance.

ICOMOS consider that this criterion has not been justified.

Criterion vi: The State Party justifies this criterion on the basis that the location of the Batanes islands makes them a natural funnel for cultural influences of diverse origins, an area for cultural evolution and development, and a place that was the first site in the migratory journey of people and species from mainland Asia to the Pacific.

This criterion is usually associated with intangible ideas and beliefs or events of cultural significance. As no discussion has been provided on the cultural traditions of the Ivatan people and particularly their relationship with the landscape, ICOMOS concludes that it is not possible to assess the relevance of this criterion.

On the question of the associations with cultural migration, there is no consensus on the role these islands might have played in the migration of early peoples south-east towards the Pacific, and in the spread of Austronesian languages.

ICOMOS consider that this criterion has not been justified.

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

4. FACTORS AFFECTING THE PROPERTY

Archaeological sites

The lack of consolidation of archaeological ruins is a cause for concern. None seem to be fenced and although visitor numbers are few, sites could be and are damaged by grazing animals.

Modern Materials

After the 2000 earthquake, repairs to traditional stone houses in the nominated area and the buffer zone were carried out by the Government using corrugated iron for roofs and concrete for walls. Most of the settlements, particularly those in the buffer zone now contain a proportion of houses either altered with modern materials or re-built.

However, houses with corrugated roofs are proving too hot for many residents to live in and some local people are wishing to revert to *cogon* grass for roofs – although this grass is currently in short supply on some of the islands.

There is a need for more effective planning guidance on the siting and design of new buildings, and the use of new materials. There are some guidelines in the management plan, and in Ordinance No.60, there are regulations for new buildings and renovation. However, the effectiveness of the new Ordinance needs to be monitored and it needs to be supplemented by more specific guidelines on height, colour and shape. The government departments for heritage protection and for building construction are different, and there is a need for more effective communication between these.

Landscape

The dossier identifies a number of landscape conservation issues of considerable concern, including soil erosion from over-grazing and the lack of political will to control grazing. There is also mention of encroachment of lowland forest on grazing areas; illegal wildlife trade by poachers which could disturb the ecological balance; harvesting of timber for construction use; collection of geological resources for construction; waste dumping and waste management issues; illegal fishing; and coral cover degradation due to boat anchorage and grounding, and trampling.

The Management Plan addresses what are called Multiple Use Zones but does not appear to address active management of the agricultural landscape. Similarly, information is given on the settlements, archaeological sites and what are called natural areas to be managed for ecological interest but not on the agricultural landscape. It is therefore not clear how far the traditional agricultural landscapes, and the overall cultural landscapes are being sustained. There is a need to strengthen the specific management actions to protect and sustain both cultural and natural values of the cultural landscape.

Ivatan traditions

As few details are given in the dossier of the traditions of the Ivatan peoples, their collaborative economic practices or their spiritual beliefs, it is not possible to understand whether or not these are vulnerable.

ICOMOS considers that without further assessment of the cultural landscape patterns and the farming and social systems of the Ivatan people and whether or not these are being sustained, it is difficult to identify the main threats to the property. Given the aspects of the landscape that are covered by the nomination, ICOMOS considers that the archaeological sites that have been excavated need better protection from grazing animals and that the coherence of the settlements in the buffer zone need protecting through the introduction of planning guidance on new structures and more effective implementation of existing regulations.

5. PROTECTION, CONSERVATION AND MANAGEMENT

Boundaries of the nominated property and buffer zone

The four islands nominated as cultural landscapes are only part of the Batanes archipelago of ten islands which together form a geo-cultural unit. The farming system on the four islands is linked to the remaining islands some of which are used for grazing. ICOMOS considers that, subject to further survey and research, consideration should be given to the possibility of enlarging the nominated property to include some or all of the remaining islands.

Furthermore, ICOMOS considers that the buffer zone needs adjusting as follows.

First, the seascape around the islands needs to be included as part of the buffer zone for the nominated islands.

Secondly, consideration should be given to including the whole of each island as the core zone. Currently the settlements have been excluded as many of the houses have been altered. However excluding these settlements excludes the residents who live there, and therefore provide an incomplete picture of the functioning of the cultural landscape. Furthermore, programmes are now in place to restore traditional buildings and there could be opportunities to reverse some inappropriate interventions carried out after the earthquake. Including the settlements, subject to restoration programmes, would give impetus to the need to put in place protective measures to sustain the coherence and planning of these settlements.

Finally, depending on the results of further studies to identify the extent of the cultural landscape, the remaining uninhabited islands in the archipelago could also be considered as part of the core zone, as part of an enlarged buffer zone or as natural areas – see below.

ICOMOS considers that consideration should be given to adjusting the boundaries of the core and buffer zone so as to include the main settlements in the core zone of each island, and to enlarge the buffer zone to include the surrounding seascape.

ICOMOS further considers that subject to research and survey, consideration could be given to including all or more of the islands in the archipelago in the core zone.

Ownership

There are three types of ownership of the nominated property: individual, community and government. According to the Law for the Transfer of control and ownership of Agricultural land to actual Tillers 1988 (CARP), properties which have an inclination of more than eighteen degrees, mostly forest, are owned by the government. Most other forests and pastures are owned by the community, while arable farmlands and houses are owned by individuals.

Protection

Legal Protection

There are two main laws applicable to the nominated property, as follows:

1) National Law Republic Act No. 8991, an act to establish the Batanes group of islands and islets as a protected area

and its peripheral waters as buffer zones, providing for its management and for other purposes; and

2) Republic Act No. 8371, an act to recognize, protect and promote the rights of indigenous cultural communities and indigenous people, creating the National Commission of Indigenous People, and establishing implementation mechanisms.

The first law concerns the regulation and change of land-use from the point of view of nature conservation. The second relates to the protection of property rights for the minority. Since the power of the traditional community is strong, there are few possibilities for dramatic changes because of this legislation.

After the submission of the nomination dossier in November 2006, Ordinance No. 60 was issued, enacting the conservation and management of the cultural heritage sites in the province of Batanes and providing associated funds. It is a revision of Ordinance No. 41 of 2002. The elements of heritage are designated as the subject of protection and the regulations are stated.

ICOMOS considers that the protective measures for the property are adequate.

Conservation

History of Conservation

No details are known of specific conservation programmes on the buildings, landscape or archaeological sites apart from the initiatives to restore buildings damaged by the earthquakes.

Present state of conservation

The present state of the archaeological sites which have been excavated gives some cause for concern. Insufficient data is given on the landscape to know how well it is conserved. Many vernacular buildings need attention as a result of the 2000 earthquake although work has started.

Active Conservation Measures

Active measures to conserve some of the traditional buildings are in place. For example, at Ivana in Batan Island, the Batanes Heritage Management Office (BHMO) purchased a house where only the basic structure survived and conserved it through the traditional cooperative association *kamañidungan*. Cooperative conservation works were also carried out by the state and the province on Mahatao Parish Church in the buffer zone.

No active measures appear to be in place for the conservation of the archaeological sites or features of the wider landscape, apart from traditional land management practices which are not detailed.

Research

Research on vernacular buildings has been carried out by the National Commission for Culture and Arts, The University of Philippines and the College of Architecture Foundation for the Environment. A report on Ivatan architecture summarises the siting, material and techniques

for traditional buildings. Research on linguistics has been conducted since 1960s, and research projects on fishing and folklore are also proceeding. Archaeological research has increased in recent years, undertaken by the National Museum of the Philippines and others, but the proportion of sites investigated is still small. Although some of the finds have been analysed, the cost of radio-carbon dating has apparently delayed further analysis.

For many sites not excavated, there are neither written materials nor oral history and no surveys of historic landscapes, traditional farming or land-use have so far been undertaken. At this stage, the relationship of historical change and the cultural landscape is not clear.

The dossier acknowledges that work done so far is basic reconnaissance and that more detailed and in-depth study is needed in the 'discovered and yet-to-be discovered' fields of interest. ICOMOS considers that more work is needed to understand the relationship between settlement history, archaeology, traditional farming and landscape in order to inform appropriate conservation and management of the cultural landscape.

ICOMOS considers that there is a need to more clearly identify the cultural values of the overall landscape in order to evaluate and encourage the formal and traditional conservation arrangements to sustain those values.

Management

Set up by the local provincial government, the Batanes Heritage Management Board (BHMB) has responsibility for implementing the relevant laws and the implementation of the Management Plan. The chairman is the Governor and the Board consists of six mayors, experts for environment and education, property owners of the archaeological sites and the National Commission on Indigenous Peoples. A monthly meeting is called by the chairman to discuss issues arising from the different sites.

To help implement the Republic Act no 8991, there are specialists and three rangers for supervision. The regulations seem to be effective and are supported by the strong and close relationships within the community. The specialist advisors are the natural and cultural heritage experts in the Philippines.

A Management Plan has been prepared for the property that sets out management prescriptions, guidelines and strategies for various aspects of the sites, particularly traditional buildings, archaeological sites and natural areas. What the plan does not cover is the overall cultural landscape in terms of addressing the needs for further research and documentation of the landscape and activities in order to put in place policies to sustain traditional agricultural and forestry practices. The Plan has not yet been implemented.

Interpretation, Presentation and Visitor Management

There is no formal interpretation of the values and traditions of buildings and land use. There are some local residents who possess an in-depth and rich knowledge of the history and archaeology of the islands. At this stage, there are no facilities to allow visitor to reach the ruins, villages, or traditional landscapes.

A small museum at Itbud in Batan Island is currently closed. The archaeological remains from the islands have been taken to Manila by the National Museum for further investigation.

Local high schools organize study tours to visit the ruins and to see the traditional folk customs. Batanes State College is considering offering courses on heritage protection.

Access to the property is difficult; and the roads in most islands are unpaved. In terms of the facilities for the visitors, there is Batanes Resort run by the Department of Environment and Natural Resources, and two or three other places that offer accommodation.

The Batanes Heritage Management Board and the Department of Environment and Natural Resources are planning for eco-cultural tourism. Conservation works have been carried out on houses at Malakdang, Sabtang Island and Ivana, Batan Island to allow them to be used as places for bed and breakfast style accommodation.

An overall visitor management programme, including capacity control, has not yet been prepared. ICOMOS considers that there is a need for a strategic approach to cultural tourism promotion and management in order to ensure vulnerable archaeological sites are not endangered.

In conclusion, ICOMOS considers that the management system in place as a structure is adequate. This needs to be directed to putting in place more in-depth studies to allow management to reflect the full qualities of the cultural landscape in terms of how people have interacted with nature to produce distinctive landscape patterns that reflect political, social and economic history.

6. MONITORING

A detailed list of monitoring indicators is put forward in the nomination which will be put in place once the Management Plan is operational. The indicators include: the number of buildings with modern materials, number of lime pits, number of nature conservation programmes, restoration of traditional houses, identification of quarries for building stone, number of people involved in communal management systems, and communal land for building timber and *cogon* grass. These concentrate on the buildings and natural aspects. Further indicators will need to be developed to reflect the full range of values of the cultural landscape.

7. CONCLUSIONS

The information presented in the dossier concentrates on the known archaeological sites, the traditional villages with specific attention to the indigenous architecture within these villages, descriptions of boat-shaped stone grave markers, and the *ljang* or fortified citadels. ICOMOS considers that these elements form only parts of the overall Batanes cultural landscape.

What is presented, together with other material gathered by ICOMOS, does however suggest that the cultural

landscape of the islands is a rich repository of cultural traditions and could have the potential to demonstrate outstanding universal value, if sufficient survey and research were to be carried out on the evolution of the landscape as a holistic reflection of history and cultural traditions, and of the interaction between culture and nature.

In particular much more needs to be documented about the chronological history of the landscape, the way the landscape has been shaped by farming, forestry and fishing practices and the natural resources that have been used. The cultural traditions of the Ivatan people need better documentation. Currently the nomination concentrates on the material evidence of some aspects of the islands, but is almost silent about the communities associated with the landscape. More information needs to be provided about the intangible associations between people and their surroundings, practices, rituals, belief systems, occupations and so forth, in order to understand better how the landscape is a physical reflection of a culture developing in a particular environment over time, and how traditional processes might be sustained.

The recent archaeological excavations have suggested that the islands could be a repository of evidence for early migrations, although the evidence is the subject of scientific debate. There is a need to establish whether there is potential for the islands to hold a significant place in the scientific study of Austronesian migrations.

Based on the evidence available, IUCN comments that it appears that this property has potentially significant natural values which might be part of the cultural landscape or separate in areas currently not utilized as part of the agricultural systems, such as on the uninhabited islands or part of the seascape.

The current boundaries put forward for nomination only include part of the Batanes archipelago. On the basis of further research, ICOMOS suggests that consideration needs to be given to ways in which the remaining islands might form an integral part of the cultural landscape, as part of an enlarged buffer zone, as natural sites or as part of the core zone.

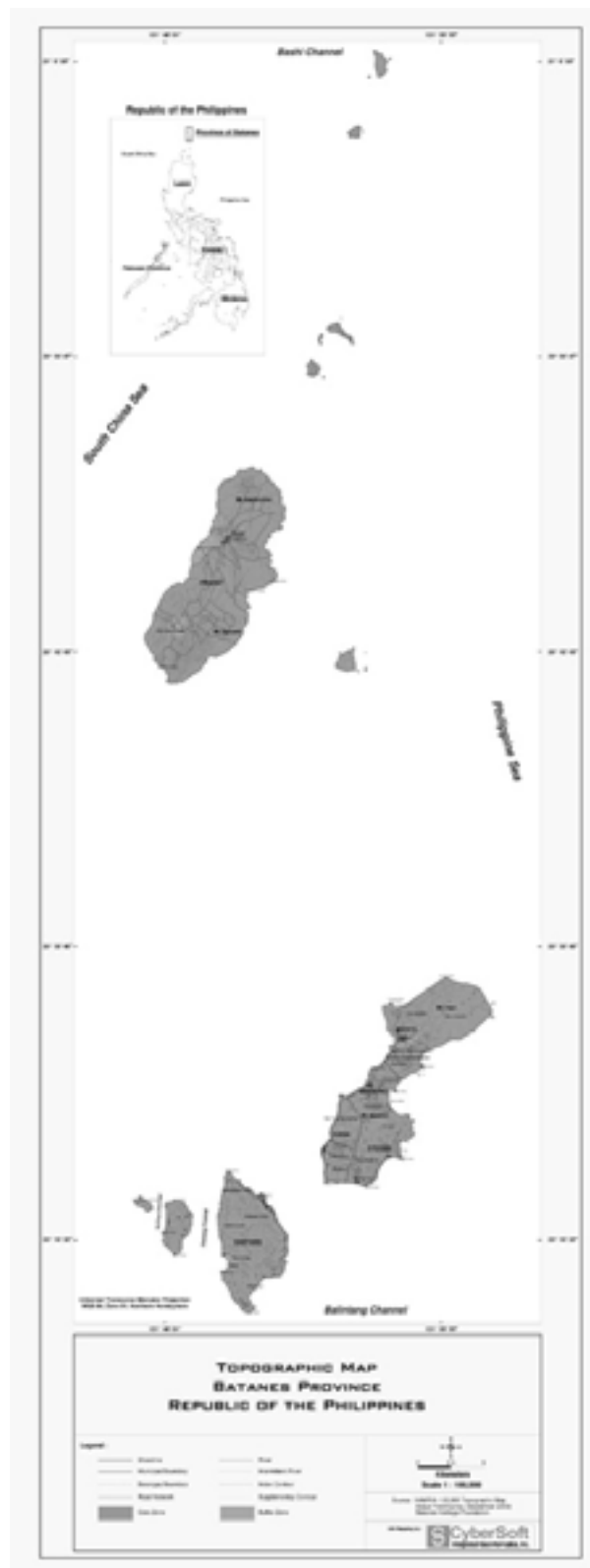
Recommendations with respect to inscription

ICOMOS recommends that the examination of the the nomination of the Batanes Cultural Landscapes, Philippines, to the World Heritage List be *deferred* in order to allow the State Party to consider re-submitting the nomination on the basis of further survey and research on:

- The evolution of the landscape as a holistic reflection of history and cultural traditions, and of the interaction between culture and nature.
- The chronological history of the landscape, the way the landscape has been shaped by farming, forestry and fishing practices, and the natural resources that have been used.
- More detailed assessments and recording of archaeological sites and settlement patterns.

- The intangible associations between people and their surroundings, practices, rituals, belief systems and occupations, in order to understand better how the landscape is a physical reflection of a culture.
- Ways of actively supporting traditional agricultural, forestry and other landscape practices.
- Whether there is potential for the islands to hold a significant place in the scientific study of Austronesian migrations.
- The natural values of the islands.

ICOMOS further recommends, pending further research, that the State Party give consideration to including all the islands of the archipelago either in a core zone or in a buffer zone.



Map showing the boundaries of the nominated property



Savidug Idyang (Sabtang Island)



Roofing by Kamañidungan (Batan Island)



Vernacular wine mill (Batan Island)



Farming landscape with reed fences (Batan Island)

Sarazm (Tajikistan)

No 1141

*Official name as proposed
by the State Party:*

Sarazm

Location:

Penjikent District, Sogd
Province

Brief description:

Sarazm is an archaeological site from the early Neolithic period to the Late Bronze Age (circa 3500 to circa 2000 BCE) that illustrates of the growth of urbanism in Central Asia and the development of regional and long-distance trade links.

Category of property:

In terms of the categories of cultural property set out in Article 1 of the 1972 World Heritage Convention, this is a *site*.

1. BASIC DATA

Included in the Tentative List: 19 June 2000

*International Assistance from the World Heritage Fund for
preparing the Nomination:* 23 November 2001

*Date received by
the World Heritage Centre:* 30 January 2006

Background : This is a new nomination.

Consultation : ICOMOS has consulted its International scientific committee on Archaeological Heritage Management.

Literature consulted (selection):

*Dictionnaire de la préhistoire (Encyclopædia Universalis),
Albin Michel, Paris*

Technical Evaluation Mission: 11-15 September 2006

*Additional information requested and received from the
State Party:* ICOMOS sent a letter to the State Party on 15 December 2006, and the State Party provided supplementary information on 25 January 2007.

Date of ICOMOS approval of this report: 21 January 2007

2. THE PROPERTY

Description

Sarazm is situated on the left bank of the Zaravshan river, at an average altitude of 910m, 15km west of Penjikent and 45km east of Samarkand (Uzbekistan), 500 m north of the main route connecting these two cities. Sarazm ('the

beginning of the earth') is located between the end of the mountainous part of the riverbed, and the entrance to a larger valley – a strategic place between mountains and flatlands.

It lies on an elevation stretching from west to east, c1.5km long and 400-900m wide. The settlement appears to have covered over 50ha during its most developed period, when Sarazm had a settled population of about 3,000 (4th-3rd millennia BCE).

The settlement consists of ten small mounds of different heights and five depressions, corresponding to built-up zones, open spaces, and reservoirs. Sarazm does not have a clearly defined plan. The settlement, which had no protective enclosure, spreads in different directions with no boundaries.

Most of the core zone is covered by low steppe vegetation. Twelve areas, representing less than 4% of the protected land, have been excavated, leaving visible traces of the structures found.

To provide better protection of some of the most interesting excavated areas, five large roofs have been constructed. Those are intended to be the main attractions for visitors, where they can see the results of the excavations. Some are still undergoing archaeological research, providing better understanding of the site and more interesting visits.

Today, the village of Sahibnazar lies on top of the northern and western parts of the settlement and the village of Avazali on its north-eastern section. Large portions of these two villages are in buffer zone 3 which is also an area subject to restrictions and an agreement between the local population and the archaeological base.

Stratigraphy

Four stratigraphic horizons have been found at Sarazm, corresponding to at least four successive periods of continuous occupation, spreading from the mid 4th to the late 3rd millennium BCE. These are more or less known and understood, depending on their level of erosion and the material found.

Approximate dates for the four periods are:

Period I	3500-3300 BCE
Period II	3200-2900 BCE
Period III	2900-2700 BCE
Period IV	2700-2000 BCE

The less investigated are those which correspond to Period I (on some excavations it is not represented, and on others to a very limited extent, owing to the necessity to save upper structures); and Period IV, which has been partially destroyed by agriculture. Periods II and III are the best represented in visible remains.

Architecture

Building remains at Sarazm comprise housing, workshops for craftsmen, storage (granaries), and palace and cult buildings. All are mainly in mud-brick (adobe), which allowed flexibility in use, size, and form. Roofs were flat

with wooden beams, covered by a network of branches and reeds supporting one or several layers of earth. There were some complex doors and windows which demonstrate mastery in ventilation and lighting devices.

Residential areas

Multi-room complexes are common in all periods. They comprise living areas with adjoining storerooms, workshops, kitchens and outbuildings. Most have a fenced courtyard in which crafts were practised. Several related families living together occupied those complexes. They were separated by squares and large or narrow streets, as well as open areas for cattle. There were also water reservoirs inside the settlements.

Inside the rooms, cult activities were carried out in Period II in small domestic shrines with round hearth-altars in the middle. Starting from Period III the sanctuaries became larger, with square altars as well as round ones. In some cases the sanctuaries were built separately from the dwellings. The walls of ceremonial buildings were often reinforced by buttresses (inside and outside) and generally covered with red or polychrome paintings.

Monumental buildings

Three types of monumental structure characteristic of the development of the proto-urban culture of the ancient East were discovered in Sarazm: a communal granary, a religious building, and a palace complex.

Burials

No large necropolis has yet been found at Sarazm, but a round funerary enclosure has been found of which a burial site containing a woman, a man, and an adolescent was the central element. On and around the woman's skeleton were found thousands of beads (steatite, lapis lazuli, cornelian, turquoise, and silver); her hair was decorated with massive gold beads. Her hands were adorned with bracelets made of seashells from the Indian Ocean, proving direct or indirect relationships with the Indus valley peoples.

The necropolis has similarities with those corresponding to southern settled agricultural cultures, and the stone enclosure wall is reminiscent of burial customs in the steppe zone of Eurasia.

Workshops

Many finds (ceramics, metallic, stone, bone and other materials) are evidence of the development of specialised productions in Sarazm. Many tools and small pieces of materials such as quartz, Ferghana turquoise and Badakhshan lapis lazuli prove that these minerals were processed in Sarazm.

A two-layer pottery kiln from the beginning of the 3rd millennium BCE attests to the specific development of ceramic production in Sarazm, since nothing similar had existed in other parts of Central Asia before 2000 BCE.

Summary

All finds demonstrate that Sarazm, following nucleation in the mid-to-late 4th millennium BCE, developed into a

proto-urban centre supplying manufactured goods to its own population as well as those of a vast hinterland. The town manufactured ornaments and tools not only from local and regional resources but also from over 1,500km away, such as the shells from the Arabian Sea.

History and development

The proto-urban settlement of Sarazm dates from the early Neolithic period to the Late Bronze Age (c.3500 to c.2000 BCE). The original Chalcolithic core town of the mid 4th millennium BCE may have been established on an earlier late Neolithic village, still to be discovered.

From a geographical point of view, Sarazm is located in a strategic place, between a mountainous zone and a large valley area, one favourable for cattle grazing and the other to agriculture and farming. The proximity of the *tugais* (jungles) in the flood-lands of Zaravshan also allowed harvesting and hunting activities. In addition, the mountainsides of the Zaravshan valley possess natural resources that made bronze production possible.

These geographical conditions made it possible for the nomadic shepherds of the mountains and the agricultural populations of Transoxiana to meet and interact in Sarazm, where the production of metals, pottery and stone artefacts developed.

At the turn of the 4th-3rd millennia BCE, Sarazm became an important centre for long-distance inter-regional exchange, especially the export of tin. The settlement became a crossroads where the major east-west axis (the Zaravshan River) and the north-south axis intersected. The main river corridors that permit the crossing of the westernmost extensions of the Pamir-Alaj massif, the parallel ridges of the Turkestan Mountains to the north, and the Zaravshan to the south, merge at Sarazm.

The town therefore represents a turning point in the history of the region. It was a centre where people developed many complementary activities within a plural economy, based on agriculture and cattle-breeding on the one hand and the processing of the nearby mineral resources on the other. This led to new developments that brought about many social changes, most particularly the beginning of specialisation in the production of goods, the formalisation of trade, the integration of social classes, and, finally, the beginnings of urbanisation with the creation of a complex settlement with sophisticated architectural achievements for the period.

Contact was established between Sarazm and the ancient agricultural centres of Mesopotamia, Iran, Baluchistan and Afghanistan. Trade with distant regions in the Near East (Mesopotamia, Elam, Khorasan, Sistan and Baluchistan) was carried out through intermediaries. The underlying local culture, the waves of migration from southern Turkmenistan, and the close relations with many other regions combined to form and develop the culture of Sarazm.

Sarazm appears to have declined between the middle and the end of the 3rd millennium BCE. No evidence of occupation has been found on the site for the periods that followed, and it seems likely that shepherds once again inhabited the area. The reasons for the abandonment of

Sarazm by its inhabitants have not yet been identified. Different hypotheses include migration of the population, epidemic disease, and attacks on this prosperous but undefended settlement, but none has yet been verified.

The site was rediscovered in 1976 by a villager, who found some objects on the surface of a newly cultivated field, including a bronze axe which he presented to the head of the archaeological centre at Penjikent. Following that discovery, discussions were held with the representatives of the local population and expansion of agricultural activities in the area was brought to an end in order to preserve the buried remains of Sarazm. This was the beginning of a fruitful collaboration between archaeologists and the local people, and the site has been excavated since 1979. In 2001, Sarazm was inscribed as a national monument and became a national concern, a symbol of Tajik national identity.

3. OUTSTANDING UNIVERSAL VALUE, INTEGRITY AND AUTHENTICITY

Integrity and authenticity

The integrity of Sarazm is indisputable. The site covers the area of the successive ancient settlements, from 3500 to 200 BCE, and all the periods are represented in the remains. Moreover, as an archaeological site, Sarazm can be considered authentic. All original elements are in their original locations as they were left when the site was abandoned, showing how natural decay occurred.

Whilst the upper layers of the remains were undoubtedly disturbed during the long period when agricultural activities were carried out on the site, the depth involved is limited; moreover, it contains evidence about the later period of occupation. In addition, there is no treasure hunting at Sarazm, and the local population has always been cooperative with the archaeologists.

Since the 1970s excavations have taken place at twelve locations, which cover more than 2.5ha of the 47ha. The excavated zones have been covered with soil in order to preserve them from destruction. This solution, however, has proved not to be fully satisfactory, with visible degradation of the excavated structures. For that reason, five zones were covered with three-dimensional metallic structures.

Opportunities exist for further excavation of the lower levels of occupation where the remains were affected when left insufficiently protected after the earliest excavations. The excavation spoil-heaps, which can be confused with original archaeological features, are few, soil from the excavation having been given to the villagers after sieving for use as building material.

ICOMOS considers that the conditions of the nominated property for integrity and authenticity are met.

Comparative analysis

Comparisons have been made by the State Party with other Central Asian Chalcolithic–Bronze Age settlements in order to understand the origins of the culture of Sarazm and its spread in the sub-regions.

Some analogies were detected with the monumental buildings discovered in several sites from the same period such as Altyn Tepe, Göksür, Tepe Hissar, Mundigak, and Shahr-e Sukhte, which are typical of the development of the proto-urban culture of the ancient east.

Comparisons were established, for example, between:

- The religious monumental building of Sarazm and of Göksür.
- The communal granary of Sarazm and the public storage buildings in the ‘noble quarter’ at Altyn-Depe.
- The palace complex of Sarazm and comparable structures of the 3rd millennium BCE at Sumer.

More similarities between Sarazm and the cultural complex of southern Turkmenistan can be observed clearly in the disk-shaped altars and the layout of the housing. Other analogies with those sites were found by comparison with the artefacts discovered at Sarazm such as the painted pottery, disc-shaped stone weights, lead plumb-bobs, etc.

More recently, new hypotheses have been put forward by scholars who find similarities for Sarazm with sites that are now better known in the Jiroft valley or the Sistan basin in Iran, and even sites such as Mundigak in Afghanistan, Ra’s al-Jinz in Oman, or Lothal in India.

However, according to the State Party, Sarazm presents many particularities which distinguish it from the other sites:

- It is the largest early Bronze Age town so far discovered in northern Central Asia.
- It is a unique example of protohistoric settlement (4th–3rd millennia BCE) with a multiple economy based on agriculture and cattle-breeding and on the processing of the mineral resources of the region.
- The specificity of Sarazm probably lies in the rich geological resources of the upper Zaravshan Valley – copper, lead, gold, silver, mercury, tin and turquoise. Sarazm was not only a major metal-producing area, it was also an important centre for the production of stoneware, jewellery and many different craft products (such as weaving, leather and pottery).
- It possesses a unique variety of components or imports from distant and very different cultures from a wider region, including South Turkmenia, North-East Iran, Sistan, Baluchistan and the Pre-Ural region. Sarazm provides evidence about the large trade routes that crossed Central Asia, starting long before the Silk Road.
- If marine shells were the key import resource to establish the long-range trading capacity of Sarazm as a manufacturing centre, tin is the corresponding export commodity. The Zaravshan Valley was the main source of tin in the ancient world, exploited in Uzbekistan and Tajikistan since the 2nd millennium BCE. It is quite likely, however, that the exploitation started at least a millennium earlier.

- The architecture of Sarazm has some analogies with that of other parts of Central Asia at the same period, but in general terms the buildings of Sarazm demonstrate greater complexity and sophistication, with more rooms, complex plans, monumental realisations, and decorated surfaces. It also has no protective enclosure, whereas many protohistoric settlements of this time were surrounded by earth enclosures, moats, canals or embankments.

ICOMOS considers that Sarazm is a significant archaeological site at a regional level that presents a comprehensive picture of proto-urban settlement and trading networks from the early Neolithic period to the Late Bronze Age (c.3500 to c.2000 BCE). Whilst acknowledging the potential cultural significance of the Sarazm monuments, ICOMOS considers that, as the site has been discovered rather recently, the on-going archaeological studies are not sufficient to fully demonstrate its outstanding importance in ancient Central Asia

ICOMOS considers that it is likely that the nominated property is a good candidate for World Heritage Listing, more work on the comparative analysis should be carried out to explore further the values and significance of the nominated property.

Justification of Outstanding Universal Value

According to the State Party, the fact that Sarazm is located at a strategic point in Central Asia is the key to its development during the 4th-3rd millennia BCE. It is situated between a mountainous zone and a large valley, the former favourable to cattle grazing, the other to agriculture and farming. It was a natural point of contact between the nomadic shepherds of the mountains and the first agricultural populations of the region between the Syr Darya and Amu Darya, who practised complementary activities.

In addition, the slopes of the Zaravshan Valley contain natural geological resources, as a result of which Sarazm became a major centre of bronze metallurgy and developed into a proto-urban centre supplying manufactured goods to its own people and those of a vast region. The town also manufactured goods (ornaments and tools) from strictly local resources.

These new developments entailed many social changes such as the beginning of specialisation for production of goods, the formalisation of trade, the appearance of social classes, and urbanisation with the creation of a complex settlement with sophisticated architectural achievements.

Sarazm was the first centre in Central Asia to establish trade relations over a large geographical area, from the Eurasian Steppes and the Aral Sea to the north, Turkmenia and the Iranian Plateau to the west, and the Indus valley in the south.

It became a prosperous and rich city with a sophisticated culture, a complex organisation, and capacities for erecting monumental buildings. Traders facilitated the exchange not only of goods, but also of knowledge, skills, and cultural

assets, which contributed to further developments in the Central Asian region.

Criteria under which inscription is proposed

The property is nominated on the basis of criteria ii, iii, iv, v, and vi.

Criterion ii: According to the State Party, Sarazm was a strategic meeting point between the nomadic shepherds of the mountains and the agricultural populations of Transoxiana. Through organising trade between these two groups and producing tools for them, Sarazm contributed to the improvement of their lives, and it became a prosperous city. It further developed as a major trading centre in Central Asia over an area from the Eurasian steppes and the Aral Sea on the north, Turkmenia and the Iranian plateau in the west, and the Indus valley in the south. This facilitated the exchange of goods and also of knowledge, skills, and cultural assets.

ICOMOS considers that, as the site has been discovered rather recently, the on-going archaeological studies are not sufficient to fully demonstrate the importance of human exchanges on the architecture and the planning of Sarazm. The case made by the State Party needs to be strengthened by further research to justify inscription of the property under the terms of this criterion.

ICOMOS does not consider that this criterion has been justified.

Criterion iii: According to the State Party, mastery of the manufacture of bronze tools and other useful crafts as well as trading activities supplied Sarazm with specific capacities that are reflected in its superior urban and architectural achievements when compared with other settlements of the same period.

ICOMOS considers that the case for inscription on the basis of this criterion remains to be strengthened, following further comparative research.

ICOMOS does not consider that this criterion has been justified.

Criterion iv: According to the State Party, Sarazm was the first large centre for metal production in the north-eastern part of Central Asia (4th-3rd millennia BCE). The mastery of this technology permitted new developments to take place that led to social changes, in particular the beginning of specialisation in the production of goods (cattle breeding, agriculture, metal, jewellery and crafts), the formalisation of trade, the appearance of social classes, and urbanisation and the creation of a complex settlement.

ICOMOS considers that the case remains to be established for the significance of Sarazm in the technological and economic development of this region.

ICOMOS does not consider that this criterion has been justified.

Criterion v: According to the State Party, the fact that Sarazm is located in a very strategic point was the key to its interesting development. It is situated between a

mountainous zone and a large valley, the former favourable to cattle grazing, the other to agriculture and farming. Finally, it is located on the natural route that linked the peoples of the northern steppes of Eurasia with those of the southern settled agricultural cultures.

ICOMOS considers that, as with the other proposed criteria for inscription, too little is known at the present time about the economic role of Sarazm and the significance of its physical setting in the development of the city.

ICOMOS does not consider that this criterion has been justified.

Criterion vi:

According to the State Party, because Sarazm is the first sophisticatedly organised society in the sub-region, most Central Asian people and all Tajik people consider the site to be the starting point of the genesis of their culture.

ICOMOS considers that, whilst Sarazm played a key role in the early cultural and economic development of its own area, the case remains to be made for its having exerted a major influence on the wider cultural region.

ICOMOS does not consider that this criterion has been justified.

4. FACTORS AFFECTING THE PROPERTY

The nomination dossier identifies the following factors:

Development Pressures

With a gradual increase of the population in the Zaravshan Valley, people have looked for more land for agriculture. Sarazm was on a hilltop and was not cultivated until the 1950s, when some irrigation canals were dug and the land was given over to agriculture.

The buffer zones are crossed by dirt and asphalt roads that lead to Sahibnazar and Avazali villages, which occupy the northern border of the territory of the ancient settlement of Sarazm.

Since 2001, no new development is authorised on the 47ha reserve, and there are strict rules for the use of the larger buffer zone that constitutes a large part of the two concerned villages.

Environmental pressures

The property is subject to the local (continental) climate with its rapid changes in temperature and an annual long period when there is frost at night. Frost combined with humidity in the remains following snow or rain is the most important factor in degradation.

Natural disasters and risk preparedness

The only risk from natural disaster in the area comes from earthquakes. The likelihood of the property being affected is, however, almost non-existent as most of the remains are low structures. The property has no steep slopes and so threats from associated landslips are also virtually nil.

Visitors/tourism pressures

At the present time visitor numbers are very limited and there is no record of visitors having caused damage to the remains. This has been taken into account in the plan to increase the number of visitors. There will be no visits without a trained guide; during these tours the specific facets of site preservation will be presented and explained. Visitor access will be limited to a distance of 1m from the excavation trenches, the edges of which will be maintained and, if necessary, repaired or reinforced.

Number of inhabitants within property

At the present time, no one lives in the Archaeological Reserve of Sarazm. Buffer zones 1 and 2 are accessible to local inhabitants, but activities are restricted. The archaeological centre, where archaeologists and their assistants live on a temporary basis, is located in the buffer zone.

Around 300 families have been living in the 'larger restricted zone' (buffer zone 3) since the early 1940s.

ICOMOS considers that there are no serious factors affecting the property.

5. PROTECTION, CONSERVATION AND MANAGEMENT

Boundaries of the nominated property and buffer zone

The core zone (15.93ha) comprises the ten small mounds and five depressions that make up the built areas, open spaces, and reservoirs of the ancient settlement.

There are three buffer zones. Buffer zone 1 (6.45ha) surrounds the core zone, clearly separating it from the village and the agricultural lands. It constitutes one of the earliest excavation zones. On 15 December 2006, ICOMOS asked the State Party to explain why this particular area had not been included in the core zone, and the State party answered on 25 January 2007 that this was selected because the excavated area, which had extended to all the occupation layers, had been left unprotected for too long and hence had no potential for visitors. The zone is also very close to the residential areas and of use to the community for access, drying of crops, etc. However, the State Party points out the fact that strict protection measures are applied in Buffer zone 1. Buffer zone 1 also houses the archaeological centre and the site museum.

Buffer zone 2 (24.96ha) is currently agricultural land. It is also where the access road and parking lots have been created.

Buffer zone 3 (110.49ha) includes parts of the neighbouring villages of Sahibnazar and Azavali and is defined as the area in which outlying parts of the Sarazm settlement might be found. There are rules in force which provide for the obligatory reporting of accidental or random finds.

ICOMOS considers that the boundaries of the core and buffer zones are adequate.

Ownership

By Resolution of the Government of the Republic of Tajikistan N° 198 and Land Certificate N° 006981 issued on 19 April 2001, the piece of land of 47.34ha (core and buffer zones 1 and 2) at Sarazm is the property of the Republic.

Protection

Historical and cultural monuments are protected by the Constitution and are regulated by laws and normative acts of the Republic of Tajikistan.

Constitution level

The Constitution of the Republic of Tajikistan (§ 44) requires all citizens to respect and protect historical and cultural monuments.

Law on culture

Protection, management, and monitoring of historical and cultural monuments are governed by the law *About Culture* of the Republic of Tajikistan ratified on 13 December 1997.

Specific texts relating to Sarazm

The juridical status of the Sarazm Reserve is defined by Republic of Tajikistan Government Resolutions N° 391 of 21 September 2000 *About organization of historical and archaeological reserve Sarazm* and N° 198 of 19 April 2001 *About approval of resolution on historical and archaeological reserve Sarazm*. The former declared Sarazm an historical and archaeological reserve, defines its extent, and charged the Academy of Science of the Republic of Tajikistan and the Chairmen of Penjikent District and Sogd Province with certain responsibilities, including funding, land distribution, and preventing any form of construction on the site.

The latter set up the Sarazm Historical-Archaeological Reserve, operated by the Penjikent Archaeological Centre under the supervision of the Institute of History, Archaeology and Ethnography of the Academy of Science. The main tasks of the Reserve are the preservation, renovation, investigation, archaeological excavations, conservation, and reconstruction of the excavated remains, operation of the museums, popularisation of ancient Tajik history, dissemination of knowledge about the history and ancient culture of the Tajik people. Direct administrative and scientific coordination of the activities of the Reserve is implemented by the Head of the Penjikent Archaeological Centre.

An agreement was concluded between the Hukumat of Penjikent, the Jamoat of Sarazm, and the Sarazm Historical and Archaeological Reserve on 31 October 2005 which specified *inter alia* that all random finds made by local people when carrying out agricultural or surface works should be given to the Reserve, the location of the find being precisely indicated. When the villagers propose to carry out any form of digging they are required to inform the Reserve so that archaeologists may be in attendance.

ICOMOS considers that the protective measures for the property are adequate.

Conservation

History of Conservation

Some of the earlier excavations were insufficiently backfilled, with the result that the reburied remains have been affected. However, in most cases, these provide an opportunity to research the earliest occupation layers, not investigated hitherto.

Present State of Conservation

Since the larger part of the surface of the property remains unexcavated and the most important parts have been protected by means of cover structures, the site may be considered in general terms to be in a good state of conservation.

Research

All work to date has been rigorously and regularly documented and so most of the information that the remains have already yielded is available and can be used for further research, interpretation and educational activities.

Active conservation measures

At the present time some but not all of the excavated areas are protected by metal covers. On-site conservation is severely restricted by the fact that there are no professional conservators based at Sarazm.

ICOMOS considers that the limited conservation work carried out to date is satisfactory. It is concerned, however, that only five of the excavated and hence archaeologically significant sites have any form of protection by means of a cove. It urges the State Party to give serious consideration to extending this protection to the remainder of the sites.

Management

Management structures and processes, including traditional management processes

Management of the protection of historical and cultural monuments is carried out by the Ministry of Culture in close cooperation with the Academy of Science. The Ministry records, controls, and drafts legislation regarding monuments, creates and manages state research programmes, carries out conservation and restoration of monuments, and coordinates joint activities with other state bodies on the research, protection, and utilisation of historical and cultural monuments. It prepares conservation projects to be submitted to Government and manages funds of the conservation projects.

The Academy of Science, Institute of History, Archaeology and Ethnography, carries out scientific studies on historical and cultural monuments, and determines the criteria for nominating properties as historical or cultural monuments. It allocates budgets for the operation of archaeological centres and research and conservation projects at archaeological sites.

Monitoring of the protection of cultural monuments by the Ministry of Culture and local authorities (municipalities, district branches of historical and cultural monuments protection) is carried out as a field operation. These bodies prepare biannual and annual reports for higher-level authorities.

The Historical and Archaeological Reserve of Sarazm has been responsible since 1994 for the Sarazm Archaeological Centre, the site museum, the archive room at Penjikent, and the office at Penjikent in the governmental building.

Management plans and arrangements, including visitor management and presentation

Currently there is no plan for the area or region. However, Sarazm is carefully supervised by the Government, and this lead is followed at local authority level.

In September 2001 the Government approved the timetable of works and the breakdown of expenditure required for the Reserve and identified the implementing bodies. Parts of these projects have already been completed by the relevant bodies, including enclosure of the territory of the reserve, reconstruction of the tourism roads, construction of the administrative building and storage for archaeological finds and the construction of the overhead covers for the most important archaeological features.

Nomination of the property to the World Heritage List has provided the opportunity to make an overall evaluation of the progress made, and also to evaluate and anticipate the efficiency of traditional practices on the property as well as the recent measures taken. This has led to the establishment of a conservation and management plan which includes a clear vision for the site and set up objectives and activities for the next five years. Those are:

Objective 1: Launch a process that will gradually lead to the precise definition of the conservation techniques that suit the requirements of the property and its environment.

Objective 2: Ensure that the property is well known and frequently visited.

Objective 3: Ensure revenue generation on the property so that conservation costs can be covered and gradual improvements of the site can be achieved.

Objective 4: Finalise the organisation of the documentation and start enriching the existing data.

Objective 5: Reinforce the capacities of the Reserve.

Involvement of local communities

Close relations have existed between the management of the Reserve and the local communities since the discovery of the site by a local villager in 1976. The local people are proud of the site, the significance of which to the Tajik people they fully recognise, and they are assiduous in assuring its protection.

Resources, including staffing levels, expertise and training

The Reserve is staffed at the present time by the Director and thirteen researchers, office personnel, technicians, and guards. There is, however, no full-time conservator nor any conservation laboratory or other facility on the site.

There appear to be no facilities for training of personnel. As a result, the State Party has had recourse to international expertise when seeking grants under the framework of the Requests for International Assistance. Priority should be given to capacity building in the fields of management, conservation, and presentation from regional institutions.

Emphasis is laid in the nomination dossier on policies for excavation on the site.

ICOMOS is concerned that there is no conservation unit on the site, and urges the State Party to give consideration to setting up such a facility. It is important that effort should concentrate on consolidation of the existing excavated monuments.

ICOMOS considers that the decision should be taken by the State Party at the highest level to reduce the level of excavation on the site. Instead, emphasis should be diverted to the use of non-invasive techniques of geophysical prospecting for further exploration of the property. This should be coupled with the training of Tajik specialists in this field.

ICOMOS considers that more resources, both human and financial, will be needed for the property.

6. MONITORING

The Penjikent Archaeological Centre of the Institute of History, Archaeology and Ethnography of the Academy of Science of the Republic of Tajikistan is in charge of the monitoring of the property. The team is employed on a permanent basis and provides annual reports.

All the relevant documentation and reports are kept in the archive of the Centre.

ICOMOS considers that the monitoring measures for the property are adequate.

7. CONCLUSIONS

ICOMOS considers that Sarazm is a significant archaeological site at a regional level that presents a picture of proto-urban settlement and trading networks from the early Neolithic period to the Late Bronze Age (c.3500 to c.2000 BCE).

Whilst acknowledging the potential cultural significance of the Sarazm monuments, ICOMOS considers that, as the site has been discovered rather recently, the on-going archaeological studies are not sufficient to fully demonstrate its outstanding importance in ancient Central Asia. ICOMOS is concerned that the values are not sufficiently represented by the current level of presentation and conservation. The State Party is encouraged to reflect upon this concern and explore further the values and significance of the property.

ICOMOS considers that the present level of conservation should be strengthened.

ICOMOS urges the State Party to give consideration to extending the installation of protective covers to all the excavated features on the site.

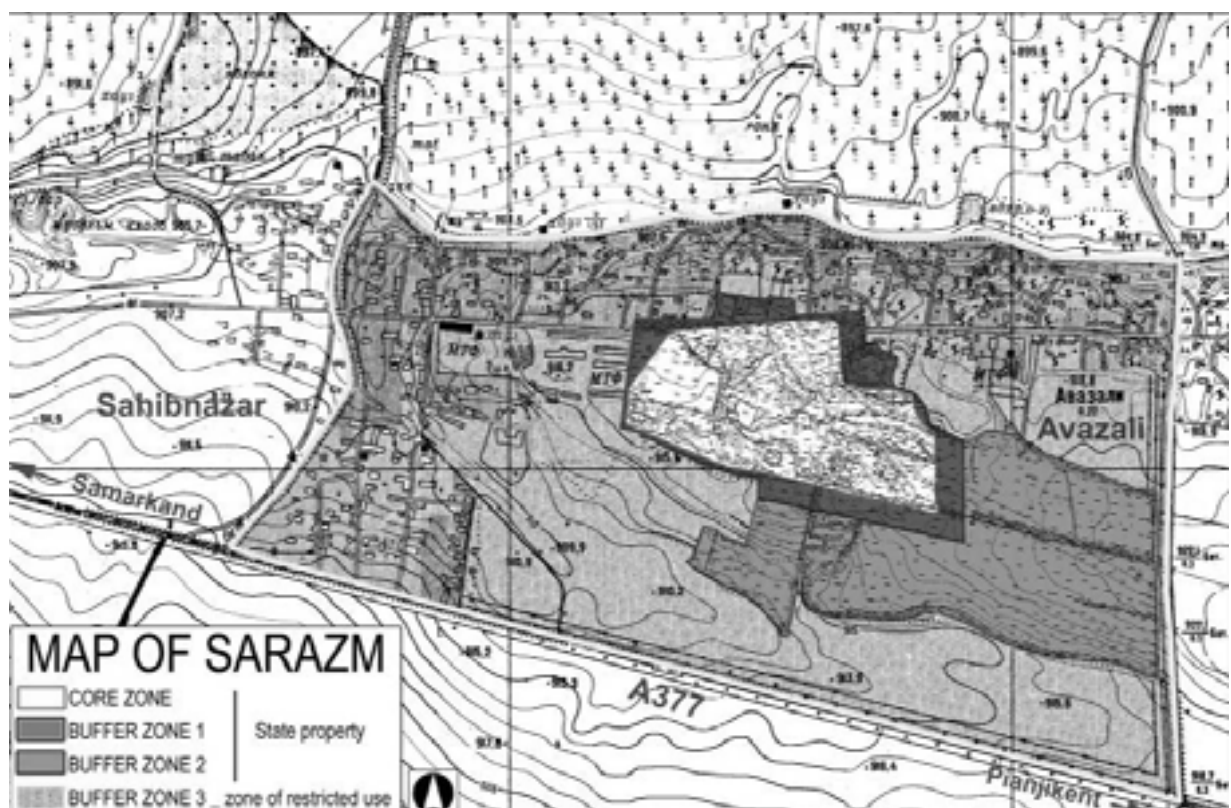
The decision should be taken by the State Party at the highest level to reduce the level of excavation on the site. Instead, emphasis should be diverted to the use of non-invasive techniques of geophysical prospecting for further exploration of the property. This should be coupled with the training of Tajik specialists in this field.

ICOMOS is also concerned that there is no conservation unit on the site, and urges the State Party to give consideration to setting up such a facility. It is important that effort should concentrate on consolidation of the existing excavated monuments.

Recommendations with respect to inscription

ICOMOS recommends that the examination of the nomination of Sarazm, Tajikistan, to the World Heritage List be ***deferred*** in order to allow the State Party to:

- Explore further the values and significance of the property.
- Give consideration to extending the installation of protective covers to all the excavated features on the site.
- Reduce the level of excavation on the site and to divert the emphasis to the use of non-invasive techniques of geophysical prospecting for further exploration of the property.
- Give consideration to setting up a conservation unit on the site.



Map showing the boundaries of the nominated property



General view of the site



Mud brick structures



Residential areas



Funerary enclosure

Nisa (Turkmenistan)

No 1241

*Official name as proposed
by the State Party:*

The Parthian Fortresses of Nisa

Location:

Bagyr settlement, Etrap of
Rukhabad, Akhal Vilayet

Brief description:

The twin tells of Old and New Nisa indicate the site of one of the earliest and most important cities of the Parthian Empire, which was a major power in the ancient world from the mid 3rd century BCE to the 3rd century CE. They have been relatively undisturbed for nearly two millennia and conserve the unexcavated remains of a powerful ancient civilization which skilfully combined traditional cultural elements with those from the Hellenistic and Roman west.

Category of property:

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

1. BASIC DATA

Included in the Tentative List: 25 February 1998

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

*Date received by
the World Heritage Centre:* 30 January 2006

Background: This is a new nomination.

Consultations: ICOMOS has consulted International scientific committee for the management of archaeological heritage.

Technical Evaluation Mission: 30 January-
5 February 2007

*Additional information requested and received from the
State Party:* ICOMOS sent a letter to the State Party on 18 December 2006, and the State Party provided additional documentation on 12 January 2007.

*Date of ICOMOS approval
of this report:* 21 January 2007

2. THE PROPERTY

Description

Archaeological excavations since 1930 in Nisa have revealed richly decorated architecture, illustrative of domestic, state, and religious functions. Two areas are

proposed for nomination: the Royal citadel, now known as *Old Nisa*, where most of the archaeological activity has taken place, and the site of the ancient town, where the majority of the population lived, known today as *New Nisa*.

Old Nisa

Old Nisa is a 14ha tell surrounded by a high defensive earth rampart with more than 40 rectangular towers. Its contours take the shape of an irregular pentagon with the corners flanked by powerful bastions.

The entire site was built on a natural hill, the top of which had been levelled and flattened with layers of earth (*pakhsa*). The number and location of the gates have not yet been precisely determined. The most probable location of the main (perhaps the only) entrance was at the centre of the western part of the surrounding wall. Inside the fortress, the buildings are distributed into two architectural complexes: the Northern and the Central.

The *Northern Complex* includes the so-called Large Square building in which rooms with different functions have been identified: the royal treasury, the wine vault in the northern part, and auxiliary premises in the south-eastern parts. This is where many famous art works of Old Nisa (the Rodogune marble statue, the Goddess of Nisa marble statue, ivory *rhytons*, fragments of royal thrones, and 2,700 *ostraka* of ceramic vessels representing the archives of Parthian house-keeping documents, etc.) were discovered.

In the *Central Complex* four interrelated buildings have been distinguished:

- the Building with the Square Hall;
- the Building with the Round Hall;
- the Tower-like Building; and
- the North-Eastern Building;
- the Columned Hall.

Paved streets and two water pools have been discovered between those two groups of buildings. Some auxiliary structures have also been revealed, located along the eastern and southern sides of the fortress.

The *Building with the Square Hall* is the most important building of the Central Complex with an area of c 1,000m². The walls in some sections are 4-5m thick. The entire space is divided into sub-square halls measuring up to 400m² in area. The building was rebuilt many times, with certain periods characterized by highly decorated features. The main facade, for example, was once decorated with eight openings. Besides this main hall, the building included a few auxiliary chambers. Corridors with floors and the bases of the walls covered with a special red coating and some rooms painted in white have been discovered.

The *North-Eastern Building* is located to the north-east of the Square Hall Building. It is composed of remains of two decorated yards and several rooms which probably had domestic uses. This building is sometimes considered as a palace of the Arsacid dynasty.

The *Tower-like Building* is a massive square pedestal (about 20m x 20m) encircled by two rows of dark

corridors, poorly lit by narrow windows. The upper parts of the construction are remarkably well conserved, with traces of a rich architectural decor and wall paintings featuring battle scenes. The south-eastern and north-eastern corners of the building take the shape of jutting out towers, one of which has recently been reconstructed to house a small museum of Parthian paintings and architectural elements.

The *Building with the Round Hall* is a square building with a massive central round hall inside, 17m in diameter, and plastered with white *ghanch* (a local alabaster). A round gallery decorated with brick semi-columns surrounds this hall. The cult-related function of this building is clearly recognizable. However, its specific role as a temple, a mausoleum, or a *heroon* remains to be established.

The inner part of the monumental *Columned Hall* consists of a large rectangular hall with four columns in the centre. Eight rooms, of different sizes, connect the hall with the northern, western, and eastern sides. The specific function of the building and the adjacent buildings has not yet been established, although its ceremonial character seems clear.

New Nisa

The fortress of New Nisa rises 1.5km north-west of Old Nisa. The 25ha tell is surrounded by powerful walls, up to 9m high on all sides, with two entrances, one from Bagyr settlement and the other from the north-west.

Several periods of occupation can be distinguished. The earliest remains date from the Mesolithic period, but it was during the Parthian period that the city was divided into the two parts that are clearly visible today: the upper one (*ark*) and a lower one (*shakhristan*).

The general layout of the hill and the traces of buildings are representative of a densely populated town. The Parthian structures have been identified as remains of the fortress, burial houses, or store-houses.

Unlike Old Nisa, life continued for many centuries after the fall of the Arsacid Empire in this fortress. The development of the town lasted throughout the Middle Ages, with a decline during the 3rd and 4th centuries CE. Old Nisa was annexed by the Arabian Caliphate in 651 and enjoyed a period of great prosperity from the 9th to the 12th centuries. However, Nisa, like many other important towns of Central Asia, underwent siege and destruction by the Mongols.

History and development

Traces of human activity dating back to the 4th-2nd millennia BCE show that long before the beginning of the Parthian Empire the area of Nisa was already colonized by sedentary populations. It is believed that there was a large settlement there as early as the 1st millennium BCE.

Nisa underwent a major development in the mid 3rd century BCE, when impressive buildings were erected by the Parthians, who decided to build a royal residence, probably the first of the Parthian dynasty.

The name of the site, Mithradatkert, and an indication of the date of its foundation are known from an inscription written

on one of the 2,700 administrative ceramics (*ostraka*) found at Nisa. Mithradatkert means 'the fortress of Mithidrat,' referring to King Mithradat I (174-138 BCE).

In addition, some ancient sources, such as Isidorus of Kharax, mention the city of Parthaunisa as an administrative and economic centre for the Arsacid dynasty. From their royal residence (Old Nisa) and the adjacent city (New Nisa), the Arsacid dynasty carried out huge conquests over a very large territory stretching from the Indus to the Euphrates. Nisa became a major city located in a strategic point, at the crossroads of many cultures – from Persia, Greece, and Central Asia.

At the local level, the centuries BCE saw the golden age of the fortresses, with the early development stages of its monumental buildings (Old Nisa) and the expansion of its economy. This period seems to have continued for a long time, until the first centuries CE.

In 224 CE, however, the Parthian kingdom collapsed. Ardashir, the Parthian governor-general in Persia at the beginning of the Sassanid dynasty, checked Parthian expansion and conquered their cities and territories. Destruction and diminished populations in Nisa led to its partial abandonment, although it continued to be an important centre until the Islamic period (12th-14th century CE).

3. OUTSTANDING UNIVERSAL VALUE, INTEGRITY AND AUTHENTICITY

Integrity and Authenticity

The property having been abandoned eighteen centuries ago, all that remains of the palace and its impressive ramparts is a tell surrounded by a high shapeless earthen wall. The two tells do not in any sense represent the original appearance of the Parthian capital, but these are authentic ruins that have not been altered by any human intervention. Their present appearance is due solely to natural erosion.

The integrity and authenticity of the property, and also of the surrounding landscape, in terms of the size of the two tells and the siting of the capital at the foot of the Kopet-Dag mountains, are unquestionable. This area has remained deserted up to the present day, since the local inhabitants established a new settlement in Bagyr.

The remains revealed by the first archaeological excavations, which have been left unprotected for decades, have suffered from erosion. Only recently have measures been taken to conserve archaeological remains as soon as they are excavated. At Old Nisa, it is considered that half of the site is still untouched, and so these remains are protected by the tell. In New Nisa, archaeological work has been confined to small-scale trenches, with the result that the great majority of the archaeological features survive underground, protected naturally from any environmental and human threats.

ICOMOS considers the integrity and authenticity of the property to be extremely high. It considers, however, that some of the interventions made at Old Nisa for the purposes of access and interpretation, such as the concrete stairs leading to the entrance and the concrete platform to which they lead, have an adverse impact on the property,

both visually and physically. The State Party should therefore take urgent action to implement the planned new installations, which will be more sympathetic in siting and materials.

Comparative analysis

Many relics from the Parthian period have been discovered, scattered over the vast territory of the ancient empire. Some of these, such as Hatra and Ashur (Iraq) or Dura-Europos (Syria), are very famous and to some extent they are comparable with Nisa. What makes Old Nisa especially significant is the fact that it was built at the beginning of the Parthian Empire and it was destroyed when Parthia lost its political power.

The importance of Old Nisa is also due to the fact that it was a sacred city of the Parthian kings. The exceptional variety of its architectural features (in both layout and decoration) testifies to the coexistence of different cultural traditions – for example, the royal cult of the Seleucids (Greco-Macedonians) alongside other typically Iranian or autonomous cultural forms.

Aerial photographs and satellite images reveal the existence of an organized network of fortified sites in the southern part of Turkmenistan (from the Caspian Sea to the Murgab valley), along what some centuries later became part of the Silk Roads network. Many Parthian sites show structures similar to Nisa, characterized by a high man-made platform strengthened by fortified curtain wall with projecting towers: these structures are almost all built of mud bricks. However, none can compete with Nisa, whether in terms of setting or in terms of size and finds. Nisa is the best known and best documented site enclosed by curtain walls. Merv must have been an important traffic node in Parthian times and subsequently, but the Parthian levels there have never been investigated scientifically. Considering the general lack of extensive excavations in these regions, above all for the late periods, Nisa was one of the main sites of the entire Parthian Empire, its royal foundation reflected in the architecture and art of New and Old Nisa.

The construction methods and layout of Old Nisa reflect traditional principles. It was built on an artificial platform obtained by levelling a natural hill which was cut into an irregular pentagonal shape, clearly delineated by powerful defensive walls. Some striking examples of high man-made platforms of this kind are to be found at Yaz Depe in Margiana or the ancient Bactrian constructions of Kuchuk Depe and Tillya Depe. However, unlike these monuments, Old Nisa demonstrates the further evolution of this building technique with the erection on this form of high platform for an entire city.

Other specific developments can be seen in the architecture of Nisa. In Mesopotamia, the buildings of Khathra and Ashur (Iraq), for example, were roofed by an evolved composition of spacious vaulted *iwans* whereas in Nisa a different building technique using ceiling beams was used to cover large spaces. To embellish the resulting monumental volumes, high-relief images on orthostats were widely used in Dura Europos, but in Nisa the same types of room were decorated with painted sculptures made of baked clay.

Many ancient cities of Central Asia founded after the Macedonian expansion by Alexander the Great bear obvious traces of Hellenic culture, and this is particularly noticeable in the Parthian monuments. Parthian towns situated closer to the frontier of the Roman Empire also bear witness to the influence of Ancient Rome.

Old Nisa, unlike the western Parthian cities, where Greco-Roman elements dominate, represents a successful symbiosis of western and eastern cultures. The volumes and layouts of the Nisa buildings are rooted in local traditions, whilst their decorative elements (bases of columns, capitals, metopes, friezes, style of the sculptural and pictorial images, etc) are Greek in essence.

ICOMOS considers that the comparative study demonstrates the significance of Nisa within the overall corpus of monuments of the Parthian Empire and therefore for inscription on the World Heritage List.

Justification of the Outstanding Universal Value

The State Party considers that the property is of Outstanding Universal Value for the following:

Old Nisa is one of the major monuments in Turkmenistan, and has considerably enriched scientific knowledge about one of the world's greatest civilizations – the Parthian Empire (mid 3rd century BCE to 224 CE). The Parthian kings began their conquests from Nisa and changed insignificant Parthia into a huge empire that stretched from the Indus to the Euphrates. Nisa was founded as the capital of this empire, a brilliant rival of Rome for supremacy in the Near East. In 53 BCE, the Parthians managed to inflict a crushing defeat upon the Romans in the battle of Carrhae (*Carrhae*), a small village in Northern Mesopotamia. Thousands of captured Roman soldiers were sent to settle in the remote Margiana, in the valley of the Murgab River. The architecture of Parthian Nisa is comparable with other complexes of the same period, with square buildings surrounded by corridors, courtyard buildings, and a round hall. However, a detailed study of the remains reveals specific combinations of architectural styles, with the wide use of Hellenistic elements, such as the ancient Greek order system, and the inclusion of classical sculptural elements into the architecture. The royal fortress-city of Old Nisa comprised palaces, temples and tombs.

Objects found in Old Nisa depict the exposure of this empire to other oriental and western cultures. The ancient art of Turkmenistan, which reached a high degree of sophistication under the Parthian Empire, reveals the complex interpenetration of different world cultures on this land. Turkmenistan, with its famous Silk Roads, is often referred to as 'the crossroads of history.' Its art combined the best features of ancient local traditions and influences of Hellenism with Roman art.

With its tell surrounded by high defensive earthen ramparts and its impressive palace complex, the ancient Parthian city of Old Nisa is one of Turkmenistan's most significant cultural sites. Old Nisa is a unique archaeological site of the Parthian period where there are few earlier or later occupation phases disturbing the global comprehension of the site. The visitor can easily appreciate the layout and the architecture of this Parthian citadel without being confused by remains from other periods.

In addition, the two impressive historical hills enclosed by defensive ramparts are still visible independently, and the ancient cultural landscape defined by the massive piedmont of the Kopet-Dag has not changed fundamentally since the Parthian period.

Criteria under which inscription is proposed:

The property is nominated on the basis of criteria ii, iii, and v.

Criterion ii: According to the State Party, Nisa is situated at the crossroads of important commercial and strategic axes. The architectural features, the ornamentation, and the objects found in Old Nisa reflect the complex interpenetration of cultures on this region (Greek and Roman influence). The visible remains at Old and New Nisa testify to monumental architecture developed by a civilization open to the rich cultural exchanges of the time and in the region.

Archaeological researches carried out at Nisa since the 1930s have revealed the important events which took place there, and prove how strongly Nisa influenced the history and the culture of Central Asia. The Parthian Empire is known as a brilliant rival of Rome which prevented the expansion of the Roman Empire to the east.

ICOMOS considers that the site of Nisa is an exceptional example of interactions of cultural influences from central Asia and from the Mediterranean world.

ICOMOS considers that this criterion is justified.

Criterion iii: The Parthian Empire came to an end in 224 CE, when Artaban V, the last of the Parthian Kings, was defeated and killed, and Old Nisa is an exceptional testimony to this lost civilization. The Parthian kings began their conquests at Nisa and turned small Parthia into a huge empire of the ancient world stretching from the Indus to the Euphrates.

Craftsmen combined the best features of ancient local traditions and of Hellenistic and Roman art. The archaeological remains and the decorative patterns at Nisa bear witness to this lost culture. Nisa is not the unique testimony to, but it is a major symbol of, this civilization which has disappeared.

ICOMOS recognizes the significance of Nisa within the overall corpus of monuments of the Parthian Empire, which was one of the most powerful and influential civilizations of the ancient world.

ICOMOS considers that this criterion is justified.

Criterion v: The remodelling of two hills to create artificial levelled platforms and the construction of the two citadels with their massive defensive walls required the displacement and transportation of huge quantities of soil. Both fortresses are located at the foot of Kopet-Dag mountains, on the fertile plain which extends from the mountains in the south to the Karakum desert in the north. The town is separated from the royal citadel, and the two hills can be seen from one another. In this desert region, Nisa is an example of good land organization at the foot of

the mountain, where water could be channelled to produce food for the region.

ICOMOS considers that, whilst the siting and land organization of Nisa are of importance, their significance is not such as to justify the application of criterion v.

ICOMOS does not consider that this criterion is justified.

ICOMOS considers that the Outstanding Universal Value has been demonstrated and that the nominated property meets criteria ii and iii.

4. FACTORS AFFECTING THE PROPERTY

The main factor affecting the property is the humidity, which gradually erodes all the exposed parts. The ramparts are less affected than the recently exposed archaeological remains, which are very fragile. The following are the major threats to this site (in order of priority):

- archaeological excavations without conservation;
- lack of financial resources;
- inadequate planning;
- rain;
- development pressure;
- seismic activities.

Archaeological excavations without conservation

The archaeological study of Old Nisa began in 1930 and has continued until the present day. Despite more than 70 years of study, however, Old Nisa has not received the required protection and conservation actions. Whilst these archaeological studies have increased knowledge of Parthian art and architecture, they have caused considerable damage to buried structures, which have been left open without protection. It is estimated that *circa* 40% of the buried structures have been exposed at Old Nisa.

All the architectural elements are extremely fragile and erode quickly once exposed to rain. In addition, each new excavation trench traps water during the wet winter months, speeding up erosion processes. The chaotic topography of the excavated area is a major cause of deterioration as proper drainage of rainwater is virtually impossible.

The conservation of archaeological sites is a new concept in Tajikistan. Archaeologists have not thought it a priority to conserve the sites that they have excavated, because they lack the required technical knowledge, have limited financial resources, and often have no time left for conservation after their excavation campaigns.

Today, the National Department for the Protection, Study and Restoration of the Historical and Cultural Monuments of Turkmenistan (DPM) makes strenuous efforts to ensure that conservation is taken seriously into consideration by archaeological expeditions. However, DPM is little respected and it lacks the equipment and financial support to implement urgent conservation measures.

Lack of financial resources

Conservation activities are limited, and the site is poorly equipped because of lack of funds. The international assistance programmes (Turin University, US Ambassador's Fund, UNESCO Tehran) have slightly improved the situation, but conservation cannot rely on international assistance alone, and new sources of funds at the local level need to be found.

Inadequate planning

Scientific research has been continuous for more than 70 years, but planning to identify and prioritize the main problems has always been lacking. Priority has always been given to excavation. However, conservation activities are gradually developing: the park staff, with the assistance of the DPM staff in Ashgabat, has already done some conservation work. This has, however, not addressed some of the most urgent remedial works that are necessary to prevent rapid deterioration, such as drainage problems.

Environmental pressure

The unpredictable weather (rain and wind erosion) of the region severely affects Old Nisa, as shown by the eroded surfaces and gullies in the earthen walls and the excavated structures, none of which is protected by a shelter. Sacrificial layers of earth and straw are regularly applied as a preventive conservation measure in spring and autumn, especially after continuous rains. Winter is the most destructive period because the frost increases the negative impact of humidity.

Seismic activity

The property is located in an active seismic zone (Ashgabat was completely destroyed in 1948). In the event of a violent earthquake, only the excavated areas would be damaged, but the massive earthen ramparts would not be affected.

The seismic activity for the zone where the sites are located is moderate, and this should be taken into account when preparing the projects of partial restoration and museum presentation. However, the low height of preserved walls (no more than 5m), their considerable thickness (2-3m), and the plasticity of the building materials and mortar do not put seismic impact among the most dangerous factors threatening the property.

Development pressures (encroachment, adaptation, agriculture, mining)

The two fortresses are still protected against encroachment, despite the close proximity of the town of Bagyr, which surrounds them. The property is protected naturally by the topography of the land, since the steep slopes of the ramparts make it very difficult to encroach on them. It is also legally protected, and building new houses within the limits of the Nisa State Historical and Cultural Park (NSHCP) is forbidden. Furthermore, the town development plans show clearly that Bagyr will expand only on the eastern side, towards Ashgabat, and not around the ramparts. The two fortresses are incorporated in the town development plan, which includes the future creation of municipal and tourist infrastructures related to the two fortresses (roads, large dwelling and administrative buildings, hotel complex, restaurant, museum, etc). This will be done in accordance with the Law of Turkmenistan *On the protection of the*

historical and cultural monuments, which guarantees the preservation of monuments and provides restrictions on the use of the buffer zone. Building new houses inside the buffer zone is not permitted, and it is planned to gradually reduce the density of buildings around the nominated territories.

Visitor/tourism pressures

Visitors represent an adverse factor when they are not monitored by the guides. The excursion routes are not well defined, and many unorganized groups of visitors climb on the fragile wall remains. More should be done to channel the flow of visitors in well defined paths.

Number of inhabitants within the property and the buffer zone

There are no houses, administrative buildings, or industrial plants on the territory of the NSHCP, and thus within the nominated territories; the only houses are located within the buffer zone. The exact number of people living in the buffer zone does not exceed 2,000 inhabitants. The General Development Plan for Bagyr does not integrate any new buildings in the buffer zone.

The relationships between the Nisa conservation team and the population living in the buffer zone are in most cases satisfactory. Regular monitoring is, however, necessary to prevent the development of illegal refuse dumps within the buffer zone. Other threats from the neighbouring community include schoolchildren jumping over the walls or throwing stones and unauthorized grazing of cattle.

ICOMOS considers that the main risks to the property are the lack of conservation of excavated sites, the acute shortage of financial resources, and inadequate planning. It recommends that special attention is given to these problems by the State Party as a matter of urgency. There should be close monitoring of development pressures resulting from the planned expansion of Bagyr.

5. PROTECTION, CONSERVATION AND MANAGEMENT

Boundaries of the nominated property and buffer zone

The boundaries of the nominated property are logical, comprising the two tells of Old and New Nisa and a band 50-100m wide around the foot of each. The proposed buffer zone, covering 400ha, links the two tells and stresses their integrity.

ICOMOS considers that the boundaries of the core zone are acceptable. The buffer zone is satisfactory, with the exception of the area to the south-east of both tells, where it should be extended to the foot of the Kopet-Dag mountain, and that to the east of New Nisa, which should be increased from 200m to at least 500m.

Ownership

The nominated zones are the property of the Turkmenistan Ministry of Culture and TV and Radio Broadcasting. The Hakimlik (regional council) of Rukhabad Etrap is the owner of the buffer zone.

Protection

Legal protection

The site is gazetted as one of the 1,300 historical and cultural monuments of Turkmenistan. In addition, Nisa is one of the eight State Historical and Cultural Parks (SHCP) that have been created to protect the most significant sites in Turkmenistan.

The SHCP Nisa was originally established by the Council of Ministers of the Turkmen Soviet Socialist Republic by Decree No. 111 dated 3 March 1980. The precise limits of the SHCP Nisa are given in the *Policy for the State Historical and Cultural Park Nisa* (1980) and Decree No. 202 of the Council of Ministers of the Turkmen Soviet Socialist Republic dated 4 May 1982.

The Policy rules that it is forbidden on the territory of the Park:

- to carry out any form of economic activity;
- to build new constructions;
- to use cultural assets for domestic purposes;
- to lay cables, pipelines, and electric or other lines which are not necessary for the requirements of the Park;
- to permit dwelling by private individuals, including park staff;
- to guide tourists, carry out archaeological excavation, and all other scientific and educational activities by non-authorized persons, organizations, or enterprises, without the permission of the DPM and the Park administration.

In addition to this policy, Resolution of the Executive Committee of the Ashgabat Regional Council of the People's Deputies No. 1/61 dated 25 January 1989 defines the buffer zones with increased control over the lands directly surrounding the protected sites. The implementation of these laws is ensured by on-site Park staff and by regional authorities (police, chiefs of *daykhan birleshiks*).

Means of implementing protective measures

The main actions taken by the Government to protect, conserve, and present the property are:

- appointment of staff (21 permanent staff ensure the protection and the basic maintenance of the site);
- provision of facilities and equipment to carry out conservation work;
- creation of a basic workshop for the production of bricks and stacking of materials, and of a basic office block.

In case of breaches of the law listed above, the Park administration is empowered to liaise with the competent authorities for the immediate punishment of offenders. The staff of the Park, a highly protected monument, has the

right to impose fines for the breaches of the policy and rules of the historic and cultural monuments.

Existing plans related to municipality and region in which the proposed property is located

The property comes within the provisions of the Bagyr town development plan. According to this plan, the town will develop on its eastern side, towards Ashgabat, and not around the ramparts of Nisa. The two fortresses are therefore politically protected. The Bagyr development plan also suggests developing specific equipments in relation with the two fortresses, such as tourist facilities and access roads.

ICOMOS considers that the protective measures for the property are adequate.
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Conservation

Present state of conservation

Viewed in an archaeological perspective, the site is well preserved. However, it has been weakened not only by the passage of time, but also from insufficiently planned studies, and recent international excavations have accelerated the decay of the remaining architectural features. Although it is legally compulsory for all archaeological teams to conserve any site they excavate in Turkmenistan, they often do not consider conservation as a priority or simply do not allocate time for it during their short field campaigns. On their side, the Turkmen authorities do not have the necessary financial means to undertake all the necessary post-excavation conservation work.

The situation is, however, gradually changing. Remedial work has begun under the supervision of the Ministry of Culture, which has appointed qualified staff on site and a small annual operating budget. The Italian archaeological team of Turin is also trying to fulfil its obligations in terms of conservation, and is providing some funding (*circa* 1,000 US\$ annually) to the DPM to undertake conservation work.

In addition, the UNESCO Tehran Cluster Office and CRATerre-ENSAG provided training and an equipped laboratory in 2005 to test the soils used for conservation activities (brick moulding, mortars, and plasters). In 2002, the American Ambassador's Fund for Cultural Preservation granted US\$ 9400 to implement a project for the conservation and reconstruction of Nisa wall-paintings, and the organization of the site museum of Nisa art.

Nonetheless, serious efforts are still needed to set up an efficient preventive maintenance scheme that will ensure the survival of recently excavated parts of the site. Funds and the necessary equipment are still lacking.

The nomination process has given the opportunity for these issues to be discussed with the concerned parties. The two archaeological teams operating on the property are fully conscious of the threat; they are ready to participate more in the conservation effort and to adhere to international conservation rules and standards.

There is not at present a defined conservation plan. This should be produced and incorporated into the management plan as a priority.

Documentation

At the present time the documentation relating to past excavation, research, and conservation is not available at one place, on the site itself, but it is scattered among the foreign institutions that have carried out archaeological investigations in Nisa. There is an urgent need to establish a comprehensive and readily accessible documentation system for Nisa, so as to facilitate further conservation and research projects. As a condition of receiving permits to carry out survey and excavation projects, foreign archaeological expeditions should be required to deposit copies (both paper and digital) of all resulting documentation (drawings, including stratigraphic sections and plans, photographs, etc) with the DPM archive.

ICOMOS considers that additional sources of funding should be sought by the State Party to support a revised and strengthened conservation programme. Excavation teams, whether national or foreign, should not be permitted to carry out any further investigations unless these are accompanied by an approved work plan which includes post-excavation conservation, the latter to be funded by the excavation team. It is also important that a comprehensive documentation system should be set up without delay.

Management

The current procedure for nomination to the World Heritage List has improved the ability of the DPM to defend their position and oblige all stakeholders to work under the guidance of a common Management Plan. The main goal of the management plan is to reach better balance between archaeology and conservation, to avoid the complete destruction of the property.

Management is exercised at the site level by the SHCP Nisa office in Bagyr-Ashgabat, and at the national level by the DPM in Ashgabat. NSHCP is responsible for the everyday maintenance of the site, the overall state of conservation, and tourism management. The Department of Restoration and Design of DPM supervises conservation work on the site.

The Park Director prepares an annual action plan which is submitted to the DPM for approval. These annual plans are, however, not adequate for reaching long-term objectives.

Management plans, including visitor management and presentation

There was no broad management plan with long-term views defined for this site when the nomination dossier was prepared, and this was recognized as a problem in relation to the nomination of Nisa. A five-year plan has therefore been formulated for 2006-2010, in order to ensure a better balance between the different activities (e.g. archaeology vis-à-vis conservation) and to combine and harmonize all the existing documents and strategies relating to the site.

The Plan begins by summarizing all existing management documents and policies in order to identify earlier failures to balance the sometimes conflicting needs of planning and implementation, of excavation and conservation. In addition to local management agencies, foreign consultants and archaeological teams participated in the preparation of the plan. Based on SWOT analysis, the Plan defines key issues to be addressed in meeting management objectives and achieving improvements in the overall management of the property.

The following objectives have been agreed upon for this five-year plan:

Protection:

- protect the Park lands and control site uses;
- control visitors.

Conservation and management:

- improve the management system;
- improve the performances of the technical staff and conserve the excavated sections;
- slow down the processes of deterioration.

Promotion and education:

- promote Turkmen history and culture, including the archaeological and architectural monuments of Nisa;
- contribute to archaeological research on the monuments;
- store, conserve, and exhibit finds and scientific collections from the Park's territory.

This management plan is intended to serve as a tool to ensure:

- partnership and optimal contribution by all parties in reaching the objectives of the plan;
- coherence of all activities developed at the site;
- optimum use of the available resources;
- proper understanding by all stakeholders, and more particularly by the local community, visitors, and the archaeological teams, of the factors threatening the site;
- continuity in the case of changes in management.

Involvement of local communities

The public authorities of Ashgabat and the local community of Bagyr are represented on the Scientific Committee.

Resources, including staffing levels, expertise and training

The NSHCP organizational structure consists of the office of the Director, and the Departments for Monument Research, Finance, and Management; the permanent staff numbers 21. NSHCP staff is also responsible for monitoring protected sites in several *etraps* in Akhal Vilayet (province). The NSHCP has a Scientific Committee, the members of which are representatives of scientific institutions, public bodies, and independent experts; the role of the Committee is advisory, not executive.

ICOMOS considers that the management system for the property, although recently set up in order to fulfil the requirements of the World Heritage Committee, is well designed. More attention needs to be paid to the preparation of subsidiary plans for conservation, interpretation, and visitor management. It proposes that the State Party should be requested to provide annual reports to the Committee on the progress of the implementation of the management plan for the next three years.

6. MONITORING

The DPM, under the authority of the Ministry of Culture, supervises and controls all activities taking place in Nisa. The Director of the Park must seek permission from the DPM to carry out any form of works, and nothing can be done without their approval. Similarly, archaeological missions are not allowed to excavate without the permission of the DPM. The site being close to Ashgabat, all actions carried out on the site must be conducted in the presence of a DPM representative. Monitoring is therefore effectively continuous, since the site can quickly be reached from Ashgabat.

In addition to this constant presence of the National Director of DPM and his colleagues heading the various departments in Ashgabat, the site is also systematically monitored by the Park staff and an official form describing the state of conservation of the site, known as a 'passport', is regularly completed.

ICOMOS considers that the monitoring measures for the property are adequate.

7. CONCLUSIONS

ICOMOS considers that

- the state of conservation of the site is in general satisfactory;
- the management mechanisms are improving and meet requirements of the World Heritage Committee;
- the site has high level of authenticity;
- the integrity of the site is satisfactory; and
- its legal protection is ensured.

Recommendations with respect to inscription

ICOMOS recommends that The Parthian Fortresses of Nisa, Turkmenistan, be inscribed on the World Heritage List on the basis of *criteria ii and iii*:

Criterion ii: Nisa is situated at the crossroads of important commercial and strategic axes. The archaeological remains vividly illustrate the significant interaction of cultural influences from central Asia and from the Mediterranean world.

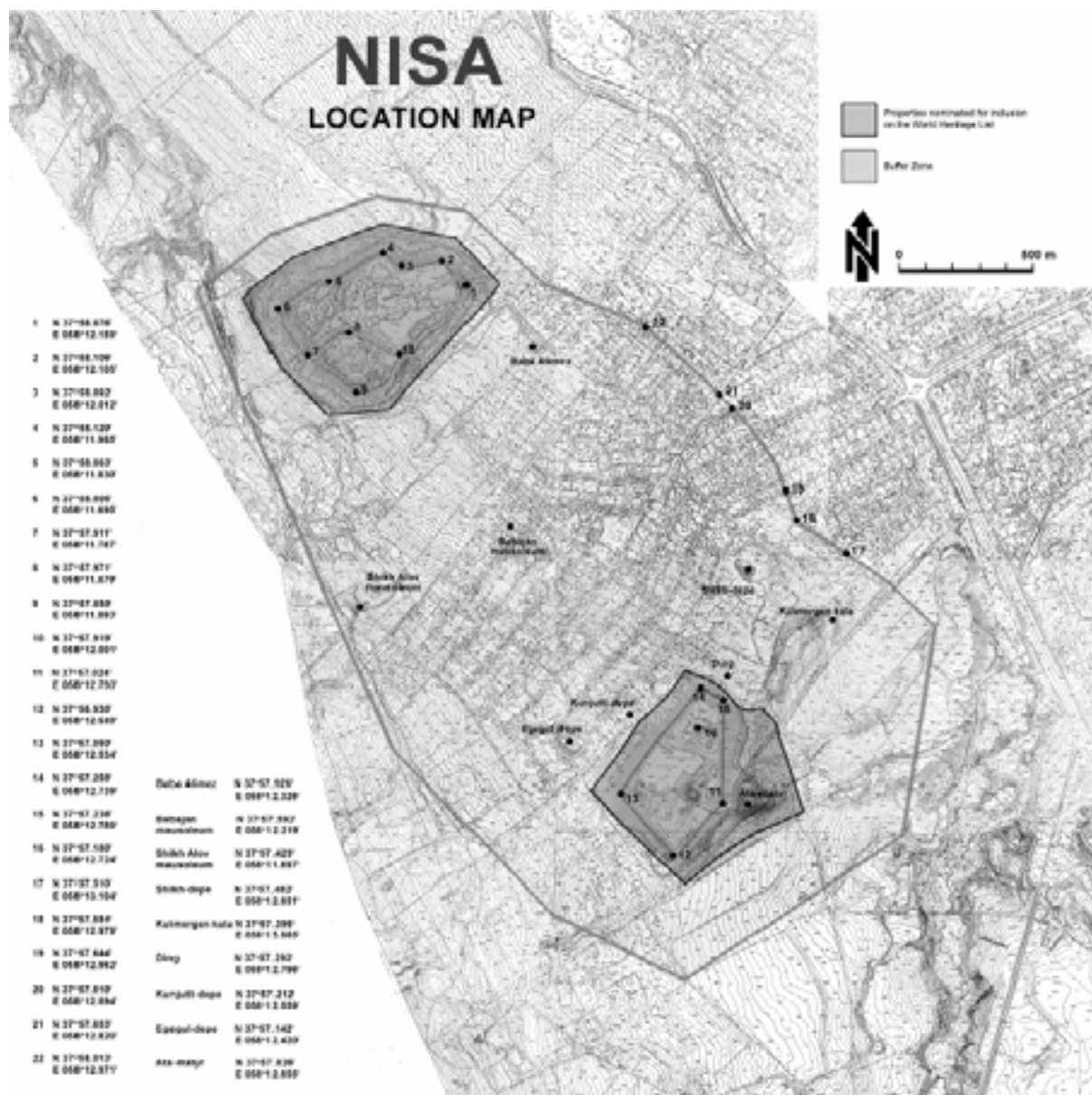
Criterion iii: The Parthian Empire was one of the most powerful and influential civilizations of the ancient world, and a brilliant rival of Rome which prevented the expansion of the Roman Empire to the east. Nisa, the capital of the Parthian Empire, is the outstanding symbol of the significance of this imperial power.

Recommended Statement of Outstanding Universal Value

Nisa was the capital of the Parthian Empire, which dominated this region of central Asia from the mid 3rd century BCE to the early 3rd century CE. As such it formed a barrier to Roman expansion, whilst at the same time serving as an important communications and trading centre, at the crossroads of north-south and east-west routes. Its political and economic power is well illustrated by the surviving remains, which underline the interaction between central Asian and Mediterranean cultures.

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

- replacement, using more appropriate materials and a more sympathetic design, of the present access stairs and viewing platform at Old Nisa; improvement of the facilities for visitors, and more particularly the viewing platforms;
- the need to pay attention in future planning to the conservation of excavated sites, the allocation of financial resources, and the implementation of its Management Plan. This should include a work plan covering the coordinated maintenance, monitoring, and presentation of both sites;
- requiring all excavation proposals as a condition for granting permits to include allowances, in terms of time and funding, for the conservation of excavated structures;
- the creation on site of a comprehensive documentation programme and an accessible database;
- the formulation of plans for conservation, interpretation, and visitor management as subsidiary elements of the overall Management Plan;
- extension of the buffer zone to the south-east of both tells, to include the foot of the Kopet-Dag mountain, and that to the east of New Nisa, which should be increased from 200m to at least 500m.



Map showing the boundaries of the nominated property



Old Nisa



North-Eastern Building



General view of the Southern Complex



Excavated corridor in the Southern Complex

Sydney Opera House (Australia)

No 166 rev

Official name as proposed by the State Party: Sydney Opera House

Location: Sydney, Australia

Brief description:

The Sydney Opera House is situated at the tip of a prominent peninsula projecting into Sydney Harbour and within close proximity to the Royal Botanic Gardens and the Sydney Harbour Bridge. The architectural form comprises three groups of interlocking vaulted 'shells' (roofing respectively the two main performances halls and a restaurant), set upon a vast terraced platform, 'the podium', and surrounded by terrace areas that function as pedestrian concourses. The complex includes more than 1,000 rooms, most of which are located within the podium, as are virtually all the technical functions of the performing arts centre.

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 *monument*.

1. BASIC DATA

Included in the Tentative List: 27 June 2006

International Assistance from the World Heritage Fund for preparing the Nomination: No

Date received by the World Heritage Centre: 26 January 2006

Background:

In 1980 Australia submitted a nomination dossier referred to as *The Sydney Opera House in its Setting*, including the Sydney Harbour Bridge and the surrounding waterways of Sydney Harbour from Bradley's Head to McMahon's Point.

In April 1981 ICOMOS recommended that the inclusion of the proposed cultural property be deferred. ICOMOS considered that the inscription on the World Heritage List on the basis of criterion i, as proposed by the State Party, did not appear to assert itself, to the extent that the Opera House is part of a series of experiments in "sculptural architecture".

ICOMOS also considered that as a question of the work of a living architect, inaugurated less than ten years ago at that time, ICOMOS did not feel itself competent to express an opinion on the eventual admissibility based on criterion ii.

The inscription was recommended to be deferred until its exemplary character or its role as model appears more clearly attributable to the creation of Jørn Utzon.

At the 5th session of the Bureau of the World Heritage Committee (Paris, May 1981), the Bureau "considered that modern structures should only be accepted when there was clear evidence that they had established, or were outstanding examples of, a distinctive architectural style. However, the Bureau expressed interest in receiving a revised nomination based on the outstanding features of Sydney Harbour, both as a bay and as the site of the first permanent European settlement in Australia. Such a nomination could include structures such as the Opera House and the Sydney Harbour Bridge, but they would not constitute the primary elements."

Consultations: ICOMOS has consulted its International Scientific Committee on 20th Century Heritage.

Literature consulted (selection):

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Technical Evaluation Mission: 20-22 September 2006

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2. THE PROPERTY

Description

The Sydney Opera House is situated at the tip of a prominent peninsula projecting into Sydney Harbour (known as Bennelong Point) and within close proximity to the Royal Botanic Gardens and the Sydney Harbour Bridge.

The architectural form comprises three groups of interlocking vaulted 'shells', set upon a vast terraced platform ('the podium') and surrounded by terrace areas that function as pedestrian concourses. The two main shell structures cover the two main performance venues, known as the Concert Hall and Opera Theatre. The third set of shells that overlooks Sydney Cove was designed specially to house a restaurant. The two main halls are arranged side by side, oriented north-south with their axes slightly inclined. The auditoria are carved out of the high north end of the podium so that they face south, towards the city, with the stage areas positioned between them and the entrance foyers. The tallest shell reaches the height of a 20-storey building above the water. The shell structures cover nearly two hectares and the whole property is nearly six hectares. The complex includes more than 1000 rooms, most of which are located within the podium, as are virtually all the technical functions of the performing arts centre.

The base of the Sydney Opera House rises up as a massive monolith of reinforced concrete, a grand granite-clad podium. Its monumental scale forms an artificial promontory that offers continuity with the harbour-side landscape. The forecourt is a vast open space from which people ascend the stairs to the podium. The podium steps, which lead up from the forecourt to the two main performance venues, are a great ceremonial stairway nearly 100 metres wide and two storeys high.

Jørn Utzon's design created an unconventional performing arts building in the way that it separated the performance and technical functions. The two main performance venues were placed beneath the vaulted roof shells, side by side upon the podium, while all the back-stage facilities and technical equipment were hidden within the podium. The vaulted roof shells were designed by Utzon in collaboration with Ove Arup & Partners; the final shape of the shells was derived from the surface of a single imagined sphere, some 75 metres in diameter. This geometry gives the building great coherence as well as allowing its construction to benefit from the economies of prefabrication.

Each shell is composed of pre-cast rib segments radiating from a concrete pedestal and rising to a ridge beam. The ribs of the shells are covered with chevron-shaped, pre-cast concrete tile lids. The shells are faced in glazed off-white tiles while the podium is clad in earth-toned, reconstituted

granite panels. The north and south ends of the shells are hung with topaz glass walls that project diagonally outwards to form foyers, offering views from inside and outside. The glass walls are a special feature of the building, constructed according to architect Peter Hall's modified design. The topaz glazed in-fill between the shells and the podium was built as a continuous laminated glass surface with faceted folds tied to a structure of steel mullions.

The Concert Hall is the largest performance space of the Sydney Opera House and accommodates up to 2700 people. Birch plywood, formed into radiating ribs on the suspended hollow raft ceiling, extends down the walls to meet laminated brush-box linings that match the floor. The Opera Theatre is the Sydney base for Opera Australia and the Australian Ballet, and a regular venue for the Sydney Dance Company. Its walls and ceiling are painted black and the floor is brush-box timber.

Peter Hall's design for the interiors used different finishes to distinguish the various spaces in the building. The Utzon Room is a multi-purpose venue overlooking Farm Cove that is used for music recitals, productions for children, lecture programs and functions. Formerly the Reception Hall, the room was transformed in 2004 under Utzon's design guidance. The western loggia is the first major structural work to the exterior of the building since the opening of the Sydney Opera House. It was designed by Utzon following his re-engagement with the Sydney Opera House in 1999. The western loggia comprises a colonnade opening into the western side of the podium facing towards the Sydney Harbour Bridge. Nine openings have been created to open up the foyers of the Drama Theatre, the Studio and the Playhouse to natural light and to allow access to harbour and city views. Utzon's design for the western loggia was inspired by the colonnades found in Mayan temples, which were one of the original design sources for the Sydney Opera House.

History and development

A major cultural centre for Sydney and its siting at Bennelong Point had been discussed since the 1940s. In 1956 the New South Wales Government called an open-ended international design competition and appointed an independent jury, rather than commissioning a local firm. The competition brief provided broad specifications to attract the best design talent in the world; it did not specify design parameters or set a cost limit. The main requirement of the competition brief was a design for a dual function building with two performance halls.

The competition generated enormous interest in Australia and overseas. The New South Wales Government's decision to commission Jørn Utzon as the sole architect was unexpected, bold and visionary. There was scepticism as to whether the structure could be built given Utzon's limited experience, the rudimentary and unique design concept and the absence of any engineering advice. The competition drawings were largely diagrammatic, the design had not been fully costed and neither Utzon nor the jury had consulted a structural engineer. Utzon's design concept included unprecedented architectural forms and demanded solutions that required new technologies and materials. The New South Wales Government also faced public pressure to select an Australian architect.

The Sydney Opera House is often thought of as being constructed in three stages and this is useful in understanding the history of the three key elements of its architectural composition: the podium (stage 1: 1958–1961), the vaulted shells (stage 2: 1962–1967) and the glass walls and interiors (stage 3: 1967–1973). Architect Jørn Utzon conceived the overall design and supervised the construction of the podium and the vaulted shells. The glass walls and interiors were designed and their construction supervised by architect Peter Hall supported by Lionel Todd and David Littlemore in conjunction with the then New South Wales Government Architect, Ted Farmer. Peter Hall was in conversation with Utzon on various aspects of the design for at least eighteen months following his departure. Ove Arup & Partners provided the engineering expertise for all three stages of construction.

Design and construction were closely intertwined. Utzon's unique design together with his radical approach to the construction of the building fostered an exceptional collaborative and innovative environment. His collaborative model marked a break from conventional architectural practice at the time. The design solution and construction of the shell structure took eight years to complete and the development of the special ceramic tiles for the shells took over three years. The Sydney Opera House became a testing laboratory and a vast, open-air pre-casting factory.

The Sydney Opera House took sixteen years to build; this was six years longer than scheduled and ten times more than its original estimated cost. On 20 October 1973 the Sydney Opera House was officially opened by Queen Elizabeth II. After inauguration, new works were undertaken over time. Between 1986 and 1988 the land approach and forecourt were reconstructed and the lower concourse developed under the supervision of the then New South Wales Government Architect, Andrew Andersons, with contributions by Peter Hall.

Between 1998 and 1999 the recording and rehearsal room was converted into two areas: an assembly area for the orchestra and the Studio, a revitalised performance space for the presentation of innovative music and performing arts. In 1998, in accordance with the celebration of the 25th anniversary of inauguration, the Sydney Opera House Trust appointed Sydney architect Richard Johnson to advise on future development of the site and to establish planning principles. Through Johnson, the Sydney Opera House Trust began negotiations to reconcile with Utzon and to re-engage him with the building in an advisory capacity. In 1999 Utzon formally accepted Premier Carr's invitation to re-engage with the project by setting down design principles that outline his vision for the building and explain the principles behind his design. Over three years he worked with his architect son and business partner, Jan Utzon, and Richard Johnson to draw up his design principles for the Sydney Opera House, including the refurbishment of the reception hall, construction of the western loggia, exploration of options for improving the Concert Hall acoustics, improving services to the forecourt to support performances, modification of the orchestra pit and interior of the Opera Theatre. In 2002 The Sydney Opera House Trust released the Utzon Design Principles. In 2004 refurbishment of the Utzon Room (formerly known as the reception hall) was completed.

3. OUTSTANDING UNIVERSAL VALUE, INTEGRITY AND AUTHENTICITY

Integrity and Authenticity

Integrity

All elements necessary to express the values of the Sydney Opera House are included within the boundaries of the nominated area and buffer zone. This ensures the complete representation of its significance as an architectural object of great beauty in its waterscape setting. The proposed buffer zone retains the relationship between the monument and its setting that has been identified as contributing to its value. All elements of the property that contribute to its heritage significance have been identified and policies developed to sustain their significance into the future.

Authenticity

Extensive documentation is available on the construction of the building to the present day and the people who were directly involved in its creation are accessible today.

With regards to form and design, it is worthy to remember that Jørn Utzon designed and supervised the construction of the podium, stairs and the shells, which together provide the exterior and interior form and structure of the building. The major and minor halls and the glass walls were designed and built by Hall, Todd and Littlemore.

As mentioned before, design and construction were intertwined and are key to a good understanding of the property. Conservation issues have arisen from this multiple authorship. Attention given to retain the building's authenticity culminated with the Conservation Plan and the Utzon Design Principles. The rigorous management and conservation of the building assist in retaining its material integrity and authenticity.

The Sydney Opera House continues to perform its function as a world-class performing arts centre. The Conservation Plan specifies the need to balance the roles of the building as an architectural monument and as a state of the art performing centre, thus retaining its authenticity of use and function.

Concerning authenticity of the setting, the Sydney Opera House is surrounded on three sides by the harbour, which provides a natural safeguard from development of the waterscape setting. Immediately behind the property, are the Royal Botanic Gardens, an important backdrop to the property when viewed from the water.

Extensive information sources are available on the construction and changes to the property. International and local expertise on the history and significance of the building is referenced throughout the nomination dossier. The ability to engage the building's creator has provided unique opportunities to authenticate its values.

ICOMOS agrees with the views expressed in the nomination dossier in relation to the authenticity of the property. The consideration of authenticity in such a "young" building obliges to take into account the specific

circumstances of its short history. The building is the result of different stages of design and construction, developed by a group of architects, engineers and constructors in the framework of the Utzon's original project. Changes introduced over the construction process and after inauguration must be considered as the natural result of the development of a living monument; they do not jeopardise the intrinsic values of the original architectural ideas and design but illustrate on the process of constructing and managing one of the landmarks of 20th century architecture.

In conclusion, ICOMOS is satisfied with the integrity and authenticity of the nominated property.

Comparative analysis

The nomination dossier includes a comprehensive comparative analysis of the Sydney Opera House with other prominent buildings of the 20th century, based on four thematic lines: the building as an outstanding example of late modern architecture; masterpieces that challenged accepted norms of buildings expression, siting or planning; masterpieces of structural engineering and technology that stretched the boundaries of the possible and iconic masterpieces. The comparative analysis is supported by quotes from some of the most important historians and critics of modern architecture.

As a masterpiece of late modern architecture, the role of Jørn Utzon as a leading architect of the so-called "third generation" is stressed. In this sense, the Sydney Opera House is compared with two masterpieces that express the poetic and environmental expressions of the third generation: the Notre Dame du Haut Chapel in Ronchamp (Le Corbusier, 1950-1955) and the Guggenheim Museum in New York (Frank Lloyd Wright, 1956-1959). This line of comparison also points out the relationship of the building with the post war search of a new monumentality, represented mainly by Le Corbusier's works in Chandigarh and Alvar Aalto's Town Hall of Säinäsalo.

With regard to masterpieces that challenged conventional norms of building expression, siting and planning, the building is compared with the City of Brasilia, the Guggenheim Museum in Bilbao, the Getty Centre in Los Angeles and the Pompidou Centre in Paris. The comparison with other opera houses or cultural centres includes the Royal Festival Hall in London, the Berlin Philharmonie and Finlandia's Hall in Helsinki. As general statement on this point, the nomination dossier concludes that the Sydney Opera House breaks new ground in terms of complex sources of architectural representation, innovation in structure and technology and an empathetic relationship between a large public building and its dramatic natural setting.

In relation with engineering and technical achievements, the building is compared with Exhibitions Buildings in Turin by Pier Luigi Nervi, and Eero Saarinen's TWA Terminal in J. F. Kennedy Airport in New York. The Sydney Opera House bears important similarities to the buildings of Nervi and Saarinen, but the functional simplicity of Nervi and Saarinen roofs serves to highlight the complex structural and architectural expression of the roofs of the Sydney Opera House.

In terms of iconic masterpieces, the building is one of the most enduring images of 20th century and world renowned monuments that traverse time and place. In this sense, it is compared to some masterpieces of architectural modernity, such as Gaudi's Sagrada Familia, Le Corbusier's Villa Savoye, Wright's Fallingwater, etc. The Sydney Opera House enjoys the same global reputation and success as these buildings for its unique architectural character and for being revered by people the world over.

The significance of the Sydney Opera House as a masterpiece of 20th century architecture has been stated by the most important historians and critics of modern architecture (see *Literature consulted* above). If compared with all the cases mentioned in this chapter, it shares some features but, at the same time, ICOMOS considers that it stands by itself as one of the indisputable masterpieces of human creativity, not only in the 20th century but of history of humankind.

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

Justification of the Outstanding Universal Value

Statement of Outstanding Universal Value

According to the State Party, the Sydney Opera House is of outstanding universal value as a masterpiece of the 20th century architecture. Its significance is demonstrated by its unparalleled and seminal design and construction; its exceptional engineering achievements and technological innovation and its position as a world-famous icon of architecture. The Sydney Opera House broke with the formal traditions of Modernism defining a new expressive form for civic monuments. It is a daring and visionary experiment that has had an enduring influence on the emergent architecture of the late 20th century and beyond.

Utzon's original design concept and his unique approach to building gave impetus to a collective creativity including architects, engineers and builders. The design represents an extraordinary interpretation and response to the setting in Sydney Harbour.

Criteria under which inscription is proposed:

The property is nominated on the basis of *criterion i*:

Criterion i: The argument for the application of criterion (i) is developed in the nomination dossier along three lines: as a masterpiece of late modern architecture (multiple strands of creativity, a great urban sculpture, a masterful synthesis of architectural ideas); as an outstanding achievement in structural engineering and technological innovation; and as a world-famous iconic building of the 20th century.

In coincidence with the State party's view, ICOMOS considers that the Sydney Opera House is a work of human creative genius, and a masterful architectural and engineering achievement. It represents an outstanding conjunction not only of architecture and engineering but also of sculpture, landscape design and urban design. It is an ensemble that has reconfigured the way public architecture can define the city's identity in the form of an iconic signature building.

ICOMOS furthermore considers that criterion i is justified on the merit of the Sydney Opera House as a work of architecture imagined and carefully developed on the basis of programme and site in order to create a marking icon, and on the merit of the engineering achievements its construction represents. Utzon's original design concept and his unique approach to building gave impetus to a collective creativity including architects, engineers and builders.

Therefore, more than 25 years after the first nomination of this property by the State Party, ICOMOS considers that the role of Utzon (and others) has been clarified and that criterion i has been demonstrated.

ICOMOS considers that this criterion is justified.

4. FACTORS AFFECTING THE PROPERTY

The nomination dossier includes an identification of the following factors:

Development pressures

According to the State Party, these will not constitute a factor of risk since the property has substantial natural protection from development: it is surrounded on three sides by the Sydney Harbour, while the fourth side corresponds to the Royal Botanic Gardens. The definition and treatment of the buffer zone will assure the proper protection of the neighbouring areas.

Environmental pressures

The property is exposed to several environmental pressures but the means for managing their effects are in place. The exposed harbour-side location includes salt water, wave action, high winds, atmospheric pollution and solar radiation, particularly in relation to the large roof and glass wall areas. The concrete structure is vulnerable to the problems of concrete decay typical for a building in a maritime environment. Conservation challenges arising from environmental pressures have been comprehensively identified and managed. It can experience strong winds but the building was designed to withstand wind loads higher than 180 kilometres per hour. A proactive and rigorous building maintenance programme is in place to deal with the critical areas of material risk.

Natural disasters and Risk preparedness

The property is located in an area not generally prone to natural disasters. Nevertheless, as a consequence of heightened awareness of earthquake risk, new Australian standards for buildings construction have been introduced. Risk management is comprehensively embedded in the administration and management of the property.

Tourism

Since the Sydney Opera House is one of the most popular visitor attractions in Australia, more than four million people visit the property each year. Strategic planning is foreseen to address the estimated increase in visitors; which is not expected to have any negative impact on the heritage values, given the size of the Opera House precinct and the management strategies being implemented.

Initiatives under consideration include the provision of a visitor's centre and an information booth.

In conclusion, ICOMOS considers that the main risks to the property are related to the impact of its maritime location on construction materials and to the increasing number of visitors. Both aspects are considered in the conservation, management and monitoring plans.

5. PROTECTION, CONSERVATION AND MANAGEMENT

Boundaries of the nominated property and buffer zone

The nominated property includes 5.8 hectares. It corresponds to the site known as Bennelong Point, where the Sydney Opera House stands. The nominated area encompasses land owned by Government of New South Wales and managed by the Sydney Opera House Trust. It is surrounded by Sydney Harbour and the Royal Botanic Gardens.

The proposed buffer zone (438.1 hectares) has been designed to protect the property's universal values in relation to its setting on Sydney Harbour. The buffer zone centres on the inner waters of the harbour and includes places around the harbour within a radius of 2.5 kilometres that have been identified as offering critical views to and from the Sydney Opera House.

ICOMOS considers that the proposed core zone includes all the physical components that express the property's outstanding universal values. The proposed buffer zone assures the proper management of the views from and to the Sydney Opera House. Construction regulations should be implemented in order to assure the conservation of the present features of shore landscape included in the buffer zone.

Ownership

The Sydney Opera House is publicly owned by the State Government of New South Wales (Ministry for the Arts). The administration and management of the property are the responsibility of the Sydney Opera House Trust under the *Sydney Opera House Trust Act 1961*.

Protection

Legal protection

Legislation and associated instruments have been established across national and state levels to ensure the comprehensive conservation and management of the heritage values of the Sydney Opera House. The property and its site are protected by being listed on statutory heritage registers at all levels of government, including specific provisions for managing their heritage values. The Sydney Opera House was included in the National Heritage List on 12 July 2005 under the *Environment Protection and Biodiversity Conservation Act 1999* and on the State Heritage Register of New South Wales on 3 December 2003 under the *Heritage Act 1977*. In 1980 the property was included in the Register of the National Estate which was established under the *Australian*

Heritage Commission Act 1975 and now maintained under the *Australian Heritage Council Act 2003*.

Listing in the National Heritage List implies that any proposed action to be taken inside or outside the boundaries of a National Heritage place or a World Heritage property that may have a significant impact on the heritage values is prohibited without the approval of the Minister for the Environment and Heritage. Actions must be subjected to a rigorous assessment and approval process. In 2005 the Australian Government and the New South Wales Government entered into a bilateral agreement for the Sydney Opera House. The agreement declares that actions approved by the New South Wales Government, in accordance with a bilateral accredited management plan, do not require approval by the Australian Government.

Australian Government and New South Wales Government legislation have provisions to impose financial penalties or imprisonment for actions that may have an adverse impact on the heritage values of the Sydney Opera House.

ICOMOS considers that the protective measures for the property are adequate to protect its outstanding universal values.

Conservation

Conservation history

Since the construction of the Sydney Opera House implied a long process that has not finished with its inauguration in 1973, conservation history is partly linked with the construction and development process, explained in the *History and development* section.

In 1993 James Semple Kerr was commissioned to write a conservation plan for the Sydney Opera House. In 1998 the Sydney Opera House Trust appointed Sydney architect Richard Johnson to advise on future development of the property and to establish planning principles. Through Johnson, the Trust began negotiations to reconcile with Utzon and to re-engage him with the building in an advisory capacity. In 2002 the Sydney Opera House Trust released the Utzon Design Principles, intended for future development in the framework of the conservation of the original design ideas. The adoption of the Sydney Opera House Conservation Plan (2003) assures the proper conservation and management of the property.

Present state of conservation

The present state of conservation is very good. The property is maintained and preserved through regular and rigorous repair and conservation programmes, as well as by scrutiny at the highest levels including the executive of the Sydney Opera House Trust and the New South Wales Government. All elements of the building and the site are currently in good physical condition.

Alternative sources have been located to replace original materials that are no longer available. The replacement of original material components is considered justified taking into account fragility of some modern materials in relation with aging and with the maritime building's setting.

ICOMOS considers that conservation measures and actions are adequate to preserve the property's values.

Management

Management structures and processes, including traditional management processes

The management structure of the Sydney Opera House takes into account a wide range of measures provided under planning and heritage legislation and policies of both the Australian Government and the New South Wales Government. As the property is registered at national and state levels, both governments share responsibility regarding protection and conservation, in the framework of the existing bilateral agreement.

At the national level, the Australian Council was established under the *Australian Heritage Council Act 2003*. The Council is an independent body of heritage experts that provides advice to the Minister for the Environment and Heritage on a range of heritage matters, including issues related to policies, protection, conservation and monitoring of places of the National Heritage List.

At the State level, the *Environmental Planning and Assessment Act 1979* provides for the proper management, development and conservation of the natural and built environment in New South Wales. The legislation requires that proposals comply with relevant planning controls and are environmentally and socially sustainable according to their nature and scale. Before a proposal can be undertaken on the Sydney Opera House site, it is subject to rigorous assessment by qualified planners, urban designers and heritage experts. This process involves consultation with the public and interested parties and identifies all likely impacts. Approval cannot be granted unless there has been an assessment and consideration of the impacts of the proposed action or proposal on the heritage values of the property. If approved, the proposal may be subject to conditions of approval to ensure that the heritage values are conserved and protected.

The *Heritage Act 1977* provides protection for places of natural and cultural heritage significance. It provides for the listing of heritage items or places on the State Heritage Register and the making of orders for their protection. Any development application for the property must be considered for approval by the New South Wales Heritage Council. In addition, the *Minimum standards of maintenance and repair*, created under the legislation, require that the Sydney Opera House is kept to a mandatory standard of care and maintenance. The property is also subject to guidelines that regulate heritage items owned by New South Wales Government agencies under the legislation. The *State agency heritage guide* sets standards for the day-to-day care of places owned by New South Wales Government agencies and establishes the integration of heritage matters into overall asset management.

The Sydney Opera House Trust was created in 1961 and is administered by the New South Wales Minister for the Arts. Functions of the Trust include the administration, care, control, management and maintenance of the property and the administration of the Sydney Opera House as a

performing arts centre. The Trust is advised by the Sydney Opera House Conservation Council on conservation issues. The Council is composed by representatives of the Trust, the Sydney Opera House Executive Committee, the Government Architect and government and private specialists with recognised experience in architecture, heritage and conservation matters, design, engineering and related disciplines and performing arts. Membership of the Council is foreseen to be enlarged with the inclusion of representatives of the New South Wales Heritage Office, the Department of Infrastructure, Planning and Natural Resources and the NSW Minister for the Arts.

ICOMOS considers that management structures and processes are adequate to assure the proper conservation and management of the property's values, integrity and authenticity.

Management plans, including visitor management and presentation

The *Management Plan for the Sydney Opera House 2005* was prepared by the New South Wales Government in consultation with the Australian Government in the framework of the existing bilateral agreement. The plan sets out the environmental assessment and approval requirements and the management arrangements that operate to protect the values of the property. The plan includes the Conservation Plan and the Utzon Design Principles. Together these three documents provide the policy framework for the conservation and management of the Sydney Opera House.

The plan provides a link between these practical documents and the legislation. It provides a sound basis for decision-making in relation to any future development and evolution, modification and change, as well as for the day-to-day management of the property including minor management proposals. All management decisions must be carried out in accordance with the plan.

Sydney Opera House: a plan for the conservation of the Sydney Opera House and its site 2003. The Conservation Plan is a highly effective management tool for the property. The plan identifies the heritage significance of the property, assesses the levels of heritage significance to be assigned to the various elements of the property and its fabric, contains detailed policies to manage the heritage values, and gives guidance on managing any necessary change or upgrade in vision for the building and its setting.

The *Utzon Design Principles* (2002) are a record of Utzon's vision for the building and its setting and his views about its future. As a reference document that explains the design principles of the building it provides a framework within which the building and site may evolve and develop to meet the changing demands of this major performing arts centre, while conserving the heritage values of the site and retaining its authenticity.

Involvement of local communities

Since the Sydney Opera House became a symbol not only of Sydney but of Australia, there is a high degree of public awareness on its values and significance.

Resources, including staffing levels, expertise and training

The Sydney Opera House is financed from a number of different sources. The administration and maintenance of the property and its operations are funded by New South Wales Government grants, earned income from the provision of facilities and services by the Sydney Opera House, corporate sponsorship and philanthropy. An annual endowment for the operations of the Sydney Opera House Trust is provided by the New South Wales Ministry for the Arts. The Ministry also funds ongoing building and maintenance requirements. In addition, the Australian Government may provide financial assistance for the identification, promotion, protection or conservation of a National Heritage place through initiative or incentive programs.

The Sydney Opera House Trust is in the position of managing the property with policies developed by one of Australia's most respected conservation consultants, James Semple Kerr (the Conservation Plan), and with the benefit of the principles set down by the building's creator, Jørn Utzon (the Utzon Design Principles). The Sydney Opera House Trust established a Conservation Council in 1996 to provide specialist advice about issues of heritage significance (see *Management structures* above). Its key responsibilities are to conduct annual inspections and review significant works, the Conservation Plan and expenditures. A range of professional, technical and maintenance staff are employed at Sydney Opera House on permanent, temporary and casual contracts.

In conclusion, ICOMOS considers that the management system for the property is adequate to assure the proper conservation and enhancement of its outstanding universal values, integrity and authenticity.

6. MONITORING

Formal monitoring systems with wide ranging indicators that measure the state of conservation are in place. The *Management plan for the Sydney Opera House 2005* establishes formal monitoring mechanisms and obligations for various parties regarding the management of the heritage values of the property.

A range of documents have been developed by the Sydney Opera House Trust to monitor the Sydney Opera House's state of conservation, protect its heritage values and manage its assets. These include a building standards manual; strategic building plans; strategic asset maintenance plans; emergency plans; security plans and policies; and a crisis management plan. These management tools are reviewed and updated regularly. They ensure that maintenance requirements and projected capital improvements are identified over a 25-year cycle.

The method of monitoring and assessing the conservation and condition of the property is encapsulated in Building Condition Indices that have evolved from quarterly condition monitoring reports. The Building Condition Indices database details thousands of individual building fabric inspections that are used to determine trends in the building's condition and to plan future preventative conservation works. It is also used by the Sydney Opera House staff responsible for the care of the building and by maintenance and cleaning contractors to assess the

condition of the property. The Building Condition Indices database has over 490 000 entries that detail the condition of every place, room, functional space, location zone and level of the building.

The internal administrative arrangements for monitoring the property's state of conservation are undertaken by the Trust's Facilities Portfolio, its staff and contractors. The Facilities Portfolio has responsibility for developing strategies and maintenance plans. A specialist technical department within the Facilities Portfolio is responsible for the ongoing care of the property. The Sydney Opera House's asset maintenance and planning framework requires the Building Conservation Contractor to conduct monthly or quarterly inspections. This periodic monitoring ensures quick identification and rectification of maintenance and conservation matters. The Sydney Opera House Conservation Council provides advice on the care, control and maintenance of the building.

In conclusion, ICOMOS considers that the monitoring measures for the property are adequate. Nevertheless, ICOMOS recommends identifying key indicators, related not only to physical components but also to uses and public use of the property (visitors).

7. CONCLUSIONS

ICOMOS recommends that the Sydney Opera House be considered bearing outstanding universal value based on its significance as one of the most prominent architectural works of the 20th century, encompassing remarkable achievements in buildings form and expression and structural and technical issues. The proposed core zone includes all the physical components necessary to express the property's values. The proposed buffer zone assures the preservation of the property's dramatic setting in Sydney Harbour.

The property meets successfully the conditions of integrity and authenticity. The protection, conservation, management and monitoring structures and processes demonstrate to be adequate to ensure the proper conservation and enhancement of the Sydney Opera House values, integrity and authenticity.

Recommendations with respect to inscription

ICOMOS recommends to the World Heritage Committee that the Sydney Opera House, Australia, be inscribed on the World Heritage List on the basis of *critterion i*:

Recommended Statement of Outstanding Universal Value

The Sydney Opera House constitutes a masterpiece of the 20th century architecture. Its significance is based on its unparalleled design and construction; its exceptional engineering achievements and technological innovation and its position as a world-famous icon of architecture. It is a daring and visionary experiment that has had an enduring influence on the emergent architecture of the late 20th century. Utzon's original design concept and his unique approach to building gave impetus to a collective creativity including architects, engineers and builders. The design represents an extraordinary interpretation and response to the setting in Sydney Harbour. The Sydney Opera House is

of outstanding universal value for its achievements in structural engineering and building technology. The building is a great artistic monument and an icon, accessible at society as large.

Criterion i: The Sydney Opera House is a great architectural work of the 20th century. It represents multiple strands of creativity, both in architectural form and structural design, a great urban sculpture carefully set in a remarkable waterscape and a world famous iconic building.

ICOMOS recommends that the State Party give consideration to the following in order to ensure the optimisation of the management system for the property and its buffer zone:

- Define and implement construction regulations for the buffer zone, especially in relation to the conservation of the current skyline of the shore landscape of Sydney Harbour.
- Consider how to reconcile the increase of visitor numbers with the proper functioning of the performing arts centre and with the preservation of the property's outstanding universal values, integrity and authenticity. Management of the property could be further enhanced by increased interpretation of its values to visitors.
- The interior spaces and material components should be considered as important as the exterior form and materials. They bear testimony of the specific history and process of design and construction of the building. It is thus recommended that conservation measures include original interior components as well as the consideration of different stages of construction and interior design as a part of the history of the property.



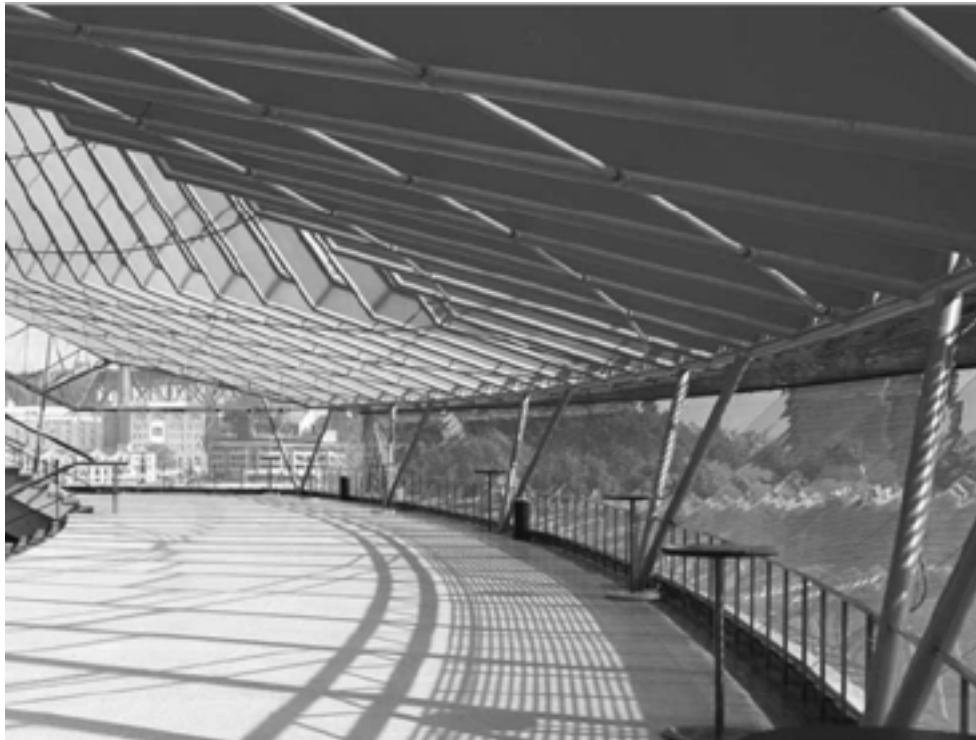
Map showing the boundaries of the nominated property



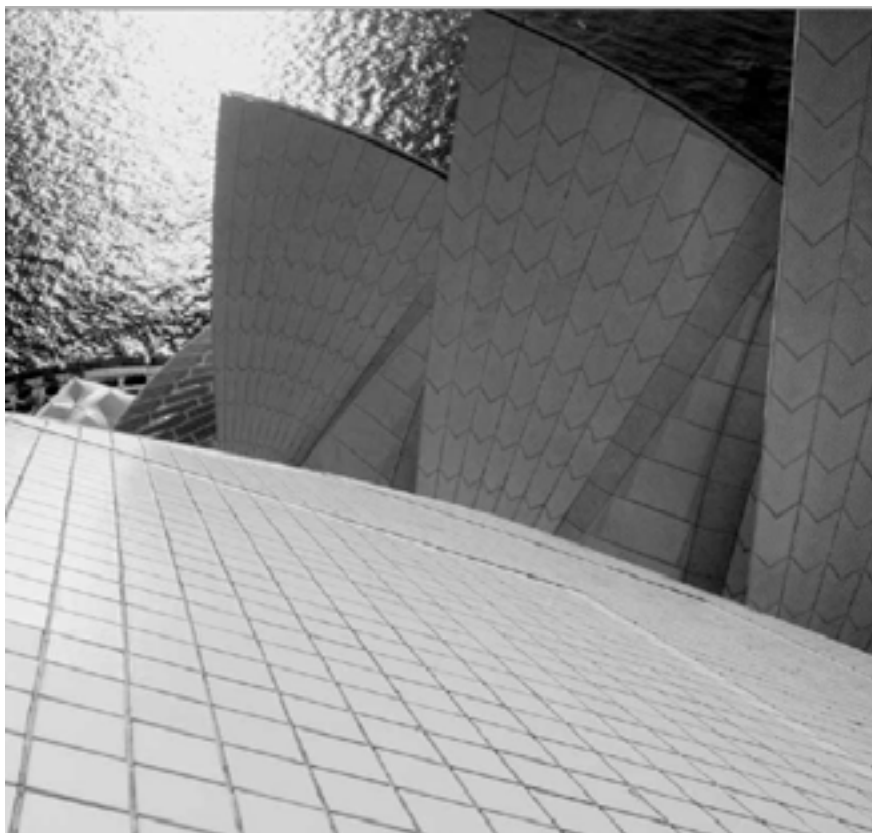
Aerial view of the site



Podium



Glass walls



Vaulted roof shells

The Red Fort Complex (India)

No 231 rev

Official name as proposed
by the State Party:

The Red Fort Complex

Location:

Delhi

Brief description:

The Red Fort was the palace fort of the Mughal Emperor Shahjahan's new capital, Shahjahanabad. It gets its name from its massive enclosing walls of red sandstone.

Originally known as 'Qala-a-Mubarak'a' - the auspicious Citadel - the fort was built together with the city, by Shahjahan, fifth Mughal Emperor of India (1628-58) when he moved his capital from Agra. It is adjacent to an older fort, the Salimgarh, built by Islam Shah Sur in 1546, separated originally by a river and now by a road. Together the Red Fort and the Salimgarh Fort are known as the Red Fort Complex

The extensive walls originally faced a moat. Two gates give access to the bazaar, audience chamber and series of finely proportioned palace rooms, lavishly decorated in white marble. The private apartments consist of a row of pavilions connected by a continuous water channel, known as the Nahr-i-Behisht, or the Stream of Paradise. The palace was designed as an imitation of paradise as described in the Koran; a couplet inscribed in the palace reads, 'If there be a paradise on earth, it is here, it is here'.

The planning of the palace is based on Islamic prototypes, but each pavilion reveals architectural elements typical of Mughal building, reflecting a fusion of Persian, Timurid and Hindu traditions. The Red Fort is considered to represent the zenith of Mughal creativity under the Emperor Shahjahan. After 1857, some structures were demolished by the British and replaced by military barracks buildings.

Category of property:

In terms of the categories of cultural property set out in Article 1 of the 1972 World Heritage Convention, this is a monument.

1. BASIC DATA

Included in the Tentative List: 16 March 2005

International Assistance from the World Heritage Fund for preparing the Nomination: No

Date received by
the World Heritage Centre: 15 October 1982
26 October 1992
31 January 2006

Background:

This is a deferred nomination (17th extraordinary session, Cartagena, 1993).

A first nomination dossier was examined by the Bureau of the World Heritage Committee at its 17th extraordinary session (Cartagena, 1993). At the time, ICOMOS recommended that: "the inscription of this property be deferred until the handover of the major portion of the monument to the Archaeological Survey of India has been completed and statutory protection has been extended to entire monument."

The Bureau of the World Heritage Committee approved the following recommendation:

"The Indian authorities provided additional information on the legal protection of historical sites, indicating that all sites have a protection area of 100 meters and a buffer zone of 300 meters. ICOMOS emphasized that there is a long conservation tradition in India and that the protection meets World Heritage requirements. In the case of Red Fort, however, major parts of the site are under the authority of the army. ICOMOS therefore recommended to defer this nomination until these parts of the Fort have been handed over to the Archaeological Survey of India. The Bureau endorsed this recommendation."

The previous nominations covered a smaller area, encompassing only the Red Fort and not the Salimgarh Fort.

A new revised nomination dossier was submitted to UNESCO on 31 January 2006.

Consultations: ICOMOS consulted its International Scientific Committee on Fortifications and Military Heritage.

Literature consulted (selection):

Koch, Ebba, *Mughal Architecture*, 1991.

Mukherji, Anisha Shekhar, *The Red Fort of Shahjahanabad, Delhi*, 2003.

Tillotson, Giles, *Mughal India*, 1990.

Technical Evaluation Mission: 19–22 September 2006

Additional information requested and received from the State Party: ICOMOS sent a letter to the State Party on 11 December 2006, and the State Party submitted additional information on 9 January 2007. ICOMOS sent a letter of request of supplementary information on 31 January 2007 and the State party submitted information on the 27 February 2007.

Date of ICOMOS approval of this report: 11 March 2007

2. THE PROPERTY

Description

The Red Fort Complex along with the earlier Salimgarh Fort occupies an area of around 120 acres.

The Red Fort was built by the Mughal Emperor Shahjahan as part of his new capital Shahjahanabad in the mid 17th century. The structure of the new planned city drew inspiration from Isfahan, the Persian Capital, and reflected the power and grandeur of the Mughal court. The Fort was the focal point of the city, strategically sited at the end of the primary axis and next to the Yamuna River. It abuts the earlier fort of Salimgarh, constructed on an island in the river and linked to the Red Fort by a bridge.

Construction of the Fort was begun in April, 1639 and completed in 1648. Its massive red sandstone walls – from which it gets its name – enclose an area 656 by 328 metres and rise to 23 metres in height.

Since it was built, the Fort has been added to and some parts demolished. Additions include the Moti Masjid (Pearl Mosque) built by Shahjahan's son and successor Aurangzeb in 1659-60, and additions by the last Mughal Emperor Bahadur Shah Zafar. After 1857, many structures within the fort were demolished by the British who erected colonial style military buildings in their place, and transformed the Mughal gardens into English gardens, interrupting the spatial planning within the Red Fort. An equally profound change has been brought by the river changing its course and moving further east; its original line between the two forts is now taken by the Inner Delhi Ring Road.

Within the enclosing walls, the spatial organisation and architectural attributes of the ensemble of Mughal monuments display most of the main day-to-day activities of Shahjahan's court, which at its height accommodated some 3,000 people.

The Red Fort was the first Mughal palace fort developed on the basis of a geometrical grid pattern set within an octagonal form, (and within an octagonal city plan). The architecture of the Red Fort is based on the concept of pavilion structures, set within the grid. The primary building material is brick, clad with sandstone or marble. The buildings were characterised by decorative elements that synthesised Persian, European and Indian motifs creating a unique Shahjahani style which incorporated intricate geometric compositions, pietra dura inlay, bright colours and flowing water. Shahjahan was the first to use tall, complex pierced marble *jali* partitions, based on hexagonal forms. These design elements were a culmination of those developed by preceding Mughal rulers.

The Mughul remains contrast starkly with those from the British period which reflect the basic requirements of an occupying force.

The nominated Red Fort Complex consists of the following main elements:

Red Fort :

- Walls, bastions and gates
- Chhatta Chowk, palace market
- Naubat Khana or Naqqarkhana Drum House
- Diwan-i-Am, Hall of Public Audience

- Palace pavilions and the Nah-i-Bihisht, Stream of Paradise
- Diwan-i-Khas, Hall of Private Audience
- Hammam Baths
- Moti Masjid, Pearl Mosque
- Hayat-Baksh Bagh, Lifegiving Garden
- British period buildings

Salimgarh Fort

These are considered in turn:

Red Fort

- Walls, bastions and gates

Along the red sandstone walls are at intervals bastions surmounted by domed kiosks. The two principal entrances are the Lahori Gate and the Delhi Gate. The Lahori gate was the ceremonial public entrance used by visitors and the emperor himself. It consists of three storeys between two semi-octagonal towers topped by a delicate, seven arch arcade with white domes flanked by two minarets. The Delhi Gate was used mainly by soldiers and all other people working in the fort.

- Chhatta Chowk, palace market

The Lahori gate leads directly into Chhatta Chowk, a vaulted arcade formerly used as the palace market.

- Naubat Khana or Naqqarkhana Drum House

From the market access leads to the Naubat Khana or Naqqarkhana (Drum House), a three-storey rectangular building. Here grand arrivals were serenaded by musicians and only princes could ride through on horseback beyond this point.

- Diwan-i-Am, Hall of Public Audience

The audience hall is based on the concept of an open forty pillared hall, as used at Agra Fort. The rectangular hall is on a raised plinth with openings on three sides and three aisles deep with a façade of nine multiple arches. Formalised tapering octagonal pillars with still leafed capitals and cusped arches supported a decorative inlaid ceiling. The royal throne used to stand beneath a marble canopy at the back of the hall decorated with pietra dura and floral motifs inlaid with polychrome semi-precious stones.

- Palace pavilions and the Nah-i-Bihisht, Stream of Paradise

Proceeding further, there is a string of finely proportioned palace buildings parallel with the river course constructed of white marble, and raised up on platforms, all connected by the Nah-i-Bihisht (Stream of Paradise), which flowed through them, its channel decorated differently in each

palace. Each building is different and yet each is in harmony with the others.

- Diwan-i-Khas, Hall of Private Audience

This is the most ornamental of all Shahjahan's buildings, of white marble decorated with floral pietra dura patterns on the columns, with precious stones and gilding. Raised on a plinth it is open on all sides except where it faces the river and is enclosed by pierced *jali* panels. Its flat roof originally faced with silver on the underside, is supported by 32 columns with acanthus carving. In the centre of the structure the Peacock throne originally stood. Today, the Diwan-i-Khas is a pale shadow of its original glory, yet the famous Persian couplet inscribed on its wall is a reminder of its former magnificence: "*If there be a paradise on earth, it is here, it is here*".

- Hammam Baths

Built of marble and decorated with pietra dura inlay and glass windows, the baths consists of a series of chambers equipped with hot and cold water which ran over channels inlaid with carved flowers to give the impression of a garden.

- Moti Masjid, Pearl Mosque

Constructed by Shahjahan's son and successor Aurangzeb in 1659-60 for his personal use, it is built entirely of marble. Its triple bulbous domes were originally clad with copper. The floor of the prayer hall is inlaid with outlines of musallas (prayer carpets) in black marble

- Hayat-Baksh Bagh, Lifegiving Garden

The Garden to the north of the Moti Masjid is laid out in characteristic Mughal form in squares with water-channels between them. These have been recently reconstructed.

- British period buildings

Constructed of dressed stone with round headed arched openings, four three-storey barracks, seven two-storey barracks and thirteen single-storey barracks were constructed between 1867-8 and occupy the north-east and south-east corner of the fort.

Salimgarh Fort

This fort is earlier than the Red Fort, built by Shah Suri in 1546 AD. However, apart from the remains of a small earlier structure, the remaining buildings all date from the late British era. Constructed on a river island Salimgarh Fort was linked to the banks by a bridge. The old bridge was replaced by another bridge in a different location during British rule, and connects the two forts. A two-track railway line runs through Salimgarh Fort.

History and development

Prior to the Mughal period, the principles of city planning had been developing in India since around the 3rd millennium BC. In the intervening centuries the construction of forts, palaces, temples, gardens and water systems had all come to be seen as key elements of local architecture. During the early Mughal period, in the 16th

and 17th centuries, architectural styles from Persia came to be fused with local Hindu traditions to create what became a distinctive Mughal style. This process was begun by the first Mughal Emperor Babur (1526-1530), enlarged by the second Mughal Emperor Humayun who introduced the octagonal form for planning and building components. Under Shahjahan this was lifted to a delicate elegance and refinement of detail, illustrated in the magnificent palaces erected in his reign at Agra and Delhi, combining grandeur with a high aesthetic sense and underpinned by the economic prosperity of his reign.

Construction of the Red Fort was begun in April 1639, and was completed in 1648 as part of the construction of Shahjahanabad, his new capital transferred from Agra. Shahjahan was instrumental in introducing various innovative approaches to town planning in Shahjahanabad where the whole city was designed within an octagonal concept and focused on the Red Fort.

The Fort was added to by his son who built the Pearl Mosque; and by the last Mughal Emperor Bahadur Shah Zafar. The fall of the Mughal Empire began with the fall of Shahjahan; the Peacock throne was removed and the building assumed new and different functions. In 1718 the Naqqar Khan was used as a prison. The place was ransacked in 1739 by Nadir Shah from Persia who emptied the Treasury. The buildings were damaged by bombs thrown by the Marathas and the Jats in 1759.

After the Sepoy Mutiny of 1857, the Fort was captured by Britain and became the headquarters of the British Indian Army. It had been shorn of its jewels by the Emperor to fund his resistance to the British. Many major structures within the fort were demolished by the British who erected colonial style military buildings in their place. They also re-designed the Mughal Gardens in English style. An equally profound change has been brought by the change in course of the river which no longer flows between the two forts. Its place has been taken by a busy ring road. When India achieved independence in 1947, the Indian Army took control of the Red Fort Complex. In December 2003 the Indian Army handed the fort over to the Archaeological Survey of India, thus satisfying the requirements set in 1993 by the World Heritage Bureau. The army barracks buildings now stand empty.

The Fort is open to the public and attracts several million visitors a year. The Fort is also the site from which the Prime Minister of India addresses the nation on August 15 each year, marking the day that India achieved independence from the United Kingdom.

Construction of the Salimgarh Fort was begun in 1544 AD by Islam Shah. It was subsequently used by Humayun to re-conquer Delhi from Islam Shah and by Shahjahan as a residence during the construction of the Red Fort. Shahjahan was also imprisoned there at the end of his life. Almost all the Mughal period buildings, including the bridge linking to it to the Red Fort, were demolished by the British. As noted above, many new structures were built by the British, including a railway line that passes through the site.

3. OUTSTANDING UNIVERSAL VALUE, INTEGRITY AND AUTHENTICITY

Integrity and Authenticity

Integrity

- **Red Fort**

The spatial layout of the Fort and its relationship with the river and with the city were key aspects of its design. It is said to be a unique synthesis of Persian, Hindu and Islamic concepts of city planning and the first Mughal fort palace to be systematically planned (in distinct contrast to Lahore and Agra). Within the enclosing walls there was careful spatial differentiation of the various functions of the court and the buildings reflected hierarchical social structures.

Since it was built, two major interventions have interrupted this harmony: the demolition of buildings and their replacement by British barracks and the re-location of the river and its replacement by a major road. Both of these impact on the integrity of the Mughal planning.

The landscape between the pavilion buildings was part of the overall spatial planning of the Red Fort. The landscape inside the fort has changed to a great extent, mainly due to interventions by the British occupying force. From the current layout of the gardens, it is difficult to identify what is authentic Mughal design and what is not. Currently, the Archaeological Survey of India (ASI), with the help of consultants, is conducting research on the landscaped areas to determine what remains of the original Mughal garden layouts.

The most dramatic impacts on the integrity of the Red Fort Complex come from the change of the river into a major road, which alters the relationship of the property to its intended setting, and from the division of the Salimgarh Fort by a railway.

What now exists cannot be said to reflect all the principles of Mughal planning and design. Rather the built remains of the Red Fort complex now display the impact of British colonisation on surviving Mughal architecture and planning. ICOMOS considers that the Red Fort demonstrates integrity in relation to these two layers.

- **Salimgarh Fort**

In the Salimgarh Fort, all structures apart from one date from the late British era. A two-track railway line divides the Fort into two parts. The State Party justifies the presence of the railway line as an example of a British layer on top of the Mughal layer.

ICOMOS considers that, while the concept of “layer” is acceptable in the case of Red Fort in relation to the substantial remains from the Mughal period which are still visible, the presence of a railway line running across the middle of the Salimgarh Fort, combined with the absence of substantial visible Mughal remains, does impact on the integrity of the Salimgarh Fort and also on the complex as a whole.

Nevertheless the Salimgarh Fort is inextricably linked to the Red Fort in use and later history and is perceived to belong to the Red Fort Complex. ICOMOS therefore considers that it is justified to include it within the

nominated property. ICOMOS emphasises that, in isolation, Salimgarh Fort does not manifest adequate integrity in terms of demonstrating features related to the identified values of the Red Fort; therefore its integrity can only be seen in terms of its value as part of the overall Red Fort Complex.

Authenticity

ICOMOS considers that there is no doubt over the authenticity of the Mughal buildings or of the buildings constructed by the British. As noted above, there is more uncertainty over the layout of the gardens within the fort which have been recreated in Mughal style from their English form, and until current research is completed, it is not known if these reflect the original Mughal layout.

ICOMOS considers that in the case of the Salimgarh Fort so little remains of the Mughal period that the authenticity can only relate in tangible terms to buildings and the railway constructed by the British, and in intangible terms to its association with earlier periods and the imprisonment of Shahjahan. In this sense what remains are authentic expressions of later history. Again Salimgarh can only be seen as an adjunct to the Red Fort included for completeness.

In conclusion, ICOMOS considers that integrity of the Red Fort Complex is satisfactory as a layered expression of both Mughal architecture and planning and the later British military use of the forts.

ICOMOS considers that the authenticity of the Mughal and British buildings in the Red Fort Complex is established, although more work is needed to establish the veracity of the current garden layout. In the specific case of the Salimgarh Fort, ICOMOS considers that the authenticity of the Mughal period is related to knowledge of its use and associations, and of the built structures dating from the British period.

Comparative analysis

The dossier puts forward a detailed comparison of the Red Fort with three other Mughal forts already inscribed on the World Heritage List, Agra Fort (1983), Fatepur Sikri (1986), and Lahore Fort (1981), all constructed prior to the Red Fort.

In planning terms the Red Fort was fundamentally different from the other three in being deliberately planned on a grid basis with social zoning in contrast to what is called the haphazard nature of the other three forts. The Red Fort therefore represents advancement in Mughal architecture and can be seen to represent its ultimate expression before the Mughal dynasty collapsed after Shahjahan's demise.

The Red Fort occupies a unique place in the development of Mughal architecture and is of significance as a symbol of the power and influence of the Mughal Emperor Shahjahan.

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

Justification of the Outstanding Universal Value

The State Party proposes that the Red Fort Complex has outstanding universal value for the following reasons. It:

- Is the most significant palace in India in terms of its planning and construction process and its unique reflection of Islamic, Hindu and Persian traditions.
- Demonstrates layers of historical development beginning with the Mughals and continuing to the present day.
- Is associated with the struggle for independence and now stands as a symbol of a free India.

Criteria under which inscription is proposed

The Red Fort Complex is nominated on the basis of criteria i, ii, iii and vi.

Criterion i: The State Party justifies this criterion on the grounds that the Red Fort Complex epitomises the palace architecture of the Mughals and demonstrates the zenith of the development and achievements of Mughal architecture and planning under Emperor Shahjahan. It demonstrates innovation in planning, construction techniques, hydraulic systems, garden design and intricacy of art-work.

ICOMOS considers that the Red Fort was undoubtedly a landmark of Mughal architecture and a masterpiece of planning, design and construction when built. However since its construction, major interventions have diminished its overall integrity and intactness and shorn it of its opulent magnificence. What remains is dramatic but does not show the wholeness or luxuriousness of the original creation. As the nomination dossier states ‘the entire concept of fort architecture was negated’. Salimgarh Fort pre-dates the Red Fort and was never an integral part of the Mughal design for the Red Fort.

ICOMOS does not consider that this criterion has been justified for the Red Fort and could not apply to the Salimgarh Fort.

Criterion ii: The State Party justifies this criterion on the grounds that the planning and design of the Red Fort represent a culmination of architectural development initiated in 1526 AD by the first Mughal Emperor and brought to a splendid refinement by Shahjahan. The architectural style of building components as well as garden design strongly influenced later buildings and gardens in Rajasthan, Delhi, Agra and the surrounding areas.

ICOMOS considers that the fusion of traditions: Islamic, Persian, Timurid and Hindu are relevant for this criterion: the final flourishing of Mughal architecture built upon local traditions but enlivened them with imported ideas, techniques, craftsmanship and designs to provide outstanding results in planning and architecture as demonstrated by what remains of the Red Fort.

ICOMOS considers that this criterion is justified.

Criterion iii: The State Party justifies this criterion on the grounds that the Red Fort Complex has played a key part

of significant stages of Indian history: Shahjahan the last Mughal Emperor built the Red Fort and was subsequently imprisoned in the Salimgarh Fort; the complex was the headquarters of the British Indian Army and witnessed the first war of independence in 1858.

ICOMOS acknowledges that the Red Fort has played a significant historical role. ICOMOS also considers that the innovative planning arrangements and architectural style of building components as well as garden design developed in the Red Fort strongly influenced later buildings and gardens in Rajasthan, Delhi, Agra and further afield. These aspects are relevant to the justification of criterion iii, as are the capacity of the Red Fort Complex to demonstrate the way British military occupation resulted in the overlaying of earlier buildings.

ICOMOS considers that this criterion is justified.

Criterion vi: The State Party justifies this criterion on the grounds that the Red Fort Complex has been a symbol of power since the reign of Shahjahan, has witnessed the key change in history to British rule, became the symbol for the struggle for independence, was the place where independence was first celebrated, and is the place where it is still celebrated today.

ICOMOS considers that the Red Fort Complex has been the setting of events, which have had over time a critical impact on its geo-cultural region.

ICOMOS considers that this criterion is justified.

ICOMOS considers that the outstanding universal value has been demonstrated and that the nominated property meets criteria ii, iii and vi.

4. FACTORS AFFECTING THE PROPERTY

Roads and railway

A convergence of roads and railways near the property and the proximity of the Old and New Delhi Railway Stations and Delhi Bus Station cause high levels of noise and air pollution – acknowledged in the dossier.

The proximity of the road running along the former river bed to the Red Fort greatly increases the air pollution levels within the property, which could adversely affect delicate materials, such as marble and sandstone, and physically damage the underlying structures. The considerable traffic on the road, which is the Inner Delhi Ring Road, also has adverse physical impacts on the bridge connecting the two forts - the bridge is badly damaged – and on the fort walls.

The railway running close to the northern edge of the Red Fort and cutting across the Salimgarh Fort also carries considerable traffic.

The State Party acknowledges that there is a need to decrease air pollution and noise levels from both roads and railways to provide visitors with a more tranquil experience.

ICOMOS considers that consideration needs to be given in the long term to the relocation of the road immediately next to the Red Fort and in the short term the impacts of pollution and physical impacts should be addressed.

Rising Dampness

This affects several structures and currently its cause does not appear to be fully understood. Both rising water tables and watering of lawns are considered possible causes. Climate change could further exacerbate this problem. ICOMOS recommends that this be addressed through the Comprehensive Conservation Management Plan (CCMP).

Emergency Preparedness

Fire is acknowledged to be a major potential threat to the wooden ceilings and other wooden components and portable objects within buildings. The nomination dossier states that the Archaeological Survey of India is developing an in-house arrangement but will need to liaise with the Delhi Fire Service.

ICOMOS considers that emergency procedures for addressing possible fire risks need to be put in place as soon as possible. It is understood that this will be addressed by the Comprehensive Conservation Management Plan (CCMP).

Conservation/Weathering

The porous nature of the red sandstone means that weathering over centuries will present problems. It is acknowledged in the nomination dossier that previous inappropriate conservation work is also an issue to be addressed. On many of the buildings the white marble is also deteriorating from deposits of inorganic matter. Iron clamps for fixing stones are a problem in some buildings as where these are exposed to water or air they can corrode, splitting the stone.

It is stated that a detailed inquiry into the vulnerability of the building materials will be carried out as part of the Comprehensive Conservation Management Plan (CCMP).

Visitor/Tourism Pressures

Between 1998 and 1999 visitor numbers to the Red Fort rose to 2.4 million with approximately 8,000 visitors a day during the peak season. Since 9/11 numbers have fallen to around 1.5 million visitors per year. However the dossier expresses the hope that the high number will again be reached in the future. Currently there is no visitor management strategy in place to even out the distribution of visitors on the property and reduce crowding and congestion in the most popular areas which could cause considerable damage from abrasion, due to dust and dirt as well as touching, and an increase in humidity levels.

Visitors are not currently provided with adequate information in order to allow them to fully appreciate the significance of the property. There are also inappropriate interventions associated with visitors such as lights, railings and obtrusive newly built walkways. Some Delhi citizens have entered in court a Public Interest Litigation to try and undo some of these recent interventions (see below).

A Lutyens-style bungalow is approaching completion in part of the space formerly used by the army. This does not appear to relate to its surroundings. It is presumably for the administrative staff.

A tourism strategy will be developed as part of the Comprehensive Conservation Management Plan (CCMP).

In conclusion, ICOMOS considers that the main risks to the property are from the nearby railway, the road along the former river bed, air and noise pollution and visitor pressures.

ICOMOS notes that work has commenced on a Comprehensive Conservation Management Plan (CCMP). In progressing this Plan, ICOMOS considers that given the scale and scope of the property and its considerable conservation and visitor management problems, adequate time should be given to the development of the Plan and its full consultation and approval.

5. PROTECTION, CONSERVATION AND MANAGEMENT

Boundaries of the nominated property and buffer zone

The boundary of the Red Fort Complex includes the whole of the Red Fort and Salimgarh Fort.

The nominated property has well-maintained parks outside the south walls and most parts of the east and west fortification walls. Illegal structures in areas on the north and north-west parts are being cleared for use as green areas. Most of the park areas extend well beyond the legally declared 100-metre-wide "prohibited areas" around the nominated property..

The Archaeological Survey of India controls most of the buffer zone areas. However, some parts of the buffer zone belong to the Delhi Development Authority (DDA), the Central Public Works Department (CPWD) and private owners. There are some slums on the northeast side of the Salimgarh Fort which, according to the nomination dossier are being resettled/removed. Because of ongoing legal disputes, the exact completion date of this process could not be ascertained.

Ownership

The Ministry of Culture of the Government of India owns the Red Fort Complex.

Protection

Legal Protection

The nominated property enjoys the highest level of protection as it has been declared a monument of national importance under the Ancient Monument and Archaeological Sites and Remains Act, 1959.

A 100-metre wide prohibited zone (called buffer zone in the nomination dossier) surrounds the protected areas and further 200-metre wide prohibited areas have been established to control development and land use through a

government notification. In addition, development and land use in the adjoining historic old city of Shahjahanabad is controlled under the Zonal Development Plan prepared by the Delhi Development Authority.

ICOMOS considers that the protective measures for the property are adequate.

Conservation

History of Conservation

The Red Fort has been under the control of the Archaeological Survey of India since 2003. During that time considerable conservation work has been undertaken and the nomination dossier includes a list of recently completed projects such as restoring lime plaster on many buildings, restoring lime concrete flooring, repairing inlay, repairing sandstone flooring and stairs. The precise dates and timescales for these are not given.

Present state of conservation

The nomination dossier acknowledges considerable problems with the conservation of the Red Fort arising from water ingress and rising damp, and the impact of dust, dirt and air pollution. It also acknowledges the need to put in place active conservation programmes for the most damaged structures. This would include restoration of lime mortar, replacing missing inlay, conserving damaged stones, removing iron cramps, and repairing roofs with water ingress.

There is a need for a long-term conservation strategy that would allow on-going preventative conservation measures to be put in place as well as shorter-term conservation programmes to address the more urgent problems. This should be addressed by the proposed Comprehensive Conservation Management Plan (CCMP).

Although, the state of conservation of the building has improved over the past ten years, much more work is needed to put the overall state of the building into a stable condition and to ensure visitors do not contribute to its decay.

Active conservation measures

Because of the Red Fort's strong association with the history of India and its status as a symbol of India's independence, there is considerable public interest in affairs related to its conservation. As a result of a public writ, a court order has been issued that directs the Archaeological Survey of India to postpone all kinds of conservation interventions within the complex until a comprehensive conservation management plan for the entire property has been prepared. Conservation work is now limited to carrying out regular maintenance work and research and documentation of the property.

In conclusion, ICOMOS considers that a conservation approach needs to be developed for the property, as part of the proposed Comprehensive Conservation Management Plan (CCMP), as soon as possible in order to inspire public confidence.

Management

Presently the Red Fort Complex is managed directly by the Archaeological Survey of India, which is also responsible for the protection of all national level heritage sites in India and Indian cultural properties included in the World Heritage List. Among these are a number of Mughal period complexes, including the Agra Fort World Heritage Property. However they are currently constrained, through a Court injunction (see above) only to carry out maintenance work until a Comprehensive Conservation Management Plan (CCMP) has been approved. A transitional management system is thus in place.

At the time of submission of the nomination dossier, there was no CCMP for the property. Since that time, the Institute of Archaeology, University College, London, in collaboration with the Cultural Resource Conservation Initiative in India and the Archaeological Survey of India, has been appointed to prepare a CCMP for the property.

It was stated in the nomination dossier that the CCMP would be a holistic site management plan to address the threats from conservation problems and visitor pressures, and the urgent need for a more strongly integrated approach that incorporates, research, education and social values.

The State Party was asked to provide details of this Plan. In January an unedited, consultative draft of the CCMP was submitted by the State Party. This sets out the management issues for the property and outline strategies of how these will be addressed. What still needs to be added are actions for each of the strategic areas. It is stated in the draft that many of these interventions are yet to be developed and will be added after a consultation period in February and March 2007. The draft envisages that the Plan will be implemented over ten years. Two committees will be set up to oversee its implementation: a CCMP Consultative Committee and a Coordinating Committee. The former will advise on the implementation of the plan, monitor its progress and establish appropriate systems, while the latter will ensure inter-departmental coordination and implementation of the action plans.

ICOMOS supports the direction of this draft plan.

Site presentation, interpretation and visitor management

The Red Fort Complex embodies many layers of interventions over a long period of time. The sheer size of the property, the destruction of many Mughal era structures and gardens and the addition of many structures during the British period have made this property difficult for visitors to understand. Despite a few information panels and a sound and light show in the evening, the presentation and interpretation is not enough for a visitor who does not know the property well to enjoy it or appreciate its cultural significance. The three museums inside the property also lack interpretive materials.

The nominated property is one of the most visited sites in India. Because of its historical importance, this site is particularly popular with local visitors. It is likely that in the event of its inscription on the World Heritage List the number of visitors will increase. The existing ticketing system is adequate to control the total number of visitors to

the property on a given day. However, there is no mechanism to control the number of visitors to a particular spot inside the property at any given moment. There is therefore an urgent need for a visitor management strategy.

Considering the important role of the Red Fort in India's history and in creating a national identity, ICOMOS considers that presentation and good on-site interpretive methods should be given a high priority.

ICOMOS considers that the scale and complexity of the Red Fort Complex, its current conservation problems, the high numbers of visitors and the need for better interpretation all point to the pressing need for the finalisation and agreement of the proposed Comprehensive Conservation Management Plan (CCMP), supported by stakeholder involvement.

ICOMOS considers that the transitional management system in place is adequate; and that the longer-term protection and management of the property will be secured through the completion of the proposed Comprehensive Conservation Management Plan and the resolution of the current legal action.

6. MONITORING

The need for documenting the condition of the buildings on an annual basis in order to monitor conservation is acknowledged in the nomination dossier, but such a system is currently not in place.

ICOMOS considers that monitoring measures need to be established for the property in order to build up data on the condition and changes to the buildings over time.

7. CONCLUSIONS

ICOMOS considers that the Red Fort Complex demonstrates Outstanding Universal Value and satisfies criteria ii, iii and vi.

ICOMOS considers that the road running between the Red Fort and Salimgarh Fort, and the railway to the north have adverse effects on the structure and conservation of the property, and on its setting and planning attributes. It therefore suggests that the State Party consider a long-term plan for realigning the road and the railway, perhaps further to the north-east away from the Red Fort; and in the short term, putting in place measures to reduce the overall volume of traffic.

Management of the Red Fort Complex is a challenge given the nature of the building materials, current air pollution and high numbers of visitors. In the light of the current court order which constrains the Archaeological Survey of India to refrain from conservation work until a Comprehensive Conservation Management Plan has been developed and approved, ICOMOS considers that it is essential that the Plan takes an integrated approach to research, conservation, monitoring, tourism, education and local social values, and is carried out in a collaborative way to inspire public confidence. Given the considerable interest locally in the management of the Red Fort Complex, ICOMOS considers that it is important that the

relevant stakeholders are consulted at all key stages of the development of the Comprehensive Conservation Management Plan and that its recommendations are based on consensus among the stakeholders. The consultative draft that has been supplied gives reassurance that this approach will be taken.

Recommendations with respect to inscription

ICOMOS recommends that the Red Fort Complex, India, be inscribed on the World Heritage List on the basis of *criteria ii, iii and vi*.

Recommended Statement of Outstanding Universal Value

The Red Fort Complex has Outstanding Universal Value:

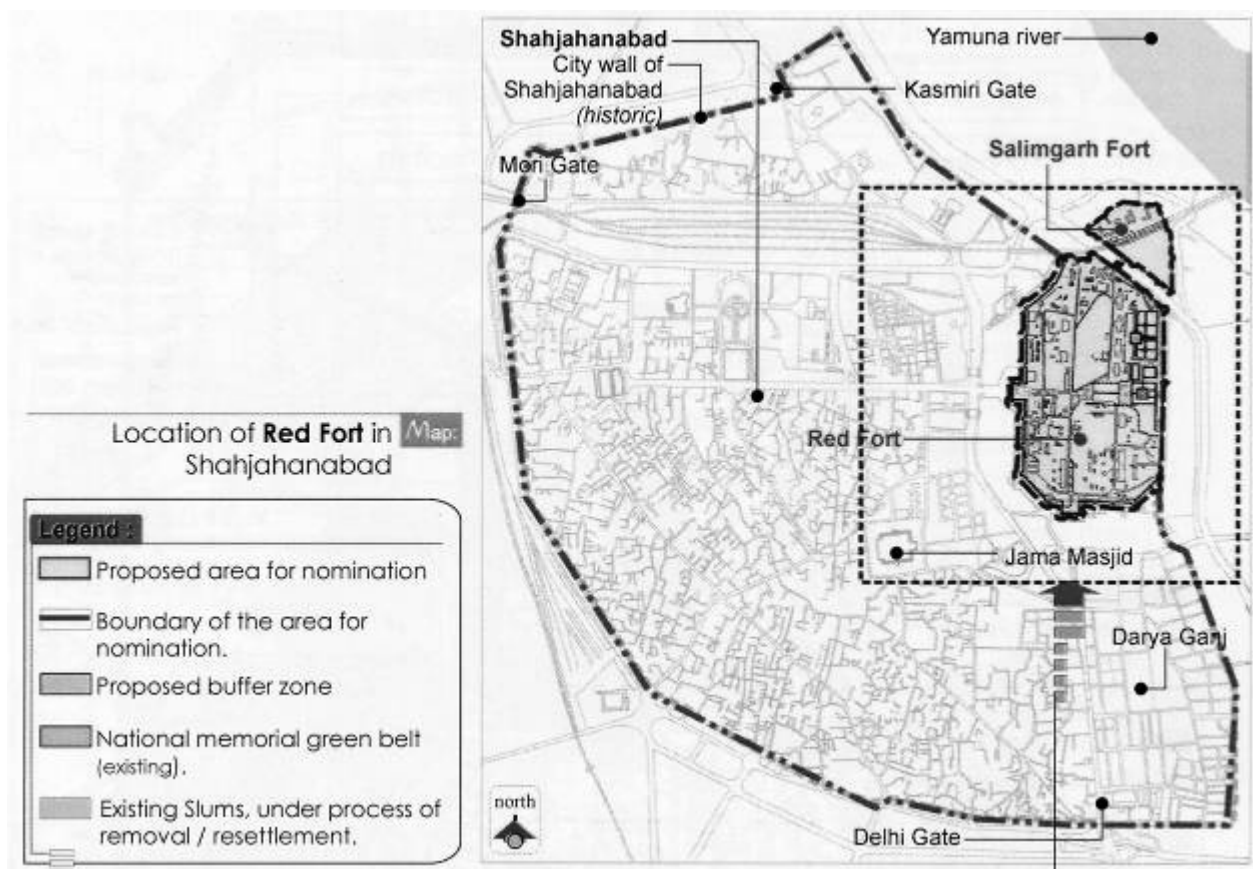
- The planning and design of the Red Fort represent a culmination of architectural development initiated in 1526 AD by the first Mughal Emperor and brought to a splendid refinement by Shahjahan with a fusion of traditions: Islamic, Persian, Timurid and Hindu.
- The innovative planning arrangements and architectural style of building components as well as garden design developed in the Red Fort strongly influenced later buildings and gardens in Rajasthan, Delhi, Agra and further afield.
- The Red Fort has been the setting for events which have had a critical impact on its geo-cultural region.

Criterion ii: The final flourishing of Mughal architecture built upon local traditions but enlivened them with imported ideas, techniques, craftsmanship and designs to provide a fusion of Islamic, Persian, Timurid and Hindu traditions. The Red Fort demonstrates the outstanding results this achieved in planning and architecture.

Criterion iii: The innovative planning arrangements and architectural style of building components and garden design developed in the Red Fort strongly influenced later buildings and gardens in Rajasthan, Delhi, Agra and further afield. The Red Fort Complex also reflects the phase of British military occupation, introducing new buildings and functions over the earlier Mughal structures.

Criterion vi: The Red Fort has been a symbol of power since the reign of Shahjahan, has witnessed the change in Indian history to British rule, and was the place where Indian independence was first celebrated, and is still celebrated today. The Red Fort Complex has thus been the setting of events critical to the shaping of regional identity, and which have had a wide impact on the geo-cultural region.

ICOMOS recommends that the State Party submit the completed and agreed Comprehensive Conservation Management Plan to the Committee for approval at its 32nd Session.



Map showing the boundaries of the nominated property



Lahauri Gate



Mughal structure



Zafar Mahal



British structure

Bregenzerwald (Austria)

No 1228

Official name as proposed

by the State Party: Bregenzerwald Cultural Landscape

Location: Province of Vorarlberg

Brief description:

Part of the Alps, between Germany and Switzerland, the high mountain valleys of the Bregenzerwald encompass 24 villages. Their farming system is characterised by a cyclical 'three-level farming' for cattle grazing and hay-making, in which farmers, parts of their family, and their livestock move between the home farm in the valley, the Vorsäss or mid level pasture, and the Alpe, high level pasture, during different seasons of the year.

Category of property:

In terms of the categories of cultural property set out in Article 1 of the 1972 World Heritage Convention, this is a *site*. In terms of the *Operational Guidelines for the Implementation of the World Heritage Convention* (2 February 2005) paragraph 47, it is also a *cultural landscape*.

1. BASIC DATA

Included in the Tentative List: 1st August 1994

International Assistance from the World Heritage Fund for preparing the Nomination: No

Date received by the World Heritage Centre: 31 January 2006

Background: This is a new nomination.

Consultations: ICOMOS has consulted its International Scientific Committees on Historic Gardens – Cultural Landscapes and on Vernacular Architecture. IUCN has provided an evaluation of the natural attributes of the site.

Literature consulted (selection):

ICOMOS Charter on the built vernacular heritage.

Technical Evaluation Mission: 28 October –
1 November 2006

Additional information requested and received from the State Party: None

Date of ICOMOS approval of this report: 21 January 2007

2. THE PROPERTY

Description

The Bregenzerwald is a collection of high mountain valleys in the northern part of the Alps, a mountain range stretching from Austria and Slovenia in the east, through Italy, Switzerland, Liechtenstein and Germany to France in the west. The nominated Bregenzerwald consists of 22 communities with two more in the buffer zone to the north-west. To the south, the property is protected by a Biosphere Reserve, while in the north and north-east the property rises to meet the boundary with Germany at the watershed. The core area covers 565.29 square kilometres.

The Bregenzerwald is a geologically very diverse region displaying in the complex overlying rock layers, the meeting of two continents, Europe and Africa, which produced the Alpine folding process. The mountains attain a considerable height and in between the valleys benefit from sandstone and marl deposits, the latter forming gentle slopes and fostering good grass pasturelands.

The Bregenzerwald has cool summers and relatively mild but snowy winters. The lower settlement areas in the valley are snowbound for some four months of the year, while the higher settlements can have up to six months of snow. Frequent wet westerly winds create damp conditions in the valleys, but sustain peat moorlands at higher levels.

The Bregenzerwald is made up of three linked zones: the Vorderwald (Front forest), Mittelwald (Middle forest) und Hinterwald (Back forest). The whole area rises north to South. The lowest point lies where the river Rotach flows into the river Bregenzerach at 460 metres; at 2,649m the Braunarlspitze is the highest point of the mountain range which runs from East to West and thus functions as a natural boundary.

The settlement patterns vary between the three areas. In the Mittelwald and Hinterwald, buildings are clustered in closed villages alongside through roads, with some in the Hinterwald of linear form with strip fields. In the Vorderwald, scattered buildings predominate.

What binds all these settlements together, however, is their common farming practices based on livestock farming which uses a three level grazing system. The farmer with part of his family and livestock moves from the farmhouse and main buildings in the valley, to the Vorsäss, mid-level pasture and then the Alpe, high level pasture as the summer advances, and then returns down the mountains as winter advances.

The livestock for the farms is predominately cattle, whose milk is used to make cheese. Until the third quarter of the 19th century, when communal dairies were set up, this cheese was made in individual farm buildings. At each of the three levels there would have been buildings for the family, their animals and for storing milk and making cheese.

Although diverse in form across the Bregenzerwald, the vernacular buildings are characterized by stout horizontal log construction with wood shingle roofing – making use of timber from the extensive spruce and fir woods that clothe many of the steeper mountain slopes.

The disposition of farms and their fields and pastures can be traced back to the 12th century when new agricultural

areas were opened up by settlers. Gradually further settlements were developed higher into the mountains as the population grew. In the 19th century the three grazing cooperatives in Bizau still reflected the original three farms.

From the 17th century, many of the farms diversified into timber trades and textile cottage industries, and buildings were constructed for these activities. As early as the 18th century in many areas agriculture had become a secondary occupation as hand embroidery grew in economic importance. By the second half of the 20th century the area saw a great diminution in prosperity of the mountain farms and an increasing reliance on income from tourism, particularly skiing, with many ski lifts being constructed even in more low lying areas.

The nominated property consists of the following:

- *Three level farming system*
- *Settlements*
- *Vernacular buildings*
- *Forestry*

These are considered in turn.

Three level farming system

Traditionally farmers kept livestock to produce milk and cheese and grew crops, such as oats and barley, to feed their own families in fields in the valley. Hay for the animals was supplied by meadows in the valley or at the higher levels.

The farming system was based on a communal or cooperative approach. In order to keep numbers in balance with the available resources, farmers were only allowed to keep as many animals on the communal mountain pastures as they could feed in the winter months with hay. The use of the communal pastures was also strictly regulated with open and closing times being agreed when the cattle were driven to and from the pastures. One of the farmers would be appointed Vorsässmaster to oversee compliance on the mid level pastures, and an Alpemaster was employed for the high level pastures.

During some months the cultivated fields in the valley were also grazed communally as farmers put their livestock to eat stubble. These communal activities were regulated overall by the Allmendrecht or law of agricultural cooperation.

The Vorsäss mid level pastures are found at between 800 and 1300 metres. They were used in the spring and autumn when traditionally the whole family would move up for a few weeks. At the height of the summer the animals would be moved to the higher level, Alpe pastures, at up to 1,700 metres. These high level pastures are the most extensive in the Bregenzerwald. They vary in size from 20 to over 900 hectares. In contrast to the mid level pastures, the high level ones were operated by farm assistants who looked after all the cattle and organised milking and cheese making. In the autumn the cattle would be brought down to the mid level pastures and fed hay grown there. This

occasion was one of the social highlights of the year, with families getting together for singing and games.

The procession to and from the high pastures of the cattle and people was conducted as a yearly ceremony with as many as 4,500 head of cattle make the annual trek.

Today with road improvements, although the annual trek for the animals still takes place, most of the farming is conducted from the valley with people only making daily visits to the mid level pastures and some of the higher level pastures. Milk from the mid level pastures is transported to the valley for cheese making and the wooden buildings on the pastures are now often used for tourist accommodation. Cheese making is still carried on in some of the higher level pastures. These areas previously mown for hay are now given over to cattle grazing and this has had the effect of increasing the numbers of cattle since the 1950s.

The Bregenzerwald cheese is now made by 17 village dairies. It is made with milk from cows that have been fed only on grass and herbs, not silage. In the nominated area there are 17 mid level pastures and 19 high level pastures.

Settlements

The villages of the Bregenzerwald reflect a roughly 500 year old process of settlement.

Vernacular buildings

The houses were built of horizontal logs under gently sloping ridge roofs covered with wood shingles. Timber for the early houses was either adzed or hand sawn; from the 1760s machines were used to plane the wood. Moss or chaff was stuffed into the gaps between logs on the outside and clay or lime in the inside. Many of the surviving roofs date from the 19th century when the simpler purlin roofs were replaced by more complex binding rafters.

The comparatively heterogeneous appearance of the Bregenzerwald farmhouses is based on two designs: a house with a transverse hallway and entrance on the eve's side, and a house with a central hallway with entrance on the gable end. Often the doorways are sheltered by a Schopf or porch. Some houses are extensive, offering accommodation for several generations of a family and also encompassing cattle byres for the winter months and the storage of hay.

Until the 19th century the layout of the living quarters was determined by the position of the fire: in the centre of the house was a hall or hearth room which was the central distribution space. Off this was the parlour (sleeping room) and in larger houses further chambers and store rooms. Under one end of the building there was usually a storage cellar. In the early buildings the fire was an open hearth with a large pot hanging over it in which the cheese milk would be warmed. From the 1870s closed stoves were introduced. Many buildings were enlarged and partially reconstructed in the 19th century but still using traditional materials and techniques.

Some of the buildings have been surveyed and analysed. The oldest buildings date from around 1550. Periods of high building activity can be seen between 1550 and 1640

and from 1740 to 1840, with an increase in activity around 1890.

A characteristic of the area is the number of new buildings constructed in the past 50 years. Those in the 1960s tended to mimic earlier buildings, while those built in the past ten years have attempted to use local materials, tradition and form to create new styles perpetuating local architectural attitudes.

Forestry

The farms were largely created from clearings in the forest in the Middle Ages and since then the forests have persisted on the steepest slopes. Over the past 100 years, timber production has increased significantly due to the construction of roads and the resulting improved access to higher situated areas and slopes also. At present approx. 90,000 cubic meters of timber are being felled per year.

History and development

Although there is some evidence of settlement in the valley in prehistoric and Roman times, the defined history of the area dates back to the 11th century when the villages Alberschwende, Egg, Andelsbuch and Schwarzenberg were established. Large manorial farms, run according to the villication system, were the centre of the settlements which were established in clearings in the forests. The settlements grew through the so-called *Huben* system whereby small farms were given to settlers for clearing and cultivation. One farm usually covered around 18 hectares. The opening up of land in the Bregenzerwald was carried out by the Counts of the Udalrichinger dynasty, who were related to the Carolingians. As a royal estate, the Bregenzerwald fell under the administration of the adjacent counties, which had long been in that family's possession. Since approximately 920 A.D. they had called themselves the Counts of Bregenz, after the centre of their rule.

In about the mid-10th century, a Pfullendorf branch of the family emerged, and the dominions were divided between this and the Bregenzer family line. Both henceforth owned considerable amounts of land in the Bregenzerwald and, together with their vassals, saw to the opening up of land there. While the Counts of Bregenz primarily pushed ahead with the expansion of Alberschwende, Lingenau and Andelsbuch, Egg and Schwarzenberg were centres of Pfullendorf colonization, which saw its zenith under Count Rudolf (who died in about 1180), and was the last of his line.

Count Ulrich of Bregenz encouraged the establishment of the Benedictine monastery in Andelsbuch through gifting land to the Abbott. This further encouraged settlement and cultivation. In the 11th century, because of difficult access, the monastery was moved to Bodensee and given the name Mehrerau. Count Rudolf of Bregenz endowed the monastery with the church and the farm at Alberschwende. In addition, it received extensive lands in Lingenau and other parts of the Bregenzerwald. The monastery thus owned three of the five large parishes there. Around 1180, Abbot Meinrad succeeded in carrying out large-scale clearing in Tutenbuch (Riefensberg), starting from Lingenau. Some endowments were also bestowed by the Countess Elisabeth. Mehrerau also

received further property from monks and brothers of the monastery, as well as from laypersons. Lingenau developed into the most important monastic centre in the valley.

In the Late Middle Ages, the number of endowments decreased sharply. The 14th century saw the development of a marked trend towards the transformation of farming estates into feudal land tenure with an increase in the number of serfs. Towards the end of the 15th century, the economic situation of Mehrerau Monastery worsened due to internal problems and the monastery incurred debts. Members of the nobility also owned land and helped in the development of the Bregenzerwald. The Knights of Ems owned extensive properties in Schwarzenberg, Bezau, Reuthe and Bizau given by the king at the end of the 12th century. They also owned the sole hunting rights throughout the Inner Bregenzerwald.

In Bizau, the village was divided into two parts towards the end of the 16th century, with 55 houses belonging to the Lords of Ems, and 52 to the Mehrerau monastery. In 1765, after the Knights of Ems died out, their rights were transferred to Austria. The Knights of Schwarzach acted as representatives of the Counts of Bregenz and their legal successors in the Bregenzerwald. They owned lands as well as serfs in Alberschwende, Andelsbuch and Hirschau. In Schwarzenberg, the Benedictine monastery St. Gallen (now in Switzerland) owned eight small settler farms, *Huben* and the church until the 15th century. The village of Mellau also belonged to St. Gallen's sphere of influence in the Bregenzerwald.

By the 13th/14th century, the noble demesne-farming of the large farms had lost much of its importance and the land was leased to tenant farmers. At about the same time, the seigneurially-controlled settlement activities were replaced by farmers' agricultural cooperatives and small settlements were established outside the settler farms.

This development becomes particularly marked in Bizau: three settler farms constituted the starting point for settlement activity, which probably began in the 12th century. At the end of the 19th century, there were still three grazing cooperatives descended from the three original farms.

A further development was the opening up of the valley hinterlands. Permanent settlement was often preceded by use as summer pasture, as for example in the case of Mellau. New farms, new settlements emerged both in the valley locations and in favourable higher regions, particularly as islands of cleared land on the sunny terraces above the valleys. The settlement process did not take place continuously. As a result of the worsening of the climate in the 16th and 17th century, exposed settlements came to be abandoned or used only seasonally within the system of multi-level agriculture. A fresh settlement push subsequently took place in the 18th and at the very beginning of the 19th century.

Since the 16th century, the relationship between husbandry and stock farming had shifted, and arable areas have given way to the grassland which dominates today. In many places in the Bregenzerwald the intensified stock farming increased at the expense of husbandry. This process was influenced in connection with

the introduction of the potato in the 18th century and was connected with the climatic changes in the 16th and, above all, the 17th century.

3. OUTSTANDING UNIVERSAL VALUE, INTEGRITY AND AUTHENTICITY

Integrity and Authenticity

Integrity

The boundaries enclose a coherent area and the extent of Alpine farming in this area of the Alps. Within the boundaries the landscape reflects all aspects of the traditional three level farming system.

Authenticity

The three level farming system that underpins the cultural landscape still exists as a working practice, with the introduction of motorised transport. The system continues to be characterised by the retention of the mid-level and high-level pastures as grazing for cows, the production of cows' milk from cows only fed on grass and hay and the local production of cheese from the milk. There is a lesser degree of transhumance now than in the past when families moved to the spring, summer and autumn pastures. Nevertheless the nature and extent of farming is sufficient to sustain the characteristics of the cultural landscape.

Tourism has brought the need for ski lifts which impact on the landscape – although many are well sited.

Modern windows and wide use of imported materials in traditional buildings as well as some reconstructions of vernacular buildings have all contributed to a loss of character and of authenticity. It is not clear whether traditional buildings and the traditional way of building will over the next decade or so still continue to dominate the building stock.

It can therefore be said that the landscape is an authentic reflection of a system that has persisted in the area for at least five centuries but that there are aspects, such as the overall collection of vernacular buildings, with reduced authenticity.

ICOMOS considers that cultural landscape has integrity and authenticity in terms of its reflection of the impact of three level farming on the Alpine landscape, but ICOMOS also considers that changes in building materials and construction have impacted on the authenticity of the overall building stock.

Comparative analysis

The Bregenzerwald has been nominated as an agricultural landscape and the comparative analysis in the dossier concentrates on comparisons with other upland areas where cattle are grazed in the mountains. The State Party makes the case that there are significant differences in the Alpine system where milking cows were sent to high pastures, not just mother cows and young cattle.

The dossier considers the nominated area in relation to other areas of the Alps. In Switzerland similar multi-level

farming systems have survived in a dynamic form, largely as a result of the Alps being considered as part of Swiss culture since the early 20th century and supported as such. These systems are very similar to the Bregenzerwald. In France, the systems are far less dynamic as there has been less support for structurally weak mountain regions. Multi-level farming only survives in isolated cases. In Italy multi-level farming has not continued to flourish in many areas, with the exception of South Tyrol where a two-level system survives. In Austria although multi-level farming is found in other areas, such as the Tyrol, it is less dynamic and there is more impact from tourism. Overall although farming in the Bregenzerwald has not been static, it has evolved slowly in a way that has allowed the basic farming systems to be maintained.

The vernacular building traditions are not taken into account in the comparative study. The regions of the Alps present a complex of related building cultures: an overall coherence within which are distinct differences reflecting differing agricultural uses developed in isolated valleys. The neighbouring areas in Switzerland, Germany, (Liechtenstein) and Austria are part of this overall tradition along with the Bregenzerwald.

Taking a wider European view, the three farming system of the Bregenzerwald is not unique and what emerges from the narrower Alpine comparison is that there are several areas in the Alps where multi-level farming survives and a case does not emerge for the Bregenzerwald being the sole survivor of the system.

Considering farming traditions alone, the Bregenzerwald cannot be said to be outstanding. Also, the dossier does not mention the Regional Thematic Expert Meetings on Alpine landscapes which were held in Hallstatt, Austria, in 2000, and Turin, Italy, in 2001.

The outcomes of these meetings were presented to the World Heritage Committee at its 25th Session in Helsinki. The meetings involved participants from six countries, and considered the overall framework for Alpine nominations. Although the initial thrust of the meetings was the natural heritage, the conclusions reflected the need to see the Alps as one of the major cultural landscapes of Europe and to give consideration to identifying landscapes that reflected cultural, ecosystem and landscape values. In particular these meetings stressed the need for the value of Alpine landscapes to be broader than farming traditions and to encompass vernacular building traditions and associations with the development of ideas on landscape appreciation.

The participants agreed to a phased nomination process and criteria for joint nominations for the Alps region which reflected its potential cultural attributes such as:

- symbolic and associative sites;
- exchanges between cultures;
- related intangible heritage;
- adaptations of high mountains cultures to the environment which results in specific cultural landscapes and traditions;

- mountain architectural features and complexes (e.g. mountain villages).

Although the Bregenzerwald is clearly one of the key Alpine areas where multi-level farming persists in an extensive way, ICOMOS considers that farming systems are only one of the key attributes of the overall Alpine region. The Alps are known throughout the world for the impact they have had on the development of landscape appreciation.

In conclusion, ICOMOS considers that further work is needed to set the Bregenzerwald into the wider Alpine context through the development of a detailed analysis of the values of the overall Alpine landscapes. The potential for a series of sites or for several series also need to be explored.

Justification of the Outstanding Universal Value

The State Party justifies the outstanding universal value of the Bregenzerwald for the following reasons:

The Bregenzerwald:

- serves as a testimony to the solutions of anonymous farmers to the challenges of nature in mountainous areas;
- has a three-level farming system which is an outstanding technical solution to the challenges of the landscape; and,
- can be read for the way its landscape developed over a five hundred year period.

Criteria under which inscription is proposed

The Bregenzerwald is nominated on the basis of criteria iii, iv and v:

Criterion iii: The State Party justifies this criterion on the basis that the cultural landscape is an outstanding example of the three-level farming system, a tradition in the Alpine environment which provides a sustainable way of life for the farmers. The architecture of the farm houses and tourism are influenced by this farming system.

ICOMOS considers that if the landscape bears testimony to a living agriculture based on a particular type of transhumance, its uniqueness or at least exceptional testimony in the Alpine region is not shown, nor is it demonstrated how this area might represent the whole Alpine region.

In conclusion, ICOMOS does not consider that this criterion has been justified.

Criterion iv: This criterion is justified on the basis that the landscape reflects significant stages in agricultural history, bears witness to the sustainability of this economy and is associated with a semi-nomadic lifestyle.

ICOMOS considers that although the landscape is an example of a grazed and cultivated landscape that illustrates the history of Alpine agriculture and economy,

demonstration as to how this can represent the whole of the Alpine system, or one aspect of the Alpine system, would need further study.

In conclusion, ICOMOS does not consider that this criterion has been justified.

Criterion v: This criterion is justified on the basis that the landscape is an example of a traditional land-use system that represents human interaction with the environment and has become vulnerable due to the global economic changes.

Although ICOMOS considers that the valley is an example of traditional land-use in the Alps, further study is needed to confirm the Bregenzerwald as representative of Alpine mountain culture on its own, or as part of a serial nomination.

In conclusion, ICOMOS does not consider that this criterion has been justified.

ICOMOS considers that Alpine farming landscapes have the capacity to demonstrate Outstanding Universal Value, but that the distinctive systems that evolved in the Alps and its profound impact on the development of landscape appreciation, should be considered as a whole, perhaps through a serial nomination or several series which together can reflect and represent the overall significance of the cultural landscapes.

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

4. FACTORS AFFECTING THE PROPERTY

Climate change

The farming activities of the valley are supplemented in the winter by skiing enterprises. Skiing is now seen to be vulnerable to climate change: warmer winters have already reduced the amount and duration of snow cover in the Alps. In the medium term, skiing activities could become problematic and vulnerable as an essential support for the local economy. Changes in climatic conditions, particularly more rain, could also have a marked adverse impact on the production of hay in the meadows

Attrition of farming activities

The income from alpine farming is said to be a fifth lower than in non-alpine areas, and some alpine farms earn only 60% of the non-alpine average.

Government support over the past decade has helped to stop farms closing down, especially in extreme locations, and in the last 15 years no more alpine pastures have been given up. Similar support has apparently been budgeted for over the planning period 2007-2015. There is a small tendency towards farm enlargement.

Closure of Alpine pastures

Unless alpine pastures and meadows are kept in use, the forest will quickly re-colonise the areas as has happened in, for instance, the Salzkammergut. The past decline in pastures is mentioned in the dossier but it is not clear what proportion of meadows and pastures have disappeared over, say, the past 100 years. Another issue in terms of the character of these areas is the re-use of traditional buildings in the mid and high level pastures for tourism purposes. This could be a potential threat if the new uses are not sensitive to the cultural values of the structures.

Loss of architectural character

The dossier points to the 'ever-decreasing' number of valuable historical buildings and raises the issue as to whether a tipping point could be reached where a decline in the architectural values and character of the settlements occurs. Currently not all buildings have been surveyed and protection is not yet in place for the most important buildings and so this aspect of the landscape is under considerable threat.

Ski Lifts

There are already ski lifts in the nominated area and approved proposals for new ski lifts in the higher areas of Damüls and Mellau, although clear arguments based on landscape and nature protection could be made against not only the lifts as such but also the pressures from development that go with increased access for skiers to the high pastures.

According to the arguments of the Federal government the new ski lifts are indispensable to safeguard jobs in the Bregenzerwald region. After 10 years the consequences of this interference will, it is said, be evaluated and if necessary the plans will be corrected.

ICOMOS considers that the main risks to the property are incremental loss of character through lack of adequate control on the alpine pastures and vernacular buildings, combined with developmental pressures from increased skiing activities.

5. PROTECTION, CONSERVATION AND MANAGEMENT

Boundaries of the nominated property and buffer zone

The nominated property is large, the boundaries follow watersheds and by and large the area is inward looking and enclosed by mountains. The boundaries enclose a coherent area and the extent of Alpine farming in this area of the Alps.

The boundary partially adjoins the State boundary with Germany. Within Austria the nominated property is protected outside the boundary in part by a small buffer zone and by a Biosphere reserve.

ICOMOS considers that the boundaries of the core and buffer zone are adequate – but see comments on the Alpine region below.

Ownership

The Bregenzerwald is almost entirely privately owned.

Protection

Legal Protection

• Buildings

Only 181 buildings are listed and legally protected, of which 102 are churches or public buildings which are automatically legally protected under the monument protection law.

ICOMOS considers that the number of protected buildings is far less than would merit protection. A detailed inventory of buildings and ensembles is needed to allow for greater protection. So far this inventory is only partially complete. Two notable farmhouses that had been nominated for listing have been demolished over the last few years. Furthermore, legal protection can ensure that all restoration measures will be carried out according to conservation obligations.

The general protection of architectural heritage outside of specific legal protection, for example for hamlets and village centres that are worth conserving, is relatively well secured by "general development plans" and by the Vorarlberg Construction Law.

• Landscape

No landscape conservation areas exist in the Bregenzerwald. With a few exceptions, the conservation of the appearance of the landscape is effected primarily through the Flächenwidmungsplan (zoning plan) and development plans. These designate building free zones but they do not designate agricultural and forestry zones.

• Forests

About 88% of the total forest stand, require a so-called Plenterbewirtschaftung (traditional technique of cutting solitary trees) due to their ecological sensibility or their inaccessibility. The annual felling is controlled by the Austrian forest stocking, which has been carried out by the Bundesamt und Forschungszentrum für Wald (Federal Office and Research Centre for Forests) on behalf of the Ministry of Agriculture since 1961, and is updated every five years by local surveys. As the Bregenzerwald is mostly owned privately, and as the timber prices are very good at the moment, the annual felling is 25% higher than in the 1990s.

• Pastures

None of the pastures are protected. For some years the federal government has been running a so-called pasture championship, which aims to make the farmers more aware of the care of the cultural landscape.

• Nature Conservation

For nature conservation, governmental support programmes have developed contracts with landowners and tenants to protecting areas of special natural history interest. In particular, the nature protection programmes of the ÖPUL (Austrian programme for environmentally friendly agriculture) have been so far very successful. As a

result today about 90% of those sites worth protecting which are located in agricultural areas have been protected on the basis of a contract.

Moorland are generally protected habitats. Encroachment on the moors and commercial turf-cutting are therefore ruled out. There is a special “low-lying moor landscapes” project which aims at protecting typical low moorland species.

In conclusion, ICOMOS considers that the protective measures are not currently adequate to protect the full range of cultural attributes of the landscape and there is a need to extend protective measures to include pastures, traditional woodland and vernacular buildings.

Conservation

History of Conservation

There is no history of deliberate active conservation measures, apart from government initiatives to support farming as outlined below. Up to the present traditional practices have been the main conservation mechanism and the overall protection of the landscape is seen to follow from continuing agriculture.

Present state of conservation

The Alpine pastures appear to be in a good state of conservation. In the valleys, development has encroached on former meadows. There is concern over loss of vernacular materials in buildings and the proportion of new buildings alongside earlier ones.

Active Conservation measures

Active conservation measures, apart from grant support for farming and nature conservation restraints, have yet to be put in place for the overall cultural landscape.

There is no evidence in the dossier of how traditional building materials and skills that are vital for the conservation of vernacular buildings and new buildings will be secured.

These need to be addressed.

ICOMOS considers that some aspects of the cultural landscape are fragile and there is a need for active conservation measures and support for craft skills to be put in place.

Management

On the basis of the federal structure of the Austrian constitution, there are three decision-making levels for the protection and the development of the Bregenzerwald: the government, the Länder (federal states) and communities. The decisive responsibility for the cultural landscape lies in the hands of the Bundesland (federal state) Vorarlberg and its government. The planning or town planning protection of the cultural landscape is ensured on the basis of the land use planning with regional planning principles and instruments of the local development plan (local development strategies and zoning plans). The protection of architectural heritage not covered by listed building

protection, is ensured for hamlets and village centres (scenic views) which merit protection by so called “general development plans” and by the Vorarlberg construction laws.

Local development plans have so far only been drawn up by eight communes. The zoning plans have been put in place by all the communes of the Bregenzerwald.

Communal planning is complemented by inter-communal consultation and co-ordination administered by the Vorarlberg federal state authorities in Bregenz. The development plans for Bregenzerwald enacted in 1998, related to the Räumliches Entwicklungskonzept (local development strategy), with models for some selected communes, have been brought forward by the federal government. Beyond this the federation of all 24 communes in the Bregenzerwald, set up 35 years ago, has developed a positive consultation structure.

Currently there is no integrated Management Plan or System in place for the proactive management of the overall cultural landscape and its cultural attributes.

ICOMOS considers that it is important to integrate the cultural and natural dimensions of the landscape in such a plan or system: to address development as well as protection strategies for farming, the aesthetic and environmental aspects of the landscape, and for tourism and industry. The system needs to put in place strategies and actions to sustain a dynamic cultural landscape, in collaboration with local communities.

Such a Plan or system would need to consider the following:

- landscape surveys including settlement areas, pastures, meadows and woodland;
- documentation of the historical development of the cultural landscape and society;
- inventory of protected properties and ensembles and of properties and ensembles that merit protection;
- options for protecting the farming systems that underpin the landscape and meadows and pastures;
- support for forestry regeneration;
- support for traditional building skills and materials;
- ways to achieve protection of the wider landscape;
- involvement of local communities.

In conclusion, ICOMOS considers that the extensive area of the Bregenzerwald and its cultural landscape need greater proactive management and recommends that consideration be given to the development of a comprehensive Management Plan or System which could address both cultural and natural aspects of the landscape. ICOMOS further recommends that local development plans are put in place for all Communes.

6. MONITORING

Currently the number and use of alpine meadows, the number of livestock and the productivity of farms are monitored on an annual basis. The state of conservation of public and private buildings is also monitored in an ongoing way.

Climatic parameters are also monitored together with water quality and water levels.

ICOMOS considers that there is a need for further monitoring of the aspects of the cultural landscape and that these could be based on more detailed surveys as suggested for the management.

ICOMOS considers that the monitoring measures for the farming are helpful, but that further monitoring of the landscape could be carried out once further surveys of the landscape and buildings have been completed.

7. CONCLUSIONS

The cultural landscape of the Bregenzerwald is part of the overall Alpine landscape. ICOMOS does not consider that a sufficient case has been made for the Bregenzerwald, as a farming landscape, to represent this aspect of Alpine landscapes. As has been agreed at the World Heritage Committee, the Alps needs to be seen as one of the major cultural landscapes of Europe and consideration needs to be given to identifying a range of landscapes that reflect their cultural, ecosystem and landscape values, and their association with the development of ideas on landscape appreciation.

ICOMOS suggests that consideration is given to taking forward the recommendations of the Expert Meetings on Alpine Landscapes, perhaps through the development of a detailed comparative analysis of the Alpine Region as a whole in order to determine how its overall values might be represented on the World Heritage List, perhaps through a series of sites, or several series of sites.

ICOMOS suggests that the Bregenzerwald landscape needs to be assessed in this wider context. A comparative study could demonstrate whether the Bregenzerwald with other sites could reflect the total Alpine cultural landscape, its farming and vernacular building systems and its significant associative values.

ICOMOS considers that the overall protection and management of the Bregenzerwald landscape should be enhanced to integrate its cultural and natural aspects. It suggests that consideration is given to putting in place a comprehensive Management Plan or System to address landscape surveys, historical development of the cultural landscape, inventory of properties and ensembles, options for protecting the farming systems, hay meadows and pastures, support for forestry regeneration, support for traditional building practices, ways to achieve protection of the wider landscape and involvement of local communities.

Recommendations with respect to inscription

ICOMOS recommends that the examination of nomination of the Bregenzerwald Cultural Landscape, Austria, to the World Heritage List be *deferred* to allow the State Party to:

- Consider the full significance of the Bregenzerwald as part of the wider Alpine Region;
- Consider whether, possibly in collaboration with other State Parties, the property with other sites could reflect the Alpine landscape farming traditions and their association with the development of ideas about landscape appreciation;
- Create an integrated Management Plan or system that could integrate the cultural and natural components, and address, amongst other issues: landscape surveys, historical development of the cultural landscape, inventory of properties and ensembles, options for protecting the farming systems, hay meadows and pastures, support for forestry regeneration, support for traditional building practices, ways to achieve protection of the wider landscape and involvement of local communities;
- Put in place enhanced protection for the landscape and its various elements.



Map showing the boundaries of the nominated property



Home farm in the valley



Mid-level pasture



High pasture



Bolgenach sawmill (Hittisau)

Višegrad Bridge (Bosnia and Herzegovina)

No. 1260

Official name as proposed

by the State Party: Mehmed Paša Sokolović Bridge in Višegrad

Location: Republic of Srpska, Sarajevo Macro Region

Brief description:

The Mehmed Paša Sokolović Bridge of Višegrad is a masonry structure constructed across the Drina River at the end of the 16th century. Built by the court architect Sinan on the order of the Grand Vizier Mehmed Paša Sokolović, it is characteristic of the apogee of Ottoman monumental architecture and civil engineering.

It has eleven masonry arches, with spans ranging from 11 to 15 metres, and an access ramp at right angles with four arches on the left bank of the river.

Category of property:

In terms of the categories of cultural property set out in Article 1 of the 1972 World Heritage Convention, it is a *monument*.

1. IDENTIFICATION

Included in the Tentative List: 18 January 2006

International Assistance from the World Heritage Fund for preparing the Nomination: No

Date received by the World Heritage Centre: 31 January 2006

Background: This is a new nomination.

Consultations: ICOMOS have consulted the TICCIH.

Literature consulted (selection):

Ivo Andrić (Nobel Prize for Literature 1961), *Na Drini Cuprija*, Belgrad 1945, 1st edition, French translation *Le Pont sur la Drina*, Paris, 1987.

Léon Mayer, *Islamic Architects and their Works*, Geneva, 1956.

Goodwin Godfrey, *Sinan, Ottoman Architecture and its Values Today*, London, 1993.

Amir Pasic, *Islamic Architecture in Bosnia and Herzegovina*, Istanbul, 1994.

John Freely, *Sinan: Architect of Suleyman the Magnificent and the Ottoman Golden Age*, London, 1996.

Eric DeLony, *Context for World Heritage Bridges*, ICOMOS-TICCIH, Paris, 1997.

Sai Mustafa Celebi, *Book of Buildings, Memoirs of Sinan the Architect*, Istanbul, 2002.

Goodwin Godfrey, *A History of Ottoman Architecture*, London, 2003.

Commission for the preservation of national monuments of Bosnia and Herzegovina, European Community and Council of Europe [Plan for the implementation of integrated rehabilitation projects, evaluation of the architectural and archaeological heritage (IRPP/SAAH programme)], *Preliminary technical studies of the Plan for the implementation of integrated rehabilitation projects*, [PTA, Višegrad Bridge], Sarajevo, 31 August 2005.

Technical Evaluation Mission: 12-14 September 2006

Additional information requested and received from the State Party: ICOMOS sent a letter to the State Party on 31 January 2007 requesting additional information, and the State Party provided additional information on 27 and 28 February 2007.

Date of approval of this report: 11 March 2007

2. THE PROPERTY

Description

The Drina is a powerful mountain river which, near to Višegrad, passes through many gorges. In the river's course from the south towards the north, it drains water from the mountains of the Balkans towards the Sava and the Danube. This region was over a long period part of the North-Eastern Ottoman Empire, from the early 16th century to the end of the 19th century, as opposed to the Austro-Hungarian Empire. Furthermore, the Drina forms the border with Serbia downstream from the bridge close to Višegrad.

The bridge stands just after a sharp curve in the river. The plain which opens out on the right bank enabled the development of the town of Višegrad, at the level of the bridge, but primarily downstream from it, at the confluence with a small tributary of the Drina.

The left bank consists of a rocky hill just next to the river and thus to the bridge. This geographical situation required the construction of a 120 metre access ramp along the river. The ramp is thus laid out at right angles to the bridge itself, and forms a direct architectural extension of the bridge. The ramp provides road access to the bridge, on the river bank, and then elevates the roadway on the ramp supported by four small arches.

The bridge itself is some 179.50 m long, with a total roadway width of 7.20 m, including the parapets consisting of large stone blocks 60 cm thick. The central part of the structure is the highest, and is situated 15.40 m above the average water level, which contributes greatly to the monumental impression of the bridge as a whole.

The bridge consists of eleven slightly ogival arches, whose dimensions range from 10.70 m to around 15 m. The piers are some 3.90 m thick. The arches are enhanced by architectural features which are typical of the classical Ottoman period: hollow ribs on the arches, and triangular pier-heads surmounted by pyramids, and rounded downstream cutwaters surmounted by tapered cones, underlining of the roadway by its cantilever layout, architectural treatment of the spandrels and mihrab by hollowed panels forming niches.

At the central pier, the passageway is widened, with on one side a wall bearing engraved inscriptions celebrating the bridge and its creators (*mihrab*), while on the other side there is a stone divan.

The historic foundations consist of wooden foundation rafts reinforced with wooden piles and stone blocks. The piers and the whole structure are in masonry, using dressed travertine calcareous rock from local quarries and binders enriched with clay to enhance their hydraulic properties.

Despite its uniform external appearance, the bridge has undergone a large number of interventions and reconstructions over the course of time.

History and development

The Višegrad Bridge was commissioned by the Grand Vizier Mehmed Paša Sokolović (1505-1579), who exercised power over a long period at the summit of the Ottoman Empire during the reign of three sultans. The commissioning of the bridge was primarily a tribute to his native region. Founding edifices of this sort, which were both religious and social, formed part of the traditions of power, which expressed itself through major architectural creations which thus reinforced its symbolic nature and its image of civil and religious power.

The Višegrad Bridge was secondly a major structure in terms of planning and control of the inner Balkans by the Ottoman Empire from Istanbul. It thus forms a highlight of the route linking the plains of the Danube to Sarajevo and the Adriatic coast, particularly to the free port of Ragusa (Dubrovnik). The period of its construction coincided with the apogee of the Ottoman Empire, following the reign of Süleyman the Magnificent (1520-1566). This was a long period of peace and prosperity for the region.

The great court architect and engineer Koca Mimar Sinan, who was the head of the team of architects of the Empire, was called on to design and construct the bridge. He had already built, on behalf of Mehmed Paša Sokolović, several major civil and religious architectural works: mosques, bridges, civil constructions, in Istanbul and in several regions of the Empire. Sinan is an emblematic representative of the classical architectural creation of the Ottoman Empire at its apogee. The Višegrad Bridge was constructed from 1571 to 1577, and substantial human and financial resources were employed in the task.

For two and a half centuries, the solidly built bridge suffered primarily from flooding. There are records of works in 1625 and then in 1875 on the piers. The exceptional flooding of 1896 submerged it entirely, resulting in serious damage. The piers were shaken and

eroded, and the parapets were washed away. The bridge was not however destroyed. In 1911-1912, extensive works were carried out to stabilise and reinforce the piers by Austro-Hungarian engineers (piers 4, 5, 6, 7, 8 and 9). At that time the bridge was strategically important in military terms, being located at the frontier with Serbia. The installation of a new thicker stone parapet brought a change to the visible parts of the bridge.

During World War I, in 1914-1915, piers 3 and 4 were blown up with dynamite. After the war, a provisional repair was carried out using steel girders supported by the remaining parts of the initial bridge. The reconstruction in stone, following the original design, was carried out in 1939-1940.

During World War II, in 1943, five of the bridge's arches were completely destroyed, affecting piers 3, 4, 5 and 6. The arches destroyed were rebuilt by the Ministry of Communication and the Roads Administration, between 1950 and 1952, following the model of the parts still intact.

The most recent period has been marked by the construction of the Bajina Basta power station downstream (1966), and by that of the Višegrad power station upstream, some 2.5 km away (1989). These two constructions on the Drina, relatively close to the bridge, have profoundly modified the hydraulic rate of flow of the river (see chapter 4 and 5). In terms of bridge maintenance, the main event was, from 1980 to 1982, an analysis of the bridge and then the launch of restoration work on the foundations of piers 5, 6 and 8. Unfortunately, this work remained uncompleted, because of a lack of funds. The same is true of the work on pier 2, begun in 1992 and not completed.

The war of 1992-1995 had no direct impact on the Višegrad Bridge.

The access ramp on the left bank was restored in 1991, in a spirit of respect for the heritage.

In 2003, vehicle traffic was prohibited, because of the structural risks arising from the state of the bridge (see chapter 4 and 5). In 1986 a modern bridge was built about 1 km downstream, duplicating the function of the historic bridge.

Since the exceptional flooding of 1896 and the damage during the wars of the 20th century, the bridge has undergone a succession of repairs and reconstructions, with the two last campaigns of works unfortunately remaining uncompleted. The resulting structural fragility has been increased by changes in the rate of flow of the Drina, as a result of the construction of the hydroelectric power plants and their management.

3. OUTSTANDING UNIVERSAL VALUE, INTEGRITY AND AUTHENTICITY

Integrity and authenticity

Integrity

The Mehmed Paša Sokolović Bridge of Višegrad has retained its overall architectural style, despite the assaults and destructions it has undergone in the course of its history. All the works undertaken have been carried out while respecting its general integrity. All the elements which confer on the bridge its outstanding value are present in the bridge as it is today, and this includes the materials and architectural details. If the integrity of the property has been altered, it is essentially as a result of inevitable changes in its environment and by changes in the buildings in the town, and more widely by the changing lifestyles of people. These modifications are considered to be external to the property itself and of slight heritage significance. There is however one point which is an exception: the considerable raising of the river water level by the hydroelectric power station of Bajina Basta in Serbia. The general appearance of the bridge is thus less majestic than it was originally. Apart from this, the image of “the bridge over the Drina” remains intact from the cultural and literary heritage viewpoint.

Traces of external calcification are affecting the walls of the spandrels of the bridge. Underwater observations of the base of the piers reveals marked undermining. The road has been resurfaced and does not correspond to the original roadway.

ICOMOS considers that the present integrity of the property has good overall coherence, enabling it to express the universal values which it embodies. This fundamental point is unquestionable. However, this integrity today seems to be fragile in the extreme. The property is suffering from the legacy of complex historical developments which have affected it for a little over a century (see chapter 2). The situation is far from satisfactory, and has not even been stabilised. The *PTA* report of 2005 (see bibliography) considers there is an urgent need of repair for all the piers and their foundations. The priority is said to be extremely urgent for piers 3 and 7. These points could call into question the expression of the universal values which the bridge embodies, and indeed its very existence.

ICOMOS also considers that the integrity of the property, intrinsically fragile, is facing other pressures:

- The water level, which has been raised by about 2 metres, and the existence of currents linked to the present use of the hydroelectric power plants upstream and downstream of the bridge, increase the undermining already observed at the base of the piers;
- A plan to stabilise the river banks upstream of the bridge does not as yet guarantee the future of the landscape environment close to the property;
- The possibility of new constructions close to the property, on the right bank, with no relation to the property and its historical environment.

Authenticity

The authenticity of the property is analysed in the light of the Nara document. The authenticity seems excellent, in the classical Ottoman style. The bridge was designed and

built from the drawings of Mimar Koca Sinan, an architect then at the summit of his art, considered an emblematic figure of the architectural ability of the Ottoman Empire, which was then at its apogee. The unique elegance of the proportions and the monumental nobility of the property as a whole bear witness to this fact. However, the original documents relating to the construction and the worksites have not been conserved.

Alterations to the bridge over the course of its history have been minor or temporary, such as the construction of wooden towers in the 19th century for the toll. The main alteration to its form consists of modifications of the parapet, in two stages. The elegant original parapet of fine stone slabs, washed away by the flooding in 1896, was initially replaced by large dressed stones, and then again in 1949 by a stone parapet 60 cm thick.

In terms of materials, the same dressed travertine calcareous stone from the Banja quarries, in the vicinity of the bridge, has always been used for repairs and reconstructions. Its resistance to both water and air are excellent. Non-authentic materials were used in the foundations in 20th century restorations, particularly concrete. These parts are not directly visible.

ICOMOS considers that the recent history of the bridge has considerably reduced the parts of the bridge which are genuinely authentic, but the reconstructions and restorations have globally been faithful to the original construction. The main questions of authenticity are related to:

- The parapets, whose inelegant forms are very different from the original;
- The restoration of the interior of the piers in 1950-1952 with concrete (probably reinforced);
- The use of modern binders in the masonry joints that do not have the appearance of the old binders;
- The current roadway is not authentic; it has been laid on top of the original cobbled way which remains buried in certain parts of the bridge.

One remark should be made however: the documentation on the materials, application and appearance of the old works is extremely minimal, and is often linked to later observations made when rehabilitation work was carried out in the 20th century.

ICOMOS considers that the current integrity of the property is an appropriate expression of the universal values which it embodies.

ICOMOS considers the authenticity of the property as a whole to have been sufficiently maintained in the course of successive restorations made necessary by its extremely eventful history. The visible alterations to form and material are secondary, and can be put right by appropriate restorations.

However, the integrity and authenticity of the property are considered to be fragile, and under threat from its condition, particularly its foundations.

Comparative analysis

The Višegrad Bridge is one of the major historic edifices of the Balkans and the South-East of Europe. In stylistic terms, it is emblematic of the Classical Ottoman period of the 16th century, and it offers parallels with the bridges of the Renaissance. The construction and assembly details are similar. Like the Renaissance bridges, it bears witness to the long duration of the influences of Roman antiquity on bridge building in Europe and the Middle East. The Višegrad Bridge is exactly contemporaneous with the Santa Trinita Bridge in Florence, whose elliptical segmental arches are however the result of a different technical and architectural choice.

The ogival arch seen on the Višegrad Bridge and on the major bridges of the classical Ottoman period, also bears witness to wide zones of architectural influence, in both time and space, from the Middle East to the Medieval Gothic of Western Europe. Moreover, the structural refinement and the architectural and technical mastery (particularly of its pier-heads and downstream cutwaters) used on the Višegrad Bridge are one of the greatest successes in the history of masonry bridges, and are in particular comparable with the most elegant French bridges.

Sinan moreover designed eight other bridges or aqueducts with several arches, in the classical Ottoman style of the Višegrad Bridge (including the Büyükçekmece Bridge in Istanbul, and the bridges of Silivri and Marica in Bulgaria) together with very large mosques (Azapkapıye, Sofia, Edirne) and architectural ensembles (Lüleburgaz, Kardiga, Edirne). Mehmed Paşa Sokolović for his part commissioned other bridges in the Balkans (Trebinje in Bosnia, Podgorica in Montenegro). Other classical Ottoman bridges have also been built in Bosnia, such as the single arch Mostar Bridge (1566) and the bridge over the River Zepa. The Mostar Bridge was destroyed in 1993, but was rebuilt in 2004, and is inscribed on the World Heritage List.

The central *mihrab* and the divan are also characteristic elements of the style, giving a high symbolic and metaphysical value to the central part of the bridge, above the water. The *mihrab* is also found on other bridges in the Balkans.

The Višegrad Bridge would seem to be the most consummate example, and the best conserved in a state of authenticity to bear witness to the classical Ottoman period.

ICOMOS considers that the prestige and importance of Sinan in the history of world architecture and civil engineering should be emphasised. His action has also been recognised by UNESCO World Heritage Committee, for the urban landscape of Istanbul, and will probably also be recognised again for his hydraulic works and aqueducts.

The link with the Italian Renaissance is relevant, as Sinan had notable contacts with the Western world, and it bears

witness to cultural exchanges between the East and West, between the Islamic world and the Christian world.

The ancient sources of the work of Sinan are of course based on his direct observation of the Roman heritage, in the East and in the West. He also found inspiration in Iranian and Seljuk architectural traditions.

ICOMOS considers that the Višegrad Bridge is one of the most representative masterpieces of Sinan. This seminal architect and engineer of the classical Ottoman period is a contemporary of the Italian Renaissance, with which his work can be compared. It bears witness to the adaptation of the ancient and medieval heritage to the Ottoman world as it was at that time.

Justification of the Outstanding Universal Value

The State Party considers that the Višegrad Bridge is one of the most impressive in the world, in terms of its situation, its technical design and its architectural forms. The bridge's qualities and solidity have enabled it to withstand the challenges of history and changes in its environment.

Its creator, Mimar Koca Sinan, is the most famous of all architects of the Ottoman Empire, and one of the greatest in the world. It is one of his major constructions and represents the a real model of bridge building. The overall architectural form, the sequence of the eleven slightly ogival arches over the Drina and the lateral access ramp make it a unique ensemble. An ensemble which has come down to us today in authentic architectural forms.

The bridge in particular bears witness to three great historical figures: the man who commissioned it, the Grand Vizier Mehmed Paşa Sokolović; its designer, the Empire's leading architect and engineer, Sinan; and its biographer, winner of the Nobel Prize for Literature, Ivo Andrić, for his book *The Bridge over the Drina*.

The edifice of Višegrad is a symbol of the many functions of the bridge, linking men and spaces which are different and distant from each other. It is also a symbolic link between the past and the present, and has inspired many literary and artistic works.

The bridge bears witness to a major period in the history of the Ottoman Empire, which was then at the height of its power and glory. Many Bosnians then occupied important functions in the administration of the Empire, notably the Grand Vizier Mehmed Paşa Sokolović. The most famous bridge of the Empire was built on his order, close to his native village.

The Višegrad Bridge embodies the traditions, poetry, literature and art of Bosnia and Herzegovina more than any other monument. It has always been considered by the inhabitants of Bosnia and Herzegovina as an extremely precious heritage.

ICOMOS considers that the universal value of the bridge at Višegrad is unquestionable for all the historical reasons and in view of the architectural values already mentioned. It represents a major stage in the history of civil

engineering and bridge architecture, by one of the most celebrated builders of the Ottoman Empire.

The bridge particularly bears witness to the transmission and adaptation of techniques in the course of a long historical process. It also bears witness to important cultural exchanges between areas of different civilisations. It is an exceptional representative of Ottoman architecture and civil engineering at its classical apogee. Its symbolic role has been important down the course of history, and particularly in the many conflicts that took place in the 20th century. Its cultural value transcends both national and cultural borders.

The outstanding universal value of the property is recognised; it is however in danger, in view of the threats hanging over the bridge.

Criteria under which inscription is proposed

The property is nominated on the basis of criteria i, ii, iv and vi:

Criterion i: The Višegrad Bridge is a masterpiece of human creative genius in its design and construction. It was built by an exceptional architect, Sinan, and commissioned by Mehmed Paša Sokolović in the 16th century. It constitutes a remarkable architectural type with remarkably designed architectonic forms.

ICOMOS recognises that the Višegrad Bridge represents a remarkable architectural type and that its architectonic forms are extremely graceful. However, the bridge should be considered more as a particularly successful evidence of the use of a set of existing techniques, in a difficult site, rather than as a masterpiece of human creative genius, in the sense given to this expression by the World Heritage Convention.

ICOMOS considers that criterion i has not been justified.

Criterion ii: Located in a position of geostrategic importance, the bridge bears witness to important cultural exchanges between the Balkans, the Ottoman Empire and the Mediterranean world, between Christianity and Islam, over the long course of history. The management of the bridge and repairs made to it have also involved different political and cultural powers: after the Ottomans came the Austro-Hungarians, the Yugoslavian Federation, and the Republic of Bosnia and Herzegovina. The question of the identity of the inhabitants of the region is complex, in view of the close proximity of Serbia.

ICOMOS considers that criterion ii is justified.

Criterion iv: The Višegrad Bridge is a remarkable architectural testimony to the apogee of the classical age of the Ottoman Empire, whose values and achievements mark an important stage in the history of mankind.

ICOMOS considers that criterion iv is justified.

Criterion vi: The Višegrad Bridge has given rise to major folklore, literary and artistic traditions, first amongst which is the literary work of Ivo Andrić, the biographer of the

bridge and winner of the Nobel Prize for Literature. Many legends have been associated with the building of the bridge, from its origins. Many travellers have also born literary witness to the bridge.

ICOMOS considers that only the literary work of Ivo Andrić can be considered to have international recognition, as the other data are frequently encountered in the case of many bridges, and are of regional or national significance.

ICOMOS considers that criterion vi has not been justified.

In conclusion, ICOMOS considers that the Outstanding Universal Value has been demonstrated and that the nominated property meets criteria ii and iv.

4. FACTORS AFFECTING THE PROPERTY

Industrial impact is considered to be very low up to now. Large industrial projects are planned by the local authorities, but they are located well away from the core zone of the property. Real estate development impact is considered to be under control in view of the buffer zone proposed.

Other impacts need to be considered in the future: new infrastructures should be set up in order to dedicate the historic bridge zone to tourism. Another bridge over the Drina should one day link up the two parts of the town.

Taking into account the situation of the property in a zone with a temperate continental climate, the climatic conditions and their effects are well known. They require the moderate use of salt in winter to provide safer traffic conditions in the event of freezing. The bridge must be regularly maintained and cleaned. The water of the Drina is of good quality and has good biological diversity. The air is of very good quality. The management plan includes surveillance of the water and air.

The most important natural threat is the scale of the flooding of the Drina. Some very exceptional flooding, as in 1896, could cause major damage to the bridge. The three dams built on the Drina can serve as regulators. A concerted emergency plan in the event of flooding has been proposed to the power stations, in order to limit the effects of flooding as far as possible.

The impact of the Bajina Basta hydroelectric power station, situated downstream of the bridge, in Serbia-Montenegro, is considered to be important in its effects of raising the average water level and undermining piers. The piers are already fragile. The average level of the water is raised by about two metres by the power station downstream, or more, and the levels often vary considerably. However the threat to the piers and their foundations also stem from the downstream dam. Substantial currents are generated when the water level is lowered, resulting in serious undermining of the pier bases.

Tourism has no significant impact on the bridge, and may be developed. The town of Višegrad in particular wishes to encourage tourism.

ICOMOS considers that there are threats to the bridge's environment from real estate, particularly from possible urban building or reconstruction on the right bank, just next to the bridge.

The restructuring of the river banks upstream of the bridge, which is linked to the Višegrad power station dam, could cause a major modification to the landscape of the environment close to the property if appropriate measures are not taken.

ICOMOS considers that the main risks threatening the very existence of the property are linked to the uncontrolled use of the two dams on either side of the bridge, upstream and downstream on the River Drina. ICOMOS recommends that particular attention should be given to this question very rapidly, both at the level of the local authorities, and at the level of the authorities of Bosnia and Herzegovina and the Republic of Srpska, in conjunction with the Serbian authorities responsible for water management.

5. PROTECTION, CONSERVATION AND MANAGEMENT

Boundaries of the nominated property and buffer zone

The nominated property consists of the bridge, its access ramp on the left bank, the river banks immediately upstream and downstream of the bridge on both sides, over some 100 metres, and a small rectangular space where the bridge roadway reaches the right bank.

The buffer zone covers a quite large area of the hill on the left bank, extending the protected riverbanks upstream and downstream. The buffer zone on the right bank, alongside the town of Višegrad, which did not appear in the initial dossier, has been created following exchanges of correspondence between ICOMOS and the State Party.

ICOMOS considers that the core zone setting out the boundaries of the property and its immediate surroundings is appropriately defined. The buffer zone, in its latest version including a protection zone on the right bank, is in line with ICOMOS' expectations. It should enable satisfactory protection of the site and the expression of its outstanding universal value.

Ownership

The bridge is the property of the government.

The buffer zone includes private properties.

Protection

The Višegrad Bridge is placed under the protection of the state of Bosnia and Herzegovina (order 1099/1951) and is inscribed on the List of inalienable cultural monuments (order 02-741-3/1962).

The Institute for the protection of the cultural, historic and natural environment, created in 1989, stipulated in 1990 that the Višegrad Bridge was a category 1 cultural and

historic heritage property, subject in particular to the heritage protection law of Bosnia and Herzegovina. In 2002, the property was listed in category 0, as being of international interest.

In 2003, the National Commission for the Preservation of Monuments raised it to the status of a national monument of Bosnia and Herzegovina. It can as such benefit from the provisions of the law applying decisions on the protection of national monuments (Republic of Srpska 9/02). Any management decision not complying with the provisions of this law is revocable.

In addition to this framework law, the bridge and its management are protected by the law on cultural properties (1995), the criminal law of the Republic of Srpska (2000) and the law on land management (2002).

ICOMOS considers that the legal protection measures are adequate in themselves, but that they must be strengthened by urgent contractual regulatory measures for the management of the hydraulic environment of the property. The application levels should be clearly established.

Conservation

In chapter 2 we examined the history of the conservation of the property and its transmission up to the present day. Note the conclusion of this analysis: "Since the exceptional flooding of 1896 and the damage during the wars of the 20th century, the bridge has undergone a succession of repairs and reconstructions, with the two last campaigns of works unfortunately remaining uncompleted. The resulting structural fragility has been increased by changes in the rate of flow of the Drina, as a result of the construction of the hydroelectric power plants and their management."

Present state of conservation:

With regard to the integrity analysis and the factors affecting the property (see chapter 3 and 4), ICOMOS considers that the current state of conservation is inadequate to ensure the conservation of the property in a long-term perspective. The most critical point is the poor condition of the piers and the damaging forces to which they are subjected as a result of the many changes in water level linked to the control of the hydroelectric dams upstream and downstream of the bridge.

Active conservation measures:

The various legal protection decisions taken in the early 2000s have resulted in a growing awareness on the part of the public authorities. For the first time since the peace of 1996 in Bosnia and Herzegovina, a budget of 250,000 Euros was allocated in 2005 by the government of the Republic of Srpska for the protection of the heritage and cultural properties, of which 20% has been earmarked for the Višegrad Bridge. It is planned that, in the future, some of the revenues from tourism, in the form of taxes, will be allocated to the conservation of the bridge.

A technical evaluation of the bridge was carried out, with international cooperation, and published in 2005 (PTA, see bibliography). In February 2007, the Višegrad Bridge was

inscribed on the list of priority interventions in the integrated regional programme for the rehabilitation of the cultural heritage of the Council of Europe. The competent authorities of Bosnia and Herzegovina will also be assisted by the Turkish Office of International Cooperation and Development (TIKA) for preliminary technical studies.

The coordinated international management of the waters of the Drina has been undertaken at various levels. A water and flooding management master plan has thus been put in place (December 2006) for the next four years by the regional authority of the Republic of Srpska.

Public information and awareness raising actions have been undertaken.

ICOMOS considers that the uncompleted work of 1980-1982, and then of 1992, has left the structural bases of the bridge in a critical state, which has unfortunately been exacerbated by the present management of the river, which has been mentioned on several occasions. The joint study of 2005 confirms that this situation is critical. As a priority, the most urgent attention should be given to the restoration of the piers, of their foundations and the management of the water level of the Drina.

Management

Management structures and processes, including traditional management processes

The setting up of management measures is the responsibility of the Republic of Srpska. It is in charge of the rehabilitation of the national monuments on its territory. Its decisions are implemented by the Institute for protection of the cultural, historic and natural heritage. The minister of urban development and public works is responsible for protection measurements linked to the environment and to the management of water, in conjunction with the municipal authorities.

ICOMOS notes that the executive role for the management of the property and its environment is the responsibility of the Republic of Srpska.

Management plans and arrangements, including visitor management and presentation

The National Commission for the preservation of monuments sets out the framework for the scientific conformity of all actions relating to preservation and the implementation of the management plan.

In 2005, the programme of preliminary studies formed the first stage of a concerted management plan. As already indicated, it demonstrated the very poor technical situation of the bridge.

The management plan linked to the World Heritage nomination was then drawn up under the guidance of the National Commission for the preservation of monuments and the municipality of Višegrad. Its main points are:

- To set objectives for the management of the bridge in relation to its environment, in order to conserve and improve its outstanding universal value.

- To propose a long-term and balanced approach for future management, taking into account the conservation of the bridge, the development of its environment and the expansion of tourism.
- To identify the level of research necessary for the future management of the property.
- To increase public interest in the bridge, and to promote its cultural and educational values.
- To identify strategies for social and economic development in the environment of the bridge. To contribute to encouraging the return of families driven out by the war of 1992-1996.
- To establish the priorities of a bridge heritage management action programme.

The management plan also includes surveillance of the use of the dams and measures to ease the impact of changing water levels on the bridge structures. The international cooperation necessary for water management is carried out at the level of the governments of Bosnia and Herzegovina and Serbia, in particular through the General Framework Agreement for Peace in Bosnia and Herzegovina. The two parties are considering the setting up of a programme for the protection of the Višegrad Bridge, in order to improve and then eliminate the negative impact of the hydroelectric power stations on the bridge.

Studies have been proposed for the harmonious conservation of the river banks upstream of the bridge.

ICOMOS considers that the Commission of preservation is carrying out work of good quality, and that it is very important for the future of the Višegrad Bridge, and for an understanding of its significance and of its outstanding universal value. Its work has been done in a spirit of cooperation and long-term vision which deserves the highest praise.

ICOMOS considers that the involvement of the regional authorities of the Republic of Srpska in the heritage management and legal protection of the bridge must be increased.

ICOMOS considers it imperative that concerted management of the waters of the Drina should be set up as quickly as possible, in order to protect the bridge. This is an essential element of the management plan.

ICOMOS considers that the State Party must as a matter of urgency restore the foundations of the bridge, and then ensure satisfactory conservation of the edifice and its environment.

Involvement of local communities

The municipality of Višegrad is involved in the management plan, and played an active part in drawing it up. In 2006, the municipality committed funds for the setting up of the management plan, in particular for the operations of the Technical Commission of the bridge.

ICOMOS considers that the efforts of the municipality are essential for the future of the bridge and the expression of its outstanding universal value. However, the bridge must not be considered solely as a tourist attraction which will benefit the commercial economy of the town and the region.

Resources, including staffing levels, expertise and training

The human resources used for the conservation and management of the bridge consist of:

- The National Commission for the preservation of monuments and the personnel of the integrated regional programme of the Council of Europe;
- The Institute for the protection of the cultural, historic and natural heritage of the Republic of Srpska;
- The architecture, town planning and civil engineering faculties of the universities of Sarajevo and Banja Luka;
- The technical personnel of the municipality of Višegrad.

The personnel of the Institute and the civil engineering faculties have been called on to draw up the project for the repair of the piers and the foundations of the bridge.

ICOMOS considers that the implementation of the management plan, including the concerted work of the various partners, is the central instrument of long-term protection.

However, ICOMOS considers that the executive commission for the management of the bridge has not really been constituted up to now. Its means of action do not seem sufficiently guaranteed, in financial terms, in terms of the devolution of power to the commission, or in terms of competent full-time staff.

ICOMOS considers that the initial uncertainties about the implementation of the management plan have only been partially cleared up by the concertation actions recently planned for the management and control of the waters. The same applies to the urgent repair of the bridge and its technical protection in the long term.

In conclusion, ICOMOS stresses:

- the urgency of the interventions required on the foundations;
- the need for concerted and permanent management of water levels in the Drina in order to respect the authenticity and integrity of the property;
- the need to clarify and specify the legal and technical roles to be played by the various actors involved in management;

- the need for an executive commission which has the approval of all the parties involved, and which has guaranteed financial and human resources.

6. MONITORING

A detailed surveillance plan is proposed in the management plan, consisting of a regular (normally annual) inspection of the various parts of the bridge and monitoring of its overall stability. The Institute of heritage protection of the Republic of Srpska and the departments of the municipality of Višegrad are in charge of these surveillance tasks.

The control of the level and the control of the quality of the water are also included in the management plan.

The bridge commission gathers the results and analyses them; it regularly submits a report to the National Commission of Monuments.

ICOMOS considers that the surveillance plan has been appropriately prepared, and that it is based on substantial technical documentation describing the state of the property in the 20th century; the plan should therefore enable monitoring of the authenticity and the conservation of the bridge's universal value.

ICOMOS recommends that the plan should be implemented in the framework of a strengthened Executive Commission of the bridge.

ICOMOS recommends that monitoring indicator observation frequency should be stepped up, and in particular the setting up of a concerted programme for the continuous management of the waters of the Drina in conjunction with the nearby hydroelectric power stations.

7. CONCLUSIONS

ICOMOS considers that the setting up of an extended buffer zone on the right bank of the Drina, as proposed in the annex accompanying the answer of the State Party of 27 February 2007, is satisfactory to ensure the future quality of the urban environment of the Višegrad Bridge and enable it to express its authenticity and its outstanding universal value.

ICOMOS considers that the general objectives of the management plan and the additional guarantees given by the State Party are steps in the right direction. However, ICOMOS considers that the actions considered should be effectively organised and rapidly set up in order to enable an effective response to the urgent issues relating to the heritage management of the bridge and its restoration.

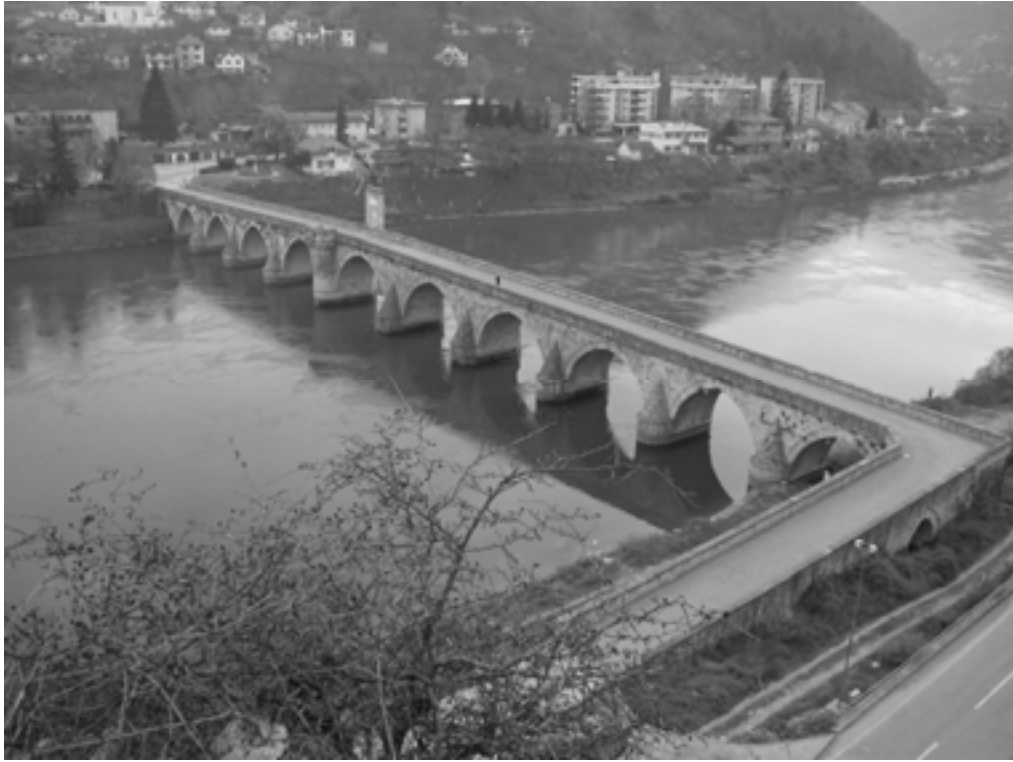
Recommendations with respect to inscription

ICOMOS recognises the outstanding universal value of the Mehmed Paša Sokolović Bridge in Višegrad, Bosnia and Herzegovina; however, ICOMOS recommends that the nomination be *referred* back to the State Party in order to allow it to :

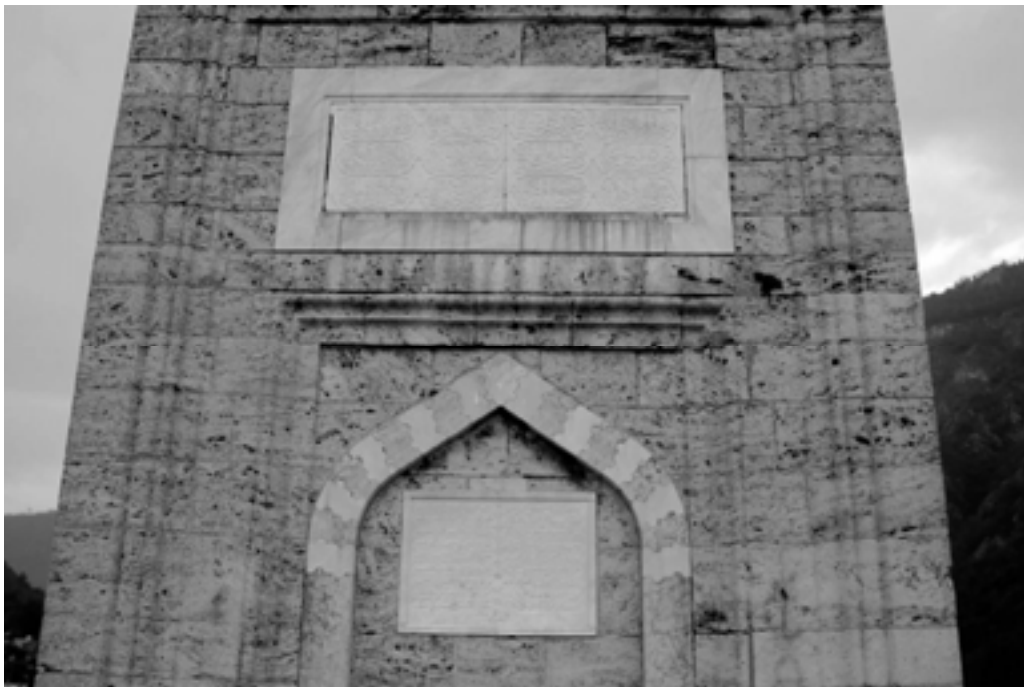
- Carry out the urgent work of restoring the foundations and piers, and more generally the technical organisation of the structural reinforcement of the bridge and then of its restoration-conservation in the long term.
- Strengthen the concerted management of water levels by the power stations of Bajina Basta and Višegrad, from the viewpoint of: flooding management; the return of the water level to a level compatible with the expression of the outstanding universal values of the bridge; the integrity of the structural bases of the bridge, which are currently being affected by the management of the dams.
- Carry out studies aimed at the harmonious preservation of the river banks upstream of the bridge.
- Clarify and specify the legal and technical roles of the various management actors. ICOMOS recommends in particular the rapid setting up of an Executive Commission for the management of the bridge, provided with guaranteed and significant financial, administrative and human resources.
- Plan for the ultimate replacement of the current parapets, which are heavy and do not conform to the original, by fine stone slabs, matching the documentation of the ancient bridge, prior to the flooding of 1896.



Map showing the boundaries of the nominated property



The bridge



Details of the *mihrab*



Arches



Details of the sofa

The Rideau Canal (Canada)

No 1221

*Official name as proposed
by the State Party:*

The Rideau Canal

Location:

Province of Ontario

Brief description:

Extending 202 kilometres from Ottawa in the north to Kingston Harbour on Lake Ontario in the south, the monumental early 19th century Rideau Canal was built primarily for strategic military purposes at a time when Great Britain and the United States of America vied for control of the region, and a safe supply line was needed for the British colony of Upper Canada. The Canal's 'slackwater' system, flooding river rapids with the use of high dams, displays the results of North American use of European technologies. The Canal was one of the first to be designed specifically for steam-powered vessels. Associated with the canal is an ensemble of fortifications along its length and around the harbour.

Category of property:

In terms of the categories of cultural property set out in Article 1 of the 1972 World Heritage Convention, this is a site.

1. BASIC DATA

Included in the Tentative List: 1st October 2004

*International Assistance from the World Heritage Fund for
preparing the Nomination:* No

*Date received by
the World Heritage Centre:* 26 January 2006

Background: This is a new nomination.

Consultations: ICOMOS has consulted its International Scientific Committee on Fortifications and Military Heritage, as well as TICCIH.

Literature consulted (selection):

De Jonge, James. *Rideau Canal, Assessment of Engineering Structures: Phase I – Historical Evaluation*, Parks Canada, Ottawa, 1985

Legget, Robert, *John By; Builder of the Rideau Canal, Founder of Ottawa*, Ottawa, 1982

Legget, Robert, *Ottawa River Canals and The Defence of British North America*, Toronto, 1988

Legget, Robert, *Rideau Waterway*, Toronto, 1955

Stovel, Herb, *The Cultural Landscapes of the Rideau Canal Corridor*, Institute for Heritage Education, 1998

*International Canal Monuments, ICOMOS/TICCIH
Thematic Study, 1996.*

Technical Evaluation Mission: 2-10 September 2006

Additional information requested and received from the State Party: ICOMOS sent a letter to the State Party on 5 December 2006, and the State party submitted supplementary information on 9 January 2007.

Date of ICOMOS approval of this report: 21 January 2007

2. THE PROPERTY

Description

The site extends to 21454.81 hectares and is surrounded by a buffer zone of 2363.20 hectares.

Built to create a defensible and reliable transport link between Lake Ontario and Ottawa in the British colony of Upper Canada, the Rideau Canal is made up of canalised sections of the Rideau and Catarqui Rivers, rather than newly excavated channels. Water raised by dams to flood the rivers, made previously difficult waterways readily navigable by large steamships.

This so-called 'slackwater' system was initiated by Lieutenant Colonel John By of the Royal Engineers Corp who had been appointed by the British Government to supervise the construction of a connection between Lake Ontario and the interior of Upper Canada colony in 1826. John By's solution avoided the need for extensive excavations of new channels and called for series of dams which backed up river water to a navigable depth and in effect created a chain of 50 locks. John By opted for fewer locks with high lifts rather than more locks with lower lifts. As a result the Rideau lifts were up to 4.6 metres high. It was John By who pressed for the design of the locks to be large enough to accommodate steamboats, then newly introduced into North America. The locks were up to 37.8m long and 9.1metre wide and this scale combined with the high lifts, necessitating lock walls, gates etc all being substantial structures to hold back the force of the extremely large volumes of water.

The locks were supported by a series of lakes that served as reservoirs, storing water in the dry summer months and releasing flood water gradually in periods of heavy rainfall.

Construction of the Canal began in 1828 and was completed in 1832. Six 'blockhouses', defensive positions, were built along its lengths at what were deemed to be vulnerable points, and a fort, Fort Henry, on the eastern side of Kingston harbour. Subsequently, in response to rebellions in the colony, defensible lockmaster's houses were added at several lock stations. Finally between 1846 and 1848 four 'Martello' towers were constructed to strengthen the fortifications at Kingston harbour.

By the mid 19th century the canal had lost its strategic position but had become a successful commercial transportation system. This success led to a profound impact on the surrounding previously almost deserted region, through the development of numerous small

settlements, based on farming, mills and service industries, and one large town at its northern end. Originally called Bytown after John By, its name was changed to Ottawa in 1855 and it became the capital of the new Dominion of Canada in 1867. By the 1870s the canal had been discovered by tourists and a number of resorts were developed in the 1890s and summer cottages appeared in increasing numbers after the First World War. The canal is now used almost exclusively for recreation.

The nominated area consists of the following:

- *Canal dams, locks, weir*
- *Bridges*
- *Lockmaster's houses*
- *Defensive Blockhouses*
- *Fort Henry & the Martello towers*

These are considered separately:

Canal dams, locks, weirs

To join up the rivers Rideau and Cataraqui and make them navigable, the river water had to be raised to eliminate rapids, shallows and swamps. This was achieved by the construction of dams that raised the water level into a series of navigable steps with boats lifted from one to the others through a system of locks. In total 74 dams and 50 locks were constructed along its 202km length. The dams were mainly constructed of earthen embankments; seven are stone arched dams (curved in a horseshoe shape with the high centre upstream and tapering in height at the ends), all surviving in their original form. At some lock stations a series of dams were constructed together, for instance earthen dams, stone masonry arch dams and stone masonry water control weirs at Kingston Mills. At Jones Falls the stone arch dam had a span of 107 metres and a height of 19 metres, double the height of any previous dams in North America. 23 of the original 74 dams retain their original structures.

There were 47 locks grouped together at 24 lock sites. Locks had either stone or timber floors and stone faced walls. None of the timber floors survive. One lock has been rebuilt in concrete.

When the canal opened, all the locks were operated by hand-powered winches. Today, three have been converted to hydraulic/electric operating systems.

Bridges

When built the landscape surrounding the canal was only sparsely populated and no bridges were constructed. As the population increased in the 19th century, bridges were built at lock stations; 12 are included in the nominated property and demonstrate the evolution of bridge design. Three are original steel king-post swing bridges constructed around 1900; four are copies of original timber bridges and the remaining five are steel replacements.

Lockmaster's houses

The original houses were built as small one storey readily defensible structures. In more peaceful times many were enlarged with the addition of a second storey. In the late 19th and early 20th centuries further lockmaster's houses were constructed. Thirty-three buildings dating from the construction of the canal remain today.

Defensive Blockhouses

Of the six blockhouses originally constructed to guard vulnerable positions along the canal, four survive. Although adapted after their defensive use had disappeared, all have now been restored to their original appearance.

Fort Henry & the Martello towers

Fort Henry on the headland of Kingston was constructed in 1830 on the site of a fortress of the so-called Vauban type of fortification. Fort Henry in plan followed Prussian models which were designed to be defensible against the newer artillery.

This vast military unit was completed with the addition of a battery and four Martello towers, constructed between 1846 and 1848. Frederick and the Cathcart tower were constructed in the east of the estuary; and Shoal and Murney in the west. These round two storey towers with a gun platform defended by a parapet and dry ditch, followed a model developed in Britain at the time of the Napoleonic Wars.

History and development

As a result of the American War of Independence, thousands of people who remained loyal to the British Crown moved northwards to Canada. The government immediately began identifying areas suitable for the development of settlements for the loyalists. The Cataraqui and the Rideau rivers were one of the areas surveyed and by 1800, a number of mills had been built, the first, at Kingston Mills, in 1784. Within a few years, there were mills at most of the major falls along the two rivers. However the difficulty of navigation along the rivers north to the St Lawrence river, the main settlement area, hindered much concentrated development.

The impetus to improve the waterway came though not from agriculture or other economic stimuli but from the needs of defence. The War of 1812-1814 between Britain and the United States of America had brought into focus the vulnerability of the St Lawrence River as the main supply line for the colony. Not only was it slow with a series of rapids, but it was vulnerable to attack from America along much of its length between Montréal and Lake Ontario. After the end of hostilities, America was still seen as a potential threat and the need for a secure military supply route a key necessity. Accordingly military planners turned their attention to the Cataraqui and the Rideau rivers.

After an exploratory mission, at the end of the war, the canal project was really launched in 1824-1825, with two studies, one by the civil engineer Samuel Clowes, at the request of the authorities of Upper Canada, and the other at the request of the Duke of Wellington, then commander-in-

chief of the army. The strategic dimension of the canal led the British government to take charges of its realisation.

Lieutenant Colonel John By of the Royal Engineers Corp was appointed by the British Government to supervise the construction of the canal in 1826. Before his appointment, military engineers had mapped out a scheme to construct new channels to bypass the rapids and swamps along the rivers. This would have necessitated around 40km of new channels along the 202 km route. By took a different approach and persuaded the government to adopt a 'slackwater' system that raised the level of the water above the rapids and swamps thorough the use of tall dams. This created a practical route with the minimum of excavation. By also pressed for the canal to accommodate the then newly introduced steamships and this necessitated dams that were taller and wider than anything previously constructed in North America. Canal construction begun in 1828 and involved around 6,000 workers at multiple sites along the length of the canal. The whole length was navigable in 1832.

The choice of route for the Rideau Canal, and the use of a slack water canal design, were influenced by the underdeveloped nature of the country through which the canal was to pass. In many parts of Europe, for instance, owners of riverside agricultural land, water mills and fishing rights would have resisted the alteration in river levels required by such a system. Slackwater canals are easier to build, and require fewer workers. Therefore this method will be chosen instead of a more costly conventional canal where the environment allows, as was the case with the Rideau Canal.

As with many canals, the Rideau Canal seems to have formed a catalyst for development. Ottawa grew around the canal as it runs southward from the Ottawa River, and elsewhere towns sprung up on the canal's banks. This is typical of economic development associated with canals, and mirrors the development of towns following canal building elsewhere in the world.

The Rideau Canal has survived almost in its original condition as it was by-passed following the improvement in relations between Britain and the USA and the development of the much larger St Lawrence Seaway. Its military capacity was never put to the test. It now functions mainly as a waterway for leisure craft.

3. OUTSTANDING UNIVERSAL VALUE, INTEGRITY AND AUTHENTICITY

Integrity and Authenticity

Integrity

The nominated property includes all the main elements of the original canal together with relevant later changes in the shape of watercourse, dams, bridges, fortifications, lockstations and related archaeological resources.

Authenticity

The original plan of the canal as well as the form of the channels has remained intact. The sitting of the original 47 locks survive. None of the wooden floors survive nor the

lock gates. Gates only last approximately 20-25 years and are replaced on a regular basis. 41 locks are considered to be in Canadian terms Level 1 cultural resource – i.e. to have high authenticity.

Of the 74 dams, 23 have level 1 status and the remainder level 2. The most significant engineering achievements are found in the stone horseshoe dams which all survive.

The Rideau Canal has fulfilled its original dynamic function as an operating waterway without interruption since its construction. Most of its lock gates and sluice valves are still operated by hand-powered winches.

ICOMOS considers that the nominated property adequately demonstrates integrity and authenticity.

Comparative analysis

The nomination gives an overview of canals built for irrigation, water control and transportation – and puts the Rideau Canal into the latter category and provides comparators for this category of canals built using slackwater principles. Comparators are also given for canals built for military purposes although this is limited to examples post 1804. ICOMOS considers that wider comparators should have been provided and these are added below. No slackwater or military canals are currently inscribed on the WH list; the only two canals are the 360 km Canal du Midi, France, (1996) built in the 17th century, and widely regarded as the first canal of the modern era and a forerunner of the Industrial Revolution, the Four Lifts on the Canal du Centre and their Environs, La Louvière and Le Roeulx (Hainault), Belgium (1998). Neither of these is comparable to the extensive Rideau Canal; nor was either used for military purposes.

Military Canals

The military use of canals has been underplayed both by canal historians and in the nomination. The role of military engineering and transport is not well recognised in the development of canal technology. The Romans built military canals such as the Fossa Drusiana of 12 BC which links the Rhine with the Ijssel near Arnhem. Earlier, in 101BC, the Fossa Mariana had been built from Arles to the Mediterranean avoiding the difficult passage of the Rhone delta. Trajan also improved the Danube by building a towing path through the Iron Gates to help with his invasion of Dacia.

The first military canal after the Roman period was the Fossa Carolina in Bavaria. Built by Charlemagne in 793AD, it linked tributaries of the Danube and Main, and allowed him to move his army by boat into the Rhine Valley. He also envisaged a similar connection between the Elbe and the Danube. The Fossa Carolina used simple inclines along which the small boats of the time could be hauled between deepened sections of river or excavated channels. Such simple systems continued in use in northern Russia until the early twentieth century and their remains can still be identified.

The Spanish Wars in the Low Countries also led to a military canal, the Fossa Eugenia, which linked the Rhine, near Duisburg, to the Maas, at Venlo. Work began in 1626 on the canal which had straight channels between

fortifications, but its construction was interrupted by the Dutch in 1628. It remained uncompleted but its remains can still be found.

The Prussians also built canals for military reasons, such as the Bromberg (Bydgoszcz) Canal which was built after Prussia had begun to expand eastwards through Poland in the 1770s. The canal created a through route from the Oder to the Vistula, allowing troops and supplies to be sent efficiently to Prussia's eastern front.

In France, Napoleon began building the *Canal de Nantes à Brest* in Brittany in 1806 to avoid the British naval blockade of coastal shipping. Between 1810 and 1832 the Gota Canal in Sweden was considered to have strategic importance for the defence of Sweden. Also in France, the *Canal de l'Est* was built avoiding Prussian gains in the Franco-Prussian War of 1870-1.

In Britain, the Royal Military Canal of 1804-6 was similar in design to the Fossa Eugenia, and was built to discourage Napoleon from landing troops on the poorly defended Romney Marshes. It was not the only one built in Britain for military purposes. The Caledonian Canal, 1803-22, was built so that small sailing warships could avoid the dangerous passage around the north of Scotland, as well as providing a passage for fishing boats. The nomination dossier only considers that Royal Military Canal in details and concludes that its importance in military terms was far less than the Rideau Canal and it was less heavily fortified. The crucial difference between the use of the Rideau Canal and others is that it played a crucial part in a military campaign which can be linked to a significant stage in human history – the resistance of the colony of Canada to the United States of America – and it survives in use and largely as built.

The Rideau Canal is an excellent example of a canal built for a military purpose that had far-reaching economic and social consequences.

Slackwater Canals

The nomination dossier considers slackwater canals in North America and concludes that none advanced technology as the Rideau Canal had done. However the Erie Canal, USA, is also a slackwater canal completed in 1825 and the Erie was far more economically significant and its engineering works more considerable than the Rideau. However it has been altered in places since it was built.

Further examples could have been considered in Europe. The Caledonian Canal, Scotland, UK, and the Gota Canal, Sweden, are similar to the Rideau Canal in that they use natural lakes and rivers for much of their route, with locks often grouped together in flights, though both do have some man-made channels. Lt-Col By would undoubtedly have had knowledge of the Caledonian Canal through the many government papers published about its progress. The locks on the Rideau Canal were similar in size. Those on the Caledonian Canal were soon found to be too small for the increasing size of ocean-going steam boats, and the canal was never a great success. Such a problem would not have affected the Rideau Canal whose boats would be purely for inland use and consequently of smaller size.

Three other slackwater canals thus exist that are similar in design to the Rideau although the Gota Canal and the Erie do show more change over time. The Rideau Canal is thus not unique but displays the way technology from Europe was imported into North America: the engineering of the Rideau Canal is typical of best practice at the time in North America. It is the only canal dating from the great North American canal-building era of the early 19th century that remains operational along its original line with most of its original structures intact.

In conclusion, ICOMOS considers that the Rideau Canal is of significance as a North American exemplar of a slackwater technology canal designed for military use, which had an impact on the development in its area and is still in use.

Justification of the Outstanding Universal Value

The State Party considers that in concept, design, and engineering, the Rideau Canal is the most outstanding surviving example of an early 19th century slackwater canal system in the world, and one of the first canals designed specifically for steam-powered vessels. It is considered to be an exceptional example of the transfer of European transportation technology and its ingenious advancement in the North American environment and a rare instance of a canal built primarily for strategic military purposes. The Rideau Canal, together with its ensemble of military fortifications, is said to illustrate a significant stage in human history when Great Britain and the United States of America vied for the control of the northern portion of the North American continent.

ICOMOS considers that the Rideau Canal demonstrates Outstanding Universal Value as a large strategic canal constructed for military purposes which played a crucial contributory role in allowing British forces to defend the colony of Canada against the United States of America leading to the development of two distinct political and cultural entities in the north of the American continent, which can be seen as a significant stage in human history.

Criteria under which inscription is proposed

The Rideau Canal is nominated on the basis of criteria i, ii and iv:

Criterion i: The justification of this criterion revolves around the choice by Lt-Col John By to use what is described as a highly innovative technology - that of slackwater- on a scale large enough to take steamboats. As has been detailed under Comparative Analysis, the use of slackwater technology was not new but could only be employed where existing land-use did not conflict with raised water levels. The creativity of John By was limited to using this technology as an expedient approach which minimized labour costs and time and was manageable in the low density land use of the area. Similar technology was used in the Erie Canal but this has been altered since it was built. The Rideau Canal thus remains the best preserved example of a slackwater canal in North America demonstrating the use of European slackwater technology in North America on a large scale. It is the only canal dating from the great North American canal-building era of the early 19th century that remains operational along its original line with most of its original structures intact.

ICOMOS considers that this criterion has been justified.

Criterion ii: This criterion is justified on the grounds that the use of European slackwater technology advanced this technology to a new level in North America, and the use of military technologies in the construction of forts represented technology transfer. Although the surveying techniques and locks were similar to those used in the Caledonian Canal, the dams however were much larger than those constructed elsewhere; the Kingston Mills dams which were of greater size than anything previously constructed in North America. Although all the forts were well suited to the purpose, the Murney fort was the most sophisticated to be built in North America using European design and construction.

In both slackwater and fort technologies, European techniques were introduced to North America and successfully employed and to a degree stretched in the case of the dams. What it is more difficult to justify is how this transfer of technology had a major impact on a whole area of the world; rather its impact was confined to the Rideau and Erie canals. The canal did in time come to have a significant economic impact on the area, but that is different from a technological impact.

ICOMOS does not consider that this criterion has been justified.

Criterion iv: The distinct stage of human history is defined as the conflict between two great world powers, Great Britain and the United States of America. It is suggested that the Rideau Canal was instrumental in ensuring that the security of Canada was not undermined by insecure supply lines. It is further suggested that the canal's successful creation was fundamental to the growth of colonial Canada. ICOMOS considers that there were other reasons why Britain ultimately kept the Americans at bay – their success was not solely because of the Rideau Canal. Nevertheless its existence did prove to be a significant contributory factor in the defence of Canada. The Rideau Canal is thus an extensive, well preserved and significant example of a canal which was used for a military purposes linked to a significant stage in human history - that of the fight to control the north of the American continent.

ICOMOS considers that this criterion has been justified.

4. FACTORS AFFECTING THE PROPERTY

Development pressures

The main threat is to the setting of the site. The Buffer Zone is very narrow (see below) only 30 metres deep. Since the 1950s residential development has taken place on shore land particularly south of Ottawa and in the Rideau Lake area, such that only half the shore lands remain undeveloped. The remaining land is said to be subject to only minimum development pressure.

The four Martello towers and Fort Henry are not individually threatened by development but their intervisibility a key feature of their planning – has been

partly compromised by modern development although what remains is protected.

Natural disasters

The major threat would come from an exceptional flood, linked to climate change, that could damage the dams and banks. Protocols are in place for responding to such a threat. This is supported by inspection to pick up at the earliest opportunity any lack of stability in the dams.

Mining

Mining was not identified as a major threat in the nomination dossier. It was however highlighted in the local press as a possible issue and discussed during the mission. The State Party was asked for confirmation that any new mining activity could not impact adversely on the setting of the canal. In response it was stated that under the Ontario Mining Act there is a prohibition on mineral exploration and extraction activities within 120 metres of all lakes and rivers; this reservation applies to the full extent of the Rideau Canal.

Beyond the 120 metre line, there are severe restrictions and it is stated that the mineral potential in the broader vicinity of the canal is generally low and the land is highly valued for natural, recreational and aesthetic purposes, thus making the likelihood of any mining activity extremely remote.

ICOMOS considers that the canal is not under any major threat but that incremental development over time could impact on the setting of the canal.

5. PROTECTION, CONSERVATION AND MANAGEMENT

Boundaries of the nominated property and buffer zone

The nominated site consists of the canal structure and associated Blockhouses and defensive structures. The Buffer Zone is a 30 metre strip along both banks.

It is stated that this 30 metre strip represents a mandatory setback of development from the shoreline under Municipal Planning policies. The State Party confirmed that all Municipalities along the length of the canal adhere to this precept and that all development is kept back from the edge of the Canal. However it also says although that for more than 95% of its length, all new development except for marinas must adhere to the 30 metre setback requirement, while within the older developed urban areas, which represent less than 5% of its length, the setbacks are somewhat less since the development pattern predates the establishment of the 30 metre standard. And further that the Official Plan for the Township of South Frontenac allows for a reduction in the 30 metre setback, if it is demonstrated through an environmental assessment that there will be no adverse impact on water quality and fish habitat. The reduction of the 30 metre setback requirement is determined on a case-by-case basis and in practice, it is apparently rarely granted.

The proposed narrow buffer zone protects the immediate setting of the canal but not its wider setting. Although no substantive new development is allowed in the buffer zone,

new houses are permitted beyond the buffer zone where they do not cause environmental damage.

In response to how the wider setting has been defined and is protected, the State Party has said that the setting is not the focus of the nomination. However all municipalities have policy statements that recognize the importance of the visual setting. The City of Ottawa has a design review process and the capacity to undertake evaluations of the impact of proposed development on the visual environment, while the other municipalities along the canal use a less comprehensive mechanism – the site plan control process – to minimize the visual impact of new development. Furthermore to encourage the protection of the scenic vistas and features of the canal setting, the Management Plan contains a commitment to identify lands of outstanding scenic value and to encourage the use of architectural styles that complement the architectural heritage of the canal corridor. To implement these actions, Parks Canada is undertaking two studies to identify the scenic vistas and features of the canal and to produce guidelines for new construction.

The State Party has also acknowledged that importance of preserving the setting of the canal through sound municipal planning policies, wise stewardship by landowners and the leadership of Parks Canada and other government agencies.

In some areas of the Canal, such as Long Island to Burritts Rapids, many houses have been constructed near the Canal. Although most of these seem to adhere to the 30m rule large numbers of houses, even on fairly large plots, can have a substantial impact on the setting of the Canal. ICOMOS considers that the visual setting of the canal needs clearer identification and where appropriate tighter controls to protect identified vistas and the background to key features of the canal, which needs protection. The current arrangement which allow development only if it does not cause environmental damage could be strengthened to include constraints against development that might cause damage to the visual setting of the canal.

ICOMOS considers that the boundaries of the nominated property are adequate to protect the structure of the canal. ICOMOS however considers that the visual setting of the canal needs clearer definition and appropriate protection to ensure the visual values of the setting are projected alongside the environmental values.

Ownership

The structures of the nominated property, that is to say the canal structure and associated lockhouses and defensive structures, are all owned by the government of Canada.

The Buffer Zone, a 30 metre strip along both banks, is in multiple ownerships, private and municipal.

Protection

Legal Protection

All the elements of the nominated area (canal, associated buildings and forts) are protected as national historic sites under the *Historic Sites and Monuments Act 1952-3*.

ICOMOS considers that the protective measures for the property are adequate – apart from the wider setting – see above.

Conservation

History of Conservation

The dossier provides details of conservation work over the past ten years. Most of this is enhanced maintenance work. Major restoration projects have been completed at the Martello Towers. A list is also given of forthcoming work: again most are fairly small projects as major work is not needed.

State of Conservation

Repairs and conservation of the locks, dams, canal walls and banks is carried out directly under the control of Parks Canada. Each year one third of the canal's assets are thoroughly inspected by engineers. A complete inventory thus exists of the state of conservation of all parts of the property. This indicates that conservation of the majority of the property is considered to be fair or good. Work arising from this inspection is carried out by Parks Canada.

ICOMOS considers that the conservation of the property is good and on-going resources are in line with the needs of the property.

Management

The Agency of Canada Parks is the authority which exerts the right of ownership, under the control of the Canadian Parliament and of a minister of supervision appointed by the Prime Minister of Canada, for the whole property, except for Fort Frederick which is under the supervision of the Ministry for Defence. The Historic Monuments Act requires each historic site to have in place a Management Plan. Currently a plan exist for the canal (completed in 1996 and updated in 2005), and plans are nearing completion for Fort Henry and the Kingston fortifications. The Canal Plan is underpinned by the Historic Canals Registrations which provide an enforcement mechanism for any activities that might impact on the cultural values of the monument. Being in one ownership and under one management greatly facilitates the management of the long canal and ensures a consistency of approach.

Parks Canada staff together present a wide array of expertise covering all the elements of then nominated site – archaeologists, planners, engineers ecologists etc and receive good continuing professional development. They are located in Cornwall, Ontario and in Ottawa.

Management and control of the buffer zone and setting of the canal is provided by land-use planning in cities and townships rather than designation. Each province has slightly different regulatory mechanisms; in some cases this appears to be limited to protection of the natural environment (see above).

Overall the natural environment is well protected by a the Conservation Authorities Act which protects water resources, wetlands, woodlands and natural habitats in Ontario, and by the Cataraqui Regional Conservation

authority and the Rideau Valley Conservation authority which together span the canal and protect natural habitats.

ICOMOS considers that the management regime is effective and well targeted to the needs of the nominated property.

consideration is given to strengthening its visual protection outside the buffer zone, in order to ensure the visual values of the setting are protected alongside environmental values.

6. MONITORING

Monitoring arrangements include monitoring the state of buildings and engineering works, development projects and visitor trends and impacts.

ICOMOS considers that the current monitoring could be extended to include the wider setting of the canal once key vistas and visual envelopes have been identified.

7. CONCLUSIONS

Although the Canal is being nominated for its technological achievements, appreciation of its scale and its impact on its surroundings have a visual dimension. Currently the canal itself and its narrow 30 metre buffer zone are well protected. Its wider setting is protected for environmental reasons but less so for visual attributes.

ICOMOS considers that the proposed study of vistas should be extended to identify the visual setting of the canal along its length and on the basis of this, consideration should be given to extending protection to those areas which contribute to the quality and understanding of the canal in its setting.

Recommendations with respect to inscription

ICOMOS recommends that the Rideau Canal, Canada, be inscribed on the World Heritage List on the basis of *criteria i and iv*.

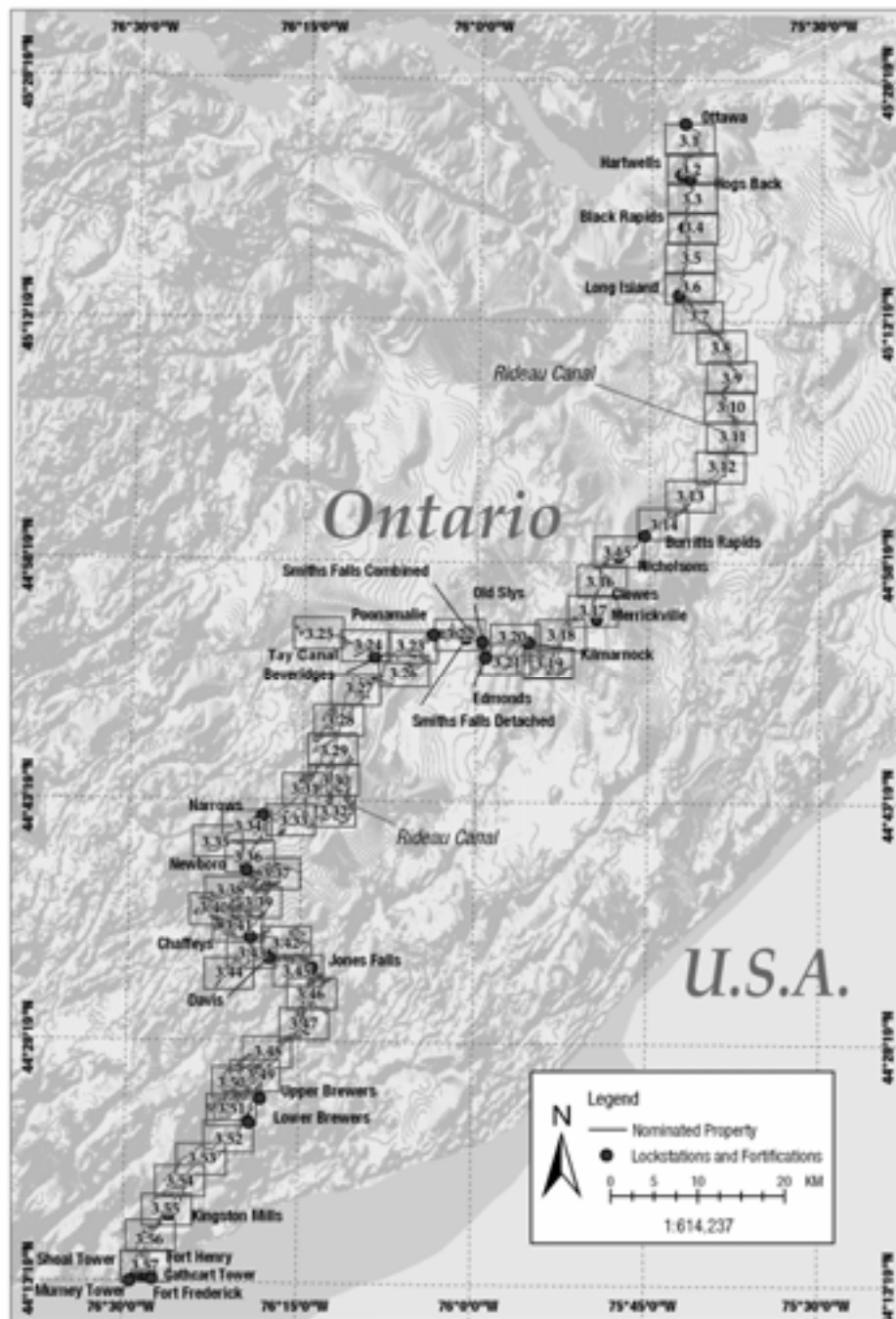
Recommended Statement of Outstanding Universal Value

The Rideau Canal is a large strategic canal constructed for military purposes which played a crucial contributory role in allowing British forces to defend the colony of Canada against the United States of America, leading to the development of two distinct political and cultural entities in the north of the American continent, which can be seen as a significant stage in human history.

Criterion i: The Rideau Canal remains the best preserved example of a slackwater canal in North America demonstrating the use of European slackwater technology in North America on a large scale. It is the only canal dating from the great North American canal-building era of the early 19th century that remains operational along its original line with most of its original structures intact.

Criterion iv: The Rideau Canal is an extensive, well preserved and significant example of a canal which was used for a military purposes linked to a significant stage in human history - that of the fight to control the north of the American continent.

ICOMOS further recommends that following the completion of the study of the visual setting of the canal,



Map showing the location of the nominated properties



Ottawa Lockstation



Edmonds spillway



Smith Falls



Fort Henry in Kingston

Handmade paper mill (Czech Republic)

No 1235

*Official name as proposed
by the State Party:*

Hand Paper Mill
at Velké Losiny

Location:

Velké Losiny,
Olomouc region,
(Northern Moravia)

Brief description:

The handmade paper mill of Velké Losiny is located on a diversion canal from the River Desná, whose water quality has enabled uninterrupted paper-making activity since the end of the 16th century, from long textile fibre pulp.

The property consists of nine buildings on about 1 hectare of land, together with the upstream water supply reach. The main architectural ensemble dates back to the restructuring of the site at the start of the 19th century, and includes baroque elements from the previous century.

Category of property:

In terms of the categories of cultural property set out in Article 1 of the 1972 World Heritage Convention, this is a *group of buildings*.

1. BASIC DATA

Included in the Tentative List: 19 January 2001

International Assistance from the World Heritage Fund for preparing the Nomination: No

Date received by the

World Heritage Centre: 2 November 2004

Background: This is a new nomination.

Consultations: ICOMOS consulted TICCIH.

Literature consulted (selection):

G. Eineder, *The Ancient Paper Mills of the Former Austro-Hungarian Empire and their Watermarks*, Hiversum, 1960.

Handmade Papers of the World, Takeo Co. Ltd., Tokyo, 1979.

M. Dohnal, « 400 years of hand paper manufacture at Velké Losiny », *Business World*, 2, 1997, n° 9, p. 32-33.

Technical Evaluation Mission: 29 August -
1st September 2006

Additional information requested and received from the State Party: ICOMOS sent a letter to the State Party on 15

December 2006 and the State Party responded on 18 January 2007.

Date of approval of this report: 21 January 2007

2. THE PROPERTY

Description

The Velké Losiny site consists of nine buildings, and occupies a surface area of 1.11 hectare. The central part of the mill comprises five adjoining buildings; the four annexes are separate but close to each other (see plans, p. 8 and 25 of the dossier). The central buildings are designated I to V and the annexes VI to IX, following the numbering used in the dossier. The buildings have architectural similarities, which lends unity to the ensemble: for example, the style of the roofs and the façades of the two buildings forming a straight line (I and II), and the treatment of the external rendering, following a recent restoration. However, for the most part, the buildings are different in their forms, in their openings, elevations and roofs, and indeed in their historical origins. These buildings house - or housed - the technical stages of pulp preparation from textile waste (II, IV, V and IX), the preparation of its sizing (IV), the formation of the sheets in the mould (III), then the drying and finishing of the sheets (I, III and IV), and finally the packaging and storage of the paper (VII and VIII). They also carry out the functions of receiving the public and customers; a considerable space is today devoted to the museography of paper.

The main ensemble is in an irregular “L” shape. Along the canal are the façades and gable ends of the various technical buildings of the paper mill (II, III, IV and V). They are not in line, and building II overhangs the canal because of its historic technical role (hydraulic energy). Buildings I and II, lined up at right angles to the canal, form the main and monumental entrance of the paper mill.

Building I in its current form is a construction of the 1820s, which is a reworking and restructuring of an 18th century building. This is reflected in the neo-classical architectural style, which retains however various initial baroque features. The ground floor includes an entrance hall, extending onwards from the large entrance door of 1825, the mill shop, the offices, a room for the drying presses, a packaging room and a printing room. The first floor was once the dwelling of the paper makers; today it is the museographic area and the office of the senior management. The garret was traditionally the space where the paper was dried, under roof timbers and a roofing specially adapted to promote the continuous circulation of air. It is intended that the garret will soon be made into an exhibition space.

While the façade of building II is a prolongation of that of I, it is on a different level and its roof is lower. This is the technical heart of the paper mill, which includes the space for the mill wheels above the canal. Partial interior restructuring was carried out in the 20th century. The basement originally housed stampers (also called “stamping beaters”), and the space they occupied remains visible. The ground floor includes the room for the Hollander beaters, which are still in use. The upper floor

consisted mainly of a storage hall and a space for sorting rags. This level is to become an area for an exhibition about pulp. The roofing has an aerated structure similar to building I, for the drying of the paper.

Building III is high and square in form, with four levels. It is closely coupled to building II because of complementary technical stages that take place here. Its ground floor houses the pulp vats; the first level is for the manual sheet making process; the second and third levels are for the draining and drying of the sheets of paper.

Building IV is on two levels. The ground floor is an extension of the technical functions of the previous two buildings, upstream by the storage and preparation of the products (sizing), and downstream by finishing options (calendering, sorting and packaging of the paper). Originally this floor included the processing of the rags and their storage. Today it houses an exhibition area open to the public, and also the museum offices.

Building V is an extension dating from the end of the 19th century, and adjoining building IV. It was used for the washing of rags using a boiler specifically allocated for this purpose.

Building VI dates from the end of the 19th century. It contained a steam boiler, its coal supply and a small forge workshop. A gas boiler was installed in the second half of the 20th century. Next to it is a flue, with a hexagonal cross-section.

Building VII was originally an 18th century dwelling house, close to the technical buildings, but separate from them. It then had several different functions, including the sorting and storage of the paper. Today it is an exhibition room.

Building VIII was built in 1858 to house a textile factory, which it remained until 1945. The ground floor today houses various ancillary technical operations for the paper mill (electricity and joinery workshops). Upstairs is an area reserved for employees and a paper warehouse.

Building IX is basically a long hangar open on one side, mainly containing pulp vats. The part near the main entrance is a closed structure, and houses a bar for the use of visitors.

History and development

In the 16th century several paper mills were established in Moravia at the instigation of its aristocracy. The oldest date back to the start of the century (1505), and over the whole territory of what is today the Czech Republic around twenty mills were then built to make paper using Italian techniques. This involved the use of a wire paper mould, fermented textile fibre pulps, and sizing with gelatine.

The paper mill of the borough of Velké Losiny was created at the initiative of the noble Žerotín family, whose coat of arms constitutes the watermark of the first papers produced. The most ancient record of the existence of the mill dates back to 1596. The establishment was made along a derivation canal of the River Desná at the entrance

to the borough. This corresponds to the location of today's buildings II and III. The original buildings were wooden, on masonry bases of which one wall element seems to remain, in building III, alongside the canal.

The business was soon sold to a private individual (1603). It seems not to have been very profitable in the early days, and then stagnated somewhat in the 17th century, particularly because it had difficulty competing with the paper mill at Šumperk, a nearby town which seemed to have more favourable conditions both in terms of raw material (rags) and market outlets. In 1692, the paper mill owner went bankrupt. His company and his debts were acquired by the lord of Velké Losiny, who again was a Žerotín.

In the 18th century, there were a series of improvements and substantial alterations to the paper mill. First the original mill was rebuilt in around 1730, with the introduction of a Hollander beater which was the first of its kind in Moravia. A second phase of works took place from 1745 to 1747, with the restoration of the canal and the hydraulic system, and the installation of a set of four stamping beaters for the preparation of the pulp, together with the construction of a dwelling (VI). In 1778, the mill was sold to its manager, master papermaker Matyáš Werner.

At the end of the 18th century, the paper mill was prosperous: sales increased and the trade extended as far as the distant provinces of the Austro-Hungarian Empire. New building works were undertaken, using masonry, renewing the structure of the technical rooms for the stamping beaters and Hollander beaters, with the construction of a large building used as a dwelling and for storage (I). A drapery workshop was also created, in particular to prepare the paper squeezing felts.

Buildings I and II were completed and again rebuilt during the 1820s, in a neo-classical monumental style which retained the previous baroque features. The cost of the investments and the beginning of competition with new papers, continuously machine-made, led to a change of ownership and the beginning of a lengthy crisis for traditional handmade paper. A conversion of the mill towards textile industry began in around 1848, and then the site was again sold in 1855 to Anton Schmidt. He decided to convert and extend the premises (VIII), in order to establish a cotton and linen mill. Well-managed, the textile manufacture was prosperous. The handmade paper mill remained however, as a secondary activity for the site. Using the equipment in place, it produced luxurious packaging for the textile products.

In around 1880, the paper mill discovered the filtration properties of traditional unfinished paper, which generated immediate interest from pharmaceutical and chemical firms, and slightly later from brewers. Paper making was reinvigorated in the final years of the century, and up to the First World War. Alterations were necessary: in 1886 a new system of hydraulic wheels and a steam engine were installed (building VI). The engine, used for heating products, was introduced while the former process used for rag pulp preparation was abandoned in favour of another, which used a specific boiler (building V). A turbine replaced the hydraulic wheels in 1911, resulting in a

complete modification of energy distribution for pulping. An electrical generator was introduced for lighting in 1913.

The inter-war years saw the growing use of handmade paper for the graphic arts and art books. Paper making became again the main activity of the site. In 1933, the fire at the handmade paper mill of Prasily, in Bohemia, left Velké Losiny as the only one of its type in Czechoslovakia. It was nationalised after the Second World War, while the owners and skilled workers, who were of Germanic origin, were expelled. There followed a new period of crisis and decline during which the profitability of the business was low.

In 1949, some work was however carried out, using concrete, on the canal and building II. Two modernisations then followed one another, affecting the pulping process. A concrete vat replaced the wooden vats in the 1950s. The pulp process was changed more fundamentally in the early 1960s: cotton and linen spinning waste replaced the rags. The boiler system then became redundant, as did the rag processing workshops. The turbine was shut down in 1965, but it is still in place.

The recognition of the site's heritage nature began in the 1970s, when the luxury paper market was moving more towards writing paper and envelopes. The paper museum was opened in 1987.

The political changes of the early 1990s brought a new private owner, and a rapid extension of the luxury paper product range.

Over the long course of history, the Velké Losiny paper mill is characterised by many ups and downs, and many changes of ownership, with both public and private owners. Fluctuations of this sort generally occur in the history of places of production, linked to markets and to the political situation. Here they stress the length of time over which the activity has been continued, its renewals and its successive technological and commercial options.

Velké Losiny is characterised by uninterrupted handmade production of paper using traditional techniques, from its foundation to the present day. Together with the fact that it is a production site which is today unique in Central Europe, this is the essential point that gives an heritage value to the property, over a long period of time.

3. OUTSTANDING UNIVERSAL VALUE, INTEGRITY AND AUTHENTICITY

Integrity and Authenticity

The integrity and authenticity of the property are closely linked issues at Velké Losiny, and in the dossier itself, although there is a brief separate chapter on the authenticity analysis (p. 6). Integrity is not considered as such, but is referred to in part in the presentation of the current state of preservation of the property (p. 33-34). Furthermore, these two points appear on several occasions in the dossier, particularly in the description of the buildings (p. 9-15), and in the long analysis of the development of the property and its changes (p. 16-32).

The authenticity statement is the foundation of the dossier in two respects: first in the continuity of the technical process over the course of history, and secondly in the successive establishment of the various strata of the built structure. These two constituent elements of the property's authenticity are furthermore in a permanent process of dialectical exchange over the course of history: the buildings follow technical evolutions and the needs of production, including the appearance of replacement textile activities in the 19th century; furthermore, the built structure faithfully reflects the various phases of the technical process and its continuation down the centuries. In short, the property reflects the process just as much as it houses it.

This approach enables the justification in particular of the continuity between the initial wooden architecture on masonry bases (17th and part of the 18th century), and the masonry constructions which succeeded them (second half of 18th century - end of 19th century). The large existing roof timbers, with their aeration and lighting louvres, bear witness to this wood/stone continuity for a technical process. The same applies to the successive architectural styles embodied in the ensemble: baroque and neo-classicism. The initial productive core (buildings II and III) has remained on the same bases, while being restructured as necessary for successive technical evolutions. The other built elements have congregated around the core, depending on the production logic and the economic demands of the moment.

So in addition to the authenticity of the built structure there is the authenticity of the technical process, and particularly its main component parts, which are still present: the canal (which predates the paper mill, and has been restored several times), three Hollander beaters with a cast iron vat (dating from around 1800), a wooden nut press (end-18th c.), a roller calendering machine (1883), and the second steam boiler (20th c.).

The main negative change affecting the authenticity and integrity of the property is due to interventions, which result is visible today, on the buildings and on the productive process itself, during the 20th century. As we have mentioned before, this period was characterised by a new technical environment: a hydraulic turbine, the change in the pulping process, and the introduction of electricity. Interventions in the period 1950-1960 left various concrete elements in the construction (portion of the canal, base of building II) and in the artefacts (large concrete vat already referred to). In the 1980s, restoration work was undertaken on the roofs of buildings I and II, which were then in poor condition. The work was done in a spirit of respect for heritage preservation.

Substantial works were also carried out in the 1990s to restore façades and roofs, to renovate space and redistribute it between paper production and the museographic presentation of the property. The work was continued in 2002.

ICOMOS considers that the integrity of the property is good, both in terms of the presentation of the technical process and for the built structure of the ensemble.

The authenticity applies primarily to a complex architectural ensemble, whose logic of construction has been to support the evolution of the technical process. From a stylistic viewpoint, the property is an example of a neoclassical ensemble with a productive function, including older elements, particularly baroque ones, and less clearly stylistically defined additions in the 19th century. The roofs are a very remarkable element of buildings I and II.

The authenticity also concerns the presence of a productive process, consisting mainly of the handmade paper making system using long textile fibres pulped using the Hollander beater. This process represents the height of the conventional manual system, at the start of the 19th century, just before the introduction of the paper machine and wood pulps. Pulp preparation however underwent considerable changes at Velké Losiny, to enable it to keep up with market requirements, at the end of the 19th century and during the 20th century. These technical changes remain broadly in line with the initial process, while aiming at quality targets which were changed by market conditions.

ICOMOS considers that the property and the technical process in activity comply with the integrity and authenticity conditions. However, the complexity of the evolution of the built structure and of the technical process makes the interpretation of the property by the public somewhat delicate. In particular, to stress the concept of commercial productive continuity as the sole criterion of authenticity is too much of a simplification, and could lead to ambiguities.

Comparative analysis

The dossier retraces the history of handmade paper production in Europe, from its first appearance in Italy and Spain (12th-13th c.) derived from Far Eastern and Arab sources. This innovation then spread to different parts of Europe (13th-15th c.). The Renaissance was a particularly flourishing period for paper making, because of the invention of printing (end-15th c.).

The dossier then draws up an inventory of the paper making heritage, mainly in Europe, based on the central criterion of production which is still in activity today, and the conservation of the handmade paper process over the history of the various sites. The uniqueness of the Velké Losiny paper mill emerges more clearly, as it seems to be the only one to have conserved throughout its history the handmade process, and the use of textile fibres in commercial production. The other sites in activity do not have the same continuity and they often use modern machines and wood pulp, or have been converted into museums simply with demonstrations of handmade paper techniques.

The other criteria of comparison are age and the buildings. The study of heritage paper mills mainly covers Europe. The typology of buildings in Italy, France and Spain is considered to be very different from that of the Czech site, and the same is true of North-Western Europe. Velké Losiny is representative of a paper mill architecture which is typical of Central Europe.

The additional note to the dossier makes a detailed comparison between handmade paper processes in the Far East and in Europe. In the Far East, handmade paper production forms part of a culture which is very strongly present, long-established and widely spread. Uses of paper are far more numerous than in Europe, and this is still true today, particularly in domestic life and in homes. They have an existential and symbolic dimension.

ICOMOS wishes to thank the State Party for the detailed comparative compilation of the papermaking heritage, particularly in the European zone, and for the technical skills mobilised in the study of paper making processes.

The literature consulted in the nomination dossier almost entirely consists of local studies in the Czech language, except for the references given below (see chapter 1). The other international references indicated come from encyclopedias, and, it would seem, from Internet sites for which no references are given. The complementary study carried out at the request of ICOMOS includes no bibliographical references.

However, ICOMOS notes that the heritage comparison is somewhat skewed by the omnipresence of the criterion of continuity of production by handmade techniques for commercial purposes. Admittedly, this criterion is important and it is the justification for the originality of Velké Losiny, particularly in the Central European context. The architectural criterion, which draws distinctions between the various European regions, is finally an adaptation both to local building material resources and to climatic conditions related to the drying of the paper. In relation to the age criterion, the establishment and the architectural heritage of several paper mills in Mediterranean and Western Europe are clearly older than those of Velké Losiny. There are many heritage evidences which testify to the spreading of paper in Europe at the end of the Middle Ages and during the Renaissance, to which should be added evidences in Arab and Far Eastern countries.

The comparative study should also take types of paper use into account in a non-exclusive way. From this viewpoint, the role of paper in the diffusion of printed texts during the Renaissance played a crucial role in Europe. Similarly, the process of mechanising paper production and the change of pulping techniques with the introduction of wood constitute a major development in Europe and in North America, which became dominant as early as the mid-19th century. Remind that this was the basis on which the Verla Groundwood and Board Mill (Finland) was inscribed on the World Heritage List. At this period, and in a global vision of paper mills productions, the criterion of continuity of the manual process may seem to be a residual solution, devoted to certain specific production niches.

ICOMOS considers that the comparative analysis in the dossier is very thorough, particularly from a technical viewpoint and as far as the European zone is concerned. However the criterion of continuity of handmade paper-making processes is considerably overvalued, bearing in mind the other components of the international paper industry heritage: the historic role of paper in connection with printing and the diffusion of knowledge, the existing built heritage, the diverse uses of papers in different

cultures, the dynamics of technical innovation and process variants.

Justification of the Outstanding Universal Value

The State Party indicates that the Velké Losiny paper mill is a monumental ensemble of outstanding technological significance. Its purpose is the production of handmade paper from textile fibre pulps. It may be considered as the oldest mill to have been continuously used for this purpose in Central Europe. It is also an ensemble of authentic buildings of great value in terms of baroque and neo-classical architecture. The monumental appearance of the main building bears witness to the importance of this paper mill, which particularly illustrates the development of the paper industry in the 18th and early 19th centuries, a period when most paper mills became industrial factories or fell into disuse.

ICOMOS considers that paper is one of the most important means whereby man can read and write, disseminate information, and increase knowledge and contacts between individuals and between civilisations. As such, paper has an indisputable outstanding universal value, without forgetting that its first uses were for paper money and as a medium of artistic expression.

Since Gutenberg, the production of printing paper in Europe has been of very great importance for its populations, and for a large proportion of peoples of the world, particularly in America.

A paper production workshop may be of outstanding universal value either if it represents the last place in which the handmade paper tradition is maintained, or if it has played an important role in paper production for the printing of texts or of artistic items of outstanding universal value.

Criteria under which inscription is proposed

The property is nominated on the basis of criteria ii and iv.

Criterion ii: According to the State Party, the Velké Losiny paper mill site bears witness to the diffusion of knowledge and the development of paper making techniques which are simple but of worldwide importance. It bears witness to the conditions in which paper making traditions developed in Central Europe from the 15th century onwards, making use of and adapting ancient knowledge brought to Europe in the Middle Ages from the Far East.

According to ICOMOS, the site of Velké Losiny bears clear witness to the diffusion of pre-industrial paper-making techniques in Central Europe and to the continuing use of these technical traditions down to the present day. The significance of the testimony it provides does not however amount to outstanding universal value in terms of the elements constituting this criterion, as indicated under the previous heading.

ICOMOS considers that this criterion has not been justified.

Criterion iv: According to the State Party, the Velké Losiny paper mill is a characteristic example of handmade paper production. It provides an authentic illustration of the whole process, in an architectural space of historic value, repeating it each day in the traditional making of handmade paper, as it was carried out at the height of this expertise, at the end of the 18th and beginning of the 19th century, before most paper mills became industrial or were completely abandoned.

ICOMOS considers that the paper mill of Velké Losiny bears architectural witness to the papermaking industry in Central Europe, for the preservation of the ancient handmade paper making process, mainly from the 18th and 19th century, and for the conservation of paper making ability of a high order. ICOMOS considers that the paper mill of Velké Losiny is of outstanding regional value.

ICOMOS considers that this criterion has not been justified.

In conclusion, ICOMOS considers that criteria ii and iv have not been justified, and that the outstanding universal value of the Velké Losiny paper mill in itself has not been demonstrated.

4. FACTORS AFFECTING THE PROPERTY

According to the State Party, there is no major threat of human or environmental origin which is directly hanging over the property. The buffer zone should make it possible to prevent real estate pressure from changing the semi-urban landscape around the property. The rerouting of an important road which passes near the property is planned.

The property has been affected by substantial flooding, particularly in the recent past (1997). Measures to prevent flooding are currently being put in place. Extensive hydraulic works should be carried out for this purpose on the River Desná.

The main risk remains fire, particularly because of the large timber frame structures and the stocks of paper. Measures for fire risk prevention and fire risk alerts have been taken. The buildings are divided into zones which can be isolated by fire doors. Smoke detectors and fire alert systems have been installed in all the buildings, together with fire extinguishers. The fire station of the town is located in immediate proximity to the property. There is a group of firemen who are specialised in high risk fires.

ICOMOS considers that the main risks of flooding and fire that could threaten the property are being kept under control by the managers of the property and the local authorities. However, ICOMOS recommends that a high degree of vigilance is maintained towards these factors.

5. PROTECTION, CONSERVATION AND MANAGEMENT

Boundaries of the nominated property and buffer zone

The nominated property corresponds to the site of the national monument, on a surface area of 1.11 hectare. It includes the land occupied by the paper mill and the zone upstream of the canal and its banks, over a distance of slightly over 200 metres. There are no inhabitants in the nominated property.

The buffer zone is bounded by roads and paths around the nominated property. It covers a surface area of 9.9 hectares. It consists essentially of a residential zone in the immediate proximity of the town of Velké Losiny. Some 500 people live in the proposed buffer zone. The regulations prohibit the construction of houses more than two stories high.

ICOMOS considers that the boundaries of the core zone and the buffer zone are adequate.

Ownership

The owner of the site is *Olšanské Papírny*, a Czech private company, whose headquarters are at Lukavice 21, 789 01 Zábřeh.

This company is specialised in paper production (about 10% of Czech production) and has five production sites, including Velké Losiny which is exclusively devoted to upmarket handmade papers. Velké Losiny gives the *Olšanské* company a brand image of luxury and prestige.

Furthermore, the historic site of Velké Losiny recently became a subsidiary with legal autonomy (*Ruční papírna*, a. s. Velké Losiny, deed of 30 May 2006), with its own managing director.

Protection

At national level:

- In 1974, the paper mill was inscribed on the list of state cultural monuments. The law on the protection of state monuments was enacted in 1987 (no. 20), followed by the application decree of 1988 (no. 66) and a governmental resolution of 1998 (no. 278).
- In 2001, it was proclaimed a national cultural monument (no. 132).
- The property is also governed by the law on the protection of collections and museums of 2000 (no. 122).

At regional and local level, the property and the buffer zone are governed by the legal devolutions stipulated by:

- The law on towns of 1976, land use and building regulation (no. 50), amended in 1998 (no. 83), and completed by the recent application decrees of 1998 (nos. 132 and 137) and 2001 (no. 135).
- The decision of the National Commission of the Šumperk District of 26 November 1979 on protected zones.

- The law on municipalities of 2000 (no. 128).

The general system of functioning of the protection of the property is described in the management plan. The exercise of the responsibilities of the various administrative bodies with regard to the property, as well as the intervention of heritage experts of the State party are also detailed.

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

Conservation

History of Conservation

See chapter 2, “History and development”, and 3, “Integrity and authenticity”.

Present state of Conservation

The question of the current state of conservation is mainly linked to the restoration works undertaken in the 1980s, on buildings that were then in a very poor state of maintenance, and then in the 1990s and again from 2002 onwards under a long-term planning scheme. The works were carried out in a spirit of respect for the heritage, and following the scientific rules and recommendations laid down by the State Party (façades, rendering, roofing, in particular).

Active Conservation measures

Master craftsmen specialised in the various building trades intervene with the approval and support of the Culture Department. Furthermore, the use of modern techniques was required to improve conservation, and this proved successful. A drainage system for example has been set up along the walls to protect them from humidity.

The restoration programme undertaken since 2002 has been prepared and then carried out in the framework of a concerted project management system, between the regional administration and the site owner (next point).

ICOMOS considers the state of conservation of the property to be satisfactory. It enables a suitable expression of the value of the property and its authentic paper making ability. ICOMOS also considers the recent measures concerning regular building restoration and maintenance works to be opportune.

Management

Management structures and processes, including traditional management processes

The restoration and protection works are organised on a contractual and scheduled basis between the regional authorities (Cultural Heritage Protection Centre of the Olomouc Region) and the private owner, via the managing director of the Velké Losiny subsidiary.

The National Institute for the Protection and Conservation of the National Heritage (NPU) carries out the scientific

monitoring of the projects and carries out financial intervention with the Olomouc Region, within the framework of their respective programmes of public aid for monuments and heritage conservation.

The Velké Losiny property is managed as a private commercial affair, in the framework of its agreements with its owner company, the *Olšanské* paper company.

At present the museum is non-lucrative. It is granted regional aid under tourism development policies. Its inclusion in the body of national museums is being considered, in connection with the nomination to the World Heritage List.

The local municipality of Velké Losiny is associated with the tourism programmes and actively contributes to the improvement of the surroundings and the security of the property. The main municipality of Šumperk manages building permits in the buffer zone. The municipalities act in concertation with the NPU experts.

Management plans and arrangements, including visitor management and presentation

The current management plan covers the period 2004-2008, for the property maintenance and restoration works, in operational conditions which have already been stipulated, and in accordance with a detailed programme approved by the NPU and by the owner. It is primarily aimed at conserving the heritage values of the property and the handmade paper production process.

The 2004-2008 management plan also provides for an extension of the exhibition rooms of the museum in the interior spaces allocated to it, the strengthening of communication about the values of the property especially in several foreign languages, and the organisation of thematic events and exhibitions.

The frequentation of the museum increased strongly from 1997 to 2000, and then stabilised at around 45,000 visitors a year, and seems to have declined a little since 2005.

The municipal plan consists of a set of local measures in force since 2003. It is essentially aimed at improving the parking areas and the surroundings of the property, the strengthening of fire and flooding security measures, the laying of footpaths, and providing a stop on the railway line to the south of the town, directly linked to the site.

The regional territory development plan indicates that the main road which is close to the site will be diverted.

Resources, including staffing levels, expertise and training

The budgets of the paper mill have not been made public, or those of the various restoration and maintenance programmes. The dossier presents, as guarantees, results which have been being obtained or are being obtained.

In addition to its managing director, the Velké Losiny paper mill has 32 employees and a full-time guide. The workers are highly skilled, and pass on their ability mainly through apprenticeships.

The museum uses the services of seasonal guides. They are trained by the firm. In the full season they number 8 to 9. There is a full-time employee for entrances and the shop, assisted by a seasonal employee.

The paper mill has engaged the services of a professional historian as museum director; he is in charge of the scientific management and the choices of presentation to the public.

ICOMOS considers as positive the efforts at concerted planning of the restoration works and the contractual arrangements which more strongly involve regional and local players. ICOMOS recommends that the museology works should be entrusted to and supervised by museum professionals.

ICOMOS considers that the management system for the property is adequate for the objective of consolidating the expression of the values and authenticity of the site. ICOMOS recommends that the municipality should be more closely involved in the management of the site so as not to restrict it to the treatment of the surrounds or to an exclusively tourism-centred approach to the property.

6. MONITORING

As with all national monuments, the Velké Losiny paper mill is under the permanent observation of the supervisory authorities, the NPU and the Regional Heritage Centre in particular. A system of "inspection days" exists. It brings together at regular intervals (at least once every two months) the management plan partners: the managing directors and the experts of the public services already mentioned, the representatives of the paper mill, the museum director, and various invited persons depending on the issues covered. The state of the restoration and museography works, and the future priorities are considered particularly closely. This leads to a detailed report which must be approved by the NPU office. It then becomes a working document on the basis of which the Regional Heritage Centre takes its technical and financial decisions.

The main indicators for monitoring restoration works to maintain the value and authenticity of the property are related to:

- maintaining characteristic historic volumes and forms; the preservation of architectural features; respect for construction materials;
- maintaining the functions of the handmade paper mill, and in particular its technological authenticity;
- maintaining the functional flows necessary for the buildings (water, traffic, energy), without visible interconnections.

The method consists of a regular and strict photographic monitoring, in accordance with international standards.

The NPU gives an annual recommendation on the state of the property and the quality of the works carried out.

It is planned to extend the brief of the “inspection days” to include tourism-related aspects, linked to the nomination to the World Heritage List.

ICOMOS considers that the monitoring measures for the property are adequate. ICOMOS recommends systematic use of the existing archival and archaeological documentation in the monitoring of the works. It also recommends that the monitoring of tourism and the improvement of the surroundings of the site should be included in the “inspection days”.

- Include the monitoring of tourism and the improvement of the surrounds of the site in the “inspection days”;
- More closely involve the municipality in the management of the site so as not to restrict its role to simply improving the surrounds or to an exclusively tourism-centred approach;
- Reinforce contacts with other similar paper making sites.

7. CONCLUSIONS

The nomination focuses on the outstanding regional value of the property, both for its built structure (the paper mill) as for the uninterrupted production of high quality handmade paper over four centuries. The property and the process have a high degree of authenticity and integrity.

However, the comparative analysis and the reflection of ICOMOS concerning the universal value to be granted to the production and use of paper, in Europe and in the different regions of the world, recommend that outstanding universal value should not be granted to the Velké Losiny paper mill only, in the forms in which the nomination has currently been made. ICOMOS considers that the criterion of continuity of handmade paper making processes is clearly overvalued compared with the other components of the international heritage of the paper industry.

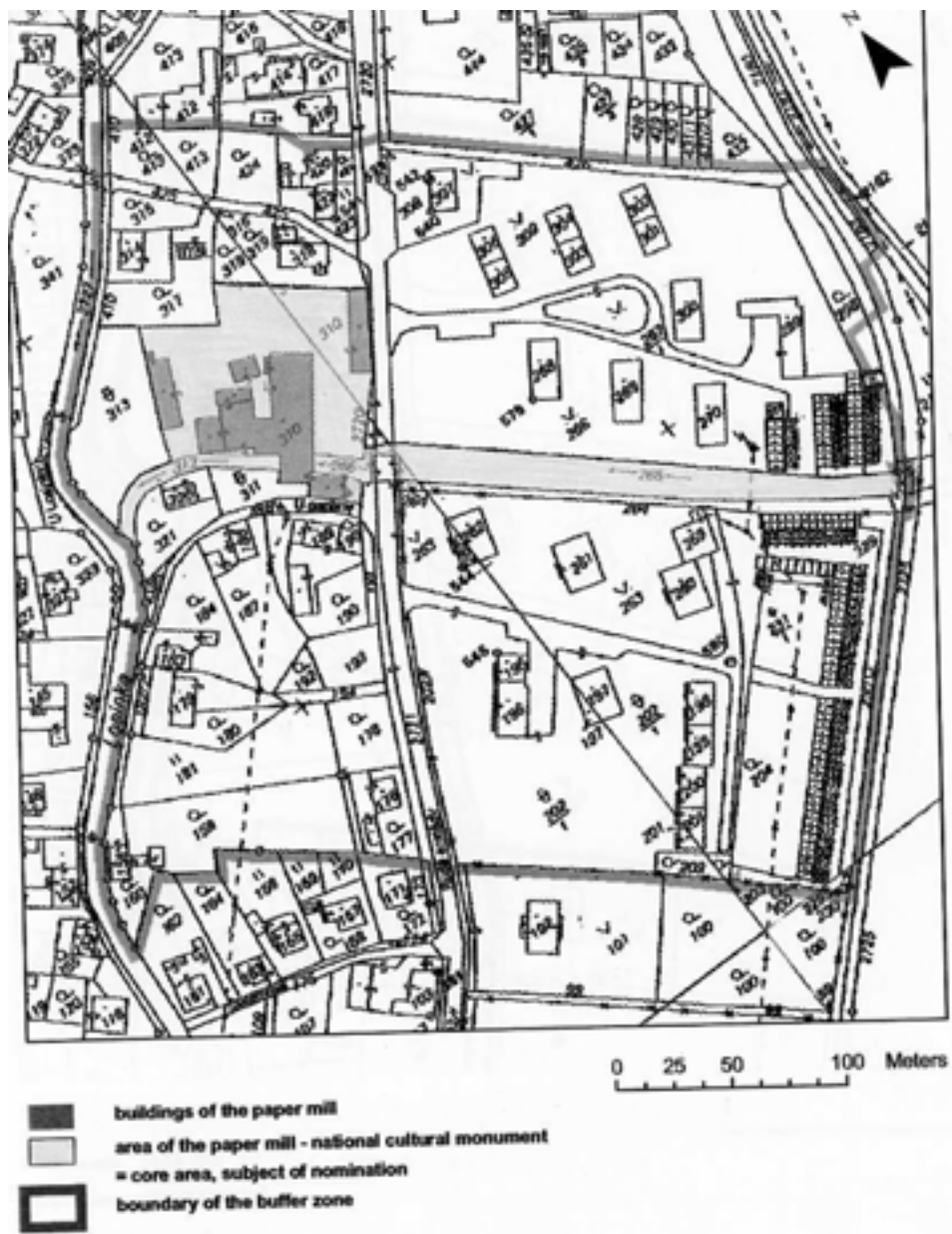
Recommendations with respect to inscription

ICOMOS recommends that the Velké Losiny handmade paper mill, Czech Republic, should not be inscribed on the World Heritage List in the form in which the dossier has been proposed by the State Party.

ICOMOS recommends to the World Heritage Committee the possibility of preparing a nomination with a wider scope covering not just the Velké Losiny paper mill, but a series of sites belonging to the history of printing and other places linked with the history of paper and its uses, in order to demonstrate the criterion of outstanding universal value.

ICOMOS recommends that the the Word Heritage Committee invite the State Party to give consideration to the following points concerning Velké Losiny:

- Maintain a high degree of vigilance towards fires and flooding;
- Continue concerted planning efforts;
- Develop museology projects with professional museum specialists;
- Systematically use the existing archival and archaeological documentation in the monitoring of works;



Map showing the boundaries of the nominated property



Aerial view of the paper mill buildings



Building I



Hollander beaters room



Hand spindle press

Paimio Hospital (Finland)

No 1251

Official name as proposed

by the State Party: Paimio Hospital (former Paimio sanatorium)

Location: Province of Western Finland,
Turku Region, City of Paimio

Brief description:

Paimio Hospital (formerly Paimio Sanatorium) was built in 1930-1933 on the basis of architect Alvar Aalto's winning entry in an architectural competition (1928-1929). The property is situated not far from the town of Paimio in south-west Finland. It is a sandy terrain in the middle of a pine forest, exceptionally well-suited for a tuberculosis sanatorium with its specific medical requirements. The main building was organised with five independent entries connected with the main functions: the patient rooms, communal rooms, operating theatre, kitchen maintenance and technical spaces. Each of them was placed in its own wing and oriented in the most favourable direction with regard to light. Other buildings in the hospital complex form an essential part of the overall free form composition, both functionally and visually. The doctors' and nurses' residences, heating plant, garages and other utility buildings of different construction periods are freely laid out within the picturesque grounds of the sanatorium. An integral part of the whole complex was Aalto's design of architectural details (windows, doors and accessories), furniture, lamps, and hospital equipment, which were standardised for industrial production. Hygiene and user comfort were emphasised as the basis for the design.

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 group of buildings.

1. BASIC DATA

Included in the Tentative List: 28 January 2004

International Assistance from the World Heritage Fund for preparing the Nomination: No

Date received by the World Heritage Centre: 25 January 2006

Background: This is a new nomination.

Consultations: ICOMOS has consulted its International Scientific Committee on the 20th Century Heritage.

Literature consulted (selection):

Tuomi, Timo, Paatero, Kristiina and Pauske, Eija (Eds.), *Alvar Aalto in seven buildings/Alvar Aalto in sieben*

Bauwerk. Museum of Finnish Architecture/Museum für Finnische Architektur. Helsinki, 1998.

Curtis, William, *Modern Architecture since 1900*. London, 1996 (3rd edition).

Porphyrios, Demetri, *Sources of Modern Eclecticism. Studies on Alvar Aalto*. London, 1982.

Schildt, Göran, *Alvar Aalto: The Decisive Years*. Ottawa, Helsinki, 1986.

Sharp, Denis and Cooke, Catherine (Eds.), *The Modern Movement in Architecture: Selections from the DO.CO.MO.MO Registers*. Rotterdam, 2000.

Weston, Richard, *Alvar Aalto*, London, 1995.

Technical Evaluation Mission: 21-25 August 2006

Additional information requested and received from the State Party: None

Date of approval of this report: 21 January 2007

2. THE PROPERTY

Description

Paimio Hospital (formerly Paimio Sanatorium) built in 1930-1933 on the basis of architect Alvar Aalto's winning entry in an architectural competition (1928-1929), gained international fame from the very moment of its construction. The Sanatorium is situated not far from the town of Paimio in south-west Finland. It is a sandy terrain in the middle of a pine forest, which is considered exceptionally well-suited for a tuberculosis sanatorium with its specific medical requirements. The hospital area is surrounded by a forest zone of natural beauty and includes scattered dwellings and fields. The hospital plays an important role in the territorial structure of modern Paimio as a significant functional, cultural and spiritual centre of this municipality. The historical road (named after Alvar Aalto) forms the main approach to the hospital area.

The nominated property consists of the following:

- The main sanatorium building,
- The doctors' and nurses' residences,
- The heating plant,
- The burial chapel (Rose Cellar),
- The garages and other utility buildings such as the tall chimney, the water-pumping station and the biological water purification plant,
- The garden with its serpentine path and fountains, and
- The pine forest grounds.

The main sanatorium building was placed on the highest point of the area, and oriented in north-south direction. It was organised into five independent entries connected with the main functions – the patient rooms, communal rooms,

operating theatre, kitchen maintenance and technical spaces. Each was placed in its own wing and oriented in the most favourable direction with regard to light. The various wings meet at a central connecting node, where the most important internal circulation routes – the main staircase and lifts – are located. The central porch, with an amoeba-shaped canopy is also situated in this central core. This planning principle has produced a unique building offering a dynamic whole with varying views outwards into the landscape, and embodying the ideas of the new Functionalist architecture.

The horizontal strip windows of the north-west façade near the main entrance reveal the corridors behind them and create an effect of transparency. The orientation of this wing allows an abundance of morning sunlight to reach the two-person patients' rooms. Sun balconies for 24 patients, originally extending this wing (glazed in the 1960's), gave as much sun as possible for patients lying there in beds. The spacious roof-top sun terrace, large enough for 120 patients, still overlooks the green ocean of pine trees.

Other buildings in the hospital complex form an essential part of the overall free form composition both functionally and visually. The doctors' and nurses' residences, heating plant, garages and other utility buildings of different construction periods are freely laid out within the picturesque grounds of the sanatorium. The tall chimney is an important visual element. The mainly two-storey residential buildings are organised hierarchically, and represented in their time a progressive type of housing. The burial chapel (Rose Cellar), the water-pumping station and the biological water purification plant are placed at the edge of the sanatorium grounds.

The perception of the whole technical process and its placement in different parts of the sanatorium complex, as well as its integration into the main building, were very important in the design of the sanatorium. All the buildings that originally served technical functions still exist today.

The immediate surroundings of the buildings are maintained in a park-like manner. Originally, patients could take walks along a serpentine path, located south of the patient wing, which leads to fountains. Typical for the overall character of the hospital, however, is the areas of pine forest, with an under-storey of blueberries and lingonberries.

All buildings are white-rendered, forming an impressive contrast to the dark green fir trees of the forest landscape, which is important to the composition. Natural beauty is also a significant part of the interior space organisation; thus, the main staircase offers views towards the greenery through its large windows.

It is important to stress that the use of colour is Aalto's significant principle in creating a comfortable and human atmosphere in the hospital. The exterior is dominated mainly by white with accents of black, red and yellow for the balcony rails and roof terrace. In the interiors, the main colours are white, sunny yellow, turquoise (Paimio Blue) and black. The patients' rooms are painted in a light neutral colour, and the corridor walls on each storey have different colour shades.

An integral part of the whole complex was Aalto's design of architectural details (windows, doors and accessories), furniture, lamps and hospital equipment, which were standardised for industrial production. Hygiene and user comfort were emphasised as the basis for design. The best known is the Paimio Chair, 1931, designed to optimise the best position for seated tuberculosis patients to help them breathe. It is still in production.

The human scale and purist aesthetics of 20th century Functionalism are still strongly evident in Paimio Hospital. It presents an overall synthesis of design (*Gesamtkunstwerk*) and the hierarchical relationship of all of the complex's constituent parts. This newest architectural concept, and the principle of harmony of the whole with its environment were used in the service of sick people, thus stressing the functional synthesis and humanistic basis of this Modernist structure. The complex is therefore designed to be a "medical tool".

History and development

Industrialisation and urbanisation of the late 19th and early 20th centuries, sharp social problems marked by crowded living conditions and the lack of sanitation significantly increased the spread of tuberculosis. Poor standards of health care and the absence of medicines to cure the disease led to significant mortality. In Finland, a special law to combat tuberculosis was adopted in 1929, and the height of sanatorium construction occurred between 1930 and 1933, when eight large public sanatoria were built. The Paimio Tuberculosis Sanatorium in the province of Western Finland was part of this group.

The myth about tuberculosis being the illness of damp, unhygienic places affected the choice of locations for the sanatoria. It was felt particularly important that the ground soil should be dry, containing clean gravel or sand for good rainwater drainage. Another requirement was that the sanatoria had to be built on high ground amidst fir trees with an abundance of fresh air.

In 1928, the Paimio municipality offered the virgin forestlands of the Spurila manor estate as a site for the sanatorium. In addition, 270 hectares were bought. The same year an architectural competition was held with 13 entries, finally won by Aalto. The prize-winning proposal was among the first in Finland to employ the principles of functionalism. Special medical expertise was involved in the planning of sanatorium, and as a result, some changes were suggested. The originally four-storey ward wing was raised by two storeys, when the number of patient places increased.

Construction began in 1930; new advanced concrete technology was applied. The main building was built on concrete pillars and the outer walls were brick surfaced with plaster and painted with lime wash. The frame and beams were designed with integrated vertical and horizontal conduits for technical installations. Due to this, repair and maintenance work could be carried out without entering the patient rooms. Particular attention was paid to lighting, heating, ventilation and acoustics. Steel windows represented the most modern fabrication technique. The open-air wing had a concrete structure balanced on one row of pillars, with tension reinforcement in the back wall that is only 10cm thick. Cantilevered sun decks were the

most innovative, structurally daring elements. The façade composition of the flat-roofed white-rendered building was seen to express the functions of the internal spaces and their different characteristics.

During the same construction period, the chief physician's residence, junior physicians' row houses, staff housing, hospital morgue, water pumping station and sewage water purification plant were built. A walking route was set out in the sanatorium's grounds, which served the rehabilitation and created a pleasant atmosphere. The serpentine path with water fountains near the patient wing was the most important. Special attention was paid to the surroundings and protection of the young forest.

The architecture of the complex was widely published and brought international recognition for Alvar Aalto: the concept (*Gesamtkunstwerk* and 'medical tool'), the layout and structural principles, and the furniture and fittings were referred to as a model. The main building with the sun balconies became an icon in the history of architecture.

Aalto and his office remained the chief architect of the complex for several years and adapted it to new needs. Several works were carried out in the late 1950s–1960s: renovation of the main entrance, a new surgeon block, a nurses' terraced house with a garage, and other utility buildings were added to the area, as well as the heating plant of the early 1980s. These new structures in-filled the composition, while subordinate to the main structural rhythm, space organisation, colour and texture. Some of the buildings and inner spaces changed their functions in later periods: the chief physician's house was turned into a kindergarten and the staff residential building was changed to offices. In the main building, the dining hall became a staff canteen, the reading room a café, patients' communal space – a lecture hall, etc. In 1964, open-air sun decks were glassed to become patients' rooms. In the main elevator shafts, the equipment was first changed in 1969, and the steel-framed glass wall replaced. The Rose Cellar (originally the sanatorium morgue) is no longer in use.

The final transformation from sanatorium to Paimio Hospital in 1971 led to interior renovation aimed at improvement of medical treatment based on new operation technology. The ventilation system was changed, the ceilings in the corridors were lowered, and the doors to the patients' rooms as well as the interior and fittings were renewed. Only one patient room was preserved as a museum room with all the original furniture, design and fittings.

In 1978, the National Board of Antiquities became responsible for the heritage of the Hospital. Analysis and research of the historical iconography and cultural values, scientific documentation, and development of the monitoring system have been completed, leading to its official registration. Since 1993, Paimio Hospital has been on the list of nationally significant monuments under the *Building Protection Act*.

Measures for the conservation of the property were implemented from construction onwards. It is possible to identify three periods in relation to conservation. Between 1933 and the early 1970s, the first interventions were oriented to repair and consolidation. In the period 1970's–1993 major changes were introduced in the interiors. In

1993, the Paimio Hospital was included on the list of nationally significant monuments and protected by the Building Protection Act. From 1993 onwards efforts were made to maintain the buildings in accordance with international conservation standards. More detailed information on conservation history can be found in section 5.

3. OUTSTANDING UNIVERSAL VALUE, INTEGRITY AND AUTHENTICITY

Integrity and Authenticity

Integrity

Visual analysis of the complex as well as of historical topographic maps, Aalto's plans and modern master plans for the Paimio region, demonstrate that the homogeneous landscape and architectural entity of the complex's core and its environment rest practically intact. The structures built in later periods are subordinate to the main rhythm and organisation of space. The scale and image of the property, and the main characteristics of its planning structure have been preserved. The integrity of panoramas and silhouettes remain untouched.

All buildings, technical plants and their surroundings – necessary to represent the concept of the sanatorium design – are included in the nominated property.

ICOMOS considers that in terms of the historical stratigraphy of a site, continuity in planning morphology and visual perception, the nominated property fulfils the conditions of integrity.

Authenticity

Since the moment of its construction in 1933, the Paimio Hospital never changed its medical function (treatment of tuberculosis and pulmonary diseases) and it has been in permanent high-standard use. However, the main focus of the complex has shifted from the treatment of tuberculosis to the wider treatment of pulmonary diseases and this has had repercussions on how the complex has evolved over time. The nomination dossier states that continuity and authentic use of the building have been of central importance and that modifications were made for hospital-related technical reasons.

Major parts of the nominated area and buffer zone consist of a well-maintained landscape, based on controlled cultivation and sustainable evolution. The natural environment with its historical topography, roads, water system, forest and stone ridges is preserved in good condition. The smooth horizontal lines of surrounding landscapes are not disturbed by alien architectural elements. This suggests the presence of sufficient levels of authenticity of setting and adequate planning policies aimed at environmental conservation. However, there is some loss of original planning structure in the "formal garden" near the main building with its serpentine path network.

The main hospital building demonstrates different levels of authenticity. In the exterior, historical evolution of the structure is clearly seen, with some changes and additions

attributed to later periods. However, it still demonstrates the originality of the initial concept and aesthetic continuity in terms of form, colour, texture and architectural style. The greatest changes have been the conversion of the patient sun balconies into internal spaces, 1964, and the construction of the surgical wing, 1958 (though also designed by Aalto).

In the interiors, only 15-20% of the original inner spaces are left intact; around 50% have been changed but in line with the original spatial subdivision; and around 25-30% have been changed totally (the nomination dossier presents floor plans demonstrating different levels of preservation). One “museum patients’ room” with full interior design and equipment has been maintained to document the history of the sanatorium.

In the interiors many authentic architectural details of the entrance lobby, staircases, front doors, railings and window frames have survived and been restored, and repairs using traditional methods and identical building materials have occurred. Aalto’s famous Paimio furniture and lamp design, and the combination of daylight and colour solutions are still an integral part of the main public spaces.

ICOMOS considers that authenticity of use and setting remain practically intact and present one of the virtues of the property. Authentic functional use gives permanent prospects for sustainability of this cultural resource. However, the change of sun balconies presents a significant artistic, structural and functional loss. As the complex was widely published in International Journals, the wing with the sun balconies became a landmark.

In conclusion, ICOMOS considers that changes introduced in the main building imply a partial loss of authenticity of design and materials.

Comparative analysis

The nomination dossier gives a detailed overview of tuberculosis sanatorium construction in the late 19th and early 20th centuries in France, Switzerland, Slovakia and the Czech Republic, Greece and the Netherlands. The main focus of the analysis is on the Functionalist buildings of the 1920s-1930s in Europe, which were intentionally designed to incorporate and promote notions of physical health. In these cases, modern architecture became a sort of “medical tool” that strengthens and protects the body. The Art-Nouveau Hospital de Sant Pau in Barcelona (inscribed in the World Heritage List together with the other works of Lluís Domènech i Montaner in 1997) is, perhaps, the only other structure of this type and profile in the World Heritage List.

Paimio Hospital offers an example of a humanistic approach to a building. Consideration of the human needs and the process of health administration on all levels made Paimio a unique structure. Various design ideas and aspects were fully integrated and formed a total work of art (*Gesamtkunstwerk*). In Alvar Aalto’s work, Paimio Hospital occupies a specific position, both revolutionary and fundamental. The focal themes of his long-time contribution to 20th century architecture (namely, art synthesis and humanism) appeared in Paimio for the first time. Among the Finnish sanatoria, Paimio Hospital is the ultimate in its comprehensiveness and architectural quality.

It is possible to find three types of development among sanatorium buildings, after their original use declined. Some of the complexes have been demolished. In others, functional changes (e.g. for hotel use) have led to alterations and extensions, and impacts on the landscape and settings. In still others, new medical uses have allowed the preservation of the character of the buildings, as in the sanatoria Martel de Janville (France) and Sotiria (Greece). However, neither of these structures has the innovative or visionary character of Paimio.

The most important comparison is with the Zonnenstraat sanatorium in Hilversum (J. Duiker, B. Bijvoet, 1925-1928) now on the Tentative List (The Netherlands). Aalto had understood its geometry and dynamism; however, he created a different synthetic model in planning structure, composition, form and functional hierarchy. Thus, Paimio incorporated new ideas in hospital design and epidemiology. These two structures supplement each other by their differences rather than their similarities, and thus both introduce the image of a perfect Modernist “medical instrument” of their time. A series of adaptations and refurbishments caused the disfigurement of Zonnenstraat from the late 1950s. An extensive restoration project was initiated in the 1980s, and the main building was restored to its earlier appearance in 2003. Duiker and Bijvoet developed Zonnenstraat as a building with a limited lifespan because they hoped that tuberculosis would become a disease of the past. This led to interesting debates about its restoration. It functions presently as a health care centre. Paimio differs also because Aalto himself supervised the continuous adaptation of the complex to its evolving needs.

The nomination dossier does not include comparisons outside Europe nor measure the importance of this building amongst other Alvar Aalto buildings. ICOMOS recommends that further exploration of the significance of the Paimio Hospital through a deeper comparative analysis be undertaken. This analysis should be broadened both geographically and methodologically – that is to include further consideration of the notion of the building as an “instrument” (medical tool) having in mind the universal Modernist requirement to create a tool for improvement of human well-being (for instance, *la machine à habiter* of Le Corbusier, etc). Additional comparative analysis of the complete works of Alvar Aalto is also important to assess the nomination in the proper context, as part of the complete works of Alvar Aalto or the most representative of them, or in terms of the architecture of sanatoria.

In conclusion, ICOMOS considers that more work on the comparative analysis should be carried out to explore further the values and significance of the nominated property within the framework of sanatoria and hospitals (medical tools) and the other works of Alvar Aalto.

Justification of the Outstanding Universal Value

The State Party considers that the property is of Outstanding Universal Value for the following reasons:

The Paimio Hospital demonstrates that the creation of a new type of sanatorium responded in its time to the challenge of medical science like an instrument. Clearly organised functions were linked with technical innovations. It offered light, air and ventilation thus

implementing the ideology of Functionalism. Patients and their needs were the starting point for design, extending from the totality to the smallest detail.

The property testifies to the breakthrough of 20th Century architecture. Innovative and humanist thinking rooted in the local culture and presented by Alvar Aalto in Paimio Hospital, significantly enriched the architectural field of the international Modern Movement.

The Paimio Hospital demonstrates the unique synthesis and balance of functionality of the “medical instrument”, perception of the entire technical process as a whole, innovative structural technology and appropriateness of the materials, as well as design of details, harmony of colours, and integrity of the environment formed by nature and buildings. The property still presents these aspects today and they continue to provide a basis for the sustainable use of the hospital.

The sanatorium was the birthplace of numerous furniture and lamp designs by Aalto, based on principles of hygiene, economy and comfort. Many pieces are still in production today and have been regarded as international classics since the 1930s.

Criteria under which inscription is proposed

The property is nominated on the basis of criteria i, ii and iv:

Criterion i: The State party justifies this criterion on the basis that the patients, their needs and well-being were the central aspects in the design of the Paimio Sanatorium. The functional synthesis of physiological, psychological and social factors linked with treatment practices and the latest technical solutions were created by Aalto. All levels of the building – from the landscape, space orientation, innovative technology, function, aesthetics, and development of interior design and furniture – aimed to serve the needs of the patients and their recovery.

The result was a *Gesamtkunstwerk*, in which the ideal of Modernist architecture treating the building itself as an instrument for human care was realised in a unique way, emphasising the importance of warmth and humanism alongside hygienic requirements. This specific quality of Aalto’s work has enriched the field of architecture.

ICOMOS considers that this criterion has to be assessed whilst also taking into account other works by Alvar Aalto.

ICOMOS does not consider that this criterion has been demonstrated.

Criterion ii: The State party considers that the Paimio Sanatorium received widespread international recognition already when it was still under construction. It greatly influenced both the breakthrough and development of Functionalism in Finland, as well as in the other Nordic countries.

ICOMOS considers that this criterion has to be assessed whilst taking into account examples in non-European countries as well.

ICOMOS does not consider that this criterion has been demonstrated.

Criterion iv: The State party considers that the Paimio Sanatorium is one of the pure examples of Functionalism, responding to the requirements of standardisation and hygiene. It is one of those buildings that logically manifest in a multi-faceted way the possibilities created by the new architecture. In Paimio, the bright synthesis of the significant features of Functionalism and Aalto’s artistic intuition had been achieved.

ICOMOS considers that the assessment of this criterion can only be done in the framework of sanatoria and hospitals (medical tools) and the other works of Alvar Aalto.

Therefore, ICOMOS does not consider that this criterion has been demonstrated.

ICOMOS considers that the nominated property is possibly a good candidate for World Heritage listing but that further comparative analysis is needed to clarify the values of the property and to allow a more in-depth assessment of the criteria and the Outstanding Universal Value of the property.

4. FACTORS AFFECTING THE PROPERTY

The nomination dossier considers that there is no significant risk to the nominated property. Paimio Hospital is not threatened by any pollution, traffic or tourism pressures or environmental changes. The only natural threat facing the area is storms that can fell the trees in the surrounding forest. The Finnish Forest Research Institute (METLA) monitors the conditions of trees in the forest area, and controls and carries out necessary interventions.

At the moment, there is no visual development pressure which could affect the nominated property. There are no planned high-rise or large-scale structures which could damage the morphology, or the historical and landscape panoramas of the nominated property.

However, the existing plans for future development of the north-east area adjacent to the Paimio Hospital (within the buffer zone) envisages one-storey residential construction. This could cause a loss of forest density in this area and change the landscape structure. Visual perception of the setting will not be affected due to the existing topography, with a smooth relief rising in the north-east direction.

ICOMOS draws attention to the need for strict building restrictions and environmental guidelines to ensure the protection and integrity of the whole property. Specification of planning regulations through the Paimio Municipality is important to diminish the risks. The National Board of Antiquities is in charge of this process.

In conclusion, ICOMOS considers that the main risk to the property – possible residential development in the buffer zone – could detrimentally affect the property’s setting. ICOMOS recommends that special attention be given to planning regulations and building restrictions within the nominated area and buffer zone to diminish the risks.

5. PROTECTION, CONSERVATION AND MANAGEMENT

Boundaries of the nominated property and buffer zone

The proposed boundaries of the nominated property cover the territory of the Paimio Hospital including the main building and other structures of this complex, together with surrounding landscape. In the north, west and south, the boundary is adjacent to historical roads.

The buffer zone has been defined as a circle with a diameter of 2km. On 14 November 2006, ICOMOS received documents on revised boundaries (being confirmed on all national levels) and detailed comments.

The Lemmenlampi water pumping station (not listed in the national register) has been excluded from the core zone. Boundaries of the buffer zone have been defined by topography and land ownership, allocated for forestry, agriculture and residential uses. In the case of Finland, combining of these two principles is organic and based on the historical tradition of collective use of natural resources (demonstrating the phenomenon of an “Open Nordic society”).

The buffer zone is of irregular form and lies within the 2km diameter originally established in the nomination dossier. The governing environmental approach, treating the property as an integral protected unity is of great importance.

ICOMOS considers that the revised demarcation of the boundaries corresponds to national planning regulations, boundaries of the conservation area and layout of the protected landscape zone. Due to this decision, the level of, and tools for, heritage protection and zoning provisions at national and international levels are improved.

In conclusion, ICOMOS considers that the boundaries of the core and buffer zone are adequate. However, ICOMOS recommends that if the property is resubmitted as a sanatorium/medical instrument, the listing as monument of national importance should be extended to include the Lemmenlampi water pumping station because it is an integral part of the complex.

Ownership

The nominated property is owned by the Turku University Central Hospital. The buffer zone is shared between four different owners:

- Turku University Central Hospital owns the Paimio Hospital and surrounding lands;
- Paimio Municipality;
- State (land owned and managed by the Finnish Forest Research Institute – METLA); and
- Private ownership.

Around 10% of the buffer zone belongs to METLA and approximately 30% to each of other three owners.

Protection

Paimio Hospital is a property of National significance. Legal protection applies at National, Regional and Municipal levels.

National level

At national level, the main protective instruments are:

- Building Protection Act 60/1985, for Paimio Hospital, Council of State decision no. 43/561/92, 18.3.1993;
- Nationally valuable cultural-historical environments, National Board of Antiquities, 1993;
- Finnish Architectural Policy, 1998;
- The Land Use and Building Act, 2000, renewed; The National Land Use Guidelines, 2000, as part of the Land Use planning system;
- National Strategy for building conservation and maintenance of the architectural heritage (with a special programme on the 20th century heritage), 2001;
- Nature Protection Act; Forest Act; Soil Act are used as the Legal tools for environment and nature protection.

These documents provide for building conservation and the management of cultural properties, establish the boundaries of protected areas and define land use monitoring.

Regional and Municipal levels

National Land Use Guidelines establish the hierarchy of the planning process, which is specific to Finland. It has three levels: the Regional Land Use Plan, the Local Master Plan and the Local Detailed Plan, connected with cultural heritage issues.

- The Turku City Regional Land Use Plan; for Paimio Hospital no. YM1/5222/2003. This is the main planning document and legal tool, which defines the built-up area, zones of protection (SR 577009), forest and recreation areas, and agricultural and ground water areas, which are prohibited from intensive construction and aim to preserve built heritage and landscape values;
- The Local Master Plan, final approval 1994, specifies the direct regulation of building, preservation of natural and cultural heritage, as well as quality of the living environment and the reduction of environmental hazards;
- The Local Detailed Plans regulate building and physical townscapes and landscapes, including conservation measures which make this plan of special preservation importance. At the moment, there is no Local Detailed Plan in force for Paimio Hospital Area.

The nomination dossier states that the legal administration provides sustainable development through existing

planning structures and guarantees the protection of heritage resources.

ICOMOS considers that the nominated property has well established protection along the existing levels of legislation and preservation. Specific national environmental and multi-stage approaches are the core of these legal tools.

In conclusion, ICOMOS considers that the protective measures for the property are adequate. However, it is necessary to draw the attention of the Paimio Municipality to approve the Local Detailed Plan with suitable protection regimes.

Conservation

History of Conservation

It is possible to define three stages of conservation activities in the Paimio Hospital. *The first period* includes 1933 to the early 1970s. During this period, the first interventions aimed at repair and consolidation occurred. The buildings mainly preserved the original materials, though new extensions were built and some changes introduced (see *Authenticity* above). Until the early 1970s, Aalto himself was involved in all repairs and modifications. However, the Paimio Hospital was not treated as a protected monument and no proper conservation methodology existed regarding the Modern Movement structures. In 1971, the tuberculosis sanatorium was renamed Paimio Hospital with a wider profile of medical treatment.

The second period includes the early 1970s to 1993. In 1974-1979, major interior changes appeared (in patients' wards, corridors, and the ventilation system), however not enough attention was paid to the architectural and conservation in relation to these repairs. In 1978, the National Board of Antiquities became the official body in charge of the approval of any alterations. A permanent curator was appointed. In 1993, the Paimio Hospital was included on the list of nationally significant monuments and protected by the Building Protection Act. According to protection regulations, the original interior spaces and structures, remaining furnishings and design elements are to be preserved, as well as the original colours and materials. The buildings and the surrounding area must be maintained, used and repaired in a way that ensures that the cultural and historical values are not endangered. Special work has been done to revive the original technology of construction, material use, craftsmanship and technique. Aalto's Office was responsible for design changes until the mid 1990s.

The third period (from 1993 to today) demonstrates conservation efforts to maintain the buildings in accordance with international conservation standards. Since 1996, the Architectural Office Laiho-Pulkkinen-Raunio from Turku has been appointed to act as permanent architect for Paimio Hospital. The year 1998, when the 100th anniversary of Aalto was celebrated, brought new levels of conservation awareness regarding Modernist buildings. The same year, the Paimio Hospital was included on the Finnish Tentative List, with support from the Nordic World Heritage Office. The restoration process is based on careful research of original technology and

building materials and gives good prospects for the maintenance of surviving authentic fabric. The protection is carried out under the supervision of the National Board of Antiquities, which guarantees competent conservation and adaptation processes, including project work and craftsmanship. In the period 2003-2005, several interventions (new isolation room and parking areas; renovation of junior physician's row houses) were carried out.

Present state of conservation

The hospital area and buildings are continuously maintained and repaired. Currently, the restoration of the Rose Cellar, and the main vestibule and entrance porch is underway. Special attention is paid to environmental maintenance and landscape planning, including the restoration of the "formal garden" with water basins near the main building. The maintenance programme includes the Lammenlampi area where the hospital water pumping station is located. Conservation planning in cooperation with different parties (Turku University Central Hospital as the owner, and the relevant authorities) is of primary importance.

ICOMOS considers that the present state of conservation is good. However, for the future a programme based on detailed documentation could be drawn up with the aim of repairing earlier changes. This strategy should be implemented into Conservation and Management Plans on a short-term and long-term basis.

In conclusion, ICOMOS considers that the current level of professional treatment corresponds to accepted international standards for conservation. However, special attention is needed to prepare a conservation strategy aimed at the gradual reinstitution of architectural values diminished in the previous periods.

Management

Management structures and processes, including traditional management processes

There are three major administrative levels – National, Regional and Local - involved in heritage policy and management processes for the nominated property. Regional international cooperation through the Nordic Council of Ministers is also widely recognised.

At the *National level*, the major institutions involved are the Ministry of the Environment, the Ministry of Education, Science and Culture (responsible for policies on building and protection of conservation areas and environment including financing), and the National Board of Antiquities (the main cultural and building historical expert). Specialised professional institutions – the Finnish Forest Research Institute (METLA) within the Ministry of Agriculture and Forestry, and the Finnish Board of Forestry – are also involved in activities for protecting the landscape surroundings and water supply in the vicinity of the Paimio Hospital.

At the *Regional level*, the main partners involved are the Turku University Central Hospital (the owner) and the Hospital District Council, which is in charge of financing, maintenance and repairs to the buildings as well as

decision-making on conservation and management. Since 1996, the Architects Laiho-Pulkkinen-Raunio Office has held responsibility for architectural project decisions and their management.

At the *Local level*, the management structure consists of the Paimio Hospital, responsible for monitoring, repairs and maintenance of the buildings and surroundings; and the Paimio Municipality, which supervises town planning, architectural activities, and environmental issues including regulations for protection zones, local financing, monitoring, and contacts with clientele.

The Building Protection Act, with provision for the Paimio Hospital, 1993, the Regional Land Use Plan and the Local Master Plan also provide for important management aspects within the nominated property.

ICOMOS considers that the management structures and processes are adequate to ensure the conservation of the property's values.

Management plans, including visitor management and presentation

The initial nomination dossier did not include a Management Plan, but detailed how the current management of the property works. On 14 November 2006, ICOMOS received the Draft Management Plan (following its adoption at the national level), along with detailed comments.

Management policy includes programmes encouraging tourist activities, promotion and presentation of the heritage of the property (through publications, lecture courses, seminars), and an overall emphasis on preservation activities. The local community is involved in this process as well.

Resources, including staffing levels, expertise and training

Conservation activities are financed at all three levels of administration (national, regional, local), within the existing structural administrative system in Finland. Turku University Central Hospital, which owns the property, is responsible for financing the maintenance and repairs of the buildings. The National Board of Antiquities offers restoration funds for buildings of the ensemble that are not in hospital use, such as the Rose Cellar (former morgue). The Finnish Forest Research Institute oversees the maintenance of the surrounding forest area.

The National Board of Antiquities is the expert body responsible for protection and restoration issues in Finland. Expertise is also available from the Alvar Aalto Foundation, the Alvar Aalto Museum, the Alvar Aalto Academy and the Museum of Finnish Architecture. The hospital employs its own maintenance staff, which is responsible for maintenance and repairs works. High levels of expertise in conservation and restoration of modern architecture is available in Finland, where, in co-operation with ICCROM, two courses on conservation of modern architecture have been organised.

ICOMOS considers that the existing financial structures and staffing levels are adequate and provide a good basis to ensure proper management of the nominated property.

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

6. MONITORING

The nomination dossier presents the following key indicators for preservation of the values of the property – the *use* of the hospital buildings; the architectonic *form* and *materials* of the buildings (including restoration and repair interventions); and hospital *surroundings*.

For all key indicators, administrative arrangements exist. The National Board of Antiquities monitors the situation in Paimio Hospital and its surroundings on a periodic basis and directs the implementation of works to ensure the preservation of the property's integrity and authenticity. Periodic reporting is drawn up every 5-10 years. Contacts with appropriate administrative, scientific, planning and architectural institutions are maintained. Reporting documentation is adequate.

ICOMOS considers that the monitoring measures for the property are adequate. However, the monitoring of Paimio Hospital should address the possibility of further restoration activities.

7. CONCLUSIONS

The Paimio Hospital built by Alvar Aalto represented a new type of sanatorium in its time and responded to the challenge of medical science like an instrument. The complex of buildings embodies the breakthrough of Modernist architecture and has become one of the most important Functionalist structures in the Nordic region which has influenced 20th century architecture internationally.

The current state of conservation of the whole complex is quite adequate. Authenticity of function and setting are well preserved. However, ICOMOS considers that the main building has authenticity losses both in interiors and exterior which diminish the values of the nominated property.

ICOMOS considers that in-depth comparative analyses in sanatorium construction are necessary, which could establish the unique qualities of the Paimio Hospital in a wider context. At the same time, ICOMOS also recommends that an analysis of the corpus of Aalto's works be undertaken in order to determine the specific focus of any future nomination of this property to the World Heritage List.

Recommendations with respect to inscription

ICOMOS recommends that the examination of the nomination of Paimio Hospital (former Paimio sanatorium), Finland, to the World Heritage List be *deferred* to allow the State Party to:

- explore further the values and significance of the property through additional comparative analyses.

Depending on the outcomes of this analysis, a revised nomination dossier could be based on the following approaches:

- consideration of the Paimio Hospital as part of the complete or most representative works of Alvar Aalto; and/or,
- consideration of the Paimio Hospital in terms of its importance in the architecture of sanatoria and medical instruments.

ICOMOS recommends that the World Heritage Committee invites the State Party to give consideration to the following:

- approval of the Local Detailed Plan with suitable protection regimes;
- adoption of a conservation strategy aimed at gradual restitution of original architectural values;
- if the property is to be resubmitted as a nomination to the World Heritage List as a sanatorium/medical instrument, the listing as a monument of national importance should be extended to include the Lemmenlampi water pumping station.



**Revised Boundaries of Nominated Area and
Buffer Zone of Palmio Hospital Complex**

Scale: 1:15 000

Map sheets: 202103, 202106 (National Land Survey of Finland)



National Board of Antiquities
19th September 2006



Map showing the boundaries of the nominated property



View of the main entrance



The roof top and sun deck



Sun balcony wing of the main building



Dining hall with its original furniture

Bordeaux (France)

No 1256

Official name as proposed

by the State Party: Bordeaux, Port of the Moon

Location:

Aquitaine Région,
Gironde Department

Brief description:

The city of Bordeaux is a port city located in south-west France, in the Aquitaine basin, on the river Garonne, some 100km from the Atlantic Ocean. The founders were Gallic tribes, but its development from a minor settlement into an important market town came after the Roman conquest in 56 BC. From the late 12th century, Bordeaux had a new stage of development due to commercial links with Britain and the Low Lands. The city retained its generally medieval aspect up to the early 18th century. The age of Enlightenment provided the framework for the principal urban development of Bordeaux in modern times. This is also the period that produced its best known architectural and urban features. Louis-Urbain Aubert, Marquis de Tourny, arrived in Bordeaux in 1743, staying there until 1757. He undertook major projects for the renovation and opening up of the city's medieval urban form. This consisted especially of the façades to the quays along the Garonne, the vital artery of the commercial life of the community. These operations also paved the way for new housing, which contributed to the classical townscape of Bordeaux. At the end of the century, a number of new public buildings were built. In the 19th century, there were several large-scale constructions, such as the first bridge built in stone across the Garonne (1810-1822). The old harbour on the left side of Garonne was not renovated, but an industrial one developed on the right side of the river in the 20th century.

Category of property:

In terms of the categories of cultural property set out in Article 1 of the 1972 World Heritage Convention, this is a *group of buildings*. In terms of the *Operational Guidelines for the implementation of the World Heritage Convention* (2 February 2005), Annex 3, § 14, (ii), the property is an *inhabited historic town*.

1. BASIC DATA

Included in the Tentative List: 1 February 2002

International Assistance from the World Heritage Fund for preparing the Nomination: No

Date received by

the World Heritage Centre: 30 January 2006

Background: This is a new nomination.

Consultations: ICOMOS has consulted its International Committee on Historic Towns and Villages (CIVVIH).

Literature consulted (selection):

E.A. Gutkind, *Urban Development in Western Europe: France and Belgium; International History of City Development*, vol. V, New York, 1970.

Charles Delfante, *Grande Histoire de la ville*, Paris, 1997.

Sir Banister Fletcher, *A History of Architecture*, Oxford, 1987.

M. Delaunay, *Les Jardins de Bordeaux*, Périgueux, 1985.

R. Galy, *Les Rues de Bordeaux des origines à nos jours*, Bordeaux, 1997.

B. Manciet & V. Monthiers, *La Façade des quais*, Bordeaux, 1994.

F.G. Pariset, *Bordeaux au XVIII^e siècle*, Bordeaux, 1968.

C. Taillard, *Bordeaux à l'âge classique*, Bordeaux, 1997.

Technical Evaluation Mission: 29 November-
3 December 2006

Additional information requested and received from the State Party: None

Date of approval of this report: 21 January 2007

2. THE PROPERTY

Description

The city of Bordeaux is a port city located in south-west France, in the Aquitaine basin, on the river Garonne, some 100km from the Atlantic Ocean. Bordeaux is the capital of Aquitaine Region. The metropolitan area of Bordeaux has a population of *ca* 1 million inhabitants, while the town itself has *ca* 215,000 inhabitants and *ca* 66,000 within the nominated property. Bordeaux wine takes its name from the city, around which wine has been grown from the 8th century.

The founders of Bordeaux were Gallic tribes, but its development from a minor settlement into an important market town came after the Roman conquest in 56 BC. Major trade routes linked it to Spain as well as to Toulouse and Marseille. At Bordeaux, the Garonne forms a bend, surrounded by hills. This area became a natural harbour, later called "*le Port de la Lune*" ("the port of the moon") due to its form. The Roman *castrum* (450 x 700m) is still reflected in the centre of the town. Nevertheless, few structures have survived, mainly the remains of the antique amphitheatre, the Palais Gallien (Gallien Palace).

From the late 12th century, Bordeaux had a new stage of development due to commercial links with Britain and the Low Lands. The commerce was based particularly on wine export. The town was enlarged, and a number of monastic ensembles and churches were constructed. These include especially: the Basilica of Saint-Seurin, Basilica of Saint-Michel, and Saint-André Cathedral, all inscribed on the World Heritage List as part of "The Routes of Santiago de

Compostela in France” (1998). While founded in earlier centuries, these buildings had major renovations or constructions in Gothic style. Some vestiges also still remain of the city walls built in the 13th and 14th centuries. From the 16th century, its economic development slowed down. In fact, the city retained its generally medieval aspect up to the early 18th century, even though some civil buildings and churches appeared in Classical or Baroque style in the 17th century.

The age of Enlightenment provides the framework for the principal urban development of Bordeaux in modern times. This is also the period that produced its best known architectural and urban features. The first important Classical work of this period, started in the 1730s, was the Place royale (Royal Square, today Place de la Bourse, Stock Exchange Square), designed by architect Jacques Gabriel (1667-1742). Chronologically, in reference to Paris, it follows Place Vendôme (Vendôme Square) and anticipates Place de la Concorde (Concorde Square).

Louis-Urbain Aubert, Marquis de Tourny (1695-1760), arrived in Bordeaux as administrator of Guyenne in 1743, staying there until 1757. He undertook the major renovation projects and opened up the city’s medieval urban form. This consisted especially of the façades to the quays along the Garonne, the vital artery of the commercial life of the community. The construction of the Allées de Tourny (Tourny avenues) was initiated in 1744, constituting the first grand town-planning intervention in Bordeaux. Tourny’s programme included the replacement of the medieval gates with new classical architecture (e.g. Ponts des Capucins, Dijeaux, Bourgogne, Aquitaine, and Monnaie). He redesigned the façades and urban spaces associated with the gates, giving the environment a new and coherent appearance. The urban squares created by Tourny include the Place Dauphine (Gambetta nowadays), Place d’Aquitaine, Place de Bourgogne and Place Tourny. In order to link the new urban spaces, Tourny opened new streets, as well as creating a public garden in the French style, later transformed to reflect the English garden style. In his work, Tourny referred to examples of Parisian architects, such as Jacques-Ange Gabriel and Soufflot.

These operations also paved the way for new housing development, which contributed to the classical townscape of Bordeaux. In the last decades of the century, Bordeaux was a vast building site. A number of new public buildings were built. These included the Grand Theatre (1773-1780) by architect Victor Louis, whose main work was the quarter of the Îlot Louis, the new business centre of Bordeaux consisting of homogeneous classical architecture. Another great public building was the Palais Rohan (today the Town Hall), built in 1772-1784 as a new residence for the archbishop. The initial design was by Joseph Étienne but the building was completed by architect Richard-François Bonfin. A large number of distinguished private residences were built at the same time. In the 1790s, during the early years of the Revolution, several decrees enabled the replacement of over nine hundred old buildings, thus continuing the urban renewal in classical style.

In the 19th century, there were several large-scale constructions, such as the first bridge built in stone across the Garonne (1810-22). The ancient fortifications were

demolished in the 1830s to provide space for new facilities (abattoir). From 1818 to 1828, the site of the former Chateau Trompette (Trumpet Castle) was transformed into a vast urban square, Place des Quinconces, the largest in Europe. By the mid 19th century, the city had grown to the limits traced in the 18th-century urban plans. The railway arrived from Paris to Bordeaux in 1852. The railway station was built in Bastide, on the right side of the river. A new railway bridge (1859-1860) was built to serve the left side with the Tourny urban plans. The bridge was built under the direction of Gustave Eiffel to the design of La Roche Talay and Regnault.

The old harbour on the left side of the Garonne was not renovated, but an industrial port developed on the right of the river in the 20th century. During the Second World War, the German occupation forces built here a strong military harbour. After the war, the harbour went through a period of renovation and modernisation.

Traditionally, Bordeaux has based its economy on agricultural products. Wine production became particularly important, starting from the 8th century AD. Wine was one of the reasons for the development of British commerce in the Middle Ages. However, it was mainly the age of Enlightenment that saw the introduction of famous vintages. In 1725, already more than a dozen chateaux produced renowned wines, such as Pontac, Haut-Brion, Margaux, Lafite and Latour. The Bordeaux wine was given a special privilege as “*vins bourgeois*”, still possessed by some fifteen families at the end of the *Ancien Régime*. In 1852, the crops amounted to 1,263,000 hectolitres. After some difficulties in the early 20th century, wine production has been re-established and amounted to some 6,609,000 hectolitres in 2001.

History and development

The origins of Bordeaux are generally dated to the 3rd century BC, at the time of the foundation of Lutetium. Its establishment as Burdigala would have been due to the Celtic tribes of Bituriges. There are relatively few archaeological remains from the earliest period, but it is known that tin was imported from Great Britain in the Bronze Age, in the early 1st millennium BC. After being occupied by the Romans, in 56 BC, Burdigala developed around its port as a market town and it retained this function for the centuries to come. It also already had a university in 286 AD.

During the early Middle Ages, the site of Bordeaux was subject to a number of invasions, such as those by the Vandals, the Visigoths, and the Franks. It was conquered by the Carolingians in the 8th century. At this time the name of Seguin also appeared, the first Carolingian count of Bordeaux, appointed by the king. In 848, the town was destroyed by the Normans, and the population killed.

From 1154, due to the union of the possessions of Aliénor (duchy of Aquitaine), Count of Poitiers, and Henry Plantagenet (duchies of Normandy, Anjou, Maine and la Touraine), Bordeaux was linked with England for three centuries. In 1214, the burgers of Bordeaux were exempted from taxes on their wines. In the 13th century, Bordeaux started developing its first municipal institutions, resulting

in the establishment of the municipality of Bordeaux in 1253.

In the 14th century, Bordeaux was an important political centre, and capital of a vast territory. In the 15th century, due to hostilities between France and England, it had to defend itself against the French, but finally, in 1453, it was conquered by the French army under King Charles VII. In the following centuries, the economy of the town was weak as it had lost an important market in England. In the 16th and 17th centuries, the economy started improving, but citizens' rights were gradually reduced under royal rule, creating some opposition.

During the 18th century, Bordeaux was the seat of various important institutions, including the parliament, the military government, administration, university, and others, which surpassed its needs. The Chamber of Commerce was established in 1705, and the Academy of Sciences, Literature and Fine Arts in 1712, assisting in the economic and intellectual revival. During the French Revolution and following decades, Bordeaux closely followed the political evolution of affairs.

By the end of the 19th century, Bordeaux had developed into a regional metropolis. During the First World War, it was chosen as one of the French bases equipped for warfare. During the Second World War, it was occupied by the German army from 1940 to 1944, but did not suffer serious damage.

3. OUTSTANDING UNIVERSAL VALUE, INTEGRITY AND AUTHENTICITY

Integrity and Authenticity

Integrity

According to the State Party, due to its port, the city of Bordeaux has retained its original functions since its creation, as a city of exchange and commerce. Its history is easily legible in its urban plans from the Roman *castrum* to the 20th century. The most substantial change, which occurred in the 18th century, was the shift from a city still enclosed within its medieval perimeter in 1733, to a city open to its surroundings by 1790. Since then, the city has continued developing following the ideas born during the age of Enlightenment.

ICOMOS considers that the nominated property has retained its overall integrity. ICOMOS questioned some areas included in the original nominated core zone, such as the area of Saint-Jean railway station, which does not have particular quality. As discussed further (below), the revision of boundaries of the core and buffer zones, dated December 2006, includes this area in the buffer zone. ICOMOS therefore considers that the proposed core zone preserves all the essential physical components that express Bordeaux, Port of the Moon.

Authenticity

The nomination dossier does not include a specific statement on authenticity. It states that the history of Bordeaux is easily legible in its plan, since the stages of

topographic formation of the town coincide with the history of the city itself. The Roman plan and the successive extensions of the 13th and 14th centuries are still legible. The comparison of plans dated 1733 and 1790 testify to the transformation of Bordeaux during the 18th century. The hitherto old, closed town became the open city that evolved up to present times according to the plans of the Enlightenment planners. It is understood that the city has retained its authenticity in the historic buildings and spaces created in the 18th and 19th centuries.

ICOMOS considers that the successive 18th century plans, for example, by *Intendant* Tourny and the architects Gabriel and Victor Louis, have been well maintained in the urban context.

In conclusion, ICOMOS considers that the conditions for integrity and authenticity are met.

Comparative analysis

The nomination dossier states that there is no other port city in France (including Rouen, Nantes, Marseille) which has respected its urban and architectural unity over two and a half centuries like Bordeaux. In the nomination dossier, comparison is made with other European World Heritage towns: Florence, St Petersburg, Naples, Sienna, Porto, Salzburg, Riga, Tallinn, Lyon, Urbino, Bruges, Aranjuez, Liverpool and Le Havre.

It is stated that the comparison with Naples, inscribed in 1995, is the most pertinent: the city has conserved rich testimonies of its long history and its royal past, an active harbour and a cultural and political centre during several centuries. Even if Naples illustrates the exceptional evolution of a great city-harbour, it does not present the architectural unity of Bordeaux or the exemplary legibility of its urban form. Liverpool, commercial rival of Bordeaux during the 18th and 19th centuries, is inscribed on the World Heritage List based on its role as pioneer of modern harbour technology. If Liverpool is a port attached to a strong maritime culture, Bordeaux is at the same time a territorial city related to wine production and bearing a strong urban and architectural identity, framed by its economical, cultural and intellectual development.

From this comparison, which includes exceptional European urban ensembles (ports or commerce centres), Bordeaux emerges as a unique ensemble of a harbour city, at the same time fluvial and maritime, a capital of both wine and business, and a town that succeeded in developing an urban and architectural ensemble representing the age of Enlightenment, expressing universal ideals. Besides, if compared with other European ports which are not inscribed on the World Heritage List (London, Barcelona, Hamburg, Stockholm or Athens), Bordeaux, Port of the Moon, has its own identity based on the coherent scale of its urban form and the homogeneity of its civil architecture.

ICOMOS considers that the main themes of the nomination refer to Bordeaux as a major international wine exporting port and as an example of urban planning and architecture from the age of Enlightenment. The comparative analysis in the nomination dossier is made in reference to an *ad hoc* list of European historic cities on

the World Heritage List, which are not all relevant to the case of Bordeaux. As international ports, Liverpool and Valparaiso would appear more relevant. However, taken specifically in relation to wine export, Bordeaux certainly emerges as significant. Regarding the architecture, the Place de la Bourse (Stock Exchange Square) and the Place des Quinconces (Quinconces Square) emerge as significant, comparable to other plans in France, such as Place Vendôme (Vendôme Square) in Paris or the public squares of Nancy.

In conclusion, ICOMOS considers that, despite the observations cited above, the comparative analysis justifies consideration of this property for inscription on the World Heritage List.

Justification of the Outstanding Universal Value

The nomination dossier includes a statement of Outstanding Universal Value, based on the following qualities:

- the importance of the port in international trade over two millennia, and its unrivalled fame as the world's capital of wine;
- its audacious urban planning, in the form of moon crescent, which transformed Bordeaux in the age of Enlightenment;
- its contribution to the development of ideas, being the seat of an ancient university, and having been associated with many renowned cultural personalities of France;
- its continuity of classical and neo-classical architecture from the 18th century to mid 20th century and its particular role in political history.

ICOMOS considers that, besides the importance of the port in regional and international trade activities over the centuries, the significance of some classical and neo-classical architectural and urban ensembles representing the 18th and early 19th centuries are recognised in the history of architecture. The spirit of this architecture continued in Bordeaux, which is today characterised by great homogeneity in its townscape. It is noted that Bordeaux has been the seat of various events related to French political and cultural history. Nevertheless, ICOMOS does not consider that these, *per se*, constitute a justification for its outstanding universal value. The role of the university, claimed to have its origins in antiquity, has not been clearly demonstrated.

Criteria under which inscription is proposed

The property is nominated on the basis of criteria ii and iv:

Criterion ii: The State Party justifies this criterion on the basis that Bordeaux bears testimony of a considerable exchange of influences between people of the land and people of the sea. The city owes its prosperity to its vineyards, the most celebrated in the world, to the strong will of its luminary people, to its natural port and the

Garonne River, which have provided the opportunity to exchange influences with the rest of the world over the centuries. These exchanges have provided this cosmopolitan town, in the age of Enlightenment, with an unparalleled prosperity that created an exceptional urban and architectural transformation that continued through 19th century up to present time.

ICOMOS considers that criterion ii is justified since Bordeaux, Port of the Moon, illustrates exchanges of cultural values over the centuries. In articulating this criterion, it is necessary to stress the traces of those influences on the urban form and architecture of the city.

Criterion iv: The State Party justifies this criterion on the basis that Bordeaux represents an outstanding urban and architectural ensemble, created in the age of Enlightenment, whose values continued up to the first half of the 20th century, with more protected buildings than any other French city, except Paris. Bordeaux is exceptional for the unity of its urban and architectural classical and neo-classical expression, which has not undergone any stylistic rupture over more than two centuries. Its urban form represents the success of philosophers who wanted to make towns into melting pots of humanism, universality and culture.

ICOMOS considers that this criterion is justified as Bordeaux, Port of the Moon, is a city whose urbanism and architecture demonstrate its successive stages of evolution, and particularly the ideas of the age of Enlightenment.

ICOMOS considers that the Outstanding Universal Value has been demonstrated and that the nominated property meets criteria ii and iv.

4. FACTORS AFFECTING THE PROPERTY

The nomination dossier includes the identification of factors affecting the property. The city of Bordeaux is subject to pressures that affect any large historic town today. The State Party states that, as in all large urban agglomerations, Bordeaux has issues of population growth, real estate pressures, air pollution and dirtiness. The nomination dossier includes a list of these issues and outlines the policies and programmes in place to deal with these situations.

ICOMOS considers that these factors are commonly experienced in many large cities and that, in this case, they do not jeopardise the values and integrity of the property.

ICOMOS recommends that special attention be given to projects that could affect the city's qualities, and considers the significance of the historic areas of Bordeaux as testimonies of the development of the city over two thousand years and the unity and coherence of classical and neo-classical monumental ensembles.

Being a port town not far from the Atlantic, Bordeaux has been subject to storms and problems related to water. The city has actively developed a system of defence against such hazards. This includes a comprehensive defence system (RAMSES), which anticipates storms and their

consequences. Bordeaux also has a Plan for protection against the risk of floods.

In order to foresee the potential risks from the development of a large urban agglomeration, the Project Bordeaux 2002-2012 has been conceived. It aims to ensure that Bordeaux continues to be a beautiful, agreeable and safe city that guarantees a high quality of life. Urban policies cover quality of life, urban infrastructure and the search for equilibrium among the different urban functions.

ICOMOS considers that the main risks, such as those related to floods and storm, have been adequately taken into account in risk prevention plans. Efforts must be made to preserve the city's urban and architectural qualities, its outstanding universal values, integrity and authenticity in the face of the unavoidable pressures of a living city.

In conclusion, ICOMOS considers that the main risks to the property are related to urban pressures, and recommends that special attention be given to the management of future development in order to assure the protection of the cultural heritage values of Bordeaux, Port of the Moon.

5. PROTECTION, CONSERVATION AND MANAGEMENT

Boundaries of the nominated property and buffer zone

The core zone is defined as an area within a ring road built at the end of the 19th century, thus including practically the entire historic city. The buffer zone extends to the more recent urban areas in the surroundings. Even recognising the logic of the choice of the boundaries, the extent of both core and buffer zones could cause problems for effective management of such a vast area.

In December 2006 the State Party provided supplementary information on the boundaries of both the core and buffer zones. The boundaries were revised to define an area that, while expressing the proposed outstanding universal values of the property, can be well managed. Both the core and buffer zone have been reduced from those in the original proposal. The core zone includes the essential parts of historic Bordeaux and the perimeter of Saint-Jean railway station with the Pont Eiffel (Eiffel Bridge), an urban extension of the 19th century in the continuity of the city. The technical railway and industrial area of Bercier has been excluded from the core zone and included in the buffer zone.

The buffer zone has been reduced to the west and slightly extended to the east. It encompasses the entire perimeter of the classical town (urban fabric corresponding to development of the city from the 18th century to the 1950s, an area protected in the Local Plan on Urbanism, PLU), areas of concentrated protected elements and the natural boundaries of the right bank of the river (protected in the PLU), indispensable to guarantee visual qualities from the left bank *quais*.

Summarising, the modified perimeter corresponds to the north to the entrance of Bordeaux by the Aquitaine Bridge; to the east by the green limits of the slopes; to the south by

Jean-Jacques Bosc Boulevard and its future prolongation by a bridge and, to the west, by the railways that form the boundaries for the extension of the urban fabric of the town beyond the boulevards.

ICOMOS considers that the revision of the boundaries of the core and buffer zones are adequate to include the main components of the historic town and ensure its proper management.

In conclusion, ICOMOS considers that the boundaries of the core and buffer zones as proposed in the supplementary documents dated December 2006 are adequate to express the outstanding universal value of the property whilst allowing for its protection and management.

Ownership

The nominated property is mainly in private ownership, most of them individuals but also some juridical bodies, such as enterprises and non-governmental associations. Public buildings and plots are owned by the City of Bordeaux, the Gironde Department, the Aquitaine Region, the autonomous port or the State; all guarantee proper management of the property. The City of Bordeaux has the power to implement measures in response to specific necessities and projects.

Protection

The City of Bordeaux has 347 listed buildings, referred to the law of 31 December 1913. Of these, 64 are listed as “*Monuments historiques*” (historic monuments), and 283 are listed on the “*Inventaire supplémentaire des Monuments historiques*” (historic monuments additional inventory). In addition, 31 ensembles are protected as industrial heritage. The historic town is protected by the “*Plan de sauvegarde et de mise en valeur*” (PSMV), approved in 1988 and revised in 1998 and 2002.

The historic town is also subject to the following plans (summaries are included in section *Management*):

- “*Convention Ville d'Art*”;
- Land use plan (*Plan d'occupation des sols*) (POS);
- Local Town plan (*Plan local d'urbanisme*) (PLU)
- Global Project for urban renewal (*Projet global de renouvellement urbain*), 2002, consisting of strategies and operational objectives;
- Plan for urban transportation development.

More detail about the ways in which these mechanisms provide protection for this property is provided in ‘Conservation’ and ‘Management’ below.

ICOMOS considers that the protective measures for the property are adequate.

Conservation

History of Conservation

The nomination dossier does not include specific information on the history of conservation. Detailed explanations of different protective and conservation structures and instruments however summarise some aspects of conservation history. In a sense, the history of conservation of Bordeaux, Port of the Moon, is related to the history of the conservation of historic monuments in France. Many buildings have been included in the existing register of *Monuments historiques* or in the *Inventaire supplémentaire*, classical protection structures established in the country in the 19th century. It is interesting to verify that some buildings were protected as historic monuments as early as 1840.

More recent actions are related to the conservation of urban areas exhibiting urban and architectural qualities. The PSMV was approved in 1988 and reviewed in 1998 and 2002. According to this plan, a protected sector is an area presenting some historic or aesthetic character that justifies its conservation, or the restoration of all or a part of an ensemble of buildings. Currently several plans are intended for the conservation of Bordeaux not only as a group of significant buildings but as an ensemble of urban and architectural coherence and unity. Detailed information on current plans and projects is included in 'Management'.

Present state of conservation

According to the State Party, the City of Bordeaux presents a satisfactory general state of conservation. A great number of monuments, especially the famous Façade, have been or are being restored. After the creation of the *Monuments historiques*, the State has always shown a special interest in Bordeaux, as, after Paris, it is the French city with the largest number of protected buildings. This has provided an especially dense protection. Each protected building has a buffer zone of 500 m around it.

The City of Bordeaux is very active in favour of its heritage, thanks to the PSMV. Special efforts were made from 1996 onwards for the restoration of historic monuments. In association with the State and the regional Council, the City now emphasises regular maintenance over protective interventions.

ICOMOS considers that the overall state of conservation of the nominated property is satisfactory.

Active Conservation measures

The heritage programme is divided into two main themes: conservation and preservation before other types of intervention, and the development of a cultural policy favouring heritage (raising public awareness of the town's heritage).

Urban policies seek to reduce motor traffic and pollution by the construction of tramway lines and underground parking areas. These works allow improved vistas of important monuments like Place de la Bourse, the Cathedral and Palais Rohan's surroundings.

The urban project includes:

- rehabilitation of *quais* by demolition of hangars and the construction of cultural facilities;
- refurbishment of preserved hangars, taking into account their heritage, architectural and cultural dimensions;
- a plan for lighting several sites and monuments, including the project of the two shores, stressing the north-south axis of the Garonne River;
- studies of the infrastructure along the borders of the right bank of the Garonne River;
- rehabilitation of the historic façade of the Palais de la Bourse, including lighting and its dedication to pedestrian uses;
- a campaign for the restoration of the *quais*'s façade, along with a programme for the improvement of housing (OPAH).

Other measures include studies and recommendations on urban furniture and a signage system in sympathy with the heritage character of the town.

In conclusion, ICOMOS considers that the state of conservation of the property is satisfactory and that active conservation measures are adequate to guarantee the maintenance and improvement of the city's urban and architectural qualities.

Management

Management structures and processes, including traditional management processes

Management structures for the protection and conservation of the nominated property include the shared responsibilities of national, regional and local governments. Interventions on buildings declared *Monuments historiques (classés)* must have the support of the Ministry for Culture. Interventions in an area of 500 m surrounding historic monuments must also be reviewed by the Architect for the Buildings of France (*Architecte des Bâtiments de France*). Buildings registered in the *Inventaire supplémentaire* also require authorisation for alterations and must be reviewed by the Architect for the Buildings of France.

Concerning protected areas (*secteurs sauvegardés*), established by the *Loi Malraux* (1962), both changes to existing buildings or construction of new ones must have special permission and be submitted to the Architect for the Buildings of France.

Management plans, including visitor management and presentation

The nomination dossier includes a detailed list and explanation of current plans aimed at the conservation of the property. The plans are:

- "Convention Ville d'Art" (1978): Its aim is to present and enhance the monumental heritage of

the town, with the support of the National Office of Historic Monuments;

- Land use plan (POS) (1983, last revision 2003): The Plan, managed by the City of Bordeaux, establishes general rules on land use. The Mayor has the responsibility of granting urban approvals. Since February 2002, a Local Plan on Urbanism (PLU) is under development by the representatives of the Urban Community of Bordeaux.
- Plan to protect the City of Bordeaux (1988): The Plan is developed by the Ministry of the Culture and the Departmental Section on Architecture and Heritage (*Service Départemental de l'Architecture et du Patrimoine*) (SDAP) of Gironde and includes a document on urbanism;
- Urban Project for the City of Bordeaux (1996): The Plan deals with policies for major public works and takes into account heritage matters;
- Global Project of urban renewal for the historic centre of the agglomeration (2002): The project includes a remarkable number of strategies and operational objectives;
- Plan of protection from the risks of floods (PPRI) (2003): The purpose of the plan is to establish risk preparedness through reinforcing or constructing protective works;
- *Management Plan*: The City of Bordeaux is responsible for the implementation of the management plan (POS/PLU, PSVM) for the nominated property. Codes of the Urban Community are applied in the buffer zone. The City is also responsible for the management of public buildings, protected or not. The Ministry of Culture intervenes on behalf of the national government in the case of buildings declared *Monuments historiques*. Responsibilities are shared with regional agencies: Regional Direction for Cultural Affairs (DRAC), Departmental Service for Architecture and Heritage (DGAC) and the General Direction for Urban Planning of the City of Bordeaux (DGAU).

The Management Plan is based on four main aspects: preserving the historic and heritage character, allowing the controlled evolution of the historic centre, unifying the various planning rules and contributing to the international significance of metropolitan Bordeaux. To achieve those objectives, six main actions have been implemented: measures for the preservation and enhancement of heritage, promotion of ambitious, good quality architecture for new construction, strategies to improve public spaces, landscape and greenery as basic elements of the urban project, implementation of policies of communication and exchange and reliable institutional partnerships.

In relation to visitors, the Tourist Office estimated that in 2002 two million people visited the city; the average visit duration is 2.6 days. The City of Bordeaux has a Tourist Office, installed since 1970 in a historic building.

Information stands are located in the railway station and, in summer, at the airport. The Office has 22 permanent employees and some 20 guides are employed in summer. Information is available for visitors; the Office publishes 700,000 documents per year.

ICOMOS considers that the management is adequately established and implemented for the nominated property.

Involvement of local communities

Several associations, together with the General Direction for Cultural Affairs and the Section for Heritage, act to promote Bordeaux's heritage. Among them, the main organisations are Recollections of Bordeaux (*La Mémoire de Bordeaux*), European Cities Renaissance, *Cap Archéo* and Grand Saint Michael Promotion (*Promotion du Grand Saint Michel*). These organisations, along with the rich cultural life of the city, detailed in the nomination dossier, verify that the local community is involved in the conservation and promotion of Bordeaux's cultural heritage values.

Resources, including staffing levels, expertise and training

The City of Bordeaux provides the necessary budget for conservation of the nominated property. Supplementary resources are provided by the State and territorial associations that assist on specific operations. Historic monuments have special grants; the participation of the State is generally 50%. Other public associations can also participate, especially in the case of monuments owned by communities. In these cases the State provides 50% of the budget, the Department 25% and the City 25%.

Required expertise for the conservation and maintenance of protected buildings are provided by State agencies. The nomination dossier includes a detailed list of involved agencies. Local governments can also provide specialised studies, offices or adviser architects.

In conclusion, ICOMOS considers that the financial resources, staffing levels, expertise and training are adequate for the proper protection and management of the property.

6. MONITORING

The City of Bordeaux has established a system of monitoring, particularly for listed historic buildings and the area of *Secteur sauvegardé*, including public spaces. There are plans to extend monitoring to various social and economic functions, the residential quarters, accessibility of services, etc. Key indicators related to historic monuments are: protection, studies prior to restoration and restoration works. Indicators related to the protected area are: the number of restoration and rehabilitation of buildings. Currently there are no indicators to monitor public spaces.

The City of Bordeaux has commissioned a study to prepare a set of indicators, which will include: maintenance and location of industrial, commercial and handicraft buildings; improvement of the image of the quarter;

increasing cultural and tourism activities; qualitative uses of public spaces; improvement of accessibility to services; housing quality and improvements of the environmental quality in the historic centre.

ICOMOS considers that the basis for a monitoring plan is adequate, though special attention is required for monitoring public spaces. ICOMOS recommends that time periods for the monitoring measurements be established.

7. CONCLUSIONS

ICOMOS considers that Bordeaux, Port of the Moon, demonstrates outstanding universal values, based on its long tradition as the capital city of a world-famous wine production region, an active harbour city related to world trade and a city that exhibits testimonies of two thousand years of history. The renovation of the city from the early 18th century onwards that included construction of big open spaces, boulevards and civil buildings, make Bordeaux an outstanding example of a classical and neo-classical urban and architectural ensemble, which bears testimony to the universal scope of the ideals of the age of Enlightenment.

The proposed boundaries of the nominated core zone are adequate to express the outstanding universal values of Bordeaux, Port of the Moon, and its integrity and authenticity. The buffer zone, as revised in December 2006, encompasses urban areas surrounding the historic city that have the required levels of protection.

Recommendations with respect to inscription

ICOMOS recommends that Bordeaux, Port of the Moon, France, be inscribed on the World Heritage List on the basis of *criteria ii and iv*:

Recommended statement of Outstanding Universal Value

Bordeaux, Port of the Moon, is an outstanding example of the exchange of human values over more than two thousand years, due to its role as capital city of a world-famous wine production region and the importance of its port in commerce at regional and international levels. The urban form and architecture of the city are the result of continuous extensions and renovations since Roman times up to the 20th century. Urban plans and architectural ensembles stemming from the early 18th century onwards place the city as an outstanding example of classical and neo-classical trends and give it an exceptional urban and architectural unity and coherence.

Criterion ii: Bordeaux, Port of the Moon, constitutes an exceptional testimony to the exchange of human values over more than two thousand years. These exchanges have provided this cosmopolitan town, in the age of Enlightenment, an unparalleled prosperity that provided for an exceptional urban and architectural transformation that continued through 19th century up to present time. The different stages of construction and development of the harbour town are legible in its urban plan, especially the big transformations carried out from the early 18th century onwards.

Criterion iv: Bordeaux, Port of the Moon, represents an outstanding urban and architectural ensemble, created in the Age of Enlightenment, whose values have continued up to the first half of the 20th century. Bordeaux is exceptional in the unity of its urban and architectural classical and neo-classical expression, which has not undergone any stylistic rupture over more than two centuries. Its urban form represents the success of philosophers who wanted to make towns into melting pots of humanism, universality and culture.

ICOMOS recommends that the State Party gives consideration to the following in order to optimise the management system for the property and its buffer zone:

- Special attention should be given to projects in the city and its surrounding area that could affect the city's qualities, and in particular the significance of the historic areas of Bordeaux as testimonies of the development of the city over two thousand years and the unity and coherence of the classical and neo-classical monumental ensembles;
- Identify and apply indicators for the condition and qualities of public spaces as an essential component in monitoring the nominated property over time.



Map showing the boundaries of the nominated property



General view of the town



Cailhau's Gate



The Royal Square by Gabriel



The Mairie



The Gobineau building

Mediterranean shore of the Pyrenees (France/Spain)

No 1261

*Official name as proposed
by the States Parties:*

The Mediterranean Shore of
the Pyrenees

Location:

Autonomous Community of
Catalonia, *Comarca de l'Alt
Empordà* (Spain)
Languedoc-Roussillon
Region, *Pays Pyrénées-
Méditerranée* (France)

Brief description:

The area where the Pyrenees dip into the Mediterranean Sea has been a funnel and a place of resistance for influences from East and South for over 2,000 years. Its steep rocky coastline has been colonised by the Greeks, Carthaginians, Romans, Visigoths, and Franks, amongst others. It has never been central to any of these political movements, although the Catalans were for a while an important maritime power, colonising wide parts of the Mediterranean. Confined to a small domain between mountains and sea, its inhabitants have absorbed multiple influences to create a hybrid Catalan culture and landscape that is characterised by mixed farming, in places communal use of scarce water resources, and remains of strong fortifications.

Category of property:

In terms of the categories of cultural property set out in Article 1 of the 1972 World Heritage Convention, this is a *site*. In terms of the *Operational Guidelines for the Implementation of the World Heritage Convention* (2 February 2005) paragraph 47, it is also 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:* No

*Date received by the
World Heritage Centre:* 31 January 2006

Background: This is a new nomination.

Consultations: ICOMOS has consulted its International scientific committee on Historic gardens and cultural landscapes. IUCN has provided an evaluation of the natural attributes of the site.

Technical Evaluation Mission: A joint ICOMOS-IUCN mission visited the site from 3 to 8 September 2006.

*Additional information requested and received from the
State Party:* ICOMOS sent a letter to the States parties asking for supplementary information on 29 September 2006, and the States parties answered on 18 December 2006.

Date of ICOMOS approval of this report: 21 January 2007

2. THE PROPERTY

Description

The property is sited at the extreme south-eastern ridge of the Pyrenees where it meets the Mediterranean Sea. It encompasses both the northern and southern slopes of the *Massif de l'Albère* and the *Serra de Rodes* and the peninsula of the *Cap de Creus*. These rocky slopes divide the area into four zones: mountain, alluvial plain, coast and related marine area. The area is characterised by its multiple routes through the mountains, its coastal links to the eastern Mediterranean and North Africa, by its relative geographical confinement, its strategic defensive position, and by the way the local Catalan culture reflects a complex fusion of the various peoples, cultures and political systems that have impacted on its territory. The mixed economy is based on the cultivation of vines, cork oak, olives, the grazing of cows and fishing. Some of the cultivated fields are enclosed by terraces with irrigation systems that are managed communally.

The area is characterised by its association with the Catalan culture and language, which extends over a much larger area of the hinterland and coast in Spain: Catalonia, parts of Valencia and the Balearic Islands, in France: 'northern Catalonia', and the whole of Andorra.

In the 20th century the area proved to be a crucible for the development of several major artists.

The nominated property extends to 640 sq km in both Spain and France. A small portion of the marine area is included in the nominated property. The buffer zone is part terrestrial and part marine, and covers the whole coastal area and almost all the land boundary. The Spanish part of the nominated property is located in Catalonia one of the autonomous communities of Spain, and includes 25 municipalities, while the French part is located in the Languedoc-Roussillon Region and includes 16 municipalities.

The property extends along coast and inland an almost equivalent distance. It is therefore as much an upland site as a coastal one.

The property contains the following attributes which are dealt with in turn:

- Dolmens, menhirs and engraved rocks
- Greek and Roman settlements
- Routes of passage: Héracléenne way
- Monasteries and Abbeys
- Fortifications

- Villages and towns
- Vernacular farm buildings
- Cultivation: the vine, olive trees, cork oaks
- Irrigation
- Artists associated with the property

Dolmens, menhirs and engraved rocks

The landscape has numerous megalithic remains and although not individually exceptional when compared to others in northern France or England, as a collection they are substantial evidence for a sizable population in the area in pre-historic times. 140 dolmens and menhirs and over 400 engraved rocks are found mainly in two concentrations in the South of *Albère*, testifying to the presence of communities of agro-pastoralists in the transverse valleys.

Greek and Roman settlements

There were several Greek and Roman colonies along the coast. *Emporion* at the mouth of the River Fluvia developed to be the largest Greek port in the Iberian peninsula. Founded in around 550 BC it continued to flourish under the Romans until overtaken economically by Tarragona and Barcelona. It finally succumbed to Viking raids in the 9th century and was abandoned. Excavations started in the 20th century; to date around a quarter of the site has been excavated.

Other Greek colonies such as *Rhodè* and Port-Vendres are still inhabited. The latter became the division between Roman provinces. In the natural harbour the many wrecks bear testimony to its mercantile importance.

Routes of passage: Héracléenne way

The nomination dossier stresses the persistence of some routes across the property: in the west, the line of the Roman road is still followed by the main national route and will soon be added to by the proposed high speed train (TGV).

Monasteries and Abbeys

Several monasteries were established by Charlemagne when this area came under Frankish control. They were on the edges of his Empire facing Islamic Spain. Of many, only traces remain; other were rebuilt in 12th century – some with 12th century frescoes such as Saint-Martin-de-Fenollar, well-preserved and with a fine register of Frescoes.

The most substantial monastic remains are those of the Benedictine Abbeys of Sant Pere de Rodes, which grew to a substantial size and gained influence over a larger part of the region in the 11th and 12th centuries. Its large church, with re-used Roman column, is seen as the principal exponent of Romanesque style in Catalonia. It was quite extensively restored in the 20th century.

Fortifications

The instability of the area over more than two millennia has resulted in many layers of fortifications including walls of the Greek *Empúries*, Roman fortifications at the *via Domitia* (Fort de la Cluse-Haute, Castell dels Moros, the *Portorium*), mediaeval fortifications, feudal castles, 17th century Vauban fortresses (the Perthus, Fort de Belleguarde, Collioure, Port-Vendres, Fort Saint-Elme and the remodelling of the Chateau Royal and the Tour Fanal), restructuring of fortifications in the 18th and 19th centuries and the blockhouses of the Second World War and of Franco's regime.

Villages and towns

Between the 11th and 13th centuries villages developed around the former strongholds. Montesquieu-des-Albères and Laroque-des-Albères are the best preserved. Others also included in the nominations are Cadaqués, Port de la Selva, Sant Martí d'Empúries, Collioure and Castelló d'Empúries. They are typically organised around the church, abbey or castle.

Vernacular farm buildings

In the interior, villages are more loosely arranged, sometimes around a church. The farmhouses, many constructed in the 17th and 18th centuries are constructed of local stone embedded in mud or more recently lime mortar and with red pantile roofs. Near the coast the houses often included a defensive tower in response to raids by pirates. Many farms had ice houses for storing ice collected in winter. These, and small stone shelters for shepherds used when their animals grazed the high mountains in summer, were built of corbelled stone. Large numbers of the shepherds' huts survive, mostly above a height of around 1,000 metres. The ice-wells were let on concessions from the landowners and the ice was a profitable commodity when sold to neighbouring towns. Most of the houses above 500 metres have been abandoned.

Cultivation: the vine, olive trees, cork oaks

The traditional agricultural economies of the area such as vines, olive trees and cork oaks, together with modest cultivation of chestnuts for wood, are all typical of the wider Mediterranean region, as are the terracing system around Banyuls and Collioure. Vines are said to have been introduced by Greeks of the colonies of *Emporion* and *Rhodè*, and it was the Romans who further developed their cultivation on the mountain slopes. The fierce northern wind has led to the need for vines to be grown with trees or on trelliss.

The monasteries of Saint-Génis-des-Fontaines, Saint-André of Sorède, Sant Pere de Rodes, Sant Quirze of Colera and Santa Maria of Roses were all actively involved in the promotion of the industry. In the 12th and 14th century the Knights Templars also contributed and the Kings of Majorca supported the expansion of vineyards in Collioure, the port of their transitory kingdom (1276-1344).

Irrigation

The landscape and its scarce water supplies has prompted ingenious solutions to water management as extant in the French Alpera Massif where water is caught in reservoirs

and distributed via a network of channels to fields and orchards.

In Montesquieu-des-Albères, Villelongue-dels-Monts, Laroque-des-Albères and Sorède, fields are irrigated by a web of channels and a system of valves leading from the water catchment areas. The management of system is entrusted for each village to an association of owners and tenants who manage the system on a communal basis. With its 2,279 meters, the irrigation canal of Laroque-des-Albères is the longest on the eastern slope north of *Albère*. The water was also used to drive grinding mills probably from the 14th century.

Artists associated with the property

Part of the *Rivage* around the small towns of Collioure, Céret and Cadaqués, inspired the work of several prominent artists associated with fauvism, cubism and surrealism. Henri Matisse, André Derain, Pablo Picasso and Salvador Dalí were all influenced by the light and landscape of this Mediterranean coastline.

History and development

The spine of the Pyrenees as it dips into the Mediterranean has been a boundary since Roman times when it separated the Roman Provinces of Narbonnese and of Tarraconaise. It later lay between the medieval kingdoms of Majorque and Catalonia-Aragon, and since 1659, has been the border between France and Spain.

The area has been inhabited since Neolithic times – as testified by large numbers of dolmens and menhirs. In the early Iron Age with a gradual warming of the climate, new people migrated south into the area bringing with them iron technology and new burial rights. Numerous necropoleis survive from this time.

In Greek and Roman times many written sources testify to the commercial importance of the sea-ports for trade around the Mediterranean, as well as describing the hostile winds and seas which terrorised the Etruscans, Phoenicians and Greeks.

The Romans established dispersed villas and introduced the cultivation of vines and olives. They also constructed roads across the Pyrenees, and from the 3rd century AD established a series of fortifications in response to increasing raids from the north.

While the Vandals and others failed to shake the Empire, the Visigoths succeeded and during the 6th and 7th centuries consolidated their hold over the area, re-constructing Roman fortifications and also constructing new ones across the Pyrenees.

In the 8th and early 9th centuries, the area was subject to invasion from both south-west and north-east as the Arabs from Spain and the Franks under Charlemagne fought to gain control. The area became part of the Holy Roman Empire under Charlemagne. He was a great monastic patron and monasteries were established along his border with Islamic Spain.

In the late 9th and 10th centuries with the break-up of the Frankish empire, the power of monasteries increased and a

large number of abbeys, monasteries and churches were developed across the region linked to large agricultural estates. A feudal structure emerged in the 10th century with feudal lords consolidating their power based on new strongholds strategically defending the valleys. These strongholds were often part way down the slopes, for instance at Quermançó, Laroque-des-Albères, and Montesquieu-des-Albères, rather than on the tops as earlier fortresses were, and some were on the plains such as at Argelès, Cantallops, and Capmany. These new castles became the focus of settlement over the next few centuries – a pattern that still dominates the landscape today.

Conflicts between France and Spain characterised the 15th-17th centuries which together with a renewal of piracy, led to the development of further defences by both Spain and France such as at Roses, the castle of Trinitat, and the fortress of Ciutadella. The Treaty of the Pyrenees in 1659 under which Roussillon was annexed to France, led France to re-configure its fortresses. Vauban designed defences which took account of the new artillery at for instance Collioure close to Port-Vendres, and Perthus, laid out according to the distinctive bastion plan.

The treaty of the Pyrenees did not end the wars between France and Spain. The fortresses were used in the war of the league of Augsburg (1684-1700), the war of the succession of Spain (1705-1714), the war which followed the French Revolution (1793-1795), and at the time of the Napoleonic wars in Spain (1807-1814).

Two world wars (1914-1918 and 1939-1945) and the Spanish civil war (1936-1939) again involved the militarisation of this frontier zone. Both the Germans and Spanish built defences in the Second World War. The area was a passage for people fleeing from Germany into Spain in the Second World War, and in the Spanish civil war there was a passage for an exodus in the opposite direction with many fleeing from Spain.

In the 18th century new roads into the area, and in the 19th century the new railway between France and Spain had a profound effect in opening up the area which had previously looked outwards only from the coast. By the mid 20th century, this new access led to the almost total abandonment of the higher farms above 500 metres. Only in Piedmont have the high level settlements and terraces survived. Between 1850 and 1880 there was a massive extension of the vineyards near the coast.

The first tourists arrived with the new roads in the 18th century. In the 20th century artists colonies in the triangle formed by the towns of Collioure, Céret and Cadaqués fostered major artists working in fauvism, cubism and surrealism.

In the 20th century the economy of the area shifted substantially towards tourism as the towns along the coast focused on summer visitors and leisure sailing. Inland, many of the vineyard landscapes still survive and the lower lying lands grow olives; higher up, the chestnut groves and pastoral communities are now far less important economically. The systems of summer grazing in the high meadows still exist in some areas, although few shepherds stay in the mountains with their animals. However in the last two decades there has been much support for sustaining and re-invigorating these traditional activities;

for instance new areas have been planted with olive trees and support has been given to the re-introduction of grazing to keep back the scrub and prevent forest fires.

3. OUTSTANDING UNIVERSAL VALUE, INTEGRITY AND AUTHENTICITY

Integrity and Authenticity

Integrity

Integrity relates to wholeness and intactness of the property in relation to its values. In the case of the nominated property it is not clear how the delineated area reflects a discrete socio-economic, cultural or geographical area or zone, and therefore whether it is 'whole'.

In places the nominated property is fragmented. Some towns are excluded despite cultural links to their landscape hinterlands; and elsewhere, landscapes are excluded even though their cultivation relates to settlements that are included in the nominated property.

ICOMOS therefore considers that there are instances where the identified values seem to extend beyond the nominated property. In addition, the wholeness is also not intact along the coast in the south of the property, where areas that have been developed have been excluded. Overall, the nominated property presents as a somewhat fragmented entity.

Authenticity

As a cultural landscape, authenticity in part relates to the physical reflections of the socio-economic and cultural processes that have shaped the landscape. In the case of the nominated property, the processes are many and varied.

The values that are put forward for the area relate to how the landscape reflects a fusion of ideas and cultures, exchanges and multiple influences, and its use as a passage for people and ideas, and as a gate and threshold.

If the property is to be seen as an organic and continuing cultural landscape that reflects these forces, there needs to be a clearer articulation of how the identified values relate to physical evidence in the landscape. Further clarification is needed as to how the fusion of ideas has resulted in distinct practices in the area.

The property does not reflect a coherent geo-cultural area; it has absorbed many outside influences and is a mixture of rural and urban areas.

IUCN considers that the nominated property demonstrates the on-going adaptation of different cultures to the ecological characteristics of this area, as shown through elements of technology and landscape design. An important example is the development of complex irrigation systems that supports the vineyards as well as the engineering system for water supply in town and villages, which still operates in an efficient way, including in serious drought periods. This is supported by a communal water management governance regime that is still in place and is supported by national laws and regulations. Both examples of irrigation and water supply systems are in line

with modern concepts on the sustainable use of water resources.

ICOMOS considers that the irrigation and water management systems are of interest but they only occur in parts of the nominated property. Furthermore the identified values of the nominated property focus strongly on its relationship with the sea, and neither of these characteristics is linked to the coastal aspects of the property.

Individually each of the elements of the landscape would seem to be found in many other parts of the Mediterranean region – if this area is exceptional, there needs to be more justification as to how a fusion of cultures has resulted in a particularly distinctive type of settlement related to the physical environment.

The impact of tourism in the coastal areas and the pressure for development to service that tourism means that the external forces are in places far stronger than the ones that created the landscape or emanate from the local communities. In several areas they are a threat to the authenticity of the landscape to the extent that some parts have been excluded from the nominated property (see below).

Inland in the rural areas, the authenticity seems to be much stronger with agricultural practices and building traditions still being sustained. As for the authenticity of relict element such as archaeological sites, this is strong as is the authenticity of the larger built monuments.

Overall ICOMOS considers that the nominated property does not reflect a coherent geo-cultural area and that the conditions of integrity and authenticity in relation to the values put forward in the nomination are not met.

Comparative analysis

In the Comparative Analysis, the States Parties consider historical axes of circulation that existed in Europe, and compares them to what is seen as the mountainous axis of Mediterranean shore of the Pyrenees.

The Roman *via Egnatia*, from present day Albania to Istanbul, and the *via Appia*, are cited but with the conclusion that none has a continuity of use or the presence of vestiges as important as those of the Mediterranean shore of the Pyrenees.

The nomination dossier also considers Cinque Terre (Italy), and the way that this property remained on the periphery of the main axes of communication. However it is acknowledged that the Mediterranean shore of the Pyrénées was never a central communication place and thus these two sites have similarities.

Comparisons are also made with the Madriu-Perafita-Claror Valley (Andorra) and the Mount Perdu (France, Spain). In those sites the landscape was shaped by the high mountains rather than the Mediterranean shore. It is stated that it is the maritime frontage of the nominated property that belongs to the sphere of Mediterranean world, profited from its climate and benefited from the exchanges with the East. It was also the basis of its qualities of light and colour

which attracted some of the major painters of the 20th century.

The Amalfi Coast is also considered as a Mediterranean comparator but it is concluded that although there are many similarities in terms of crops and architecture, the social and political situation was very different because Amalfi was a separate political entity.

The valley of the Rhine is considered as one of principal axes of transport in Europe since prehistory, supporting the exchanges between Mediterranean area and the interior. This valley also occupies a strategic situation in the middle of Europe, while at the same time it was a border and a bridge between the East and West and touched by many empires. However, in spite of their similarities, the Valley of the Rhine, organised around its river, is seen as being very different from the Mediterranean shore of the Pyrénées whose axis is one mountainous mass.

In conclusion it is stated that the Mediterranean shore of the Pyrénées is unlike any of the example cited.

ICOMOS considers that the landscape as nominated has been proposed for inclusion in the World Heritage List for its reflection of multiple cultural influences bought about by the area's strategic location. ICOMOS considers that comparisons are needed with other sites which display this cultural fusion. However in the case of the Mediterranean shore of the Pyrénées, ICOMOS considers that first of all it is necessary to define more precisely the cultural unit and its identity. Unlike many of the other examples cited, the current property does not have a readily identifiable boundary as a reflection of a cultural unit.

In conclusion, ICOMOS considers that before a satisfactory comparative analysis can be undertaken, it is necessary to define more clearly the cultural unit and its identity in relation to its boundary.

Justification of the Outstanding Universal Value

The States Parties consider that the property is of Outstanding Universal Value for the following reasons:

Sited where the Pyrenees meet the Mediterranean Sea, the landscape of the Mediterranean shore of the Pyrénées reflects

- Its siting as
 - a zone of passage, for territories and people;
 - a junction of cultures, between the East and the West since the Neolithic era, or a vector of penetration for influences coming from the East;
 - a link between North and South, Europe and Africa since Antiquity;
 - a divisional limit between Roman provinces, between Islam and Christendom, then between medieval counties, before becoming, in 1659, a border between two States.
- A common and shared identity within the natural barrier formed by the Pyrenees.

- Its influence as an exceptional crucible for Modern art.
- Multiple cultural responses to the environment in the form of terraced vineyards, cork oak groves, olive trees, exceptional architecture, clever systems of irrigation and fishing.
- 'Catalanity' – developed through the fusion of many influences.

Criteria under which inscription is proposed

The property has been nominated on the basis of criteria ii, v and vi.

Criterion ii: The States Parties justify this criterion on the basis that the Mediterranean shore of the Pyrenees displays:

- The impact of Greek colonists and Romans, who introduced new agricultural practices (vine, olive-tree) and generated an inter-breeding which has fostered Catalan culture.
- Its geopolitical situation as a defender and protector of what became borders or passages, as attested to by its great number of fortifications from Greek city to the blockhouses of the Second World War.

ICOMOS does not consider that the nomination has demonstrated how the landscape is exceptional in relation to other similar landscapes that have time depth and show a succession of responses to differing political regimes and the impacts of trade and cultural contacts.

ICOMOS does not consider that this criterion has been justified.

Criterion v: The States Parties justify this criterion on the basis that the landscape reflects:

- a mix of coastal and mountain cultures, with both low stone walls and irrigation systems;
- Mediterranean crops of olive, cork oak and vines;
- the will of men to preserve the landscape;
- farmhouses that are the heirs of Roman villas.

Further in relation to criterion v, it is said that the nominated property demonstrates the long-term adaptation of land use practices to the environment that have shaped a living and evolving cultural landscape. The agricultural, forestry and fisheries practices have been substantially influenced by the knowledge of different cultures living in, and passing through, the property. This has, in turn, been strongly influenced by the nominated property acting as a gateway throughout the Mediterranean basin and the European continent as a whole. Many of the existing technologies for maintaining the vineyards as well as for traditional fisheries have their roots in Roman and Greek practices. But more importantly, this has resulted in a strong and unified culture – the Catalan – which has

survived political conflicts and transcends existing political boundaries to create a strong identity.

ICOMOS considers that the justification for this criterion could apply to many settlements around the Mediterranean whose landscapes have been modified over many centuries by trade and the waxing and waning of Empires, and where traditional practices have links to Roman and Greek settlements. ICOMOS does not consider that the reasons why the nominated property is an outstanding example of this process have been justified.

ICOMOS does not consider that this criterion has been justified.

Criterion vi: The States Parties justify this criterion on the basis that the territory is where new artistic perceptions and designs emerged. It is directly associated with modern artists and their paintings which are of universal significance. In the triangle formed by the cities of Collioure, Céret and Cadaqués, the artistic movements of fauvism, cubism and surrealism were born and developed in the first half of the 20th century.

ICOMOS recognises that the three towns and the landscape were influential in the development of the work of several key 20th century artists, such as Henri Matisse, André Derain, Pablo Picasso and Salvador Dalí. However, ICOMOS does not consider that these towns or the landscape now reflect those associations well.

ICOMOS does not consider that this criterion has been justified.

ICOMOS considers that the identified values of the nominated property have not been translated into tangible elements in a way that can define the cultural landscape. ICOMOS further considers that more work would be needed to link these values to the landscape in order to define more closely its cultural identity before it is possible to assess its Outstanding Universal Value.

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

4. FACTORS AFFECTING THE PROPERTY

Development

Parts of the nominated property, particularly near the coast, suffer from considerable development pressure, especially on the Spanish side. This is evident from the amount of building activity in sensitive areas such as Port Lligat and Cadaqués, including in the nominated property. The future development strategy for the tourist colony of Empuriabrava includes the building of 2,900 dwellings, and this has apparently been accepted. It is understood that there are active citizens groups and NGOs seeking to resist the development of 140,000 dwellings along the coastal strip of Catalonia, planned in spite of provisions of the *Pla Director Urbanistic del Sistema Costaner* (PDUSC). A wind farm on the mountains of Albera has been approved in spite of strong opposition of both local citizens and the Government of France.

The PDUSC has the aim of limiting building along the coast; nevertheless the number of dwellings that could be built under the current urban planning instruments is 18,270 in eight areas. The promontory between Cadaqués and Port Lligat appears to be particularly vulnerable because the amount of land classed as urbanisable or urbanised seems to favour considerable building activities.

There are similar concerns for the possibility of building activities in the buffer zones of Roses, Llançà Port de la Selva and the urban areas of Serra de Rodes as these areas have a direct impact on the nominated property. In the latter the current plans would seem to allow substantial expansion of the built area into currently rural areas. All these areas are highly visible from the sea and the plain of Empordà.

Farming

Farming is a key activity that underpins the maintenance of the values of the landscape. It is therefore necessary that active support is given where possible to sustaining traditional practices (and in some cases, reviving these practices). The nomination dossier lists various programmes to support farming activities. However, it is not clear how far these are specifically aimed at sustaining the distinctiveness of the cultural landscape.

Clearly agriculture will need to develop to survive. New structures in this open and sensitive landscape will need to be handled with care. It is suggested that guidance is prepared (see below).

Risk Preparedness

- Fires

Violent winds, high numbers of summer visitors and changes in land use with the disappearance of farmers and shepherds, and the lack of management of woodlands create serious fire hazards.

All administrations have specific action plans in place against the fires. In Spain these include the Plan of Civil Protection for Forest Fires in Catalonia (1994), and in France the inter-commune Trade Union for the Development and Safeguard of Albère. There is also cross border collaboration under a programme called Salamander which exchanges information on methods and techniques.

- Floods

The government of Catalonia has emergency plans for intense rains and/or floods and heavy falls of snow.

Climate change

The area is particularly vulnerable to potential climate change impacts of rises in sea level or more extreme weather. The former could impact adversely on the viability of ports and harbours, while the latter could have a severe impact on vineyards and olive trees – which were already effected by frosts in recent decades.

In conclusion, ICOMOS considers that the main risks to the property are from development, particularly along the

coast on the Spanish side where current plans would seem to allow considerable urban expansion in the nominated property and its buffer zone, all of which would impact adversely on the qualities and setting of the nominated property.

5. PROTECTION, CONSERVATION AND MANAGEMENT

Boundaries of the nominated property and buffer zone

The rationale for identifying the boundaries has not been set out in the nomination dossier. The boundaries are a mixture of physical, administrative and legal lines, including roads on the French side, and roads and protected areas on the Spanish side, such as the *Paratge Natural de l'Albera*, the Natural Park of Cap de Creus, the Natural Reserve of the Aiguamolls de Emporada and the archaeological area of Empúries.

The boundaries do not appear to have been chosen mainly to reflect a coherent socio-economic or cultural unit. In places this means that the identity of the cultural landscape has not been the main factor influencing the determination of the boundary, and settlements are divided from their supportive landscapes, or significant sites are left outside the core zone. One example is Agullana where the cork trees around the village, identified in the nomination dossier as being a characteristic feature, are outside the nominated property.

A considerable part of the prehistoric remains which have been inventoried are also outside the boundary of the property, although they are included within the buffer zone. This results from the boundaries following areas largely protected for their natural attributes rather than their cultural ones. As a cultural landscape, ICOMOS considers that the boundary should have more accurately reflected cultural factors.

The buffer zone is made up of two parts: one terrestrial and the other marine. Along the coast, the buffer includes in the Spanish part, settlements excluded from the nominated property as they have been developed to an extent that they are said to have lost their integrity and authenticity. These areas are: L'Escala, Empuriabrava, the urbanised areas of Roses, part of Llançà and the Port de la Selva. Although in the buffer zone, the siting of these towns makes them prominent in the nominated landscape. They are therefore extremely sensitive and need management policies to ensure that further development does not impact adversely on the adjacent nominated area.

The inland buffer zone consists of parts of the alluvial plain, with ample evidence for traditional farming based on dispersed farms, with cultivated and abandoned fields, orchards and field boundaries. Much of this supports the agricultural activities within the nominated area and therefore needs active rather than passive protection.

The reasons for delineating the buffer zone on the Spanish side are not clear: municipal areas included present similar features to those excluded. In the south, the buffer is a narrow strip that does not seem to present adequate protection from perceived threats. ICOMOS therefore considers that the rationale for the buffer zone on the

Spanish side needs to be re-examined to allow better protection. It is suggested that the zone should be expanded to the road joining l'Escala with Figueres to allow better protection of the archaeological remains of Empúries and to strengthen protection for the Aiguamolls in relation to development in the Region of Empordà.

ICOMOS considers that the boundaries of the core and buffer zone do not currently respect cultural boundaries nor do they provide adequate protection for all the cultural attributes.

Ownership

The majority of the nominated property is in private ownership.

Protection

Legal Protection

The nominated property is covered by a wide range of protection and planning measures, especially as this is a transboundary nomination. Very little of the area is protected for its cultural qualities: this is restricted to individual monuments and a few small areas. Protection for the remainder relies on planning policies.

France's legal and planning arsenal is supplied with more specific instruments for the protection and management of urban areas, sites and landscapes of cultural value, like the *secteurs sauvegardés*, or the sites classes. The planning instruments like the *Schéma de cohérence territoriale* and the *Plan local d'urbanisme* are conceived to include concerns and appropriate measures to ensure the quality of the built environment. Among the legislative and planning instruments of particular relevance for the management of the nominated property, are the *Contrats territoriaux* within the law for agriculture, based on territorial diagnoses that identifies objectives and challenges for the administrative area considered (departments); the provisional *Schéma d'aménagement et de développement touristique du Pays Pyrénées-Méditerranée* (2006), which represents the theme 2 of the *Charte de territoire* of the *Pays Pyrénées-Méditerranée*, a document elaborated at the departmental level that outlines the shared vision for the development of the territory, established by the *Loi d'orientation pour l'aménagement et le développement durable du territoire* (LOADDT) and developed in 1999. The *Charte de territoire* may be seen as an agreement among different actors (mainly public) on general objectives, means (especially the transfer of taxes at the local level) and governance strategies and procedures that orient the future development of the territory at the inter-municipal level.

In Spain, the protection of cultural heritage is matter of cooperation between the State and the Autonomous Communities, according to the competencies acknowledged by the Constitution of Spain. The National Law for the Spanish Historic Heritage, issued in 1985, outlines the provisions to be put in place by the competent authorities (autonomous communities, municipalities or any other intermediate administrative level) to ensure the protection of the Spanish heritage. These provisions have to be further detailed by each autonomous community.

The law foresees the development of Special Urban Plans for the historic cores or groups of buildings, historic sites and archaeological areas, which have to be approved by the competent authorities and whose implementation is the responsibility of Municipalities. In the nominated property there are two villages that have this type of plan: Cadaqués, and Castellò d'Empúries.

The *Generalitat* of Catalonia developed its own law for the protection of cultural heritage in 1993. The law establishes two levels of protection: the properties of national cultural interest (BCIN) and the catalogued properties or properties of local cultural interest (BCIL). The development of catalogues of BCILs is the responsibility of municipalities (greater 5,000 inhabitants) or of the *Consells Comarcals* (for municipalities less than 5,000 inhabitants). While a high level of protection and control for BCIN is foreseen by the Law 9/1993, the protection of BCILs is delegated to the instruments established by the urban planning legislation (art. 39) and no specific criteria for intervention are provided. However, permission for projects affecting BCILs in the Alt Empordà are issued by the Cultural Commission of the *Generalitat* of Catalonia, located in Girona. The Law also provides for spaces of archaeological protection, where any intervention affecting the subsoil should be accompanied by a study of the archaeological remains. These spaces are currently determined by delimiting a 100m belt around any archaeological sites.

The municipalities and the *Consell Comarcal* of Alt Empordà have undertaken an inventory of rural *masies*, which will be the base for developing a special planning tools for the rehabilitation of *masies* and rural buildings related to agricultural activities, and individual residential units.

The planning situation in Catalonia is complex, due to the recent approval and subsequent revision of the Law for Urban Planning (2002 and 2004 respectively) and of the law for the protection and management of landscape (2005), the approval of new planning instruments (*Pla Director Urbanístic del Sistema Costaner* - PDUSC, May 2005, and *Pla Director Urbanístic dels Àmbits del Sistema Costaner Integrats per Sòl Urbanitzable Delimitat sense Pla Parcial 9 Approvat* - PDUSC-2, Dec 2005) and the *Pla Territorial Director de l'Empordà* - PDTE, 2006, and the *Pla Director Urbanístic del Sòl no Urbanitzat de la Serra de Rodes i Entorns* - PDU Serra de Rodes, 2006.

The *Pla Director Urbanístic del Sistema Costaner* (PDUSC) aims at regulating and reducing the building activity on the coastal strip of Catalonia, which is under threat due to the increasing extension of the built areas. The Plan fixes a limit of 500 m from the coastal line for building in non-urbanised areas. The plan identifies three types and uses of non-urbanised land which are subject to specific provisions.

The *Pla Territorial Director de l'Empordà* (PDTE) aims at orienting the development of the *Comarca* over a 20 year period. For settlements and urban areas, six different strategies of development are outlined: *creixement potentiat*, *creixement moderat*, *creixement de reequilibri*, *canvis d'ús i reforma interior*, *millora urbana i complexió*, *manteniment del caracter rural*. The only explicit limit to

building development is 30% of the urban consolidated nuclei or urbanised areas for the category *creixement moderat* while the development scenario for the area foresees a provision of 48,000 dwellings for Alt Empordà for the next 20 years.

The Law for the protection and management of landscape (*Llei 8/2005 de protecció, gestió i ordenació del paisatge*) outlines the instrument for the protection and management of the landscape in the spirit of the European Landscape Convention. This law foresees the elaboration of catalogues of Catalan landscapes (*catàlegs del paisatge*), with descriptions and objectives of landscape quality for each landscape unit, and the related proposed measures to meet these objectives.

Considering the urban planning instruments for the historic centres of five villages: Cadaqués, Selva de Mar, Castellò d'Empúries (Spain), Laroque-des-Albères, and Collioure (France), it emerges that Cadaqués and Castellò d'Empúries have special plans according to the Spanish Law for heritage protection (1985), while Selva de Mar has just recently revised its existing planning provisions. For Collioure a Plan has been developed and is in force, while Laroque-des-Albères has an urban planning instrument (PLU), conceived for retention of valuable components of the municipal territory and the improvement of degraded areas.

Overall, the urban planning tools in place appear to be generally effective in limiting the modifications to the character of the historic urban fabric and its immediate setting. However, some of them, like in the case of Selva de Mar, foresee the possibility of modest increases in the heights of the edifices that may lead to the homogenisation of the cityscape and to the demolition of historic roof structures that have not been expressly classified as cultural properties. On the other hand, Selva de Mar has developed an inventory of the ground-floors and basements of cultural value which cannot be demolished. The present inventory may be expanded to other features of the buildings, and be developed into guidance for alterations.

Although the *Pla Director Urbanístic del Sistema Costaner* (PDUSC) has the aim to limit building along the coast, in the municipalities facing the sea and included in the nominated property and related buffer zone, the number of dwellings that it will be possible to construct under the urban planning instruments in force is 18,270. There are therefore concerns about how effective the planning tools will be in limiting the number of new dwellings in sensitive areas within the nominated property and in the buffer zone, particularly in the coastal areas in Spain.

ICOMOS considers that the planning instruments in force, together with specific protection measures give an adequate framework for the protection of cultural values. However, ICOMOS has concerns that the pressure for development, particularly along the coast, could lead to economic pressures taking precedent over measures to sustain cultural qualities.

Conservation

History of Conservation

Very sensitive conservation works have recently been carried out in some areas. In other areas, such as the *Tour de la Massane* and the remains of the Castle of Laroque-des-Albères, less conservation works have occurred.

Present state of conservation

The conservation of the landscape is ensured through traditional agricultural practices. The condition is somewhat uneven; for instance, the terraces in some areas are very well maintained, and have been abandoned in others, which impacts on their legibility.

In general the standard of conservation of the built heritage in the villages and towns is good. In some areas the standard is less acceptable, for instance in parts of Agullana. Traditional activities in some villages, such as Collioure, have given way to tourist activities and this inevitably impacts on their overall appearance through standardised rehabilitation solutions.

Active Conservation measures

These include a large ongoing project for the rehabilitation of the monastic complex of Sant Quirze of Colera, which includes tourism arrangements.

The conservation of the terraced vine landscapes of Banyuls and Collioure are being addressed by a strategy developed jointly by the *Chambre d'agriculture*, the CAUE (Council for Architecture, Town planning and the Environment) and the DIREN (Regional Directorate for the Environment) of Languedoc-Roussillon. Studies developed by the DIREN and CAUE on the traditional system of water management in the villages of Laroque-des-Albères, Montesquieu-des-Albères, Saint-Génis-des-Fontaines will form the basis for a maintenance and conservation programme.

ICOMOS considers that overall the standard of conservation is acceptable.

Management

A Management Plan has been prepared for the nominated property which aims to coordinate the actions of the many stakeholders involved. It sets out a strategic approach to management between 2007 and 2013, which promotes the involvement of local communities. The Plan will be overseen by a trans-boundary body, the *Groupeement européen de coopération territoriale*.

The Plan addresses conservation, knowledge and diffusion of the values of the cultural and natural heritage. Amongst its many aims are the following:

- Acquire and share knowledge
- Preserve and rehabilitate the cultural inheritance
- Safeguarding of the cultural landscape by supporting social and economic development
- Support for traditional agro-pastoral activities

- Rehabilitate and develop the rural inheritance
- Recover the historical memory
- Support quality tourism

Overall the plan aims to balance conservation and development and put forward frameworks for actions that will contribute to improving the quality of life of the inhabitants.

Currently these strategies are not translated into concrete actions. ICOMOS considers that a more detailed action plan should be developed which would include monitoring as well as maintenance and conservation. It would also be helpful to define how this plan will relate to the large number of initiatives already under way in rural areas (and listed in the nomination dossier) to sustain aspects of the landscape such as grazing areas, olive groves and vineyards. For instance, work is being undertaken by the Catalan Observatory of Landscape to develop 15 *Pactes territoriaux*, with strategic plans to ensure the recognition of local agro-alimentary products, maintaining pastoral activities in the mountains, protecting the rural landscape, promoting bio-farming and breeding, and improving technologies related to agro-forestry activities.

It would be appropriate if the Plan could also address the need for thematic guidance on certain key aspects of the cultural landscape such as the methods and materials for maintaining vernacular buildings, the design and mitigation of new agricultural structures, and the appropriate design of new buildings.

What the Plan does not appear to address are the major developmental threats to the property. ICOMOS suggests that the proposed management body needs to propose as a matter of some urgency, appropriate strategies and actions to counter threats in sensitive areas.

In conclusion, ICOMOS considers that management arrangements need to be targeted more closely at the threats to the property, and developed into concrete action plans, in order to put in place proactive responses to the needs and threats of the property.

6. MONITORING

The overall property is well documented, the result of research over several decades. This includes work on archaeological sites, historical research, including local and social history, architecture, including rural architecture, the terraced systems of Banyuls and Collioure and the water management systems of the French side of Alpera. Much of this has been published – the work on water management in 2000 and 2004. No detailed monitoring regimes are set out in the nomination.

ICOMOS considers that it would be desirable to develop formal monitoring indicators linked to the key qualities of the area.

7. CONCLUSIONS

The detailed nomination dossier shows vividly how the property reflects in its cultural landscape the way societies over two millennia and more have responded to their difficult mountain and coastal environment, and the effects of many political conflicts.

ICOMOS does not consider that the nomination has demonstrated how the landscape is exceptional in relation to other similar landscapes. ICOMOS does not consider that the nominated criteria and the Outstanding Universal Value of this property have been demonstrated

ICOMOS considers that the boundaries of the nominated property have not been linked to a clearly defined geo-cultural unit associated with the proposed cultural values.

ICOMOS commends the State Parties for the appraisal of the cultural qualities of the area, for their efforts in bringing communities together across a large area in order to foster a strong cultural identity, and for using these to help sustain and regenerate the area. This is manifest in the Management Plan which aims to safeguard the landscape through supporting social and economic development.

However there are threats to parts of the property from development and these constitute a major concern and one that the management strategies are not so far actively addressing. ICOMOS considers that it would be appropriate to work to extend the Management Plan to develop specific strategies and actions to address development threats in sensitive areas. It would also be desirable if the Management Plan could link with initiatives already under way in rural areas to sustain traditional practices through putting in place strategies encompassing proactive measures to sustain grazing areas, olive groves and vineyards. ICOMOS also considers that it would be beneficial to develop further guidelines on methods and materials for maintaining vernacular buildings and the appropriate design of new buildings (including agricultural buildings).

Recommendations with respect to inscription

ICOMOS recommends that the Mediterranean shore of the Pyrenees, France and Spain, should not be inscribed on the World Heritage List.



Map showing the boundaries of the nominated property



Greek settlement of Emporion (Empúries)



Castello church of Empúries



Fort of Bellegarde



Collioure



Traditional cultures (vineyards)

Corfu (Greece)

No 978

Official name as proposed

by the State Party: The Old Town of Corfu

Location:

Ionian Islands Region, Corfu Prefecture

Brief description:

The Old Town of Corfu is located on the Island of Corfu (*Kerkyra*), off the western coasts of Albania and Greece. It is an ancient site, which was in a strategic position at the entrance to the Adriatic Sea. The fortifications of Corfu were designed by renowned Venetian engineers, and they were used for four centuries to defend the maritime trading interests of the Republic of Venice against the Ottoman Empire. In the course of time, the fortifications had to be repaired and partly rebuilt several times, more recently under the British rule in the 19th century. The mainly neo-classical housing stock of the Old Town is partly from the Venetian period, partly of later construction.

Category of property:

In terms of the categories of cultural property set out in Article 1 of the 1972 World Heritage Convention, this is a *group of buildings*. In terms of the *Operational Guidelines for the implementation of the World Heritage Convention* (2 February 2005) Annex 3 (14, ii), the property is an *inhabited historic town*.

1. BASIC DATA

Included in the Tentative List: 28 June 1999

International Assistance from the World Heritage Fund for preparing the Nomination: No

Date received by

the World Heritage Centre: 31 January 2006

Background:

An earlier nomination was presented in 1999. ICOMOS completed its evaluation of the property and recommended that the property should not be inscribed on the World Heritage List. The State Party withdrew the nomination dossier before its examination by the 24th session of the Bureau of the World Heritage Committee (Paris, June 2000). The new dossier differs mainly from the first by the presence of a substantial comparative analysis and by a change in the vision of the buffer zone.

Consultations: ICOMOS has consulted its International Scientific Committees on Historic Town and Villages and on Fortifications and Military Heritage.

Literature consulted (selection):

Puppi, L., *Michele Sanmicheli, architetto di Verona*, Padua, 1971.

Agoropoulou-Birbili, A., *The Architecture of the town of Corfu under Venetian rule*, Athens, 1976; *The work of the Corfiot architect I. Chronis*, Technical Chamber of Greece – Corfu Branch, Corfu, 1997; *Documentation of archaeological features during British rule* (in Greek), Corfu, 1997.

Concina, E., *Città e fortezze nelle tre isole nostre del Levante*, Venice, 1986.

Corfu: History, urban life, architecture, 14th-19th c., Cultural Association of Corfu, Corfu, 1994.

Corfu: a Mediterranean synthesis, Acts of the International Conference, Cultural Association of Corfu, Corfu, 1998.

Technical Evaluation Mission: 18-21 September 2006

Additional information requested and received from the State Party: ICOMOS sent a letter to the State Party on 20 December 2006 and the State Party provided additional information on 18 January 2007. ICOMOS sent another letter on 30 January 2007 and the State Party supplied additional documentation on 26 February 2007.

Date of approval of this report: 11 March 2007

2. THE PROPERTY

Description

The island of Corfu (in Greek: *Kerkyra*) lies in the Adriatic Sea off the western coast of Greece and Albania. The Old Town of Corfu lies between two fortresses midway along the island's eastern coastline. The Old Citadel and the New Fort form two remarkable monuments in the urban fabric. To the east, the canal dug by the Venetians has transformed the rocky promontory on which the Old Citadel was founded into an island looking down over the tiny harbour of Mandraki. The citadel retains the imposing Venetian fortifications, restructured by the British, laid out on three levels on the far side of the canal linked by a footbridge to the Spianada. A first outer wall leads to the frontal fortification, consisting of two orillon bastions (Martinengo and Savorgnan) and a curtain through which the main gate enters (around 1550). A stone bridge crosses a broad ditch along which runs a 19th century barracks. A second wall protects the base of the two fortified peaks, and access to it is via a series of ramps and stairs. A vaulted passage leads to the harbour of Mandraki which itself also retains a monumental gate, now closed. Some buildings on various levels, mainly dating from the 19th century, have been preserved. These include the former Venetian prisons, raised in height by the British, four powder magazines, the hospital, which stretches from one peak to the other, two barracks, and the Church of St George in the form of a Doric temple (1840).

The imposing structure of the New Fort dominates the north-western sector of the Old Town. A pentagonal salient, a half-salient, and the small fort of Punta Perpetua are connected by a rampart and command the old harbour. Long sloping tunnels lead to the British barracks and the two bastions of the Seven Winds linked by a curtain wall and looking out over the countryside. These look down on

a broad ditch and two bastions preserved from the second Venetian perimeter wall. The two gates of the New Fort still exist, as does the church of Panagia Spiliotissa (rebuilt in 1739). The ring road around the Old Town follows the line of the ancient town wall, some traces of which remain to the west and south and one gate, the Spilia Gate, of the original four (Royal Gate, St Nicholas Gate, Raimonda Gate).

The outlines of the Old Town were determined by lack of space and the needs of defence. The urban fabric forms a compact core consisting of ten quarters, differentiated by their form. The quarters which range over the three low hills (Campiello, Agion Pateron, and Agiou Athanassiou) are irregular and fragmentary in their make-up, a sure sign of the original suburbs preserved from the demolition necessary for the construction of the perimeter wall. They are characterised by a network of radial streets, small squares, and compact blocks of housing clustered around the churches. The outskirts of these areas, in transition, and the quarters built in continuation of the perimeter wall present a more regular framework, especially those which open out behind the Spianada in a grid of straight lines running east-west.

The two main streets running east-west and the north-south axis which once connected the Old Citadel to the four gates of the perimeter wall follow an ancient outline. This simple traffic system, dictated by strategic imperatives, contrasts with the secondary alleys (the *kantounia*, between 1m and 3m wide) which form a complex network of stairs and vaulted tunnels running through a series of small squares, of which Kremasti Square is a typical example.

The restricted space within the perimeter dictated the construction of multi-storey dwellings ranged indiscriminately in serried ranks along the streets. Though the Old Town must have numbered many a patrician dwelling during the Venetian period, only a few of these can be identified in the present day, such as the houses of the Ricchi and Yallina families (17th century). The house fronts of this period are characterised by regular rows of windows, stone balconies, ground-floor arcades, and a red and ochre rendering that contrasts with the stone door and window jambs. Many feature doorways ornamented with sculptures. Some public buildings from the Venetian period still survive: the door of one of the grain stores (1592), the pawnbroker's (1630) that forms part of the Commissioners' Palace, part of the Spilia barracks, and the Grimani barracks to the south of the Spianada.

The trend towards building upwards was accentuated in the 19th century when the old buildings were raised to anything up to six storeys or, in most cases, replaced by new buildings which often occupied more space than in the past by annexing the courtyards. The wider frontages were divided into three vertical sections, always with many windows, but tended to become more uniform, particularly along sections of the main streets, while remaining sober in their classically inspired ornamentation. Balconies on every floor created a sense of movement and variety in the facades.

Spianada, the esplanade which divides the town from the Old Citadel, takes up one-third of the surface area of the

Old Town. Once the most populous of the suburbs in the 16th century, it attained its present size in the 17th century for military reasons and is still bordered by 18th century barracks. In the late 18th and early 19th centuries it became an architectural showcase dedicated to leisure activities and civil functions. The French embellished it by constructing arcade-fronted buildings, the Liston, to the west and planting trees. Under the British it became a monumental open space with the Neo-Classical Palace of St Michael and St George (1819-23), once the residence of the Commissioners, to the north and to the south the circular Ionic temple dedicated to Maitland: both are the work of George Whitmore (1775-1862).

At the centre of the Old Town stand two large squares, each leading off one of the two main streets. On Dimarchion Square, once the social and cultural centre of the Venetian town, which lies on the slopes of the hill of Agiou Athanassiou, stand the 18th century Cathedral of St James, the former residence of the Latin Archbishop (rebuilt in 1754), and the *Loggia Nobilei* (1663-69), converted into a theatre in 1720 and home of the Town Hall since the early 20th century.

On Heroon Square stand the churches of St John (pre-16th century) and *Phaneromeni*, a basilica with three aisles dating from the early 18th century and altered in 1832 by Corfiot architect Ioannis Chronis, who designed many public buildings in the Neo-Classical style for the Old Town, including the Ionian Bank which stands on the same square, the home of Ioannis Kapodistrias, the first Greek governor, and the Ionian Parliament (1854, then restored after the bombings in 1943). To the north of this square stands the Church of St Spyridon (1589-94, altered in 1670), which houses the relics of the patron saint of the town and the island. Although the Orthodox faith was upheld during the centuries of foreign occupation, contact with the Latin West also influenced the religious architecture of the Old Town, which shows a strong Byzantine tradition. The example of the single-aisled church, often with a low exterior narthex running around the exterior, is much more common than the three-aisled basilica, although both reflect the repertoires of the Renaissance and the Baroque style. The simplicity of the facades offers a remarkable contrast to the elaborate interior decoration. Many ancient churches were enlarged and renovated in the 18th century.

History and development

Corfu, the first of the Ionian Islands encountered at the entrance to the Adriatic, was annexed to Greece by a group of Eretrians (775-750 BCE). In 734 BCE the Corinthians founded a colony known as *Kerkyra* to the south of where the Old Town now stands. The town became a trading post on the way to Sicily and founded further colonies in Illyria and Epirus. The coast of Epirus and Corfu itself came under the sway of the Roman Republic (229 BCE) and served as the jumping-off point for Rome's expansion into the east. In the reign of Caligula two disciples of the Apostle Paul, St Jason, Bishop of Iconium, and Sosipater, Bishop of Tarsus, introduced Christianity to the island.

Corfu fell to the lot of the Eastern Empire at the time of the division in 336 and entered a long period of unsettled fortunes, beginning with the invasion of the Goths (551).

The population gradually abandoned the old town and moved to the peninsula surmounted by two peaks (the *korifi*) where the ancient citadel now stands. The Venetians, who were beginning to play a more decisive role in the southern Adriatic, came to the aid of a failing Byzantium, thereby conveniently defending their own trade with Constantinople against the Norman prince Robert Guiscard. Corfu was taken by the Normans in 1081 and returned to the Byzantine Empire in 1084.

Following the Fourth Crusade and the sack of Constantinople by the Crusaders in 1204, the Byzantine Empire was broken up and, in return for their military support, the Venetians obtained all the naval bases they needed to control the Aegean and the Ionian Seas, including Corfu, which they occupied briefly from 1204 to 1214. For the next half-century, the island fell under the sway of the Despots of Epirus (1214-67) and then that of the Angevins of Naples (1267-1368), who used it to further their policies against both the Byzantine Empire now re-established in Constantinople and the Republic of Venice. The tiny medieval town grew up between the two fortified peaks, the Byzantine *Castel da Mare* and the Angevin *Castel di Terra*, in the shelter of a defensive wall fortified with towers. Writings from the first half of the 13th century tell of a separation of administrative and religious powers between the inhabitants of the citadel and those of the outlying parts of the town occupying what is now the Spianada.

In order to assert its naval and commercial power in the Southern Adriatic, the Republic of Venice took advantage of the internal conflicts raging in the Kingdom of Naples to take control of Corfu (1386-1797). Alongside Negropont (Chalcis), Crete, and Modon (Methoni), it would form one of the bases from which to counter the Ottoman maritime offensive and serve as a revictualling station for ships en route to Romania and the Black Sea.

The ongoing work on defining, improving, and expanding the medieval fortified perimeter reflects the economic and strategic role of Corfu during the four centuries of Venetian occupation. In the early 15th century activity concentrated on the medieval town, with the development of harbour facilities (docks, quays and arsenals) and continued with the renovation of the defence works. Early in the following century a canal was dug, cutting off the medieval town from its suburbs.

Following the siege of the town by the Turks in 1537 and the burning of the suburbs, a new programme of works was launched to isolate the citadel further and strengthen its defences. The strip of land (now the Spianada) cleared in 1516 was widened by demolishing houses facing the citadel walls, two new bastions were raised on the banks of the canal, the elevation of the perimeter walls was lowered, and the two *castelli* were replaced by new structures. The work, based on plans drawn by Veronese architect Michele Sanmicheli (1487-1559), were completed in 1558, bringing the town's defences up to date with the rapid progress made in artillery in recent decades.

Yet another siege by the Turks in 1571 decided the Venetians to embark on a vast project covering the medieval town, its suburbs, the harbour, and all the military buildings (1576-88). Ferrante Vitelli, architect to

the Duke of Savoy, sited a fort (the New Fort) on the low hill of St Mark to the west of the old town to command the surrounding land and at sea, and also the 24 suburbs enclosed by a ditched wall with bastions and four gates. More buildings, both military and civil, were erected and the 15th century Mandraki harbour was restructured and enlarged. At the same time, the medieval town was converted to more specifically military uses (the cathedral was transferred to the new town in the 17th century) to become the Old Citadel.

Between 1669 and 1682 the system of defences was further strengthened to the west by a second wall, the work of military engineer Filippo Vernada. In 1714 the Turks sought to reconquer Morea (the Peloponnese) but Venetian resistance hardened when the Turkish forces headed towards Corfu. The support of Christian naval fleets and an Austrian victory in Hungary in 1716 helped to save the town. The commander of the Venetian forces on Corfu, Giovanni Maria von Schulenburg, was inspired by the designs of Filippo Vernada to put the final touches to this great fortified ensemble. The outer western defences were reinforced by a complex system of outworks on the heights of two mountains, Abraham and Salvatore, and on the intermediate fort of San Rocco (1717-30).

The treaty of Campo Formio (1797) marked the end of the Republic of Venice and saw Corfu come under French control (1797-99) until France withdrew before the Russian-Turkish alliance that founded the State of the Ionian Islands, of which Corfu would become the capital (1799-1807). The redrawing of territorial boundaries in Europe after the fall of Napoleon made Corfu, after a brief interlude of renewed French control (1807-14), a British protectorate for the next half-century (1814-64).

As the capital of the United States of the Ionian Islands, Corfu lost its strategic importance. Under the governance of the British High Commissioner Sir Thomas Maitland (1816-24), development activity concentrated on the Spianada; his successor, Sir Frederic Adam (1824-32), turned his attention towards public works (building an aqueduct, restructuring the Old Citadel and adding new military buildings at the expense of the Venetian buildings, reconstruction and raising of the town's dwellings) and the reorganisation of the educational system (the new Ionian Academy was opened in 1824), contributing to the upsurge in intellectual interests sparked during the French occupation. At the same time, the British began demolishing the outer fortifications on the western edge of the town and planning residential areas outside the defensive walls.

In 1864 the island was attached to the Kingdom of the Hellenes. The fortresses were disarmed and several sections of the perimeter wall and the defences were gradually demolished. The island became a favoured holiday destination for the aristocracy of Europe. The Old Town was badly damaged by bombing in 1943. Added to the loss of life was the destruction of many houses and public buildings (the Ionian Parliament, the theatre, and the library), fourteen churches, and a number of buildings in the Old Citadel. In recent decades the gradual growth of the new town has accelerated with the expansion of tourism.

3. OUTSTANDING UNIVERSAL VALUE, INTEGRITY AND AUTHENTICITY

Integrity and Authenticity

Integrity

The Old Town of Corfu is a fortified Mediterranean harbour retaining traces of Venetian occupation, including the Old Citadel and the New Fort, but primarily of the British period.

The strict legal measures enacted after World War II, and the listing of the town for protection as a cultural monument in 1967 have provided the basis for the control of changes and the possibility to retain the integrity of the town. During the British period, three forts were preserved: the Old Fortress, the New Fortress and the small island of Vidos. The plan provided for the demolition of all the western forts. The British did demolish the south-west side in 1937 and fort of Sotiros in 1938 to give space for prisons. In the old and new fortresses, the British intervention related to internal restructuring and some new additions.

The overall form of the fortifications has been retained. Nevertheless, like most fortifications, Corfu has faced many severe military attacks, causing destruction, demolition and rebuilding. The interventions of the 19th century and the rebuilding after the World War II have in fact reduced the historic fabric of the property. Only a relatively small part of the structures actually dates from the Venetian period.

Authenticity

Corfu developed from a small Byzantine town along the lines of a western urban model, which can be seen on all cultural levels and displayed in the town's structure and form. The Old Town of Corfu today occupies the same area as the ancient town whose overall design it still reflects, with the two fortifications, the open space of the Spianada, the compact urban core with its different quarters and the streets. This urban fabric has been shaped by centuries of demolition and reconstruction dictated by military needs. In the 19th century the British were the first to begin dismantling the complex Venetian defence system, the scale of which is amply illustrated by the many maps still extant. The British example was followed by the Greek government after 1864.

About 70% of the pre-20th century buildings date from the British period. There were no large openings made in Corfu as was the case in many other fortifications. Some of the dwellings have undergone further modifications in the 20th century, such as the addition of an extra floor.

World War II bombing destroyed some houses and buildings in the Old Town, particularly in the western section, where whole blocks were destroyed. The buildings thus lost were in part replaced by new constructions in the 1960s and 1970s.

These interventions represent a particular juncture in history and express the aesthetic attitudes of their time,

clearly distinguished from previous buildings. The existence of rich records on the old form of the town has ensured full documentation in the case of interventions to existing buildings.

The fortifications of Corfu and the historic urban areas have been subject to various armed conflicts and consequent destruction. The present form of the ensemble results from the works in the 19th and 20th centuries, even though based on the overall design of previous phases, particularly in the Venetian period.

ICOMOS considers that the fortified ensemble of Corfu is authentic, despite the many structural alterations resulting from its major strategic importance as a military position. It has been actively involved in many conflicts which took place at the point of contact between the West and the Mediterranean East from the 15th to the 20th centuries. It has been rebuilt several times, and altered to allow for developments in weapons of attack and principles of defence, successively by the Venetians and by the British. The integrity of the fortified ensemble, in its current state of conservation, is satisfactory in terms of expressing its outstanding value.

ICOMOS considers that the urban site of Corfu is representative of an urban history which is closely associated with the structure of forts and ramparts. ICOMOS considers however that the authenticity and integrity of the urban fabric are primarily those of a neo-classical town.

In conclusion, ICOMOS considers that the authenticity and integrity of the fortified ensemble of Corfu enable the expression of its outstanding value.

Comparative analysis

The comparative analysis in the 2006 nomination document refers to the following Mediterranean fortified cities: Rhodes, Valletta, Dubrovnik, Trogir, and Heraklion. In the supplementary information provided by the State Party, the comparison has been extended to several other port towns in Italy, the Near East and the Dalmatian coast. Corfu is distinguished partly due to archaeological evidence of history from the 8th century BC and from the Byzantine period.

It is argued by the State Party that Corfu is characterised due to its European influences and for its identity resulting from its role as a crossroads of civilisations. The fortifications of the Venetian period, designed by architects Sanmicheli, gave Corfu a major role as one of the strategic military bases of Venice at the entrance to the Adriatic Sea. It is also one of the few areas that avoided Ottoman occupation keeping its western character.

There are a number of important fortifications in the eastern Mediterranean region. Of these, Valletta and Dubrovnik are certainly the most impressive. The maritime republic of Venice established its reign through a series of fortifications along the Dalmatian coast, and Corfu was one of these. The Ottoman Empire ruled in the inland of the Balkans and in the eastern part of the Mediterranean, including the old town of Rhodes and the town of Heraklion on the island of Crete. From the mid 14th

century Dubrovnik became an autonomous republic and a rival to Venice. Valletta instead was ruled by the Knights of Malta and remained the most important fortified port in this part of the Mediterranean until the 20th century.

ICOMOS considers that Corfu certainly had an important strategic position at the entrance to the Adriatic Sea. For this reason it also had to face the many attacks by the Ottomans. Historically, the property has its origins in antiquity, but architecturally the fortification represents a typical Renaissance fort, which was rebuilt several times. The housing stock is in neo-classical style, but without special architectural features for which it could be distinguished.

ICOMOS considers that the comparative study that accompanies the new dossier is satisfactory, and that it enables a suitable assessment of the value of the property.

Justification of the Outstanding Universal Value

The State Party considers that Corfu has an Outstanding Universal Value for the following:

The Old Town of Corfu, internationally renowned, is a unique cultural entity of a high aesthetic value: the aesthetic value is recognised in the structure and form of the once-walled town, as well as in its arts, letters and social life. The Old Town developed diachronically, through the osmosis of features of the two worlds of the Mediterranean, the East and the West. It has been preserved, alive and substantially unaltered, until the present day.

The defence system and the urban fabric were designed and developed during the Venetian period, from the 15th to the 18th centuries, and then by the British Empire during the 19th century.

The importance of Corfu's fortifications for the history of defensive architecture is huge. From both the technical and aesthetic point of view they constitute one of the most glorious examples preserved, not only in Greece, but across the Eastern Mediterranean more widely. At various occasions, Corfu had to defend the Venetian maritime empire against the Ottoman army.

Neo-classical in its architecture, the old town bears witness to the duration of European architectural and cultural influence in the Balkans, which were mainly dominated by the Ottoman empire. Corfu is also important for studying the development of urban multi-storey buildings, since it is the first Greek city in which the idea of horizontal ownership appeared. The composite character of the town that resulted from its history and the ability to assimilate differences without conflict led to the development of a particular cosmopolitan atmosphere with intense European symbolism.

Criteria under which inscription is proposed

The property is nominated on the basis of criteria i, ii and iv.

Criterion i : According to the State Party, the forts of Corfu are highly important in military architecture, from

15th to 19th centuries. Work of the leading architects and engineers, the fortifications required all the creative genius of those involved to be united in an organised effort in which science and art triumphed over nature.

ICOMOS considers that the fortifications of Corfu are an illustration of the military architecture of the late Renaissance period, in a remarkable geographical position. The defensive site has maintained its general structure over several successive sieges and reconstructions. It would however be going too far to say that criterion i is fully illustrated by the site.

ICOMOS considers that this criterion has not been justified.

Criterion ii: According to the State Party, Corfu is unique in preserving traces since the 8th century of Corinthian, Macedonian, Roman, Byzantine, Angevin, Venetian, French, British and Greek influences. Corfu has never known racial, political or religious hatred.

ICOMOS considers that the main features of the property are its fortifications and the old town, which are the result of modern influences. The reference to the Venetian, British and Greek periods is common to most places in the Mediterranean. As such, there are not enough elements to support this criterion.

ICOMOS considers that this criterion has not been justified.

Criterion iv: According to the State Party, the structure and form of Corfu has been preserved more or less unchanged keeping its late medieval and Renaissance features. The Corfu urban dwelling that took the form of a multi-storey building, as it came to be in the Venetian period and continued to develop during the 19th century, is a very interesting building type, unique in Greece for its early appearance and valuable for the study of the historical development of horizontal property ownership from its beginnings to the particular form it takes today.

The State Party refers to the neo-classical multi-storey building of the old town as being of interest in the Greek context. ICOMOS does not consider that this is sufficient to justify this criterion.

On the other hand, the comparative analysis set out in the nomination dossier of 2006 highlights the remarkable nature of Corfu's defence system, which is characteristic of fortifications of the Venetian period.

ICOMOS considers that Corfu does represent one of the significant fortifications in the eastern Mediterranean. Designed by the Venetians, it has demonstrated the quality of its design through the many attacks to which it has successfully resisted. Even though the property has been repaired and rebuilt after the various damages, it has still retained its overall form.

ICOMOS therefore considers that this criterion is applicable.

ICOMOS considers that the Outstanding Universal Value has been demonstrated and that the nominated property meets criterion iv.

4. FACTORS AFFECTING THE PROPERTY

The nomination dossier includes an identification of the following factors.

Development pressures are seen particularly in the need by inhabitants to make alterations to existing buildings, such as building new upper floors. In the old town, part of the building stock has been taken over by poorer social strata with limited ability to afford expensive repairs. Some of the problems that have required special intervention relate to weak structural conditions. However, recent renovation works have already improved the situation.

Environmental problems relate to high humidity and dampness, and the risk of heavy rains, which can result in floods. Corfu is not located in serious earthquake hazard area. Fire is noted as a possible hazard but has been rare. Only 6% of the visitors to the island actually visit the old town area.

In addition to these factors, ICOMOS has concerns regarding the large size of the buffer zone. Particular attention is required to ensure that no tall buildings are built in the buffer zone.

ICOMOS considers that the main threat facing the site is the risk of uncontrolled private initiatives affecting housing stock inside the site and in the buffer zone. ICOMOS recommends great vigilance in this matter.

5. PROTECTION, CONSERVATION AND MANAGEMENT

Boundaries of the nominated property and buffer zone

The site nominated consists of the two fortresses and the old town located in between them; it occupies a surface area of 70 hectares.

ICOMOS considers that the proposed site is appropriately defined.

The buffer zone in its new definition covers an urban area which is relatively large and homogeneous. It includes many elements of the neo-classical town, green zones and more recent urban extensions. It also includes ancient monuments, Byzantine monuments, many archaeological excavation areas, and museums. Forming a homogeneous whole, the buffer zone occupies a surface area of 162 hectares. The coastal strip, to the north of the buffer zone but not included in it, is public property under the supervision of the Ministry of Marine Commerce, and is managed by the Corfu port authority. It is therefore a closed space with the function of a port. Any intervention modifying the built structure must be submitted for approval to the local and ministerial authorities, including the Ministry of Culture.

ICOMOS considers that the buffer zone is appropriately defined, and that the regulatory arrangements for its management are also appropriate.

Protection

Legal Protection

The responsibility for protection is shared by several institutions and relevant decrees. These include the Hellenic Ministry of Culture (ministerial decision of 1980), the Ministry of the Environment, Spatial Planning and Public Works (Presidential decree of 1980), and the Municipality of Corfu (Presidential decree of 1981).

Furthermore, the Greek law on the shoreline of towns and of islands in general applies to the whole length of the site and its buffer zone, for which the control distance is up to 500 m for any intervention which could modify the urban landscape, the natural landscape and the archaeological situation. The parties concerned by the application of these provisions are the Ministry of Culture, the Ministry of the Environment, and the Architectural Committee of the Municipality of Corfu through the building permit scheme. Furthermore, any modification involving an action affecting the sea bed is subject to the approval of the Antiquities Department of the Ministry of Culture.

ICOMOS notes that there are two new provisions that affect Corfu. One is the law on the protection of antiquities and cultural heritage in general (n° 3028/2002), which is linked with town and country planning and will improve protection around listed monuments. The other is the establishment of a new independent Superintendence for Byzantine and post-Byzantine antiquities, in 2006.

Conservation

History of Conservation

The intervention of the Greek government concerning fortresses, to ensure their preservation and restoration in the interest of history and heritage, began in 1922.

As indicated earlier, the town suffered from bombing during World War II. The reconstruction of the old town was then managed by the Greek Ministry of Reconstruction, until 1967. Various decisions concerning the reallocation of premises and areas in the old citadel or urban palaces have been taken since then, concerning for example the Archives of Corfu, the Public Library, University of the Ionian islands and the Music Academy. From 1967 onwards, the town has been classified as a historic urban ensemble and the fortresses as historic monuments.

The setting up of a proactive policy of heritage conservation dates from the early 1990s, with programmes of actions based on historic studies respecting restoration standards in line with international criteria. Nineteen conservation and enhancement programmes have been drawn up since then for the citadel and the new fort. The programmes have been implemented or are in progress, under the supervision of the Fort Restoration and Conservation Office. The work carried out has primarily

concerned the fortification system and the restoration of buildings which are today used for public activities.

Present state of conservation

The proactive policies of restoration and enhancement of the fortifications and of the citadel, which have been under way for some fifteen years, have resulted in a generally acceptable state of conservation, enabling the expression of the outstanding value of this part of the property.

Notable results have been achieved in the rehabilitation to heritage standard of the most significant parts of the urban fabric. Many works however have still to be completed or started.

The current status of the maintenance of the buildings in the old town is as follows: 11% of buildings in excellent condition, 55% in good general condition, 31% in mediocre condition for which intervention will ultimately be required, and 3% in a situation requiring urgent intervention.

Active Conservation measures

At present, nine additional restoration programmes are being considered for the fortifications, of which seven are autonomous programmes of the Office, and two are cooperation projects.

The restoration of the urban fabric of the town is covered by eight restoration programmes, either completed or in progress, representing an amount of more than ten million euros. Four are being conducted by the municipality on its own, and four in cooperation, the two main ones being the restoration of the streets of the town (4.1m euros) and the rehabilitation of the Jewish quarter (1.8m euros).

Various funds have been allocated and programmes implemented over the last ten years of so, aimed at restoring the town's many public buildings and encouraging private owners to carry out heritage conservation actions, particularly on facades. Actions under the urban rehabilitation programme over this period have amounted to an average of 1 million euros per year, with 0.3 million euros a year for the fortresses, and 0.4 million euros a year for the archaeological programmes. The restorations and works on properties carried out by the University amount to 13m euros.

The application of new legal protection provisions (in particular, the law of 2002) have led to a consolidation of the funds committed to the restoration and maintenance of the old town and the fortresses.

ICOMOS considers that all the measures taken have contributed to the good state of conservation of the property, enabling it to express its outstanding value.

Management

Management structures and processes, including traditional management processes

The Ministry of Culture is responsible for the protection of historic monuments and archaeological sites (law of 1967,

amended in 1980). This is reflected in provisions to prohibit the demolition of buildings under its protection, recommendations for restoration, particularly concerning facades, and conformity controls of actions by the municipal and regional authorities. It directly protects 35 historic monuments and 9 contemporary buildings (i.e. constructed since 1830) in the nominated site, and 21 historic monuments and a large number of contemporary buildings in the buffer zone.

The Ministry of the Environment controls all projects affecting the natural environment and landscape (Law of 1980). It controls the application of the building permit provisions by the municipalities (Decentralisation Law of 1981).

The Municipality of Corfu monitors building development and manages various town planning and property management plans in concertation with the ministerial departments. The plans include: the General Urban Planning Scheme (1987), the Town Plan (1958), Programme for Local Development (1998), and Action Plans for the Old Town, the Fortifications, and Tourism.

An urban action plan, which is in line with the management plan of the nominated site, has just been adopted (2005) for the period 2006-2012.

ICOMOS considers that the management system is satisfactory, in view of the concertation procedures linked to the management plan.

Management plans, including visitor management and presentation

In connection with the new nomination for UNESCO World Heritage status, a management plan has been drawn up by the various parties already mentioned (Ministries, Municipality), joined by the Region of the Ionian Islands and the Technical Chamber of Greece (TCG). Since then they have constituted an official Steering committee, endowed with planning powers and in charge of the general monitoring of the projects and programmes associated with the site. A coordinator is in charge of examining dossiers and financial monitoring; he is also in charge of making proposals to the Steering committee.

The coordinator also works in conjunction with the Committee of owners and users of the site, to determine future actions.

The main objectives of the 6-year plan are:

- The protection and conservation of the site, and in particular the monitoring and evaluation of the heritage and its condition; a programme of technical recommendations for building facades (architecture, materials, etc.) and of support for property owners; ensuring that the main balances are maintained so that balanced urban life can continue.
- To work on the various points of access to the town and urban traffic control (selective entrance authorisations, car parks for local inhabitants,

public transport); and on the establishment of protected pedestrian routes and cycle paths inside the old town.

- A programme of scientific documentation and pedagogical action for the public (signs, information at entrances, general documentation and heritage routes, etc.); the development of tourist facilities and targeted actions (themed routes, concerted projects with tour operators, etc.).
- A heritage tourism promotion action, as only 6% of tourists arriving on the island (1.1 million) currently visit the site of the old town and forts.

ICOMOS recognises the recent efforts made in the 6-year management plan, including a Steering committee and a Committee of users and owners, and the presence of the coordinator. ICOMOS considers that the management plan proposed is satisfactory, while recommending that attention should be paid to the technical competency and the quality of the executive team working with the coordinator, and its links with the municipal departments in charge of the old town.

Involvement of local communities

The Municipality of Corfu has always played a leading role in maintaining and enhancing its urban, military and archaeological heritage. The legal decentralisation provisions together with all the concerted actions proposed in the management plan strengthen this major role played by the Municipality. The Municipality intervenes through the Technical Department of the old town, and an Architecture Committee.

The prefecture of Corfu is also involved in the 2006-2012 plan.

The 6-year management plan takes into account users and owners, and professional actors in the field of tourism.

Resources, including staffing levels, expertise and training

The financial resources are provided by the Ministry of the Environment, Spatial Planning and Public Works, the Archaeological Receipts Fund, Ministry of Culture, and Municipality of Corfu. We have seen that the various institutional partners have committed significant amounts of funding for recurrent actions or specific programmes over a period of several years. The management plan strengthens these efforts in terms of amounts of funding and concerted actions for the future.

The human resources centre on local companies which already have considerable experience of working with the municipality and the relevant ministries, while complying with heritage criteria. A substantial effort is also being made to have executives (historians, archaeologists and technicians) trained by the University of the Ionian Islands. Agreements have been signed in this regard with the School of Architecture and the Polytechnic School of Athens. The Technical Chamber of Greece is capable of playing a role of advice and scientific guidance.

Corfu has good contacts with various academic institutions. It also participates in a network of historic Mediterranean towns and organises regularly working meetings and scholarly conferences focused on issues that concern the built heritage of Corfu.

ICOMOS considers that the active mobilisation of the funds necessary for conservation, together with the available human resources and expertise, are satisfactory.

In conclusion, ICOMOS considers that the measures taken for the protection and conservation of the site are appropriate, and that they will fully benefit, over the coming years, from the management plan drawn up for 2006-2007.

6. MONITORING

Sixteen monitoring indicators have been defined for the built structure and town planning of the old town, most of which apply for five years; the most important indicators are however revised every two years, and this applies in particular to works to be undertaken and costings. Six indicators concerning works on the forts have been defined.

Monitoring of heritage and its indicators are under the direct responsibility of the Municipal Department of the old town, and for archaeological matters the Ministerial Antiquities Department. These indicators are also examined by the Ministries of Culture and the Environment, which intervene through financing in particular.

The management plan strengthens the concertation of scheduling between the various bodies, and also between the various levels of technical expertise.

ICOMOS considers that the monitoring indicators and policy are favourable for the expression of the outstanding universal values of the site.

7. CONCLUSIONS

ICOMOS considers that the application of the continuous buffer zone, as proposed in the new dossier, constitutes an acceptable level of protection.

ICOMOS considers that the application of the management plan as defined in the final version of the nomination constitutes a good management tool in terms of expressing the outstanding universal value of the property.

Recommendations with respect to inscription

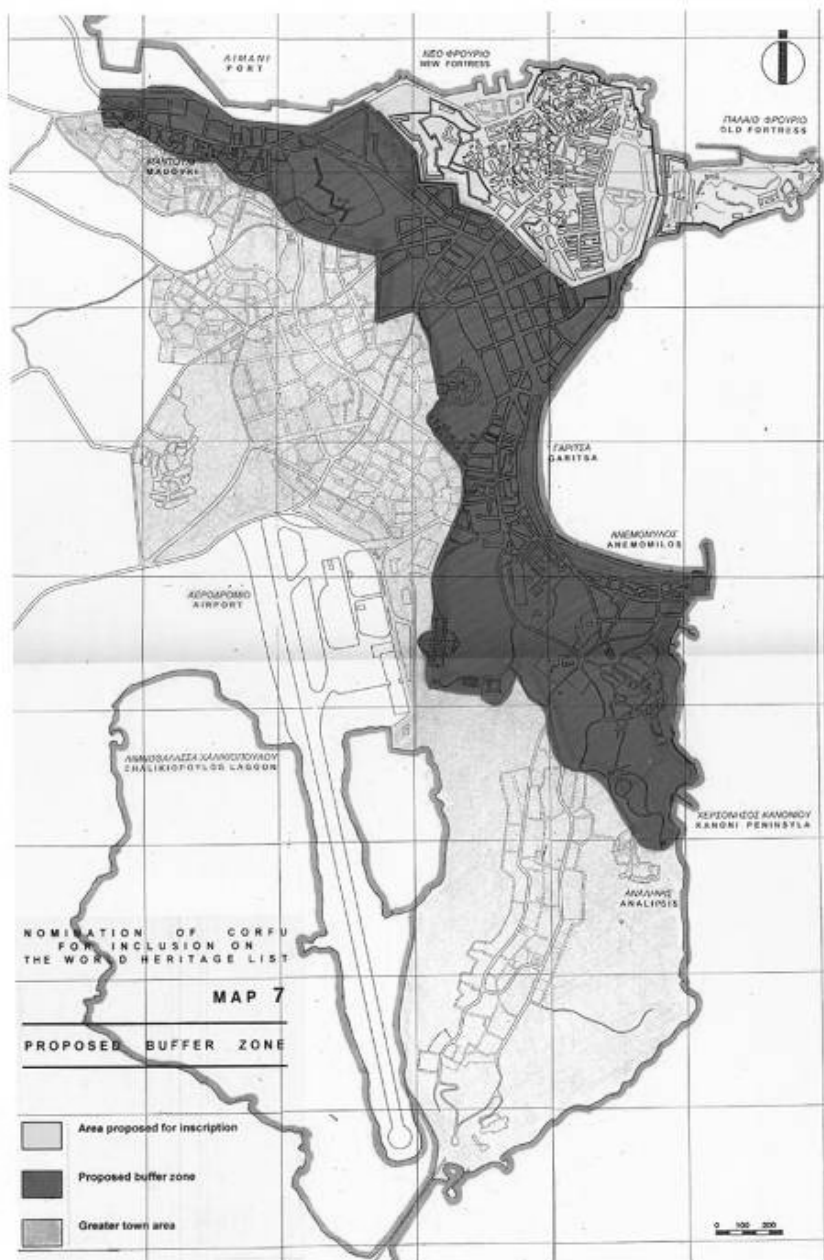
ICOMOS recommends that The Old Town of Corfu, Greece, be inscribed in the World Heritage List on the basis of ***criterion iv*** :

Recommended Statement of Outstanding Universal Value

The ensemble of the fortifications and the Old Town of Corfu is located in a strategic location at the entrance to the Adriatic Sea. Historically, its roots go back to the 8th century BC and to the Byzantine period. It has thus been

subject to various influences and a mix of different peoples. From the 15th century, Corfu was under Venetian rule for some four centuries, then passing to French, British and Greek governments. At various occasions, it had to defend the Venetian maritime empire against the Ottoman army. Corfu was a well thought of example of fortification engineering, designed by the architects Sanmicheli, and it proved its worth through practical warfare. Corfu has its specific identity, which is reflected in the design of its system of fortification and in its neo-classical building stock. As such, it can be placed alongside other major Mediterranean fortified port cities.

Criterion iv: The urban and port ensemble of Corfu, dominated by its fortresses of Venetian origin, constitutes an architectural example of outstanding universal value in both its authenticity and its integrity.



Map showing the boundaries of the nominated property



General view of the town



Old Fortress



Street of Corfu



Venetian dwellings

Bahá'í Holy Places in Haifa and the Western Galilee, (Israel)

No 1220

Official name as proposed

by the State Party: Bahá'í Holy Places in Haifa and the Western Galilee

Location: Haifa and Northern Districts

Brief description:

The Bahá'í faith originated in 1844 with the declaration of its Prophet-Herald, the Báb, in the city of Shíráz, Iran. The rapid spread of the new creed was met by savage persecution, and the execution of the Báb in 1850. His follower Bahá'u'lláh a Persian nobleman, became the focus for the new faith. After persecution and banishment to various parts of the Ottoman Empire, he arrived in Acre in 1868. Bahá'u'lláh spent the remaining 24 years of his life in Western Galilee compiling the scriptures that are the foundation of the Bahá'í faith and establishing a spiritual and administrative centre for the religion. He became known as the Prophet-Founder. After his death he was succeeded as spiritual leader - first by his son, Abdu'l-Bahá and then his grandson, Shoghi Effendi.

The Bahá'í faith has now spread around the world and has five million followers.

The serial nomination covers 26 sites in Acre and Haifa associated with the two founders of the Bahá'í faith, with their successors and with key events in the history of the faith. They include the two most sacred shrines associated with the religion: the Shrine of Bahá'u'lláh in Acre, to which all Bahá'í believers direct their thoughts while praying, and the Mausoleum of the Báb in Haifa, as well as houses, gardens, a cemetery and a large group of Neo-Classical administration, research and archive buildings.

Category of property:

In terms of the categories of cultural property set out in Article 1 of the 1972 World Heritage Convention, this is a serial nomination of *sites*. In terms of the *Operational Guidelines for the Implementation of the World Heritage Convention* (2 February 2005), paragraph 47, this is also a *cultural landscape*.

1. BASIC DATA

Included in the Tentative List: 30 June 2000

International Assistance from the World Heritage Fund for preparing the Nomination: No

Date received by the World Heritage Centre: 26 January 2006

Background: It is a new nomination.

Consultations: ICOMOS has consulted its International Scientific Committees on Historic Gardens and Cultural Landscapes, and on Intangible Cultural Heritage.

Technical Evaluation Mission: 22-25 October 2006

Additional information requested and received from the State Party: None

Date of ICOMOS approval of this report: 21 January 2007

2. THE PROPERTY

Description

The serial nomination consists of 26 buildings, monuments and sites at eleven distinct locations in Acre and Haifa, associated with the two founders of the Bahá'í faith, their two successors and key events in the history of the faith.

The roots of the Bahá'í faith can be traced to the Shí'ah branch of Islam in the mid 19th century. It spread rapidly among young Muslim theologians, merchants and the general public in the 1840s and 1850s. At a relatively early stage it also gained significant numbers of adherents among Jewish and Zoroastrian minorities in Iran, and later attracted a smaller number of Levantine Christians. Toward the end of the 19th century, a connection was also made with Protestant Christianity and this link facilitated its acceptance in North America, which became the principal base for its spread to the rest of the world in the 20th century.

Although it was treated initially as an Islamic heresy, the teachings of the Bahá'í religion soon placed it outside the framework of its mother religion. Today, the Bahá'í religion is independent of Islam. It now has a following of about five million people, unrestricted to any particular ethnic, regional or cultural identity.

The serial nomination includes the two shrines, houses and gardens associated with the Bahá'u'lláh, Abdu'l-Bahá and Shoghi Effendi (son and grandson, and his two successors), the locations where the "Most Holy Book" and the "Tablet of Carmel" were revealed, together with the resting places of the family of Bahá'u'lláh, the rooms where he and his family were incarcerated for two years, the mansion of Mazra'ih, the Ridván Gardens, two places where the Bahá'u'lláh conversed with the British orientalist Edward Granville, the places where 'Abdu'l-Bahá met with the first European and North American pilgrims, the hall where the international governing body was first elected, a cemetery, and a group of large modern Neo-Classical administration, research and archives buildings for the Bahá'í faith.

Eleven sites, covering 26 buildings, monuments or gardens; they are considered in turn:

Acre

- *Prison, Acre*

Bahá'u'lláh was incarcerated here for two years from 1868-70 after his arrival in Acre in part of the Ottoman Acre Citadel.

- *Houses of 'Abbúd and 'Údí Khammár, Acre*

Bahá'u'lláh lived here from 1871 to 1877, and in 1873 revealed the *Kitáb-i-Aqdas*, the “Most Holy Book of Laws”.

- *Ridván Gardens, Acre*

This is a small Persian style garden, prepared by Abdu'l-Bahá for his father, Bahá'u'lláh in 1875, on what had once been a small island in the Na'mayn River.

- *Mansion of Mazra'ih, Acre*

This early 19th century house was used as Bahá'u'lláh's residence from 1877 to 1879, after his nine-year confinement within the walls of Old Acre.

- *Bahji, Acre: Mansion and Tomb of Bahá'u'lláh*

Bahá'u'lláh moved to this mansion in 1879 and stayed there until his death in 1892. A number of his best known works were composed during his twelve year stay. This Ottoman style mansion was erected in 1821 and a second storey was added by 1868. Two of the outbuildings are used as a pilgrim house and a teahouse.

In 1892, the remains of Bahá'u'lláh were interred in one room in an outbuilding and the group of small buildings around a small court became a mausoleum. The large gardens surrounding the mansion and tomb were landscaped later by his grandson Shoghi Effendi, to form an approach to the tomb. They are laid out with radiating crushed red tile paths between lawns decorated with star shaped flower beds, urns on pedestals and clipped bushes. The Shrine of Bahá'u'lláh is the point to which all Bahá'í believers direct their thoughts while praying.

- *Bahji, Acre: House of 'Abdu'lláh Páshá*

Abdu'l-Bahá rented the south wing of this complex. It is where his son Shoghi Effendi was born, where the first western pilgrims met with Abdu'l-Bahá in 1898-99, and where the casket of the Báb was kept for ten years before being interred in the Mausoleum in Haifa.

Haifa

- *Place of Revelation, Haifa*

This is a small open space, where in 1891 Bahá'u'lláh composed the “Tablet of Carmel”, the charter of the Bahá'í world administrative centre. It is marked by an obelisk commissioned by Shoghi Effendi but not erected until 1971.

- *Persian Quarter, Haifa*

Residence, of Abdu'l-Bahá: Abdu'l-Bahá commissioned this house which was completed in 1908. He lived there from 1913 until his death in 1921. Shoghi Effendi also occupied the house, and it remained the official residence of the head of the community until his death in 1957. His

widow remained there until she died in 2000. The funeral of 'Abdu'l-Bahá, and many other historic gatherings took place in its central hall.

10 and 11 Haparsim Street: One of these houses was used as a pilgrims' hostel from 1919 until 1929, and the other was used as an occasional pilgrims' hostel, around 1908.

Garden : This was the resting place of Amatu'l-Bahá Rúhíyyih Khánum, Abdu'l-Bahá's widow; a marble monument was erected in 2001.

- *Bahá'í Cemetery, Haifa*

A change in the orientation of graves in the cemetery reflects a break with Islamic rites and practices; the first burial was in 1911.

- *Junayn Garden, Haifa*

This 19th century farmhouse was owned by believers who followed Bahá'u'lláh into exile.

- *Old Western Pilgrim House, Haifa*

This house was constructed in 1910 for pilgrims and was restored in 1920.

- *North Slope of Mount Carmel, Haifa:*

Pilgrim House: Abdu'l-Bahá authorised one of the believers to erect this modest oriental style stone building in 1909 as a hostel for pilgrims from the Orient. Since 1969 it has been used as a place for believers to prepare themselves for their visit to the Shrine of the Báb.

Tent Land and Garden: This is a small garden surrounded by cypress trees, where Bahá'u'lláh pitched his tent during a visit to Haifa in 1890.

Shrine of the Báb: The Mausoleum of the Báb in Haifa, where the remains of the Báb were enshrined, after having been brought back from Iran, constitutes the religion's second most sacred shrine. The casket containing the remains of the Báb was initially interred in a simple one-storey stone structure of six rooms, built between 1899 and 1909, its construction overseen by Abdu'l-Bahá. In 1921, Abdu'l-Bahá was also buried in the building in the centre room on the northern façade. The building, high up on the slopes of Mount Carmel, was subsequently added to on the south side. A major enlargement was carried out under the guidance of Shoghi Effendi, between 1948 and 1953, designed by the architect William Sutherland Maxwell. He surrounded the original stone building with a circular colonnade, of Rose Baveno granite columns topped by marble Corinthian capitals, and surmounted it with a clerestory, drum and gilded dome.

Terraced Gardens: A kilometre-long series of nineteen rising semi-circular terraces, planted with grass and Cyprus trees and with a central stone stairway was created to frame the ceremonial approach to the Shrine of the Báb. Designed by architect Fariborz Sahba, the terraced gardens were constructed between 1990 and 2001. The idea for the gardens came from 'Abdu'l-Bahá as early as 1910; then began the long process of acquiring the necessary land. An

initial stairway to the shrine was constructed by Shoghi Effendi in the 1930s.

Nearby is the Arc Path and Monument Gardens laid out by Shoghi Effendi, with four marble monuments erected between 1932 and 1939 to mark the resting places of the wife, son and daughter of Bahá'u'lláh and the wife of 'Abdu'l-Bahá. The Arc Path formed the axis for the development of the administrative buildings.

- *International Archives Building*

This Greek neo-classical building, designed to the proportions of the Parthenon, stands at the western end of the Arc Path. Constructed between 1954 and 1957, its design and construction were supervised by Shoghi Effendi who stipulated that its design should set a pattern for the other buildings to follow. It houses sacred writings, portraits of the Báb and Bahá'u'lláh, personal objects associated with the central figures of the faith, and historical artefacts from the early years of the Bahá'í.

- *Seat of the Universal House of Justice*

The Seat of the Universal House of Justice is the dominant structure of the administrative complex, reflecting its role as the permanent seat of the supreme governing body of the Bahá'í. Of Greek neo-classical style, it was designed by architect Husayn Amanat and constructed from 1975 to 1983. The five and a half storey building is surrounded by an arcade of 58 marble columns topped with Corinthian capitals and crowned with a white marble cupola rising above the green tile roof. It occupies the dominant position at the apex of the arc-shaped path.

- *Centre for the Study of the Texts*

This centre of scholarly research and library primarily focuses on the sacred writings and subsidiary texts to meet the needs of the Universal House of Justice. The façade features a portico with a circular entablature resting on a colonnade of marble columns with Ionic capitals. In the centre of the colonnade a marble fountain is set in a sunken garden, separated by glass walls from the interior. It was designed by Husayn Amanat.

- *International Teaching Centre*

The Centre was established by the Universal House of Justice in 1973. Its principal function is to coordinate a worldwide network of counsellors, who act as advisers to the elected institutions at the local and national levels. This nine-storey building, designed by Husayn Amanat, is the largest within the administrative complex. It has two curved classical porticos and an arched roof in-filled with glass at both ends.

History and development

As summarised above, the Bahá'í faith originated in 1844 with the declaration of its Prophet-Herald, the Báb, in the city of Shíráz, Iran. The rapid spread of the new creed was met by savage persecution, and the execution of the Báb in 1850. The focal point of the Baha'i faith moved to Western Galilee in 1868 when, after 15 years of wandering in Iraq, Turkey and Egypt, the Prophet-Founder, Bahá'u'lláh, who had been expelled from Iran in 1853, was banished to

Acre, then a remote part of the Turkish Empire, by the Ottoman Sultan, Abdu'l Aziz. Bahá'u'lláh spent the remaining 24 years of his life in Acre compiling the scriptures that are the foundation of the Baha'i faith and establishing a spiritual and administrative centre for the religion.

Bahá'u'lláh and his family were confined for two years in the Ottoman citadel of Acre during which time he maintained contact with believers and wrote some of his best known texts, such as "Tablet of the Carmel". In 1870 his youngest son died, falling through a skylight in an incident that Bahá'u'lláh likened to Abraham's intended sacrifice of his son.

When he was finally released from the Citadel, Bahá'u'lláh lived for nine years under house arrest in a succession of houses in the Christian and Muslim neighbourhoods of Old Acre. These included the Mansion of Bahá'u'lláh, where he died and his mausoleum is housed, and the House of 'Abdu'lláh Páshá where Abdu'l-Bahá lived until 1911 and where his son Shoghi Effendi was born, and where the remains of the Báb were stored for ten years until moved to the Mausoleum in Haifa.

In 1909 the remains of the Báb, brought from Iran, were buried in a very simple mausoleum in Haifa. This was greatly enlarged in 1953 and adorned with a golden dome. The building is now approached through a kilometre-long garden laid out between 1990 and 2001.

The spiritual and administrative centre established by Bahá'u'lláh has continued to develop until the present day, while the religion has spread first to Western Europe and North America and then to the rest of the world.

The Bahá'í religious community now numbers about five million around the world. It proclaims that the founders of the world's main religions - Abraham, Moses, Jesus, Buddha, Mahommed and Krishna - have been sent by God to educate humanity.

3. OUTSTANDING UNIVERSAL VALUE, INTEGRITY AND AUTHENTICITY

Integrity and Authenticity

Integrity

The primary basis for the significance of this property is its link to the Bahá'í faith, and the singularly important position these places hold within that religion worldwide.

The nomination puts forward all the important buildings and gardens in Acre and Haifa associated with those who shaped the Bahá'í faith and their successors, and with key events in the history of the faith.

In terms of completeness of the evidence for the manifestation of the faith in Israel, the nominated sites display integrity. ICOMOS examined the selection of sites put forward by the State Party, and in particular considered whether the information provided by the State Party provides a comprehensive justification for the inclusion of each of the selected sites, based on their importance in the history and beliefs of the Bahá'í religion.

ICOMOS concluded that the identification of the key sites of importance to the followers of the Bahá'í faith is best made by the followers themselves, and that the documentation provided by the State Party clearly indicates that this is the case for the sites that comprise the nomination.

ICOMOS further concluded that it is not appropriate to suggest reductions to the nominated sites.

ICOMOS considers that the nominated property demonstrates integrity linked to the history, belief systems and present day spiritual home of the Bahá'í faith.

Authenticity

The dossier suggests that the nominated property is authentic due to the important historical and continuing spiritual associations with the Bahá'í faith.

The State Party also puts forward the view that because of the very recent construction of some of the selected buildings and gardens, their authenticity and integrity are assured. In support of the claims to authenticity, the nomination dossier also cites letters written by 'Abdu'l-Bahá about the restoration and maintenance of their holy places, in which he states: *"The house must, however, preserve its original design. Nor should the slightest change or modification be permitted... The aim is not to embellish, but to preserve the precise state and condition prevailing in that blessed abode at the time..."*

The nomination dossier stresses that the process of minimal intervention is practiced on the selected sites and monuments associated with the founders of the Bahá'í faith. The dossier also details how the form of several buildings has been restored to the condition at the time of their association with the founders, such as the prison at Acre where post-1920s alterations have been removed and some features recreated; and the Junayn Garden which has been restored to what it would have looked like at the time of Bahá'u'lláh's visits, involving some demolition and replacement of joinery.

Other buildings have been significantly altered and enlarged since the time of the founders, such as the Shrine of the Báb, at which a major enlargement was carried out under the guidance of Shoghi Effendi between 1948 and 1953, designed by the architect William Sutherland Maxwell.

On other parts of the property there has been progressive enlargement of designed gardens, such those around the Tomb of Bahá'u'lláh, laid out by Shoghi Effendi, and the kilometre-long terraces created between 1990 and 2001 to frame the ceremonial approach up to the Shrine of the Báb. Elsewhere there has been construction of administrative buildings on a large scale such as the Seat of the Universal House of Justice 1975-83, the Centre for the Study of the Texts 1999, and the International Teaching Centre, 2000.

The buildings and sites nominated are tangible expressions of the body of doctrine and system of values and beliefs that form the content of the Bahá'í faith. Given the link between authenticity and the faith, and the standards of conservation established by the Bahá'í faith and

documented in detail by the State Party in the nomination dossier, ICOMOS considers that the nominated property as a whole demonstrates authenticity.

In particular, ICOMOS considers that the buildings associated with the Báb and Bahá'u'lláh, and the gardens and buildings remodelled or designed by Shoghi Effendi display a high degree of authenticity as they largely survive as they existed at the time these people were living, although some have been restored.

ICOMOS considers that the more recently constructed buildings and gardens have a more tenuous association with the people who shaped the faith but are undoubtedly authentic in terms of their associations with the doctrines and beliefs of the Bahá'í faith.

In conclusion, ICOMOS considers that the nominated property demonstrates integrity linked to the history and spiritual home of the Bahá'í faith and that the selected buildings and sites demonstrate authenticity as tangible expressions of the body of doctrine and system of values and beliefs that form the Bahá'í faith.

Comparative analysis

The nomination dossier compares the nominated elements of the property with those buildings connected to the founders of the Bahá'í faith in other countries. These include structures in Iran, Iraq and Turkey. It is stated that most of these other sites are not in the hands of Bahá'ís, have not been adequately preserved, and/or are not accessible to visitation by believers from other countries. A notable exception is the house in Edirne, Turkey occupied by Bahá'u'lláh from 1864 to 1868, which has been acquired by the Bahá'í community and meticulously restored.

A number of buildings and sites in Europe and North America associated with the travels of 'Abdu'l-Bahá in 1911-1913 are owned and preserved by the national Bahá'í communities. Effendi's grave is in London and Bahá'í houses of worship are found in the United States of America, Australia, Germany, Uganda, Panama, India and Samoa, while another is planned for Santiago, Chile.

ICOMOS considers that the primary significance of the property is its link to the Bahá'í faith, and the singularly important position these places hold within that religion worldwide. The nominated property, consisting of a group of 26 buildings and sites, cannot be compared to any other group of buildings within the same faith and is therefore unique.

ICOMOS does not consider that it can assess faiths, nor comment on the importance or otherwise of the Bahá'í faith in relative terms or whether this association is stronger than, or as strong as, other associations between other buildings and other faiths.

In conclusion, ICOMOS considers that there are no relevant comparators for the nominated property.

Justification of the Outstanding Universal Value

The State Party states that the 26 buildings and sites are of Outstanding Universal Value for the way they:

- Represent and reflect the birth, consolidation and spread of an independent monotheistic religion supported by an unprecedented abundance of authentic scripture and other contemporary documentation including accounts, commentaries and even polemics from a variety of sources and contrasting points of view.
- Testify to the existence of a coherent body of doctrine completed by a system of values and beliefs, which forms the distinctive content of the Bahá'í religion.
- Reflect the investment of scarce resources in the preservation and beautification of the properties, and particularly in gardening, as well as the extensive use of colour and light in architectural and landscape designs, which are expressive not only of the love and devotion of Bahá'ís for their religion, but also of their optimistic and forward-looking worldview.

The State Party makes the case that the collection of 26 buildings and sites in areas of Acre and Haifa reflect a pivotal period in the development of the faith, and that several sites are unique, such as the tombs of Bahá'u'lláh, the Báb and 'Abdu'l-Bahá, the three most important figures in the religion; the rooms where Bahá'u'lláh and 'Abdu'l-Bahá passed away; and the locations where the "Most Holy Book", the "Tablet of Carmel" and other major scriptural works were revealed.

Criteria under which inscription is proposed

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

Criterion iii : The State Party justifies this criterion on the basis that the selected sites "constitute a unique testimony to the religious beliefs and cultural values of the Founders of the Bahá'í faith, their early disciples and its contemporary worldwide following. As such they represent a priceless resource for the study of one of the world's monotheistic religions and the physical, historical and cultural context in which it developed".

ICOMOS recalls that "cultural heritage" for the purpose of the World Heritage Convention is defined in article 1 of the Convention.

ICOMOS considers that the property does constitute a unique testimony, which includes all the important holy places related to the origins of the Bahá'í faith in Israel. This is possible because the development of this faith was initially restricted territorially and has developed over a relatively short space of time.

ICOMOS notes that not all spiritually and historically significant buildings and sites associated with any particular faith can be said to be outstanding for those associations alone. For many religious sites inscribed on the World Heritage List, their architectural and material qualities are a deciding factor and many such properties are inscribed according to criteria (i) and/or (iv) as well as (vi). Other religious sites are inscribed for the way they demonstrate and encapsulate in a significant and material

way, a cultural tradition, and these are inscribed on the basis of criterion iii.

In the case of the nominated Bahá'í buildings and sites in Haifa and Acre in Israel, none are nominated for their architectural or material attributes. Rather they are nominated for their associations with significant events in the lives of the founders of the Bahá'í faith and with the later development of the faith. ICOMOS recalls that criterion vi is the only criterion that recognises an association with "*living traditions, with ideas, or with beliefs, with artistic and literary works (...)*". Therefore, in considering the arguments put forward by the State Party in justification of criterion iii, the key issue is whether as a group, these buildings and sites can be said to demonstrate an outstanding cultural tradition in material terms.

ICOMOS considers that the outstanding universal value of the collection of buildings can not be justified in terms of their intrinsic historical, artistic or scientific merits.

ICOMOS does not consider that this criterion has been justified.

Criterion vi: The State Party considers that this criterion is justified as the Shrine of Bahá'u'lláh is the point to which all Bahá'í believers, wherever they reside, turn their faces and direct their thoughts while praying. Thus for Bahá'ís, it holds a position comparable to that of the Temple remains in Jerusalem for Jews, or the Kaaba in Mecca for Muslims. The Mausoleum of the Báb constitutes the faith's second most sacred shrine.

The concentration of holy places in this small area makes it the principal focus of pilgrimage for the followers of the Bahá'í faith, who aspire to pray at the Shrines of Bahá'u'lláh and the Báb, and to visit the other buildings and sites included in this nomination in order to strengthen the bonds that connect them with the founding figures of their religion and to deepen their religious understanding and identity.

The nominated property is seen by the followers of the Bahá'í faith as tangible expressions of the body of doctrine and system of values and beliefs that form the content of the Bahá'í religion, and the nomination dossier provides a very comprehensive description of each element and its religious meaning.

ICOMOS acknowledges that the collection of buildings is of exceptional value to the followers of the Bahá'í faith because of their associations with the founders, as the fount of their religion, and the influence the faith has had around the world. As mentioned before, ICOMOS cannot provide a more in depth assessment and considers that it cannot assess faiths, nor comment on their importance. Similarly, ICOMOS cannot comment on whether the associations between the Bahá'í faith and these buildings is stronger than, or as strong as other associations experienced by other faiths.

In conclusion, ICOMOS draws the attention of the World Heritage Committee to the premises of the evaluation and considers that if the World Heritage Committee accepts these premises and recognises Outstanding Universal Value in the nominated property, it would be on the basis of criterion vi alone.

ICOMOS recalls that the World Heritage Committee, following thorough discussions on whether criterion vi can be used alone or not, decided to amend the *Operational Guidelines*, and that criterion vi now reads: “...*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 Committee considers that this criterion should preferably be used in conjunction with other criteria)*” [underscore by ICOMOS].”

Through this amendment, the Committee wanted to acknowledge notably that some properties are of Outstanding Universal Value based on criterion vi only: e.g. Robben Island (South Africa) was inscribed on the basis of criteria iii and vi because at the time criterion vi had to be used in conjunction with others, even if there was agreement that criterion vi was the primary criterion.

Properties inscribed on the World Heritage List on the basis of criterion vi only include:

- Island of Gorée – Senegal (1978)
- L’Anse aux Meadows National Historic Site – Canada (1978)
- Forts and Castles, Volta, Greater Accra, Central and Western Regions – Ghana (1979)
- Auschwitz Concentration Camp – Poland (1979)
- Independence Hall – United States of America (1979)
- Head-Smashed-In Buffalo Jump – Canada (1981)
- Rila Monastery – Bulgaria (1983)
- La Fortaleza and San Juan Historic Site in Puerto Rico – United States of America (1983)
- Hiroshima Peace Memorial (Genbaku Dome) – Japan (1996)
- Old Bridge Area of the Old City of Mostar – Bosnia and Herzegovina (2005)
- Aapravasi Ghat – Mauritius (2006)

All of these have associations that are of universal significance.

For some cases there was a substantial debate before the Committee reached a decision. In most cases, but not all, this debate focussed not on the whether the property was of Outstanding Universal Value or not, but on the requirement to use other criteria in conjunction with criterion vi.

For an overview of the evolution of criterion vi, see working document **WHC-2001/CONF.208/INF.13** and the subsequent Committee decisions.

4. FACTORS AFFECTING THE PROPERTY

The nomination dossier includes an identification of the following factors:

Development pressures

The nomination underlines the fact that the coastal area of northern Israel from Haifa to Nahariya is undergoing a process of urbanisation, generating pressures to build highways, industrial zones, shopping centres and high-rise housing.

Unfavourable developments within the buffer zones could jeopardise the setting of the nominated sites within this property and might impact negatively on its values. Currently these are opposed by patient and insistent negotiations by the representatives of the Bahá’í faith to prevent exemptions from the requirements of legally valid, but obsolete planning schemes, and through the rights of objection provided by the Planning and Building Law.

ICOMOS considers that current practices cannot in the long term guarantee the protection of the settings of the nominated sites (see below).

Environmental Pressures

The nomination dossier acknowledges the concentration of heavy industry in the area between Haifa and Acre, most of it dating from the early to middle decades of the 20th century. This poses serious problems of air pollution which can have a devastating impact on sandstone and marble. No ameliorating measures are suggested to counter the problem, although various reverse osmosis systems are being tried on the stone.

Natural Disasters

The risk of destructive earthquakes is considered relatively high due to the close proximity to a major geological fault line. Buildings are monitored regularly for structural weaknesses and earthquake risk is considered, among other factors, in all restoration plans. Reinforcement of foundations has been undertaken in a few cases, but only when it was indispensable to remedy a clearly established and potentially dangerous weakness in the structure.

Risk Preparedness

Fire and safety regulations are adhered to in all the buildings, and fire alarms have been installed.

ICOMOS considers that the main risks to the property are from urban development and that currently there are not sufficient measures in place to mitigate these effects adequately.

5. PROTECTION, CONSERVATION AND MANAGEMENT

Boundaries of the nominated property and buffer zone

For most of the sites which comprise the nominated property, the boundaries are defined by ownership. Almost all of them are owned by the Bahá’í World Centre (the

exception is the prison in the fortress of Acre, which is owned by the State of Israel). The great majority of the properties lie in urban areas, and in practical terms, there is little space to enlarge the boundaries.

The boundaries of the nominated sites do not always correspond to the boundaries of the areas protected by town planning schemes. These schemes sometimes take into account the ownership situation, but are sometimes much broader.

The buffer zones have been determined on a case-by-case basis, according to the degree of sensitivity of the particular Holy Place, the character of the surroundings, the topography, the nature of the anticipated threats, etc. They are divided into “A” and “B” zones, the former representing an area where a reasonably satisfactory levels of protection is provided by ownership, contract, or town planning schemes, and the latter denoting territory where unfavourable developments may be expected. In zone B there is currently little protection, and because of the degree of threat, extra vigilance by the Bahá’í is needed to try and counter adverse development.

It is acknowledged that concern with threats in the immediate surroundings must be complemented by the monitoring of the much wider setting of the sites for more serious and unusual threats, such as polluting industry, waste disposal facilities and major transport infrastructure.

In the case of the Bahá’í properties in Old Acre, the buffer zone is the area within the city walls, which is already inscribed as a World Heritage Property.

In order to ensure better protection of the nominated areas, the Bahá’í World Centre has made efforts to acquire additional properties both within the boundaries of the sites and in the buffer zones. Certain properties that constitute part of the buffer zones are held under long-term lease or as protected tenancies, as a step towards acquisition of full ownership. Other properties are owned by the Bahá’í community and leased out to third parties under the terms that enable the Bahá’í World Centre to ensure that the use of these properties is compatible with the adjacent Holy Place.

Currently the inner buffer zones protect only part of the settings of the sites: the remainder has to be protected either by ownership by the Bahá’í community or by planning policies, which are inadequate as mentioned above, and thus protection relies on vigilance and objections to adverse planning proposals.

ICOMOS considers that the boundaries of the core zone adequately represent the most important places of the Bahá’í faith worldwide. ICOMOS considers that, in many cases, the buffer zones are too tightly drawn around the sites and offer only weak protection for the settings of the sites and need to be enlarged and strengthened (see below).

Ownership

All the properties are owned by the Bahá’í World Centre through one of the not-for-profit associations that serve as holding companies, apart from the Acre prison, which is owned by the State of Israel.

Protection

Legal Protection

Legal protection of the nominated sites is provided by legislation applicable to heritage sites in general, and through regulations protecting their character as holy places: the Antiquities Law (1978), the Palestine Order in Council (1922 and 1924), the Law for the Protection of Holy Places (1967), the International Agreement between the Bahá’í International Community and the Government of Israel (1987), and the Planning and Building Law (1965).

At the national level, the Combined National Scheme for Building, Development and Conservation (“TAMA 35”), designates most of the Bahá’í sites as “*urban complexes for preservation*” and the Mansion of Mazra’ih as a “*rural complex for preservation*”. This designation recognises sites of historic or architectural value where integrity needs be protected. Bahjí, the North Slope of Mount Carmel, Ridván Gardens, the Place of Revelation of the “Tablet of Carmel”, Junayn Garden and the entire Old City of Acre are “*urban complexes for preservation*”. This means that not all the nominated sites are protected as properties of national importance through this legislation.

At the regional level, the comprehensive district plan (“TAMAM 6”) is presently being finalised. It recognises the most significant (but not all) of the Bahá’í sites in Haifa District, and stresses their importance as “*focal points of tourism*”. The same applies to the city of Acre, where the new master plan has recently been approved, and the new outline scheme for the entire municipal area is being prepared. The dossier states: “*We have every reason to believe that it [the plan] will give due consideration to the importance of the Bahá’í sites within the municipal borders.*” ICOMOS is concerned that the nominated sites are not protected by the master plan.

In Israel, the task of compiling lists of cultural heritage properties is divided between the Israel Antiquities Authority, which has an inventory of all archaeological sites, and the Council for the Preservation of Buildings and Historic Sites, which holds a list of buildings considered to be of national and local significance.

The control exercised by the Antiquities Authority is fairly strict, but it covers only the properties dated to older than the year 1700. Later buildings and sites are protected by particular town planning schemes approved in conformity with the Planning and Building Law. The primary tool for the protection of heritage sites available to interested parties is to propose schemes and to object to those proposed by others. Because all of the Bahá’í properties date from the period following 1700, their protection is based on the provisions of the Planning and Building Law, although because some are linked to older structures or sites, they are sometimes subject to the Antiquities Law.

The main threats to the properties come from outside the nominated areas, within part of the buffer zones and beyond. In some cases, the existing town-planning schemes are out of date, and others are prone to “spot schemes” which allow for waivers to enable specific developments that can in some cases be detrimental to the values of nearby sites. The usual way to oppose such unfavourable developments is to make demands to the

local planning authorities to issue policy statements not to grant exemptions from the requirements of legally valid, but obsolete, schemes, which could have adverse effects on the Bahá'í properties. The Bahá'í World Centre asks to be involved in consultations on the planning or re-planning of the areas with obsolete schemes or without any schemes. Finally, the resistance to unfavourable developments can be exerted through the rights of objection provided by the Planning and Building Law.

ICOMOS recalls that the *Operational Guidelines* outline the requirements for protection of properties inscribed on the World Heritage List, including that “*States Parties should demonstrate adequate protection at the national, regional, municipal, and/or traditional level for the nominated property*”.

Although ICOMOS considers that, in the case of the nominated sites of significance to the Bahá'í faith, it is appropriate to rely in the first instance on the Bahá'í community to identify the potentially negative impacts of new developments, it is also expected that the State Party should provide more secure protection of the sites and their settings, including appropriate mechanisms for consultation and responses to such assessments by the community.

ICOMOS considers that the legal protection of the nominated areas is less than ideal and presents as a mixed set of arrangements. Not all the nominated sites are designated as being of national or regional importance. ICOMOS acknowledges that, in practical terms, this is mitigated to a large extent by the almost single ownership of properties by the Bahá'í International Community and their preservation and conservation approaches grounded in the faith itself (see also ‘Management’ below).

ICOMOS considers that the buffer zones and wider settings that might impact on the nominated areas are not adequately protected and these areas remain vulnerable, their protection reflecting only the persistence of the community in opposing unsuitable developments. ICOMOS recommends that the State Party urgently address the lack of adequate protection against inappropriate development in the buffer zones and wider setting.

Conservation

History of Conservation

The history of interventions in the buildings is detailed above.

Present State of Conservation

The present state of conservation of the nominated areas is good.

Active Conservation Measures

The basic conservation principles were set out by the founders of the Bahá'í faith and these dictate that historic structures should be preserved through minimising the loss to the original building fabric; that regular maintenance is the most effective and economical form of conservation over the long term; that repair is always preferred over

restoration; that materials used for repair should be compatible with the existing; and any restoration work should be reversible.

The overall approach to the conservation of the Bahá'í Holy Places generally gives priority to maintenance over restoration. In a few instances major structural strengthening has been undertaken, using modern materials and techniques. Presently large portions of load-bearing walls of the 1957 International Archives Building, originally constructed using blocks of light concrete, are being replaced with reinforced concrete to provide for extra seismic resistance.

ICOMOS considers that conservation approaches are appropriate.

Management

All the nominated sites, except for the Acre Prison located in the northwest tower of the citadel in the Old City of Acre, are owned by the Bahá'í World Centre and managed by the Universal House of Justice, the central authority of the worldwide Bahá'í community. It is a collegial body of nine members who reside in Haifa on a full-time basis during their five-year term of office.

The staff of the Bahá'í World Centre number approximately 700 Bahá'í volunteers and about 200 local employees, divided into Departments of Holy Places, Works, Gardens, Facility, Cleaning and Maintenance, Security, and the Office of Public Information. The permanent staff includes one architect trained in building conservation, three other architects and engineers, an objects conservator, 40 craftsmen, 150 gardeners and 134 guards and caretakers. Additional professional skills are provided through the extensive use of expert consultants from Israel and other countries, as well as through the expertise of the Israel Antiquities Authority.

The fundamental management philosophy derives from the sacred writings of the Bahá'í faith, which emphasise the historical and religious importance of the properties for future generations. Management of the properties is seen as a long-term process, and priority is given to maintenance and good housekeeping. A Management Plan has been prepared which sets out the management, maintenance and conservation approaches. The overall management is well structured, and its success will further be secured by regular monitoring and reporting, through condition assessments (so far performed for four properties), conservation surveys (prepared for one major structure) and maintenance manuals (presently being drawn up).

Equally high standards apply to visitor management. The Holy Places attract large numbers of visitors (550,000 to 860,000 visitors per year in Bahjí, the Shrine of the Báb and the terraced gardens only). The two main attractions are open to the public without entrance fee. However, all the Bahá'í properties are primarily open to the pilgrims (an organised nine-day program), to other Bahá'í visitors from overseas and to the staff of the Bahá'í World Centre.

Resources, including staffing levels, expertise and training

Qualified professionals occupy the key staff positions, and the volunteers and local workers are supervised by

experienced senior members who give them on-the-job training, so the know-how is passed from one generation to the next.

The maintenance and operating costs, and the capital expenditures are funded by voluntary donations from the worldwide Bahá'í community. The funds allocated are sufficient for high quality work. As an indication, during the twelve-month period from May 2002 to April 2003, approximately \$ 4.5 million (US) was spent on the maintenance of buildings and grounds, security and crowd management, restoration works and property insurance.

ICOMOS considers that the management system for the property provides high quality management.

6. MONITORING

A suite of indicators has been used for monitoring since 2005. These include structures with stability concerns, the number of visitors and the price of water for irrigation. Further conservation assessments of properties are needed as a baseline for further more detailed monitoring exercises.

ICOMOS recommends that further condition assessments are carried out as a baseline for future monitoring.

7. CONCLUSIONS

ICOMOS considers that this is a difficult nomination to assess in the context of the World Heritage Convention.

ICOMOS considers that not all buildings associated with a particular religion with a worldwide following can be said to be outstanding for that reason alone.

ICOMOS considers that the buildings of the nominated property do not demonstrate outstanding universal value from an historical, artistic or scientific point of view.

Accordingly, ICOMOS considers that the *primary significance* of the collection of sites and buildings which comprises the nominated property is its link to the Bahá'í faith, and the singularly important position these places hold within that faith worldwide.

ICOMOS acknowledges that the association of the Bahá'í faith with the 26 sites is seen by its followers as an exceptional and tangible expression of the body of doctrine and system of values and beliefs that form the content of the Bahá'í religion. As explained under section 3 (above), the question is whether this recognition is universal.

ICOMOS considers that the nominated property demonstrates integrity linked to the history, belief systems and present day spiritual home of the Bahá'í faith. ICOMOS also considers that the selected buildings and sites demonstrate authenticity as tangible expressions of the body of doctrine and system of values and beliefs that form the Bahá'í faith.

ICOMOS considers that, as a non-governmental organisation of heritage professionals, it cannot assess faiths, nor comment on their importance or comment on

whether the associations between these buildings and this faith is stronger than, or as strong as, other associations between other buildings and other faiths.

ICOMOS considers that, if the World Heritage Committee accepts the premises of this evaluation and recognises the Outstanding Universal Value in the nominated property, it should be on the basis of criterion vi alone.

ICOMOS acknowledges that the World Heritage Committee may have a different view and use different justifications in reaching its decision. In doing so, the World Heritage Committee may recognise that the nominated sites have outstanding value only for the followers of the Bahá'í faith as manifestations of the body of doctrine and beliefs and the influence of the faith throughout the world.

In either case, ICOMOS considers that the lack of adequate planning mechanisms to ensure the protection of the settings of all the sites which comprise the nominated property is a cause for concern and recommends that consideration is given to putting in place stronger protection as required by the *Operational Guidelines*.

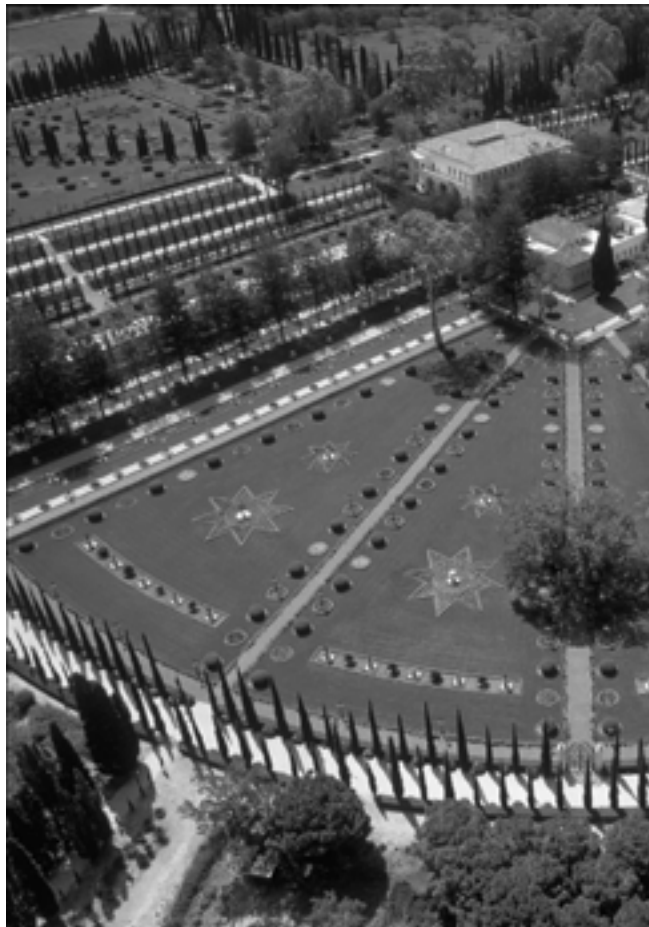
Recommendations with respect to inscription

If the World Heritage Committee accepts the specific premises of the ICOMOS evaluation and recognises the Outstanding Universal Value in the nominated property on the basis of criterion vi, ICOMOS recommends that the World Heritage Committee *refer* the nomination of Bahá'í Holy Places in Haifa and the Western Galilee, Israel, back to the State Party in order to allow it to:

- Put in place stronger protection, particularly for the buffer zones and settings of the sites which comprise the nominated property.



Map showing the location of the nominated properties



Acre: shrine, mansion and gardens of Bahá'u'lláh



Acre: house of Abdu'lláh Páshá



Haïfa: shrine of the Báb (north slope of Mount Carmel)



Haïfa: place of the Revelation of the “Tablet of Carmel”

Valnerina (Italy)

No 1254

Official name as proposed

by the State Party: Valnerina and the Marmore Cascade

Location: Provinces of Perugia and Terni

Brief description:

Valnerina, the Nera Valley, reflects water management schemes and the spread of monasticism.

The water management systems date from Roman times to the present day. The most dramatic intervention is the Cascade des Marmore, the tallest waterfall in Europe, created by the Romans to divert a river away from the marshy plains of Terni. In the 8th century the Benedictine monasteries revived the landscape around Norcia, and introduced the *marcite* system of winter flooded water meadows, parts of which still exist. The valley also contains the remains of small mediaeval hydraulic water mills, developed at the heads of the minor valleys, and early 20th century hydro-electric plants.

The valley is also associated with the development and spread of monasticism in the west and the later development of an appreciation of the Italian landscape: the Cascade des Marmore was revered by writers and artists in the 18th century and depictions of the falls have become a key symbol for Italian landscape.

With a network of abbeys, parish churches, castles and villas, Valnerina was never a marginal landscape - even if an isolated one - and its religious and political importance generated by the economic success of the Benedictines is reflected in the Romanesque art of its abbeys and towns.

Category of property:

In terms of the categories of cultural property set out in Article 1 of the 1972 World Heritage Convention, this is a *site*. In terms of the *Operational Guidelines for the Implementation of the World Heritage Convention* (2 February 2005) paragraph 47, it is also a *cultural landscape*.

1. BASIC DATA

Included in the Tentative List: 1 June 2006

International Assistance from the World Heritage Fund for preparing the Nomination: No

Date received by the World Heritage Centre: 27 January 2006

Background: It is a new nomination.

Consultations: ICOMOS has consulted its International Scientific Committees on Historic gardens and cultural

landscapes and on Historic Towns and Villages. ICOMOS has also consulted TICCIH.

Literature consulted (selection):

Fontana, Giovanni Luigi, *National Report for Italy in National reports presented to TICCIH 13th Congress, 2006*

E. Orsomando, F. Pedrotti, Le "marcite" de Norcia, Camerino 1982

Technical Evaluation Mission: 4-8 September 2006

Additional information requested and received from the State Party: ICOMOS sent a letter to the State party on 15 November 2006, and the State party provided further documentation on 14 December 2006.

Date of ICOMOS approval of this report: 21 January 2007

2. THE PROPERTY

Description

Valnerina, the valley of the River Nera, covers the south-eastern area of Umbria, one of the steep valleys of the Apennine Mountains. The nominated property lies within the watershed of the valley and includes the towns and villages of 15 communes. The valley today is isolated and relatively sparsely populated. In earlier times it was an important route between the Tyrrhenian Sea and the Adriatic Sea. Archaeological finds have indicated that some of its passes were already being used in prehistoric times.

The lower valley was dramatically altered in Roman times when the waters of the River Velino were diverted away from the plain around Terni in order to drain it. In 271 BC a channel was cut for the river to flow north until it joined the River Nera. Together the two rivers flowed over Mount Marmore, their combined flow producing spectacular falls. Once in the valley the water was used for irrigation; traces of this hydraulic work are still evident in the valley.

The lower part of the Nera valley is part of the Parco Fluviale Neri, covering 2,120ha, and created in 1995 to safeguard its natural heritage.

Between the lower and upper valley are ancient villages, towers, and abbeys, such as Collestatte, surrounded by the castle's battlements, two strongholds, Arrone and Castel di Lago, the Convent of San Francesco, founded by Saint Francis of Assisi, and two villages, Ferentillo-Matterello and Precetto, with the Benedictine Abbey San Pietro in Valle towering above.

The impulse for the development of the upper valley came from religious communities, attracted by its spring water and isolation. Between the 4th and 5th centuries its gorges such as Val Castoriana, Val di Narco, Valle di Noce, Scentelle, Romita and Monteluco were inhabited by ascetic monks belonging to the eremitic and Anchorites movements, many of whom had fled from persecution elsewhere.

In the 6th century some of these isolated hermitages grew into monastic foundations, particularly under the influence of the followers of San Benedetto da Norcia (Saint Benedict), born in Norcia, and founder of the Benedictine movement.

In order to develop agriculture and forestry in the valley, the abbeys managed the water, draining marshes and putting in place irrigation, particularly to allow winter flooding of meadows for pasture on Norcia's karst limestone plateau, a system called *marcite*.

In Valnerina, this process of agricultural development, alongside improved roads, new churches and settlements, is said to have occurred much earlier than anywhere else, and its systems thus served as models for development in other parts of Europe.

The considerable economic prosperity generated by the Benedictines is reflected in the valley's historical, artistic and architectural heritage, including sculptures and paintings, found both in urban and rural settlements such as Norcia, Cascia, Sellano, Preci, and Vallo di Nera, spanning from the 13th to the 17th century.

The property consists of:

- *Cascade des Marmore*
- *Hermitages*
- *Marcite de Norcia*
- *Landscape, towns, villages*
- *Benedictine abbeys*
- *Hydro-electric schemes and Galleto power station*

These are considered in turn:

- *Cascade des Marmore*

The Cascade des Marmore, the tallest waterfall in Europe falling 165 metres, is man-made. Created in 271 BC by the Roman Consul Curius Dentatus who wished to put an end to the floods in the Sabine valley around Terni, the river Velino was diverted north to join the Nera, and the combined water from the two rivers flowing over Mount Marmore created the spectacular 'artificial' waterfall. Downstream, the water was used for irrigation and parts of the Roman hydraulic system are still in evidence throughout Valnerina.

In Mediaeval times the cascade was partly reformed, to counteract flooding, and the water used for a series of small mills which remained functioning until the early 20th century. The flooding was not finally solved until 1787 when the architect Andrea Vici further modified the channel. The river's course was partially deviated by 20th century hydro-electric plants supplying industries in the lower valley and the falls now only run to their full capacity when the plants are not working.

In the 18th century the Marmore Falls became one of the sites of the Grand Tour, when aristocratic tourists mainly

from England visited the classical sites of Italy. The Falls were described by the poet Byron and immortalised by many artists. They came to epitomise the 'classical' Italian landscape.

• *Hermitages*

Following the edict of Constantine in 313 AD, Christians were allowed to practise their religion in the Roman Empire and Christianity spread along the Roman roads into towns and villages. Dioceses of Valnerina were set up in Spoleto (1st century), Terni (2nd century), Narni (4th century) and finally Norcia (5th century). The valley attracted ascetic monks from the Middle East, particularly from Syria, who lived initially as hermits in the caves of the valley. These hermits in time became part of the growth of monasticism – monks living together in communities according to agreed rules of conduct. The earliest hermitages seem to have been founded in the 5th and 6th centuries by Anchorites (hermits being free to wander and anchorites living in communities). Evidence for the activities of these early hermits can apparently be found in caves, Syrian cypress trees and sculptures. There are reportedly three hermits still living in the valley.

• *Marcite de Norcia*

Under the patronage of King Ostrogoth Théodoric (493-526) the new monastic communities set about reclaiming the agricultural lands neglected since the fall of the Roman Empire. Documentary evidence records three interventions: the draining of the marshes around Terni, the Sant'Anatolia di Narco and the Campiana with Norcia. Of the two first, few signs persist today; the third still survives as the *Marcite di Norcia*.

On Norcia's karst plateau irrigation channels were constructed to allow the winter flooding of pasture land. About seventy hectares still partially survive, with lines of trees and canals, known as *cortinelle*. Part of the irrigation system and the small water mills have been reconstructed for educational purposes.

• *Landscape, towns, villages*

The Lombards, who had conquered the area in the 568-9, reconstructed the landscape with nucleated settlements around towers and churches and brought in a period of prosperity and agricultural advancement, based around the Benedictine abbeys (see below).

After the defeat of the Lombards in 774 by Charlemagne, there followed a period of uncertainty when fortified dwellings, housing several farming families, were constructed against the threat of invasion by Hungarians and others. From this period, around 100 fortified dwellings remain in the landscape, often separate from the earlier settlements: these are listed in the dossier.

Monastic revival in the 11th and 12th centuries led to a growth of communities and the early work in abbeys and churches dates from this period. From the 13th to 15th century, cities (Terni, Norcia and Rieti) were reinforced and walled and the flourishing economy based on the breeding of sheep was reflected in new decoration of churches.

The 13th and 14th centuries saw a gradual decline in the abbeys and this in turn meant a decline in the management of the water courses; marshes began to re-appear. This was reversed in the following three centuries when the water courses were once again functioning and a whole network of small water mills was developed in the valley.

The final phases of the valley's development were in the 19th and 20th centuries with the building of new roads, railways and industrial centres based on hydraulic power and the retreat of people from the countryside in the mid 20th century – as was and is happening in the uplands areas over many parts of Europe.

Details are given in the dossier for all the main settlements, the smaller settlements in their hinterland, and the main monuments as follows:

Province of Perugia:

Cascia: 46 settlements, 9 archaeological sites, 7 churches

Spoleto: 7 settlements, 12 churches

Monteleone di Spoleto: 6 settlements, 1 archaeological site, 2 churches

Norcia: 33 settlements, 7 churches

Poggiodomo: 5 settlements, 3 churches

Preci: 17 settlements, 2 churches

Sant'Anatolia di Narco: 8 settlements, 1 archaeological site, 4 churches

Scheggino: 8 settlements, 7 churches

Sellano: 9 settlements, 11 churches

Vallo di Nera: 7 settlements, 4 churches

Province of Terni:

Arrone: 6 settlements, 2 archaeological sites

Ferentillo: 19 settlements, 1 church

Montefranco: 1 settlement, 1 archaeological site

Polino: 2 settlements

Terni: 8 settlements

Although the various periods of settlement are described in the dossier, and parts of the landscape are described – such as the oak and other woods, there is no detailed evidence provided on the evolution of the landscape outside the settlements in terms of farming and forestry patterns and the way water management supported these.

• *Benedictine Abbeys*

The birth of Western monasticism is usually associated with works of Saint Benedict of Norcia, born in Norcia in 480 AD. He lived as a hermit for several years before

founding the monastery of Montecassino (located outside of the nominated property) and organised a code of conduct for monastic communities adapted to Western needs. His precise association with Valnerina is unclear but the Benedictine abbeys of San Pietro in Valle, San Felice di Narco, Santa Maria de Ugonis and Sant'Eutizio were founded in the valley – mostly probably around the 8th and 9th centuries by the Lombards. San Pietro in Valle became the burial place of the Lombard Dukes of Spoleto.

The precise dates for the founding of the monasteries is also unclear and little remains of their fabric prior to the 11th and 12th centuries when a period of peace following two centuries of unrest led to a rebirth of monastic communities all over Europe. They grew in power and prosperity, many controlling several villages and castles, and their impact is demonstrated in urban planning and the flowering of artists and craftsmen in what is known as the Romanesque style of Spoleto – particularly evident in the monastery buildings and their fine frescoes.

• *Hydro-electric schemes and Galleto power station*

In the late 19th and early 20th centuries the water resources of the River Nera were harnessed to supply power for industry around Terni and large hydro-electric plants were constructed along the lower river. The first stage was the construction of the Nerino channel carried out in 1880-81. In 1924 the Terni Company was created and it took full control of water in the entire basin. Between 1927-1929, the monumental power station of Galleto was constructed (located within the nominated property). In 1932 and 1935 further channels and dams in Salto and Turano (located outside the nominated property) supplement the power of the cascade.

There are also several small hydro-electric power stations dating from the early 1900s along the Nera valley, although not all are in use. They can be identified, even if sometimes with difficulty, by vegetation, and lines of trees.

History and development

The main history is covered in the description above. In 1993 the lower reaches of the valley became part of the *Parco Nazionale Monti Sibillini* with the aim to safeguard the environment.

3. OUTSTANDING UNIVERSAL VALUE, INTEGRITY AND AUTHENTICITY

Integrity and Authenticity

Integrity

The valley is nominated by the State Party for a wide range of attributes: Roman and medieval water management systems, monastic organisation and the buildings displaying the wealth it created, the aesthetics of the landscape and hydro-electric generation.

ICOMOS considers that the key attributes of the valley and the subsidiary ones need to be more clearly identified. The integrity of the property relates to its wholeness and intactness depending on the attributes described. The

nominated property encompasses almost the whole valley up to the watershed. However, from the perspective of water management, there are gaps which relate to recently developed industrial areas around Norcia, and an area at Papigno which is related to hydro-electric generation.

Authenticity

The functional authenticity of the main built attributes nominated is high. The hydro-electric power industry is active and still uses the water energy from the Roman Cascade des Marmore; the *marcite* of Norcia is still in part functional; the abbeys retaining their religious importance; and the later hydro-electric plants are still in commission. The 1997 and 1979 earthquakes had a major impact on the historic centres and their monuments but the major conservation works on these are now complete. The scale of restoration has impacted to a degree on the authenticity in terms of fabric.

What is less clear is the authenticity of the farmed and forested landscape and more specifically the water management associated with it, as little evidence is provided on the precise way it has evolved nor on how recent changes in the farming systems might have impacted it.

The valley landscape has been affected in part by new developments, along the main arteries of the Valnerina, including a new road crossing, and by changes in land management which have impacted in part on its picturesque qualities. In the large nominated property there are aspects and areas with less visual authenticity than others.

ICOMOS considers that the overall integrity of the nominated property has been impacted on by the exclusion of some industrial structures. Although the functional authenticity of the built remains is high, ICOMOS considers that the authenticity of the valley as a landscape demonstrating active as well as relict water management systems is difficult to assess because of lack of information on farming and forestry and the management of water-related structures. The visual authenticity of the landscape is less intact in some parts of the valley that have been changed by recent development.

Comparative analysis

The analysis provided by the State Party considers very briefly other ancient water management systems of irrigation such as Dujiangyan, China (inscribed on the World Heritage List in 2000), and Roman transport of water in, for instance, North Africa and Spain. It suggests that the Cascade des Marmore is different from all of these for the following reasons:

- The falls were different in conception from other irrigation systems.
- The revival of irrigation systems by the Benedictines.
- The survival of the *marcite* irrigation system formerly present in other areas such as Lomellina but practically non-existent today.

- The dense network of religious and civil buildings built in the medieval period around its principal abbeys.
- The churches of Valnerina preserve *in situ* their artistic inheritance and in particular frescos, of which some are of exceptional quality for their 11th and 12th century dates.

The nomination proposes the whole valley for its ensemble of water management practices from Roman times to the 20th century. The Comparative Analysis does not address in any detail other areas where extensive Roman irrigation systems are still reflected in later land management practices. Mention could have been made of the farmland around Saint-Rémy-de-Provence where the present irrigation system is linked to the Roman Peiroou dam (a vaulted dam built in the 1st century AD), part of a vast irrigation plan throughout the Alpilles that supplied water not only to the surrounding cultivated farmland but also to the thermal baths, the triumphal fountain in Glanum, to Barbegal (near Fontvieille) and Arles (inscribed on the World Heritage list in 1981).

Nor are comparators considered for the way the Benedictines and other monastic communities had a major impact on the development of agricultural exploitation right across Europe. Water management was a key part of the way the monasteries opened up land for cultivation and allowed larger settlements to be sustained. It is mentioned elsewhere in the text that the improvements in water management in Valnerina, as illustrated by the *marcite* system, occurred earlier than in other parts of Europe and therefore acted as exemplars. On the other hand, the dossier also acknowledges that the early history of the monasteries in Valnerina is not entirely clear and no evidence for this early spread of knowledge is provided.

Comparisons are not made with other surviving *marcite* systems - the tradition of winter flooding of pastures was widespread in Europe, and quite a number survive but clearly some of these systems could be later than those near Norcia. More evidence is needed to put the Norcia systems in context.

What is clear is that flourishing monasteries in the Valnerina led to the creation of many Romanesque religious and secular buildings, some of which display fine frescoes and other monuments. It is suggested in the Comparative Analysis that these could equal those of Catalan Romanesque Churches of the Vall de Boí, Spain (inscribed on the World Heritage list in 2000).

No comparators are put forward for the 20th century hydro-electric plants. The earliest hydro-electric plant was constructed in 1870 in Cragside, UK for a domestic house. Many commercial plants were constructed before the end of the 19th century and some still survive. The example in Valnerina is not therefore particularly early.

Although it does not appear that any of the component parts of the water management practices are unique, apart from the Cascade des Marmore, what has not been established through the Comparative Analysis is whether the ensemble of systems can be said to be outstanding. Valnerina is not compared with any other whole valley.

Valnerina is nominated for a complex range of attributes, some of which apply to only parts of the property. The one thread that links them all is water management. ICOMOS considers that a much more detailed comparative analysis is needed in order to establish whether the ensemble in Valnerina is outstanding in terms of the way Roman irrigation systems formed the basis of water management from the 6th century to modern times. What is also needed is a clearer understanding of the physical impact of those systems in the overall landscape and how they are currently maintained.

Justification of the Outstanding Universal Value

The State Party considers that Valnerina is of Outstanding Universal Value because:

- Valnerina reflects a series of inseparable historic environmental, urban, landscape, cultural and spiritual values.
- The Cascade des Marmore is an exceptional Roman hydraulic work.
- The Falls are an expression of the human genius and symbol *par excellence* of the Italian cultural landscape.
- Valnerina reflects the fight against hostile nature, where the need for the control of water and the harshness of the landscape have, through a patient and persistent drainage work over many centuries, guaranteed the self-sufficiency of the population.
- The valley reflects the first steps in the development of the monasteries.
- The structure of the landscape displays its evolution.
- A rich and diffuse artistic inheritance of the Early Middle Ages and the Middle Ages persists in abbeys, churches (“*pievi*”), castles and villas.

Criteria under which inscription is proposed

The property is nominated on the basis of criteria i, iv, v and vi.

Criterion i: The State Party justifies this criterion on the basis that:

- The Cascade des Marmore, created by the Romans in 271 BC, is the highest waterfall in Europe and constitutes one of the most important examples of regulation of water realised by man.
- The artificial origin of the Cascade was seen as an expression of the human genius and hydraulic capacities of the ancient world by visitors on the Grand Tour and, exalted by

writers and painters, it became one of the principal symbols of the Italian landscape.

Neither the Cascade of Marmore nor the water management system is the focus of the nomination. The nominated property covers a wide landscape with remains of monastic irrigation, mediaeval hydraulic mills and 20th century hydro-electric systems.

ICOMOS does not consider that it is appropriate to consider this criterion for the whole nominated property. Therefore, ICOMOS does not consider that this criterion has been justified.

Criterion iv: The State Party justifies this criterion on the basis that Valnerina:

- Constitutes a late ancient territorial structure which, consolidated and definitively organised in Romanesque times, still preserves today its principal constitutive characteristics.
- Represents an eminent example of reorganisation of the landscape in a significant period of history between the Roman and modern world.
- In spite of repeated devastations through works of nature and of man, and its small population, the local community of Valnerina has preserved its capacity to develop a self-sufficient, sophisticated economy over the centuries through the knowledgeable use of its own territory.

ICOMOS considers that the reorganisation of the landscape to utilise water resources, first by the Romans, then the Benedictines and more recently industrialists, reflects several periods of history in the landscape, but it does not consider that this ensemble has been justified as being outstanding.

ICOMOS considers that there are many other sites that could be considered as reflections of ancient hydraulic schemes, of monastic schemes, and of more recent hydro-electric schemes which could be said to be more exceptional in technical terms. If the Valnerina sites are to be considered as an outstanding ensemble, further work needs to be undertaken on the Comparative Analysis to demonstrate that this valley has outstanding qualities when compared to other sites in which water management schemes have persisted over many centuries.

ICOMOS does not consider that this criterion has been justified.

Criterion v: The State Party has justified this criterion on the basis that the *marcite* irrigation system originating in the 6th century on the karstic high plateau of the valley to fertile water meadows for fodder, led to the development of a single biotype which still persists.

Although it is said in the comparative analysis that other *marcite* systems do not exist, they do in many areas, such as Piedmont, but many possibly originated at a later date than those in Norcia which were established by the Benedictines. Flooding meadows is an ancient technique found in many parts of Europe and further work would be

needed to establish if the Norcia examples are outstanding.

ICOMOS does not consider that this criterion has been justified.

Criterion vi: The State Party justified this criterion on the basis that Valnerina is the result of a territorial transformation, both spiritually and materially, brought about through the impact of anchoretism and cenobitism, associated with monachism which, coming from the East, found in this territory an environment favourable to its development in Europe.

The history of monastic development over Europe has been well researched and further comparators would need to be developed to allow a better understanding of the precise importance of the early hermits and hermitages in Valnerina for which documentary evidence is slight.

ICOMOS does not consider that this criterion has been justified.

4. FACTORS AFFECTING THE PROPERTY

Impact of climate change

The whole nomination is underpinned by water from the river Nera and is clearly vulnerable to change which might impact on this water supply – either an increase which could produce floods, or a decrease which might make hydro-electric schemes uneconomic.

Development pressures

Gradual urbanisation of the lower parts of the narrow valleys is the main development pressure affecting the values of the property. This includes infrastructure and traffic development, new built structures for small business, visitor facilities and housing. A new tunnel in the north-east makes it possible to pass readily through the whole Valnerina area and this has increased traffic. It also facilitates commuting to work outside Valnerina and contributes to the pressure of new housing outside the core areas on the very small historic urban centres. In the future the need for an enlargement of the present road capacity can be anticipated. All these developments could have an impact especially on landscape structures at the bottom of the valley and settlements on midway slopes. A detailed study on the existing areas and a strategy for their protection and rehabilitation is urgent.

A new highway bridge will be crossing the nominated property south of the Cascade des Marmore. The project has been approved by the state conservation authorities. ICOMOS requested the State Party to provide an environmental impact assessment for the bridge and this has been submitted.

The results of this show that the proposed line of the bridge will not be visible from the Cascade des Marmore as this is separated by Mount Sant'Angelo and the Mount Valle. The bridge will be visible in the valley of Papigno and in places such as the Pennarossa mount. The report concludes that the bridge would not interfere with the hydro-electric power station of Galleto, which is in the

core zone as the bridge would sail over it, and although it would be visible in the lower part of the valley, it would not be incompatible with the industrial buildings nearby.

Seismic risk preparedness

The proposed Management Plan includes hydro-geomorphological, seismic and hydrological risk mapping. The region is prone to earthquakes, suffering serious damage in 1979 and 1997 – as a result of which, there is a high level of awareness.

Environmental pressures

The main environmental pressures in Valnerina relate to forestry and water management.

Changes in forest management or the abandonment of the high terrains in response to a dwindling rural population are present in some valleys but so far have not had a major effect on the landscape, but could in the future. Water management practices and the maintenance of river and stream banks and irrigation channels, drainage ditches and mills all rely on sufficient people farming the valleys to maintain the structures. It is therefore imperative that sufficient incentives are in place to encourage farmers to remain in the valleys. The impact of the National Park (which covers part of the south of the nominated property) on farming practices is not clearly set out.

Forest fire and water protection measures according to existing regulations are included in the management plan.

In conclusion, ICOMOS considers that the main risks to the property are from incremental urbanisation, the visual impacts of infrastructure development and the weakening of farming and forestry practices which could impact on water channel maintenance and the overall structure of the landscape.

5. PROTECTION, CONSERVATION AND MANAGEMENT

Boundaries of the nominated property and buffer zone

The natural and visual boundaries follow the watershed of the valleys of the rivers Nera and Velino.

Some of the valleys within the nominated property appear to have fewer physical attributes related to the proposed values, and their visual integrity has been partly disturbed by new development. In other areas, sites have been excluded where industrial development has taken place. For instance in Norcia the boundary of the property is immediately adjacent to the walls of the historic centre and does not include the whole valley which has later industrial developments. South of the Cascade des Marmore the boundary has been defined very tightly, including the hydro-electric station of the ENEL energy company, dating from the 1920s but excluding the adjacent industrial area of Papigno. Papigno is part of the same history of hydro-electric power development from the 1920s but it is no longer functional. The area was excluded as there is currently no conservation project for the Papigno industrial area. It is at present abandoned,

being used for various temporary purposes such as film studios. It is included in the buffer zone.

Depending on further clarification of the values of the property, ICOMOS considers that the boundaries need to be reconsidered to ensure that all the attributes are included.

The buffer zone includes the area of the fifteen mountain communities. The exceptions are in the southern part towards the municipality of Terni and in the north-west of Norcia. The buffer zone would also need to be reconsidered if the core zone is amended.

ICOMOS considers that the current boundaries of the core zone do not entirely match the extent of hydraulic attributes in the valley and need to be re-considered.

Ownership

The property is in public and private ownership, including some ownership by ecclesiastical organisations.

Protection

Legal Protection

The property is not protected under a single specific legal statute. Conservation in Valnerina is related by planning tools at four levels:

- at the state level through regional authorities for cultural heritage, archaeology, architecture, artistic heritage;
- at the regional level (Region of Umbria), through agencies responsible for protection at territorial level;
- at the provincial level (two provinces, Perugia and Terni) through agencies with responsibilities for planning, communications, tourism and education;
- at the Municipal level through by-laws for land-use, urban development, communications and public transport.

The following development plans apply to Valnerina:

- Territorial Urban plan (COULD) of the Umbria Area
- Plan of Parco Nazionale Monti Sibillini
- Territorial plan of Coordination of the Province of Perugia
- Territorial plan of Coordination of the Province of Terni

Plan of the Park of the Nera River

- Inter-commune plan of the Province of Terni, the Commune of Ferentillo, Arrone, Montefranco together with plans for individual communes.

Due to these overlapping planning regulations, there is a need for special attention to the coordination of conservation and development issues – something the Management Plan addresses (see Management).

Without formal legal protection for the landscape, conservation and protection rely on the implementation of development plans. This in turn relies on adequate resources and competency being in place at the municipal level. However the '*Piano Regolatore*' which is the main instrument at the local level for new development, apparently accepts development that surpasses the limits by 10%. Even this marginal developmental increase can have a considerable impact on the fragile structure of the small municipalities and there is clearly a need to ensure resources to interrogate all relevant applications.

It would clearly be desirable if the planning policies could be supplemented by legal protection for all key aspects of the landscape. These would need to be identified after further survey and research, as acknowledged in the Management Plan.

ICOMOS considers that the current protective measures for the property should be supplemented in due course with protective measures for key aspects of the landscape when these have been formally identified and surveyed.

Conservation

History of Conservation

An earthquake in 1997 created considerable damage in this part of Umbria and in response a large amount of conservation work has been undertaken - and is still being done, supported by special national funding. Thus buildings and monuments in almost all towns have been subject to major repair and conservation programmes and a general rehabilitation has taken place alongside this reconstruction. The conservation works have been supervised by the state. The abbeys have also been subject to conservation works under state supervision. Less information is available on the features related to water management.

Present state of conservation

As a result of the works undertaken following the most recent earthquake damage, the major part of the architectural heritage is in a good state of conservation. The major scale of this work has impacted on the authenticity to a degree – see above.

No details are available on the state of conservation of the landscape and in particular water courses, water management systems, woodland and related farming practices.

Active Conservation measures

The state financing of earthquake reconstruction works is now at a final stage.

Currently conservation measures consist mainly of initiatives by individual owners on rural buildings. Conservation benefits from the training courses in conservation in the Umbria area.

Little information is provided on conservation of the water resources, either the river and stream banks or on mills and irrigation systems. Nor is detailed information given on the conservation of the woodlands, the meadows and grazing lands or the industrial buildings

ICOMOS considers that conservation measures for buildings are adequate but that the conservation of landscape features needs to be identified as a separate issue to be resourced and monitored.

Management

A Management Plan has been developed which effectively establishes a framework for local planning for the property.

The Management Plan Action Plan is divided into themes: Knowledge; Safeguard and Conservation; Development of the Cultural, Environmental and Socio-economic Inheritance; and Promotion, Formation and Communication. Initiatives are set out to cover a four-year period. This includes the need for research into historical agrarian landscape and, in particular, on the antique hydro-geologic factors and the *marcite*, and includes as actions the development of a Water Resources Plan and projects for the recovery and restoration of the river banks.

No formal structures have yet been put in place to implement this plan, but the need to do so is recognised. In 2005 the stakeholders including all Communes, the Archbishop of Spoleto-Norcia and the National Park of Monte Sibillini signed an agreement for coordination of the Management Plan for Valnerina.

The municipalities are already working together within a joint organisation of the Mountain Communities. As a contrast the Cascade des Marmore area is part of the large industrial municipality of Terni with specific competencies, especially for tourism management.

Resources, including staffing levels, expertise and training

The main management issue is competency and resources at local level, with the exception of the province and large municipality of Terni, and to some extent Norcia. Although funds might be available for projects, resources are also needed for on-going implementation of existing regulations.

The small size of the municipalities facilitates direct communication and consultation. Although the commitment and pride in Valnerina was strongly emphasised during the mission, limited human and economic resources make some of the work vulnerable. At the time of the mission, one architect was being appointed to assist the municipalities on building development issues.

There is high level competency in conservation available in the administration and the universities in the region. For example, the University of Orvieto has a Masters programme in conservation of small historic centres. Capacity building and training for local administrations and builders and owners could be very valuable.

Tourism

The Cascade des Marmore is the main tourist attraction in the area. Terni is also the driving force in tourism development and has a comprehensive visitor management plan including an important educational component for schools. Currently tourism is geared at recreational and natural tourism. Cultural tourism is being addressed in the management plan.

Currently there is little information for visitors on water management and industrial heritage. Some of the future strategies include the demolition of the industrial 'village' for the creation of a recreational park. A much higher awareness of the industrial landscape sites is needed.

ICOMOS considers that the Management Plan that has been developed is to be commended as a framework but will need adequate resources for its implementation, particularly to research the ancient and more recent water management systems, develop a Water Resources Plan, undertake projects for the recovery and restoration of the river banks, and to monitor the impact of development proposals.

6. MONITORING

Currently the level of documentation for the agricultural landscape and its water management systems is less than adequate – as acknowledged by the Management Plan. Monitoring of that landscape is therefore difficult without a detailed baseline.

Currently the area is monitored through aerial photographs (although the dossier does not say how often), through the development control mechanisms, and through the use of tourism figures.

7. CONCLUSIONS

The Valnerina landscape presents a fascinating history of water management since Roman times, and sustaining the living cultural landscape clearly has the support of local communities.

The property has been nominated for a mixture of attributes, covering the Roman Cascade des Marmore, monastic *marcite*, associations with ascetic monks and the development of monasticism, the collection of Romanesque abbeys, churches, castles and villas and their art that blossomed under the prosperous monasteries in the Middle Ages, the artistic and literary associations of the Cascade, and the 20th century hydro-electric power generation.

The Cascade des Marmore is dramatic and memorable and clearly forms the focus for the whole area. However to justify inscription of the Valnerina as a whole, ICOMOS considers that further research and survey work would need to be undertaken. This work will need to identify the landscape patterns resulting from the various hydraulic systems, from Roman times to the 20th century industrial zone of Papigno, as a basis for a more detailed Comparative Study that could address whether Valnerina as a landscape can demonstrate Outstanding Universal

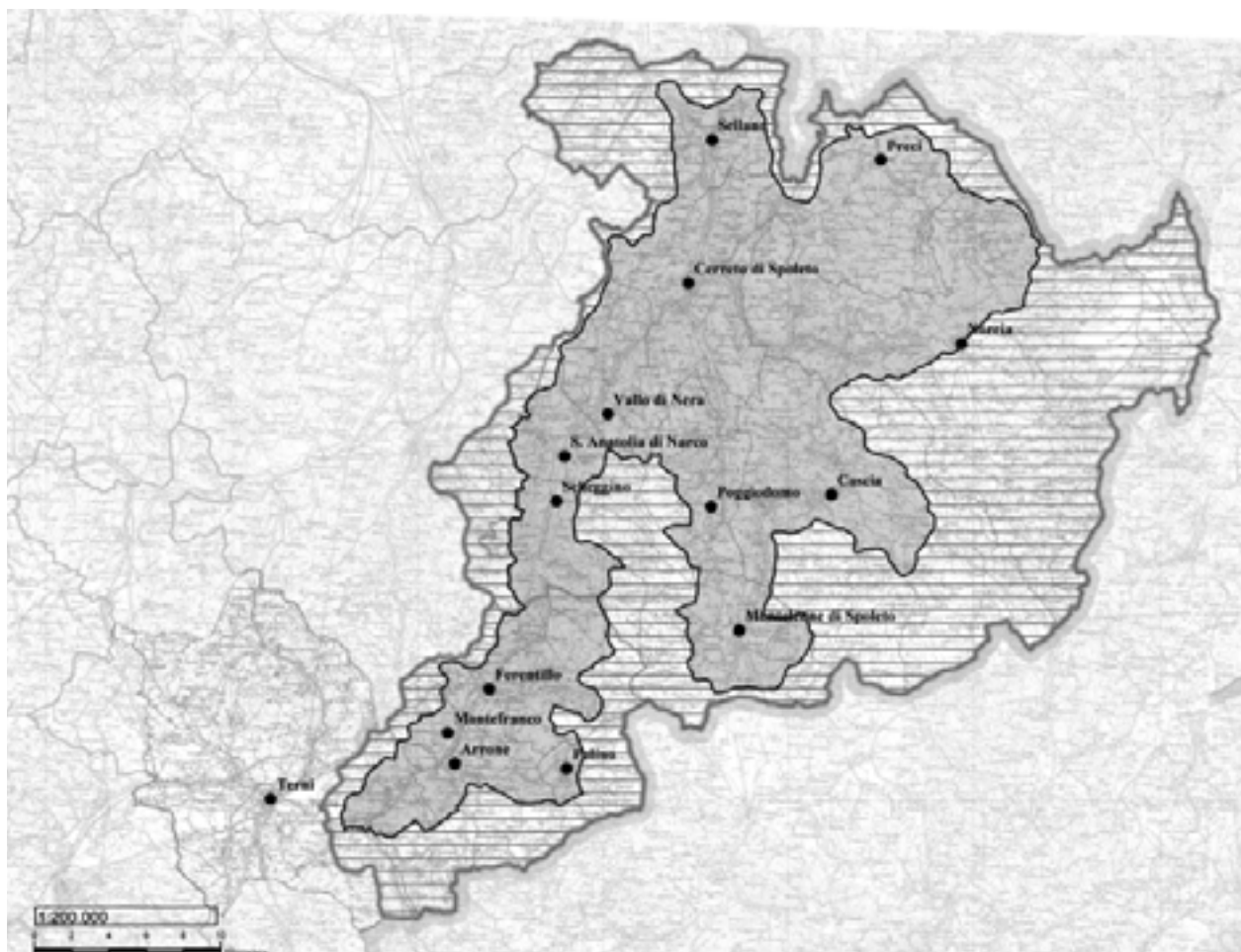
Value for its hydraulic works and the impact they have had on its farming, forestry and settlement patterns and practices.

On the basis of the available evidence, ICOMOS considers that the two halves of the valley – upstream and downstream from the Cascade – are fundamentally different, and further attention should be paid to hydraulic arrangements in the lower valley, including the Cascade des Marmore, the irrigation it fostered, mediaeval water management, and the later industrial developments based on water power.

ICOMOS further considers that landscape surveys to identify in more detail the way the landscape has been shaped as a result of water management systems, and the conservation of water management features needs to be given a higher profile and resourced and monitored as a way of sustaining the hydraulic systems that underpin farming and forestry in the valley.

Recommendations with respect to inscription

ICOMOS recommends that the examination of the nomination of Valnerina and the Marmore Cascade, Italy, to the World Heritage List be *deferred* in order to allow the State Party to research further the attributes and significance of the Valnerina landscape, particularly its hydraulic works and industrial heritage, and to re-consider the boundary of the property accordingly.



Map showing the boundaries of the nominated property



Marmore Waterfalls



Vallo di Nera



Scheggino



Marcite de Norcia



Benedictine Abbey (St. Claudio)

Gdańsk (Poland)

No 1240

Official name as proposed

by the State Party: Gdańsk – The Site of Memory and Freedom

(The change of name of the property was suggested by the State Party in the Supplementary information sent in December 2006)

Location: Pomeranian Voidodeship
(Province), Gdańsk Urban
County

Brief description:

The nomination of Gdańsk – The Site of Memory and Freedom refers to a select list of historic buildings that survived the destruction of the town towards the end of World War II, in 1945. These buildings are all associated with the themes of memory and freedom related to the role of Gdańsk as Free City and a town of religious tolerance. It was part of the Hanseatic League and one of the major ports in the Baltic. The Westerplatte memorial site recalls resistance against enemy occupation at the beginning of the Second World War, in 1939, and the Gdańsk Shipyard refers to the emergence and development of the Solidarity Movement, which contributed to the change of political regimes in the 1980s.

Category of property:

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

1. BASIC DATA

Included in the Tentative List: 4 November 2005

International Assistance from the World Heritage Fund for preparing the Nomination: No

Date received by the World Heritage Centre: 21 October 2005

Background:

The State Party submitted a first nomination titled: “Gdańsk: the Main Town, the Motława Side Channel and the Vistula Mouth Fortress” in 1997. In October 1998, ICOMOS recommended that the property should not be inscribed on the World Heritage List. ICOMOS considered that this case was not substantiated by a study of the material evidence. Its eligibility was considered to be weakened by the fact that it has been almost entirely reconstructed following destruction at the end of World War II. This reconstruction was carried out with considerable care for historical accuracy, but there are several features of the

overall action that dilute the authenticity of present-day Gdańsk. The State Party prepared an amendment in order to show the level of conservation of remaining elements, mostly concerning large-scale public buildings. Whilst ICOMOS appreciated the high quality of both the original nomination dossier and the supplementary documentation, it felt unable to change its original recommendation. The State Party withdrew the nomination dossier before its examination at the 22nd session of the World Heritage Committee, (Kyoto, December 1998).

Consultations: ICOMOS has consulted its International Scientific Committee on Historic Towns and Villages.

Technical Evaluation Mission: 2-6 October 2006

Additional information requested and received from the State Party: ICOMOS sent a letter to the State Party on 17 October 2006, requesting additional information on:

- Redefinition of boundaries of the nominated and buffer zones of the Solidarity Square to include shipyards.
- A comprehensive and conclusive analysis of how each selected historic monuments is interlinked in the nomination and how the monuments as a group form the concept of the nomination.
- A comprehensive map showing the geographical areas where the local plans are applied.

The State Party provided further information on 11 December 2006. The additional information consisted of a document that answered the requested issues. At the same time, under the title of “Gdańsk – The Site of memory and freedom”, this document suggested a new name for the property instead of the previous “Gdańsk - Town of memory and freedom”.

Date of ICOMOS approval of this report: 21 January 2007

2. THE PROPERTY

Description

Gdańsk is in northern Poland, on a bay of the Baltic, where the eastern arm of the Vistula and its tributary the Motława enter the sea. The city of Gdańsk is composed of a number of sections, all dating from the Middle Ages. The Main Town, the largest of these components, is on the west bank of the Motława (ca. 42ha). It is traversed by the historical main traffic route, known as the Long Street, which opens out to form the Long Market, the heart of the town. It is straddled by a series of gates - the Highland Gate, the Prison Tower, and the Golden Gate at its western end and the Green Gate on the east. The other main streets run parallel with Long Street to north and south and all run down to the Motława. They are crossed by streets running north-south, almost at right-angles, the layout being interrupted only in the vicinity of the Church of the Virgin Mary.

The Main Town was surrounded in the medieval period by defensive walls, sections of which still survive. The Green Gate (1564-68) is an imposing structure, resembling a palace, whilst the Golden Gate (1612-14) combines the form of a Roman city gate with a triumphal arch and garden pavilions; it is decorated with symbolic sculptures. The Highland Gate, which was given its present appearance in 1588, incorporates part of the medieval fortifications at the eastern entrance to the city. There are several water-gates at the river end of the main streets; Crane Gate which closes Broad Street was erected in the mid 15th century to support what was at that time the largest crane in Europe.

During the Second World War, the city of Gdańsk was heavily bombarded, and was almost completely destroyed. Only a small number of historic buildings survived in a form that was possible to restore after the war. The present nomination includes twelve of these monuments in the Main City of Gdańsk. In addition, the nomination includes two recent memorials recalling the start of World War II and of the Solidarity movement.

1. *Upland Gate* [Brama Wyżynna] (area: 216 m²) was erected in 1574-76. It is the start of the Royal Route to the town, combining a defensive function with the representative one. It reflects Italian fortification arts and the rich plastic art decoration of the Dutch Renaissance. The ideological contents express the ties between Gdańsk and Royal Prussia with the Polish Commonwealth Republic. The gate survived the war only with minor damage, and was repaired in 1946-47.

2. *Outer Gate Complex at Długa Street* [Zespół Przedbramia ulicy Długiej] (area: 524 m²) was built from the 1480s. In 1586, it was renovated and transformed into a municipal prison. It illustrates the changes of medieval defensive techniques and the introduction of modern innovations, a medieval fort protruding beyond the line of the defensive walls. The complex suffered major damage in the war. In 1956, the prison was rebuilt, and the gateway beneath the Torture House was cleared in 1958.

3. *St. George Guild Mansion* [Dwór Bractwa św. Jerzego] (area: 450 m²) was built in 1487-94. It represents late Gothic lay architecture, and was erected for the St. George Guild, which provided training in the use of arms and in the art of defending the town's fortifications. In the 19th century a fine art college was opened here. The building suffered from fire during the war, and was restored in 1950-53.

4. *Golden Gate* [Złota Brama] (area: 127 m²) was erected in 1612-14. The name already indicates the rank of this edifice in the ideological programme of the city: - *Let those who love Thee thrive, let there be peace within your walls and happiness in your palaces* (Psalm 122) and *Small states build on agreement, large ones fall due to discord*. Allegoric statues reflect the main pursuits of the city (Peace, Liberty, Wealth and Fame) and exemplary civic attitudes (Prudence, Piety, Justice and Harmony). The gate was damaged in 1945. Its rebuilding was completed in 1957, including reconstruction of the allegoric statues.

5. *Uphagen House* (area: 437 m²) has its origins in the 14th century. In 1775, the property was acquired by Johann Uphagen who had the building refurbished into a wealthy merchant residence. Today it is a museum of interiors of patrician houses from the late 18th century. In 1945, the building partly burnt down. In 1953, the main part was rebuilt based on preserved elements, and the outhouses were rebuilt in the 1990s.

6. *Main Town Hall* [Ratusz Głównego Miasta] (area: 918 m²) is located on the site of an earlier town hall from 1327-36. The present building was built from the late 14th century and went through several phases in successive centuries. Its main body is a Gothic building, while the interiors date from the 19th century. It is the most important secular building of the Main Town, symbolizing the wealth and the might of the town, and its independence. The tower is a symbol of the domination of the municipal council. The city's links with Poland are reflected in the 16th century statue of King Sigismund August, on the top of the town hall. The decoration represents the sources of prosperity and splendour of the city. In 1945, the building suffered major damage. Fire destroyed the cupola, the roofs, the wooden floors and parts of the furnishings. Reconstruction began in the 1940s lasting until 1970, when it was reopened to visitors as Historical Museum of Gdańsk City.

7. *Artus Hall* [Dwór Artusa] (area: 774 m²) is built on the site of earlier buildings, though the present building was completed in 1481. There were various changes and additions in the following centuries. It has the most ancient reference to the legend of King Arthur. It was the seat of the merchant guilds of Gdańsk, a meeting place for the town's elites, the place for receiving noble visitors. In 1945, the roof was destroyed by fire and parts of the vaults collapsed. Reconstruction was completed in 1997.

8. *Neptune Fountain* (area: 25 m²) was erected in the early 17th century, and renovated in the 18th century. It stands on the axis of the entry portal of Artus Hall – in the Long Market. A symbol of the port town, it exemplifies the perception of antiquity in the fine arts of Gdańsk. Most of the fountain was kept in safety during the World War II and only part of it required rebuilding.

9. *Green Gate* [Zielona Brama] (area: 505 m²) was built in 1564-68, but underwent renovations in later centuries. It stands at the intersection of the main axes of the town. It is the largest municipal chamber in Europe of its time (late 16th century). It was erected for the exercise of local self-government in the city, consisting of the assembly of representatives of the merchants and craftsmen (Third Estate). It was damaged in 1945. The rebuilding was concluded in 1964, based on its 16th century form.

10. *Our Lady Church* [Kościół Mariacki] (area: 5100 m²) was built from 1343 and continuing into the 16th century. It is 105m long and able to seat 25,000 people. It became a Protestant church, though it remained under royal patronage and efforts were made to return it to Catholic faith. It symbolises the cohabitation of different faiths, exceptional in the early modern period in Europe. Its roofs were destroyed in 1945, and rebuilt by 1952. In 1980-82, mural paintings, such as those in St. James' chapel, were uncovered.

11. *Royal Chapel* [Kaplica Królewska] (area: 318 m²) is an example of ecclesiastical baroque architecture, built 1678-1781. As a royal foundation it served to strengthen royal authority and prerogatives in Gdańsk. It is still a symbol of the protection extended by the Polish king, Jan III Sobieski, over the Roman Catholic minority in Gdańsk, dominated by Protestants at the time. The interior was destroyed in 1945, and rebuilt in 1946-48. The adjoining houses were rebuilt in the 1970s.

12. *Wharf Crane* [Żuraw Portowy] (area: 279 m²) is documented from 1367, and it was renovated with masonry structures after a fire in 1442, and built higher in 1500. It is the largest harbour crane of medieval origin. In 1945, the wooden parts burnt out together with the mechanisms. It was rebuilt in 1957-62 as Marine Museum, and in 1993 a metal weathercock was added based on an illustration from 1770.

13. *Westerplatte Peninsula* (area 61.95ha) is a memorial site; it marks the battlefield where World War II began. From 1 September 1939, a small detachment of Polish soldiers began the resistance to overwhelming forces of the Nazi Third Reich lasting an astonishingly long time. The site includes a modern memorial and the remains of guardhouses, barracks and outposts.

14. *Part of the Gdańsk Shipyard* is defined as a memorial site associated with the Emergence of the Solidarity Movement, which began here with a strike in 1980. The site includes a memorial erected to the Fallen Shipyard Workers.

History and development

Gdańsk owes its origins to Duke Mieszko I, who gained control over the mouth of the Vistula, then inhabited by the Slavic Pomeranian tribe. It was established on an island between three branches of the Vistula - the Leniwnka, the Motława, and the Siedlica. The Teutonic Knights seized the town in 1308 and built a castle on the site of the fortified settlement. German merchants had been settling here since the 13th century, and by 1361 it had become one of the most important trading ports on the Baltic, being admitted to the Hanseatic League in 1361. New settlements developed - the Old Suburb (*Vorstadt*) around 1320, the New Town (*Jungstadt*) in 1380, the Granary Island (*Speicherinsel*) before 1311, and the Long Gardens (*Langgärten*) before 1456.

Following the defeat of the Teutonic Order Gdańsk returned to Polish rule in 1456 and from the 15th to 17th centuries it was the largest and wealthiest city in Poland; 80% of the country's foreign trade (mainly in grain) passed through it. The Reformation reached Gdańsk early: the first Protestant preachers were there in 1518 and Luther sent a petition to its inhabitants in 1525. Zygmunt I tried to combat the movement with force and, later, legislation, but his successor Zygmunt August sanctioned Lutheranism in 1557. The German-speaking Protestant majority in the city continued to be loyal to the Roman Catholic Polish monarchs, as did the Netherlands, Saxons, English, Scots, and French citizens. The inhabitants of Gdańsk were free to practise their own religions, whether they were Lutherans, Calvinists, Catholics, Mennonites or Jews.

The city was governed by five mayors and the city senate, forming a Protestant burghers' republic. The Calvinist elite, who ruled until 1612, worked according to the principles of stoicism from Republican Rome. This Protestant humanism provided the intellectual basis for the works of art, commissioned mainly from Dutch artists, with which the city was embellished in the 16th and 17th centuries. Gdańsk was known in the 18th century as the city "governed by scholars" (*Gelehrten-regierung*).

With the second partition of Poland in 1793 Gdańsk was seized by Prussia (there was a short period from 1807 to 1814 when it was a Free City under French protection), when it entered a period of political and economic decline that lasted until the middle of the 19th century. The advent of the railway led to the modernization of the port and revival of seaborne trade, accompanied by industrialization. At this time much Neo-Gothic and Neo-Renaissance architecture appeared in the city.

Gdańsk was to become a Free City once again after the Treaty of Versailles in 1920, but it was annexed by Germany at the outbreak of World War II in 1939. It was recaptured in March 1945 by the Red Army, who destroyed 80-90% of it. At the end of the war it became part of Poland and most of the German population was forcibly expelled, to be replaced by Poles from the eastern lands lost to the USSR. During the period of communist rule workers' demonstrations were bloodily repressed in 1970. In 1980 the Gdańsk shipyard was the centre of resistance and it was here that the Solidarity trade union was formed.

3. OUTSTANDING UNIVERSAL VALUE, INTEGRITY AND AUTHENTICITY

Integrity and Authenticity

The nomination dossier includes under one heading considerations of integrity and authenticity. The arguments of the State Party have been grouped in this section according to their references to the conditions of Integrity or Authenticity.

Integrity

According to the State Party, all the features proposed for inscription on the World Heritage List are situated in historical space, the documented history of which reaches a thousand years back. The complex of historical buildings in the Main Town is embedded in a medieval urban plan, preserved until the present day, whose structure it shapes and enhances, forming an integral and consistent entity. The nomination dossier includes a detailed report on the present state of each monument and memorial place that make up the nomination, including their current uses.

ICOMOS considers that, since the historic town of Gdańsk was almost entirely destroyed during the Second World War, the town has been largely reconstructed after the war, on the basis of documentary evidence of the situation before destruction. The individual monuments selected in this nomination represent the surviving historic buildings of Gdańsk after the destruction of 1945. As a result, the

architectural integrity of the buildings and their surroundings has been re-established even if the historical integrity of the whole remains more a “memory”.

Authenticity

According to the State Party, the requirement of authenticity of the nominated monuments of heritage is completely fulfilled. In the material sphere, the remaining fabric of the buildings results from natural processes involving decay and change over time. All conservation works, and to a limited extent reconstruction works, have been carried out on the basis of reliable inter-disciplinary studies resulting in complete and detailed documentation of the original. To a great extent, elements of historical interior furnishings integrated with the architecture have been preserved (often because they were kept in a safe place during war). In the intangible sphere, the nomination refers to the programme created by Gdańsk in the 16th and 17th centuries, in which ideological messages are associated with works of art. The direct and unequivocal links with documented events and ideas, constituting living tradition, continue to apply and possess unchallenged universal values.

ICOMOS considers that the historic monuments of the Main Town have lost considerable historic fabric during the war time. The reconstruction work however, begun very soon after the war, was generally based on documented evidence. Recognising the authenticity of the sites, the physical authenticity of the monuments is not convincing. In accordance with the evaluation of 1998, ICOMOS still considers that there are several features that have diluted the authenticity of present-day Gdańsk, such as the complete redesign of most interiors and the conceptual approach in the case of many facades. Although the conditions of integrity and authenticity of Westerplatte and Gdańsk Shipyards as memorial sites are accepted, ICOMOS considers that those conditions are not evident for the property as a whole.

In conclusion, ICOMOS is not satisfied that the necessary conditions of integrity and authenticity of the property as an ensemble have been met.

Comparative analysis

The nomination dossier traces the development of each nominated monument within its relevant historical context, comparing each with similar structures elsewhere, in different European countries and cities such as Antwerp, Amsterdam, Frankfurt, Lübeck, and Bruges. The nomination however notes that the scope is not to propose inscription on the basis of architectural values. In relation to the memorial places, references are made to the Independence Hall in Philadelphia (USA) and the Luther Memorials in Eisleben and Wittenberg (Germany), which were inscribed on the World Heritage List due to events of outstanding universal value.

According to the State Party, the importance of the events in Gdańsk Shipyard in 1980 could be considered similar to the effects of American Independence: the signing of the agreements on 31 August 1980 gave rise to the abolition of the “iron curtain”. Westerplatte, the place where World War II began, is considered in the nomination dossier as a

symbol of heroic resistance. In the case of both memorial sites in Gdańsk, the State Party states that there is no doubt that the political events associated with them symbolise the defense of human rights and how strife strengthens relations among people who are peaceful and full of tolerance.

Whilst recognising the arguments that support the nomination of the memorial sites, ICOMOS considers that no comparison has been provided of Gdańsk as the site of memory and freedom. It can be noted that generally all historic towns have their memory and many also have strong symbols related to freedom. In the nominations of Philadelphia and the Luther Memorials the case was clearly made to link the relevant events to these places. While the case of Gdańsk Shipyard is comparable to the above, the rationale in relation to the whole nomination of Gdańsk is not clarified.

In conclusion, ICOMOS considers that the comparative analysis is not exhaustive and does not deal with all the essential issues related to the nomination and the proposed outstanding universal values of the property. Special attention should be given to a deeper comparative analysis in relation to other memorial sites inscribed or not on the World Heritage List

Justification of the Outstanding Universal Value

According to the State Party, Gdańsk is of outstanding universal value because it owes its establishment and over 1000-year long development to harmonious cooperation among people of different nationality, religion, cultures and professions. The King of Poland (1457) granted it true liberty from external political, economic and religious coercion, creating the foundations for the multi-national municipal republic, which became the patron of distinguished artists. Gdańsk made excellent use of its freedom by its openness to new ideas in art and religion. The Italian-Renaissance “free-city” model, unique in protestant northern Europe, functioned for almost 350 years.

Gdańsk has been an important trading port in the Baltic region as is also reflected in its role in the Hanseatic League. Its destruction close to the end of the Second World War was an event of great human suffering and caused great losses to cultural heritage. The love of freedom is the main axis of the historical tradition and modern experience of Gdańsk; it was also at the foundation of the impressive architectural works erected there. It was at the origin of many historical events, including the heroic defence of Westerplatte in the initial days of World War II. It was at the roots of the events associated with the emergence of Solidarity, the first popular opposition movement in any communist country.

ICOMOS considers that the present nomination is based on the underlying themes of memory and freedom. Reference is made to symbols that express such associations with the selected buildings and memorial sites. Nevertheless, the comparative study is more focused on the architectural and art-historical significance rather than on the exploration of the issues of memory and freedom. Indeed, it has not been demonstrated in the nomination that Gdańsk would be

unique or exceptional or the most representative site in relation to such ideals.

Criteria under which inscription is proposed

The State Party nominates the property on the basis of criteria *ii*, *iv* and *vi*:

Criterion ii: According to the State Party, Gdańsk, through the set of historic buildings in the Main Town, shows an important exchange of human values within Europe, from the 2nd half of the 16th century to the 17th century related to architecture, technology and urban planning. This is characterised by a complete functional programme, the highest artistic and conceptual values, resulting from the aspirations and ambitions of the burghers, and confirmed in the urban space as the apotheosis of civil freedom and liberty rights.

Whilst recognising the importance of the selected monuments as examples of exchange of human values related to architecture, technology and urban planning, ICOMOS considers that it has not been demonstrated that those monuments in themselves represent the idea of memory and freedom on which the nomination is centred.

Criterion iv: According to the State Party, Gdańsk offers an exceptional example of a programme of urban public facilities, reflecting the aspirations of its inhabitants, assuring their freedom of association and religious faith, and safeguarding the economic and security of citizens. The landscape with its cultural and spatial values, dominated by the characteristic towers of the Main Town Hall and the Church of Our Lady, illustrate an important stage in the history of humanity.

ICOMOS considers that the reasons given to support the application of this criterion are not sufficient to demonstrate the outstanding universal values of the property.

Criterion vi: According to the State Party, Gdańsk is directly associated with the most important historical events in this part of Europe, conceiving liberty as the highest value, and the memory of the past as an obligation towards the future. In this regard, the memorial sites of Westerplatte and Gdańsk Shipyard have exceptional significance being associated with the heroic defence of the universal ideals of freedom.

ICOMOS recognises the significance of the memorial sites. This criterion could be applied, taking into account the importance of the selected monuments and the two memorial places in relation to historic events, but the outstanding universal significance based on an in-depth comparative analysis has not been demonstrated.

In conclusion, ICOMOS considers that the outstanding universal value of Gdańsk as a site of memory and freedom has not been demonstrated.

4. FACTORS AFFECTING THE PROPERTY

According to the State party, there are no particular development pressures related to the nominated monuments, even though there will be some projects in surrounding areas related to their economic revitalisation.

There are some risks from the long-term fluctuation of groundwater levels, which can result in foundation failures. The location and hydrological structure of Gdańsk pose a risk of floods. This is the case especially under particular climatic conditions. Nevertheless, anti-flooding measures have been taken, including the installation of flood gates, dykes, drainage pump stations, retention reservoirs and rain collectors.

In terms of tourism, Gdańsk is the fifth most visited site in Poland, having some 1.3 million visitors in 2003. The State Party reports that tourism does not threaten the city's cultural artefacts. The problematic period is reduced to three months (from June to August), due to climatic conditions and the holiday period. Plans and programmes have been adopted to ensure an adequate management of tourism traffic.

ICOMOS considers that the main risks relate to floods and groundwater levels, and that the State Party has demonstrated that measures have been undertaken for their adequate control.

5. PROTECTION, CONSERVATION AND MANAGEMENT

Boundaries of the nominated property and buffer zone

The property has been identified as three parts, each with its own buffer zone: the Old Town area, and the two memorial sites. In the Main Town, the nomination includes each selected building, with a total area of 0.9675 ha. The memorial site of Westerplatte Peninsula covers an area of 61.95 ha and the memorial site of Gdańsk Shipyard includes an area of 1.82 ha.

Every nominated zone has its own buffer zone. In the Main Town, the buffer zone was defined to coincide with the limits of the medieval fortifications. This area conserves the medieval urban layout and many historic structures. For the memorial site of Westerplatte Peninsula, the buffer zone consists of the protected area surrounding the site designated as a Memorial of History, together with the Fort of Wisłoujście and adjacent area. For the area of Gdańsk Shipyards, the buffer zone consists of the immediate protected zone of the site, entered on the register of immovable monuments. Surrounding the buffer zone, a conservation and landscape protection zone has been defined.

ICOMOS considered that in order to understand the working fields and shipbuilding industry, where the Solidarity movement emerged, at the least the most important parts of the shipyards should be taken into consideration. At the request of ICOMOS, the State Party has reviewed the boundaries of the proposed core and buffer zones corresponding to this memorial site.

The revised nominated area includes the building of the Gdańsk Shipyard Management, built in ca. 1880 (at the beginning of the 20th century both wings of the building

were further developed). The buffer zone was also extended to encompass the oldest, most architecturally significant part of the shipyard.

ICOMOS considers that after the amendment by the State Party, for the Shipyard area, the boundaries of the core and buffer zones are now adequate to include the material components that support the nomination.

Ownership

The complex of monuments located in the Main Town is owned by different institutions and associations, although most belong to the Historical Museum of the City of Gdańsk. The rest are owned by the Association of Polish Architects, the Municipality of Gdańsk, the Archdiocese of the Catholic Church and the State Treasury.

In Westerplatte, the grounds around the Monument belong to the Municipality of Gdańsk. The rest of the area belongs to the State Treasury. The perpetual usufruct holders include the Gdańsk Sea Port Management Company and the Historical Museum of the City of Gdańsk. A part of the area is managed by the Ministry of National Defence, Regional Infrastructure Management and the Sea Unit of the Border Guard. The area around the Monument to Fallen Shipyard Workers (Solidarity Square) belongs to the Municipality of Gdańsk City.

Protection

Legal Protection

The presently binding law for the protection of the nominated historic properties is the Act of 23 July 2003 on the protection and guardianship of monuments. The listed monuments and the Gdańsk Shipyard memorial site are protected under this law. In the buffer zone there are 150 other protected monuments.

The status of Memorial of History is the highest form of protection of monuments accorded by Polish law. This status is granted by the President of the Republic who issues the decree at the request of the Minister of Culture. There are at the moment 25 properties in this category. The historical complex of Gdańsk, the town within the limits of 17th century fortifications, is designated as a Memorial of History. Similarly, Westerplatte memorial site is protected as such.

The Shipyard Square was entered on the Inventory of Monuments in 1999. The nominated area and the nearby Emperors' shipyards have a Local Spatial Development Plan approved in September 2004. According to it the industrial area will be converted to residential and service areas, with a new ring road construction cutting off the Labour, Hygiene and Safety Hall from the industrial area at the seafront. In the supplement provided by the State Party, new information is given on the plans, which will be changed in order to take into account ICOMOS' concerns. For example, there is now a proposal that the road be taken into a tunnel in order to avoid cutting the shipyard area.

ICOMOS considers that the legal protection is adequate in the case of the monuments located in the Main Town. The Local Spatial Development Plan for the Main Town area

of Gdańsk was adopted in 2003. The aim of the plan is to preserve the historic urban layout of the Main Town. Reconstruction will be encouraged and will to some extent be obligatory along some streets. The target is to establish this area as a centre for culture, services and tourism, with supplementary residential housing functions.

In relation to the Local Spatial Development Plan for the shipyards area, ICOMOS considers that the conversion of the area into a residential and services district could affect the adequate interpretation of its heritage values, especially those related to historic events and to the industrial activities that traditionally featured the area.

Conservation

History of Conservation

As has been referred to above, the historic town of Gdańsk was destroyed in the Second World War. The nominated historic buildings are selected amongst those few that survived this destruction and have since been restored and partly rebuilt.

Present state of conservation

According to the State Party, the physical state of conservation of the nominated monuments is generally satisfactory with the exception of Upland Gate, which is still to be restored. The nomination dossier includes a detailed explanation on works carried out during the last years on the monuments of Main Town, the buildings and structures included in Westerplatte remembrance site.

Active Conservation measures

According to the State Party, the properties proposed to be listed are repaired on a regular basis and they are also additionally treated by the following measures: cleaning of the facades, reinforcement and small repairs of wall structures, securing of stonework details and dehumidification of the foundations. The details which had to be omitted during the postwar reconstruction works are now gradually being restored. An example of that is the reconstruction of the renaissance cupola of the Prison Tower.

Management

Management structures and processes, including traditional management processes

The principal responsibility for the protection and guardianship of monuments is with the Minister of Culture and the Voivodeship Governors (Provincial governors). The implementation of the measures is the responsibility of the General Inspector of Monuments, who has the position of Undersecretary (Secretary) of Monuments at the Ministry of Culture. In Gdańsk, the body responsible is the Governor of Pomerania Province, and the respective competencies are exercised by the Inspector of Monuments (Provincial Conservator). Parts of the responsibilities have been given over to the Municipality of Gdańsk.

ICOMOS considers that the general management structure is adequate.

Management plans, including visitor management and presentation

There exist several plans regarding the planning and management of the areas concerned in the nomination. These include:

- Development strategy for the Voivodeship of Pomerania (2000);
- Study of the conditions and orientations of spatial development in Gdańsk, adopted by Municipality of Gdańsk in 2001;

Special plans have been implemented to ensure the management of the monuments and sites included in the nomination. They have been prepared by the Office for Development of the City of Gdańsk. The plans are:

- *Local Spatial Environmental Plan for Westerplatte - Wisłoujście Fortress in Gdańsk.* It was approved by Resolution of the Gdańsk City Council on 5 December 2002. The Plan determines uses of land, types and heights of buildings. The Plan also includes specifications for the conservation and/or reconstruction of historic buildings.
- *Local Spatial Environmental Plan for the City Centre – neighbourhood of the Main City in the City of Gdańsk.* It was approved by Resolution of the Gdańsk City Council on 10 July 2004. The Plan determines uses of land, types and heights of buildings.
- *New Local Environmental Plan for the Area of Gdańsk New Town – Shipyard, Solidarity Square.* It was approved by Resolution of the Gdańsk City Council on 30 September 2004. The Plan determines uses of land, types and heights of buildings and includes rules for protecting cultural heritage, historic sites, cultural landscapes, and contemporary cultural values.
- *Management Plan for the nominated property, 2006.* The main purpose of the preparation of the management plan is to provide a stable framework for protection and conservation of the world heritage site submitted in the application to UNESCO world Heritage List. The Management Plan includes a description of the site, an analysis of its current condition, action strategy and objectives and action programme structure 2007 – 2013.

Gdańsk is one of the most visited sites in Poland and special services are provided for them. There is an extensive choice of accommodations, catering, etc.

ICOMOS considers that the management planning in Gdańsk is generally adequate. However, as noted above, it would be desirable to review spatial plans for the surroundings of the Gdańsk Shipyard area.

Resources, including staffing levels, expertise and training

The resources for the implementation have been foreseen in the management plan. The region and city of Gdańsk have adequate professionals on heritage protection and management. Since 2000 the City of Gdańsk has a City Development Office, which works in close contact with the professionals in heritage protection of the region. The municipality of Gdańsk has allocated subsidies for the restoration of monuments in the historic areas of Gdańsk.

ICOMOS considers that staffing levels, expertise and training are sufficient to ensure the adequate management of the property.

6. MONITORING

The State Party reports that regular inspections are carried out at sites and objects included in the present nomination with regular reporting procedures and action programmes. The area of the Site is monitored by special dedicated services, first of all those supervised by the Pomeranian Inspector of Monuments (supported by the Regional Centre for Historical Monuments Studies and Documentation in Gdańsk) and - in the cases of on-site intervention inspections - by the Municipal Conservator as well. The report provides the overall number of properties entered in the inventory of monuments, the number of immovable historical objects in the form of large-area urban systems (streets, squares, city in its historical borders), the number of historical objects which have preserved their original footprints and unchanged structures or those which preserved the old footprints with structures partially replaced by new construction, etc. The report also indicates the number of objects which do not require conservation procedures and those which need it (plus description of the scope of such intervention). It includes proposed new ways of using the historical objects or areas involved, if their present service does not meet protection requirements. The current status of historical properties in both, the legal and physical sense, are recorded on individual evidence cards. Further, the percentage proportions of objects requiring overhaul, small repair or care are defined and the stage of such works is determined (for ongoing conservation projects).

Separate monitoring is carried out for the Westerplatte because of its specific hydrographical conditions. The monitoring and reporting results are available at the Historical Museum of the City of Gdańsk and at the office of the Pomeranian Inspector of Monuments. Road traffic monitoring in the Main Town is carried out by the Municipal Guard who are responsible for issuing vehicle identification tags.

Increased air humidity and temperature, caused by the presence of visitors, is monitored. The buildings owned by the Historical Museum of the City of Gdańsk: the Artus Hall, the Uphagen House, the storage and library rooms at the Main Town Hall and the Green Gate administered by the National Museum, are equipped with quality air-conditioning systems. The other Museum facilities are equipped with humidity measuring and controlling devices.

ICOMOS considers that the State Party has provided sufficient information related to the monitoring system and structure. However, attention should be paid to the identification of key indicators that assure a systematic approach.

Recommendations with respect to inscription

ICOMOS recommends that Gdańsk – Site of Memory and Freedom, Poland, should not be inscribed on the World Heritage List.

7. CONCLUSIONS

ICOMOS considers that, unlike the earlier nomination of 1997, the present nomination does not deal with Gdańsk as a historic town but is rather concentrated on relevant intangible values, grouped on the basis of different historic events connected with the city and expressing the idea of freedom.

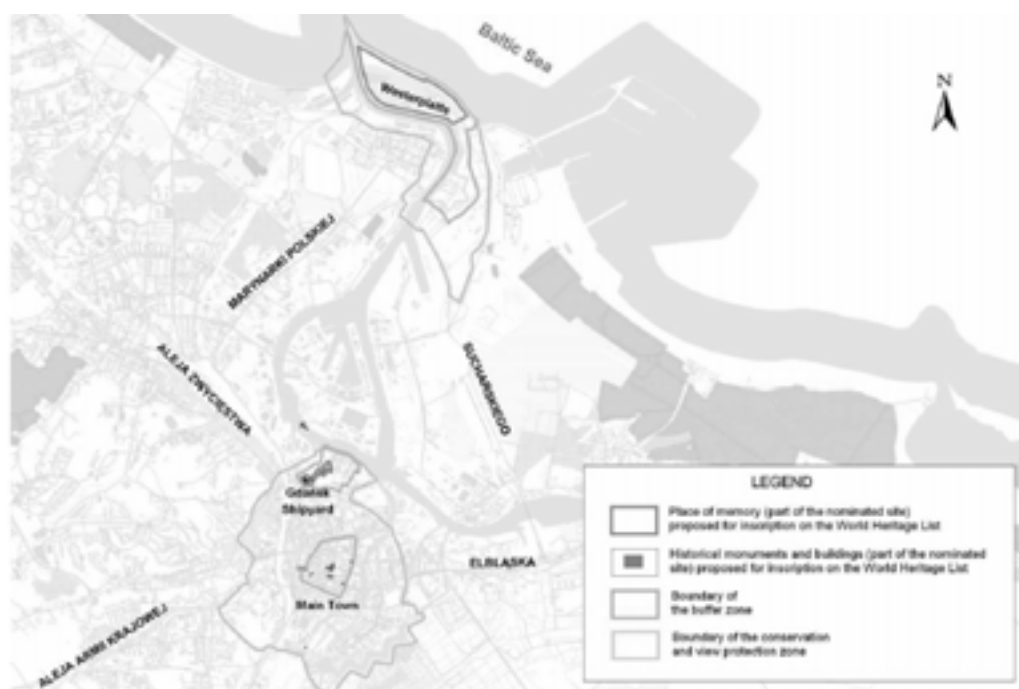
The three main areas of this nomination (monuments in the Main Town, Westerplatte memorial site and Gdańsk Shipyard memorial site) are relevant from different points of view. As an ensemble constituting a serial nomination to the World Heritage List, ICOMOS considers that the outstanding universal values of sites of memory and freedom have not been sufficiently demonstrated.

The State Party has tried to integrate in a unique nomination a group of monuments and places of quite different character and nature. The central idea that supports the nomination, the idea of memory and freedom, is already represented on the World Heritage List by a number of properties mainly located in Europe but also in Asia and the Americas. It is regrettable that the State Party has not undertaken a deeper comparative analysis, which would have enabled a more considered conclusion on the possible outstanding universal values of the property.

In relation to the monuments of the Main Town, whilst recognising that they constitute fine pieces of architecture that illustrate the economic, social and cultural significance of the harbour city of Gdańsk, ICOMOS considers that their role as testimonies of the condition of a free city is not evident, and that other towns in Europe exhibit the same kind of architectural programmes.

In relation to the memorial sites of Westerplatte Peninsula and Gdańsk Shipyards, their role as testimonies of historic events is evident. ICOMOS considers that the events related to historic monuments in the Main Town, Westerplatte and Gdańsk Shipyards correspond to different stages and episodes of the life of the country and have indeed international resonances. But, from a heritage point of view, their unification under the title of the site of memory and freedom, identified with the city of Gdańsk appears to be an artificial construction that is not sufficiently supported by the arguments of the State Party.

ICOMOS appreciates the high quality of the nomination dossier and the supplementary documentation provided by the State Party and recognises that the protection and management structures and instruments are adequate to ensure the conservation of the sites that integrate the nominated property. ICOMOS also recognises the importance of Gdańsk as a symbolic city on account of the historic facts that occurred there over time, but it regrets to express that this condition is not sufficiently demonstrated, on the basis of material evidence, to justify the inscription of the property on the World Heritage List.



Site map showing the location of objects proposed for entry on the World Heritage List with the city view in the background

Map showing the boundaries of the nominated properties



General view of the town



Royal Chapel and Our Lady Church



Westerplatte aerial view



Former Kaiser shipyards, now Gdansk shipyards

Sibiu, the Historic Centre (Romania)

No 1238

*Official name as proposed
by the State Party:*

Sibiu, the Historic Centre

Location:

County of Sibiu

Brief description:

Situated half way between Vienna and Byzantium (Istanbul), Sibiu was from its earliest days at a crossroads of Europe and in a conflict area, constantly threatened by foes. Although benefiting from the protection of its natural strategic position in the Carpathians, it developed an extensive defence system of walls and towers reinforced by moats, lakes and marshes.

Shaped in the 12th and 13th centuries by Saxon settlers from Germany who had been invited by the Hungarian King Geza II, in the 16th century Sibiu became the focus for the introduction of Lutherism into Transylvania. By the 18th century the city was thriving as a peaceful multi-ethnic centre of trade and commerce. Following World War II there was an exodus of Germans from the city.

The architecture and planning of the city reflects its evolution as well as its political, economic and religious roles: in the upper town three interlocking squares, Huet, Kleiner Ring, Grosser Ring, a succession of smaller squares in the lower town, and an extensive group of Gothic, Renaissance and Baroque buildings such as St Mary's Parish Church, c1350, the Altemberger Haus (Town Hall) 1475-1704, and the Brukenthal Palace, 1778-1788, together with a collection of large merchants' houses in the upper town and in the lower town extensive vernacular buildings.

Category of property:

In terms of the categories of cultural property set out in Article 1 of the 1972 World Heritage Convention, this is a *group of buildings*. In terms of the *Operational Guidelines for the implementation of the World Heritage Convention* (2 February 2005) Annex 3 (14, ii), the property is an inhabited historic town.

1. BASIC DATA

Included in the Tentative List: 29 June 2004

International Assistance from the World Heritage Fund for preparing the Nomination: No

*Date received by
the World Heritage Centre:* 29 September 2005

Background: This is a new nomination.

Consultations: ICOMOS has consulted its International Scientific Committee on Historic Towns and Villages.

Technical Evaluation Mission: 28-31 August 2006

*Additional information requested and received from the
State Party:* None

Date of ICOMOS approval of this report: 21 January 2007

2. THE PROPERTY

Description

Sibiu was settled by Saxon colonists originally in the 12th century and they consolidated their influence over the town during the next three centuries. The architectural development shows the influence of German architecture, particularly Regensburg - and the continuous strong economic and cultural relations between colonists and the country of origin.

Sibiu became the main settlement and religious centre for Saxon settlers in Transylvania. In the 15th century it was the seat of the *Universitas Saxonum*, the self-administration of the colonists, and also an economic centre for that part of Transylvania. Since the seat of the Lutheran bishop was settled in Sibiu in the middle of the 19th century the city was seen as the focus for Saxon communities of Transylvania. This is reflected not only in the buildings belonging to the German community - the Parish Church of St. Mary, Palace of Lutheran Bishop, the orfany centre of Johannis church - but also the Brukenthal high school, a German theatre, and a philharmonic orchestra.

Sibiu became a multiethnic city in the 18th century, as demonstrated by not only the religious buildings - German Lutheran, Hungarian Catholic and reformed communities, Jewish (since the late Middle Ages), and Romanian Orthodox - but also the commercial buildings. Sibiu traded with the Romanian communities of the surrounding area and had commercial relations with many central European cities in Hungary, Slovakia, Czech Republic, Poland, Germany and also to the southeast, Bulgaria, Istanbul and further afield.

Since the 19th century, the Romanian population has steadily increased and Sibiu has become the seat of the Orthodox Bishopric, and also a cultural centre.

The nominated area is enclosed within, and includes, the final forth line of fortifications for the City. Within these line of walls and towers, the city is divided by an earlier line of fortifications into the Upper Town and the Lower Town, the latter enclosed by the last walls. At the heart of the city lie the two earliest enclosures, the original fortress and the enlarged fortress.

The nominated area extends to 86.50 ha and is enclosed by a buffer zone of 107.00 ha.

The architectural ensemble includes late Romanesque to Gothic houses, late Baroque period architecture reflecting the political power and administration of the Austrian Empire, such as the Brukenthal Palace, the espousal of Lutheranism by the Saxons and the response of the Catholic counter-Reformation. There are also 19th century

buildings reflecting the commercial world, the opening of the city to Romanian inhabitants and the foundation of the first Orthodox Bishopric in Sibiu.

The following main elements are considered separately:

- *Fortifications*
- *Town planning*
- *Religious Buildings*

St Mary's Lutheran Parish Church
Church and Convent of the Ursuline Sister

- *Altemberger Haus –Town Hall*
- *Lower town vernacular buildings*
- *Upper town merchant houses*
- *Brukenthal Palace*
- *Orthodox Cathedral*

Fortifications

The final defence of the whole city consisted of 8km of walls constructed in the late 14th century; originally these had 70 towers and several roundels and bastions. Around 2km of walls survive, half of which to their original height, together with 20 towers, 2 roundels and 2 bastions.

The earliest pentagon shaped fortress was constructed in the 12th century – part of a one storey brick tower survives at the heart of the city; its enclosure is now partly occupied by the Lutheran Church.

In the 13th century the fortified area was enlarged to the north-east. Remains of parts of the river stone wall, and two towers survive from this era. One of these, the Town Hall gate tower, in subsequent centuries raised to eight stories, has become an unofficial symbol of Sibiu.

The third line of defence enclosed what is now the Upper Town in the 14th century. Numerous segments of this wall survive, of stone and in some places brick, as well as parts of defensive towers incorporated into later buildings. Part of the fortifications were pulled down in the 19th century.

Town planning

The City is sited on two terraces above the Cibin River, with the main mass of buildings on high ground.

In the Upper Town is a series of three interlocking squares Huet, Kleiner Ring (Lesser Square) and Grosser Reing (Grand Square), originated in the 13th century, and were added to over several centuries. The oldest, Huet, lies in the grounds of the first fortress and contain houses, church and chapels. Lesser Square was added to Huet in the form of a crescent and in it the Town Hall and various Guildhalls were sited around the central space of the main market. The third, Grand Square, became the city centre, with a range of public buildings added in the 15th century. Around these three main squares, 'squarelets' developed at

street intersections and as various parts of the earlier fortifications were demolished. An example is Aurarilor Square.

Religious buildings

St Mary's Lutheran Parish Church

The first religious buildings were constructed in the Lower Town with the exception of the Lutheran Church. This Gothic Church is the dominant landmark of the City centre with its large size and tall spire. Originally a Catholic Church of St Mary, it became Lutheran after the Reformation.

Church and convent of the Ursuline Sisters

The Church and Convent of the Ursuline Sister were constructed around 1475 as a Dominican Church and Monastery. Both were reconstructed in the 18th century. The city contains many other smaller churches, chapels and a synagogue.

Altemberger Haus – Town Hall

This housed the city's administration from 1545 until 1945 and is the most significant Gothic civil building in the city. It has a three-storey dwelling tower at the corner of the main courtyard. Its loggia in the second courtyard is attributed to Andreas Lapicida, a Sibiu stonemason.

Lower town vernacular buildings

The late Romanesque to Gothic vernacular buildings of the city are characterised by brick built courtyard houses on long narrow plots with the roof ridges at right angles to the street behind brick gables. The earliest gables of the 14th and 15th centuries were stepped, while later ones were triangular or truncated. One of the oldest houses is the Böbel House which like many other houses had a barrel vaulted entrance added to one side, probably in the 17th century. Around the Great Square, the original roofs of several Gothic houses are preserved.

Upper town merchant houses

In the 15th century, large merchant's houses with integral commercial spaces and so-called Patrician houses begun to be constructed in the Upper Town. Both displayed the wealth of their owners through decorative facades and porticos with Gothic vaulting, and both had much wider plots than earlier houses with roofs with ridges running parallel to the road. The Patrician houses often incorporated family dwelling towers, unique in Transylvania, and were built for the major Saxon families of Sibiu. An example is Haller House of five bays and a run of Renaissance windows with broken pediments and inside elaborate barrel-vaulted and cross-vaulted rooms.

Brukenthal Palace

In the late 18th century urban 'palaces' appeared constructed on limited plots. The most significant example is the Baroque Brukenthal Palace constructed by the Austrian Governor of Transylvania, Samuel von Brukenthal. Its wide gates surrounded by Ionic columns and highly decorative entablature, gives access to the

domestic courtyards and ornate stables with rows of Tuscan columns. The ceremonial rooms on the first floor housed Brukenthal's impressive library and rich art collections, (opened in 1817 to the public), and still contain decorative carvings, and stuccoed ceilings. Other palaces were built by Hungarian aristocrats who settled in the town after 1781.

Orthodox Cathedral

Following the opening of the city to Romanian inhabitants (see below) the first Orthodox Bishopric was founded in Sibiu and its Cathedral, built in the early 20th century, reflected the "new Byzantine style" developed further south, especially in Muntenia, Romania, during the late 19th century.

History and development

Around 1150 AD western 'hospites' (guests) founded settlements in what is now the Lower town, probably on the site of earlier settlements. They were invited by Hungarian King Geza II, in order to consolidate his domination over Transylvania. The settlement became known as Hermanstatt after its legendary founder, Herman, from Nürnberg. By 1241 when it was besieged and destroyed by the Mongols, it had clearly become a town of strategic importance. Sibiu's political importance increased to the extent that in the 15th century, the Saxons, one of the three Transylvanian nationalities, established their centre in the town.

After the Battle of Mohács in 1526, Hungary and Transylvania came under Turkish authority. During the next century Hermannstadt was caught many times between the two conflicting powers and besieged by both. At the end of the 16th century, the Romanian prince Michael The Brave defeated the Hungarian army in 1599 under the walls of the town and united Transylvania with the province of Walachia and then later the province of Moldavia. The union did not last. When the Turks were defeated by the Austrians at the end of the 17th century, Transylvania became a principality of the Austrian Empire.

Renaissance ideas greatly changed the buildings of the town and its life. In 1543 the Saxons adopted the religious reformation, converting to Lutheranism. Prompted by the Austrian Empress Marie-Theresa, the Catholic church embarked on a counter-Reformation campaign, promoting churches in the Baroque style, such as the remodelling of the Jesuit church in the Great Square, to demonstrate the power of the Jesuits and the Catholic church.

In the 18th century the town extended over the precinct walls, forming the districts of Josephin, Terezian and Lazaret. Since 1541 only Saxons could have properties inside the walls of the town, so the Romanian population settled in these new districts.

In 1781 other peoples were given the right to live in the town alongside the Saxons. As a result, the Romanian orthodox bishop Vasile Moga and his church settled in the town. The Romanian population became more and more present in the life of the town, which around the middle of the 19th century became the spiritual centre for the Romanians' struggle for political emancipation. When the seat of the Lutheran bishop was settled in Sibiu in the

middle of the 19th century, the city also became a sort of capital for the Saxon communities of Transylvania.

The Austro-Hungarian Empire finally removed the privileges and the territorial administrative autonomy of the Saxons at the end of the 18th century. Transylvania was annexed to Hungary in 1867. At the end of World War I, in 1918, Transylvania was united with the Kingdom of Romania. Sibiu remained the main centre of German culture in Romania.

After the Second World War the new communist authorities accused the Saxons of collaborating with the German Reich and many of them were deported. Prompted by the dictatorial regime and economic hardships Saxons began in the 1970s to emigrate to West Germany. By 1989, only 2,200 Saxons remained.

3. OUTSTANDING UNIVERSAL VALUE, INTEGRITY AND AUTHENTICITY

Integrity and Authenticity

Integrity

The basic planning of the town dates back to the 12th-14th centuries and remains readable and has been respected by later rebuilding. The overall built heritage reflects the evolution of the town centre from the 15th to the 20th centuries in a coherent and harmonious way.

Only during the 20th century have some out of scale buildings in and beyond the buffer zone, such as a new high-rise hotel in the buffer zone, impacted on the perspectives from the town and the visual integrity of the whole.

ICOMOS considers that the nominated areas contained within the final town walls encompass all the main elements of the early and late mediaeval town and its later development within the walls and maintains sufficient visual integrity.

Authenticity

A few areas of the old centre have been reconstructed but these have only affected limited areas. There is no doubt about the authenticity of the majority of the structures within the nominated area. Some suffer from adverse effects of development or neglect but there are measures in place to counter these.

In conclusion, ICOMOS considers that the nominated property demonstrates adequate integrity and authenticity.

Comparative analysis

The State Party has compared Sibiu with Sighișoara, inscribed on the World Heritage List in 1999. Like Sibiu, Sighișoara was associated with Saxon settlement. Unlike Sibiu, Sighișoara was a smaller more provincial semi-rural town inhabited by merchants and craftsmen and the centre of the agricultural hinterland in which it sits. Its defensive systems are almost completely preserved but its Lower Town was never incorporated into the stone walled defences and was protected only by bulwarks. Sibiu was a

political and cultural centre whose influence is present in the civic and religious buildings.

As well as Sighişoara, seven Transylvanian villages in Romania, inscribed on the World Heritage List in 1993 and 1999, also reflect the influence of Saxon immigrants into Romania. Thus the Saxon culture in Romania and abroad (see below) is already well represented on the World Heritage List.

The dossier also compares Sibiu to other Transylvanian cities. It concludes that Sibiu had political, economic and religious roles not encompassed by many other towns. Its trade was also more western oriented than in other markets. Its planning reflects a fossilised early layout in comparisons to other towns which developed more comprehensively later such as Cluj.

Further comparisons are made with cities in Central Europe and Europe more widely. In the Pannonian Plain, so many cities were destroyed by Turkish forces that comparisons are limited. In Slovakia, several cities have similarities but are much smaller in size. The most relevant comparison is with Spišský Hrad, Slovakia, (the fortress was inscribed on the World Heritage List in 1993) a rural settlement that subsequently became a county seat, and Banská Štiavnica (1993). Both are comparable to Sibiu in size and age, and in both there are fortified buildings, but that is all they have in common. Banská Štiavnica's prosperity was based on mining and Spišský Hrad is a bishopric.

In conclusion, ICOMOS considers that Sibiu is an interesting example of a city that reflects its mediaeval planning, its role as a political, cultural and religious centre in south-eastern Europe, and its mercantile role with both west and east. However ICOMOS does not consider that the comparative analysis has demonstrated why Sibiu should be considered to have outstanding universal value for these attributes. This is explored further below.

Justification of the Outstanding Universal Value

The State Party considers Sibiu to have Outstanding Universal Value for the following reasons:

Sibiu has outstanding urban and architectural qualities, residing in a particularly skilful adaptation, over a long time – mediaeval and modern. This extends from the process of evolution to the specific features, as well as to early settlements and constructions.

Criteria under which inscription is proposed

Sibiu is nominated on the basis of criteria ii, iii, iv and v.

Criterion ii: The State Party justifies this criterion on the basis that Sibiu as a major centre at the junction of central and west European culture, influenced by Byzantium and partially also by the Ottomans, made an essential contribution to the spread of urban and architectural principles from western Europe to beyond the Carpathians.

ICOMOS considers that it is the case that Sibiu absorbed influences from west and the east which are reflected in its urban buildings. However, ICOMOS does not consider that

this exchange of knowledge had a wide impact outside Sibiu on the further development of architectural styles.

ICOMOS does not consider that this criterion has been justified.

Criterion iii: This criterion is justified by the State Party on the basis of the role played by Sibiu as a centre for German people in Transylvania, the most important centre of such settlers between eastern and western Europe. After the migration of these settlers back to Germany following World War II, and the alteration of many of these towns, Sibiu remains the most important centre in terms of its physical remains.

ICOMOS considers that the founding of Sibiu by Saxons and their continued occupation until the last fifty years has had a profound impact on the development of the city.

ICOMOS does not consider that this impact, although of great significance locally and resulting in the creation of a very harmonious city, amounts to a unique 'cultural tradition' or one that can be said to be an exceptional for Sibiu.

ICOMOS does not consider that this criterion has been justified.

Criterion iv: This criterion is said by the State Party to be justified on the basis of the harmonious forms of the central squares of Sibiu, the links between them, together forming an exceptionally coherent site that can be seen as a paradigm of mediaeval urban development in the south-east of central Europe.

ICOMOS considers that although the squares and the links created between them are picturesque and mediaeval in style, they cannot be defined as an outstanding example of such urban typologies. As explained in the dossier, the squares created by the widening of streets are a typical mediaeval typology.

ICOMOS does not consider that this criterion has been justified.

Criterion v: Sibiu is said by the State Party to fulfil this criterion on the basis that it is an outstanding example of a traditional city in the southeast of Central Europe, and thus representative of a regional culture, now vulnerable as a result of the mass exodus of its original German settlers. ICOMOS does not consider that the dossier has justified how the massive immigration of its original German settlers has left Sibiu vulnerable to irreversible change. Although initially founded by Saxon settlers, by the 18th century Sibiu had become a mixed cosmopolitan city and by the 19th century was the home of more and more Romanians.

ICOMOS does not consider that this criterion is applicable.

ICOMOS does not consider that Outstanding Universal Value has been justified or the nominated criteria have been justified.

4. FACTORS AFFECTING THE PROPERTY

Traffic

One of the most critical issues today is the traffic and parking problems throughout the town. With the exception of the repaved shopping street and the central square, cars may presently drive in all non-adapted streets and park on all footpaths.

ICOMOS considers that measures to improve traffic circulation and to support access to the historic centre by public transport are urgent matters to be addressed.

Tourism

The number of visitor facilities within the historic centre is limited at present though it serves the demand at the moment. Sibiu is in the process of promoting cultural tourism and it is expected that it will have an increase of this type of tourism in the near future. In 2004, the Council of Ministers of the European Union decided that Sibiu, together with Luxembourg, will be the Cultural Capital of Europe in 2007. This obviously requires the modernization of the International Airport and the Railway Station, and the rehabilitation of the infrastructure (which is already underway). There is also a project for the rehabilitation of markets, passageways, public illumination and signage of monuments. Amongst other projects, thematic tours, guide-books, CDs, films and other promotional material have been produced to help promote the cultural importance of Sibiu to the visitor. The inner town is where the main events and activities will occur.

There is a need to keep the living capacity and the tourist capacity in balance. The surface of the historic city is restricted and too many tourists could destroy the quality of city life.

Tall buildings

'New capitalism' is attracting investors to the city. This is prompting pressure for development in the proposed Buffer Zone. Next to the former town-hall in the buffer zone, a semi-skyscraper is being constructed as a 300 room "international" hotel. Outside the historic town, but within a group of 18th-19th century 'Saxon' houses, another hotel of 8 stories is under construction on a small corner plot, sandwiched between two-story houses. A high density shopping mall was also proposed in the proposed buffer zone but has been so far resisted.

This unsatisfactory town planning seems to be in direct contradiction with the conservation of the historic centre and is in response to pressure from investors.

In conclusion, ICOMOS considers that the main risks to the property are pressures from the rapid growth of tourism and the investment offered by developers.

5. PROTECTION, CONSERVATION AND MANAGEMENT

Boundaries of the nominated property and buffer zone

The historic town with its medieval planning is well defined by the former fortification lines. The boundary of

the buffer zone follows the river, the railway and streets parallel to the borders of the historic town. Both boundaries are logical.

ICOMOS considers that the boundaries of the core and buffer zone are adequate.

Ownership

The nominated area is mixed private and public ownership. Currently 66% of the buildings are privately owned, 2% are State owned, 4% are the property of religious institutions and the remainder, 28% are in mixed ownership.

Protection

Legal Protection

The nominated property and its surrounding area has been declared a Site of National Interest comprising the city walls, archaeological sites and 84 buildings which have the status of national monuments and 85 of regional importance.

If inscribed on the World Heritage List, a Law of 2000 which protects World Heritage properties will apply together with a Law of 2004 which sets out methodologies for monitoring and management of World Heritage properties.

The agencies responsible for implementing this protection are the Ministry of Culture and Religious Affairs and its Directorates, including the Sibiu Directorate.

The proposed Buffer Zone does not currently have official protection. In some parts of this buffer zone larger buildings were erected in the post war communist period and further tall and dense development is planned. Satisfactory planning controls do not currently seem to be applied to control pressures for inappropriate development.

ICOMOS considers that the protective measures for the nominated property are adequate but considers that either existing controls should be implemented more effectively or the protection should be strengthened.

Furthermore ICOMOS considers that further tall and large dense constructions in the buffer zone and beyond which impact on the visual integrity of the historic city should not be approved.

Conservation

History of Conservation

Considerable progress has been made over the past 8 years in restoring the exterior of prominent buildings and public spaces. This work has been undertaken by Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ). These projects are focusing only on the mantle of historic buildings. Restoration of the main fabric and the interiors are excluded and the many different private owners do not currently have the financial resources to do the work themselves.

Present state of conservation

Many properties still suffer from the adverse effects of development or neglect. There is still a long way to go, taking into account the complexity of the ownership, before the city will be brought up to desirable conservation levels. Nevertheless there is a willingness to make progress.

Active Conservation measures

Over the past 8 years GTZ have been supporting conservation work in the City. The main active conservation measures are those directed by GTZ. There are currently no further grants available to owners.

ICOMOS considers that the present state of conservation is not yet adequate and should not be allowed to deteriorate further.

Management

The Municipality of Sibiu Council is the body that coordinates activities in the town. A rehabilitation Charter for the Historic Centre of the City of Sibiu, was published in 2000. This was followed by a Municipal Action Plan (2001–2004) and the development Guide for Sibiu (2004).

A Management Plan for the nominated area of Sibiu has been prepared as a result of a joint Romanian-German GTZ collaboration. It was completed in April 2005. It aims to provide management guidance and overall coordination of existing initiatives, instruments and programs for the presentation and restoration of the site, to guide and control development, to ensure that the values of the site are not harmed and to highlight the priority actions of Sibiu City Hall for the five years 2005-2009.

The issues and strategies addressed include technical infrastructure and public services, traffic management public spaces, tourism and public participation. The action plan contains costs, the proposed years of implementation and respective responsibilities.

As part of the work for the plan, GTZ has put in place an inventory of buildings in the nominated area.

As part of one of the ongoing GTZ projects, architects as well as construction workers have the opportunity to attend courses in restoration. The Chamber of Commerce, Industry and Agriculture of Sibiu, in co-operation with the Chamber of Commerce of Mainz, started a project a few years ago that also incorporates training courses in traditional crafts.

Resources

In terms of professional staff, the Council are under-equipped. Apart from the chief architect of the town, only one person is indicated in the report as responsible for the department of monitoring and planning for the historic centre and monuments.

Unless this service is enlarged, it will be difficult to control the built development within the historic town or the conservation work on its structures. The Council needs

urgently to consider appointing a city conservator in municipal administration.

In conclusion, ICOMOS considers that the management system for the property is adequate but needs supporting with more specialised staff within the City Council. ICOMOS recommends that the State Party give consideration to enabling a conservator to work for the City Council.

6. MONITORING

There exists an integrated monitoring system which can be broken down into seven main sections – state of conservation, housing and social infrastructure, demographics and socio-economic data, tourism, local government and administration, the real-estate market, and the presentation of the site. The results of monitoring provided a basis for the current strategies for renovation and rehabilitation.

ICOMOS considers that the monitoring system is adequate.

7. CONCLUSIONS

Sibiu is a historic town with an urban pattern that can be found with variations all over Europe. Its architecture and planning reflect all the different periods of its architectural evolution from the 13th century to the 20th century. It is confined within the remains of its last city walls.

Its comparative lack of development over the past fifty years means that Sibiu now presents a harmonious face. Sibiu is associated with Saxons, who founded the city and continued to exert a substantial presence there until after World War II. Its planning and architecture also reflect its mercantile, political and religious importance. Although Sibiu is an attractive place, ICOMOS does not consider that its Outstanding Universal Value has been established, either in terms of it being outstanding as a particular example of town planning in south-eastern Europe, or as a place that demonstrates an exceptional cultural system that had an impact in the wider region.

ICOMOS considers that Sibiu is vulnerable – but not to the point of irreversible change – and recommends that consideration is given to strengthening professional resources in the City Council and to strengthening protection in the Buffer Zone, either by implementing existing controls more effectively or by supplementing protection.

Furthermore ICOMOS considers that further tall and large dense constructions in the Buffer Zone and beyond which impact on the visual integrity of the historic city should not be approved.

Recommendations with respect to inscription

ICOMOS recommends that Sibiu, the Historic Centre, Romania, should not be inscribed on the World Heritage List.



Map showing the boundaries of the nominated property



General view of Sibiu



First Town Hall



Centumvirilor Street



Samuel von Brukenthal College

Gamzigrad-Romuliana (Serbia)

No 1253

Official name as proposed

by the State Party: Gamzigrad-Romuliana, Palace of Galerius

Location: Eastern Serbia

Brief description:

The archaeological site of Gamzigrad is a Late Roman fortified palace compound with a memorial complex on the adjoining hill. It was built in the late 3rd and early 4th century. The construction was commissioned by the Emperor Galerius Maximianus (the successor of Diocletian). The complex was named *Felix Romuliana* after his mother, who was Dacian by birth.

Category of property:

In terms of the categories of cultural property set out in Article 1 of the 1972 World Heritage Convention, this is a site.

1. BASIC DATA

Included in the Tentative List: 18 March 2002

International Assistance from the World Heritage Fund for preparing the Nomination: No

Date received by the World Heritage Centre: 26 January 2006

Background: This is a new nomination.

Consultations: ICOMOS has consulted its International Scientific Committees on Fortifications and Military Heritage and on Archaeological Heritage Management.

Literature consulted (selection):

The Princeton Encyclopedia of Classical Sites, W. L. Mac Donald, R. Stillwell, M. H. Macallister, eds, Princeton university press, 1976.

The Cambridge Companion to the Age of Constantine, N. Lenski, ed., 2006.

Technical Evaluation Mission: 22-26 August 2006

Additional information requested and received from the State Party: None

Date of ICOMOS approval of this report: 21 January 2007

2. THE PROPERTY

Description

Gamzigrad is a Late Roman fortified palace compound with a memorial complex on the adjoining hill. It was built in the late 3rd and early 4th century CE. On the basis of archaeological findings and written sources it has been established that the complex was commissioned by the Roman Emperor Caius Valerius Galerius Maximianus and was known as *Felix Romuliana*.

The nominated property consists of the following:

- *The Fortified Imperial Palace Complex*, itself consisting of:
 - Fortifications
 - The palace in the north-western part of the complex
 - Basilicas
 - Temples
 - Thermae
- *The memorial complex*
- *Tetrapylon*

These are considered in turn:

- *The Fortified Imperial Palace Complex*

During archaeological exploration of the site the remains of two fortifications were found. Within their walls a palace was located on the north-western side, along with two temples, baths and numerous other structures. Both the fortifications and the buildings associated with them were constructed in about ten years, from 297 to 311.

The area inside the ramparts is divided by a road that was probably the main thoroughfare (*decumanus*) connecting the eastern and the western gates. The northern part of the area is occupied by the imperial palace complex, with its public and private rooms and a small temple with a sacrificial altar. In the southern part there are public rooms (a large temple, *thermae*) and service areas (a *horreum* and a single-aisled building with a portico).

From the first half of the 4th century to the middle of the 6th century the appearance and function of the fortified palace underwent substantial changes. As early as the second half of the 4th century the palace fell into disrepair, and after the invasion of the Goths and the Huns into the Balkan Peninsula it became a small Byzantine settlement, which appeared under the same name in the list of settlements restored by Justinian in the 6th century. Gamzigrad was revived for the last time as a fortified Slav settlement in the 11th century.

Systematic archaeological excavation at the property has been carried out since 1953, with associated conservation and restoration of the architecture, mosaics, and architectural sculpture.

- Fortifications

The Gamzigrad fortress covers a rhomboid shaped area of about 4ha with visible remains of ramparts and towers in places up to 15m high. Archaeological excavation has uncovered two parallel fortification systems.

The inner fortification is the older of the two. It consists of 16 towers connected with ramparts. In the east and the west of the fortress, octagonal towers flank gateways while rectangular towers are lined between them. The older fortifications are mostly brick-built; the state of preservation is uneven.

The outer, later fortification comprises twenty towers connected by ramparts. The fortifications were constructed using *opus mixtum* (several courses of stone alternating with three rows in brick). The later fortifications are in a better state of repair than the earlier.

Two monumental gates give access into the fortress. The lower part of the western gate is built from sandstone blocks, followed with moulding in worked sandstone and facing in *opus mixtum*. Examination of the eastern gate found it to be in a somewhat worse condition than the western but similar to it in building technique and decorative elements. A number of smaller gates and posterns have also been discovered.

- The palace in the north-western part of the complex

Systematic research has uncovered the remains of an edifice with many rooms, halls, and atriums. The spatial plan of the building and the rich floor and wall decorations have revealed that this must have been a large palace.

The main entrance is on the eastern side and leads into the first entrance hall, the floor of which was covered by a mosaic with abstract motifs and a central representation of a labyrinth. From here a wide, horizontal hallway led to a hall with a raised apse on the south side, most probably the throne room. This also had a mosaic floor with geometrical and hunting motifs.

The throne room led to the atrium, where numerous fragments of a fountain were recovered. The hall with the apse to the north of the atrium was identified as a *triclinium*. The central part of the room was raised and covered in marble slabs of various colours in *opus sectile* technique.

In addition to these and other public rooms, numerous smaller accompanying rooms of unknown purpose have been revealed. All the palace buildings were constructed in brick and marlstone and were most likely plastered.

- Basilicas

Two basilicas were built in this area in the 4th and 6th centuries, one above the other, and were partially destroyed at that time. For the outer load-bearing walls the first basilica used the walls of the throne hall. The later one is far larger and was probably constructed at the time of Justinian's restoration of Gamzigrad. It is a three-aisled building with a four-leaf font room on the southern side.

- Temples

Within the palace complex are to be found the remains of a small temple with a sacrificial altar facing the entrance. It has been determined that the temple belonged to the tetrastyle *prostylos* type, with four pillars at the entrance.

Around the middle of the 19th century, excavations revealed the remains of a much larger structure in the central part of the southern segment of the fortress. These were identified as parts of the podium and the staircase of a monumental temple.

- Thermae

This building is a classical Roman baths with characteristic elements – changing room, cold bath, warm bath, and hot bath.

- *The memorial complex*

About 1km to the east of the main gate of the palace, on the Magura hill, stands a complex of memorial buildings. Archaeological investigations have uncovered on the levelled top of the hill two mausoleums devoted to Galerius and his mother Romula, as well as two circular tumuli for consecration purposes. To the north-east, alongside the road leading to the fortress, the remains of a monumental *tetrapylon* were found.

The first building to be discovered was the mausoleum devoted to Romula, erected in 305. It is in a damaged condition, but sufficient survived for its impressive size and form to be recognised. A giant circular tumulus adjoins this mausoleum. It is a monument for consecration purposes, put up at the same time as the mausoleum.

The nearby mausoleum of Galerius, erected in 311, is better preserved, and it has been possible to discern its original size and form. Like that of his mother, the tomb of Galerius is accompanied by a consecration monument, erected at the same time as the mausoleum. It is a masonry ring 39m in diameter filled with earth in the shape of a cone.

- *Tetrapylon*

Found a short distance to the north-east of the memorial complex were the lower parts of four pillars identified as belonging to a monumental *tetrapylon*.

The relation between the two spatial ensembles is stressed by the location of the *tetrapylon* on the crossroads between the worldly fortification with the palace and the other-worldly mausoleums and consecration monuments.

History and development

The Gamzigrad fortified palace was built by the Roman Emperor Caius Valerius Galerius Maximianus, the successor of Diocletian in the Second Tetrarchy, at the end of the 3rd and the beginning of the 4th century CE. This was substantiated by the discovery of a sculpted head in the Emperor's likeness during excavation of the baths.

The tetrarchy form of governance required the Emperor to abdicate after twenty years of rule and, having celebrated the *vicennalia*, to retire. Galerius followed the model of his ideological father, Diocletian, and made plans for the

construction of a palace, surrounded by ramparts, in the area of his origin where he intended to spend the rest of his life.

Galerius was not able to devote himself to the construction of the fortress-palace until after his victory over the Persian king Narses in 297. With the title of Caesar and as the adopted son and heir of Diocletian, he began the work in his place of origin in *Dacia Ripensis*, today Eastern Serbia. He named the fortress *Romuliana* after his Dacian mother Romula. A fragment of an archivolt found in the excavations bears the inscription *Felix Romuliana* circled with a laurel wreath. The inner fortifications of the compound, the palace in the north-western part, and the small temple were erected in this first stage.

After the death of Constantius Chlorus in 306, Galerius became the most powerful man in the Roman Empire. Viewed from that lofty position, the fortress appeared to be too humble. Work then under way was abandoned to concentrate on a more monumental fortress encompassing the buildings already erected. A huge temple dedicated to Jupiter was erected in the south part of the compound. The new phase is characterised by even greater lavishness of decoration full of symbolic meaning, executed in various materials.

On the hill to the east of the fortified palace, Galerius built mausoleums for himself and for his mother flanked by consecrational monuments in the shape of tumuli. The latter are connected with the *apotheosis* – the symbolic elevation to the status of god.

As Caesar, Galerius was identified with Hercules and later, when he had been raised to the status of Augustus, with Jupiter. Connecting rulers with the divine hierarchy was one of the characteristics of tetrarchy. As a divine personification Galerius wanted to provide for his mother a place among the gods, and through the act of *apotheosis* he secured divine immortality for Romula.

The *tetrapylon* which marked a crossroads was erected above the intersection of the Roman road leading to Romuliana and the road to the memorial complex to mark the intersection of earthly and heavenly roads.

The main role in the construction of all the buildings was played by the V Macedonian Legion which followed Galerius in the battles he fought in the East and which served as construction labour in periods of peace.

After the Emperor's death in 311 life in the palace went on, but without royal ceremonies. The palace and other buildings were redecorated and put to other uses. This quiet decline continued until the end of the 5th century when the throne hall was converted into a three-aisle Christian basilica. At the time, along the eastern facade of the palace, another building was put up with an atrium in the centre and an apse with a small marble basin, probably a font. Several towers of the defensive bulwark were turned into craft shops manufacturing items needed by the new inhabitants.

At this time Romuliana was an important village community where a court official might have resided. Around the mid 5th century the compound sustained heavy damage and was burned, probably following the invasion

of the Huns. In the second half of the 5th and the 6th century Romuliana was reconstructed, but it never regained its former splendour. The new buildings were inferior both in size and in the manner of construction.

During the reign of the Byzantine Emperor Justinian some extensive construction was undertaken. In this period considerable architectural and spatial changes were carried out. A monumental three-aisle basilica with a four-leaf font was erected in the palace compound, overshadowing the existing building with its exceptionally beautiful mosaics. The east gateway was abandoned and the west gate became the main entrance. Architectural decorative sculptural elements from the palace and temples of Galerius were reused as building material.

At the beginning of the 7th century, owing to frequent raids by the Avars and the Slavs, the site was abandoned. The remains of the former palace were reoccupied, as late as the beginning of the 9th century, when a small medieval settlement developed in the eastern part of the compound.

3. OUTSTANDING UNIVERSAL VALUE, INTEGRITY AND AUTHENTICITY

Integrity and Authenticity

The fortified palace of Galerius is representative of the Late Roman concept of Imperial symbolism. The all-embracing ideological programme of rule, created in the era of the Tetrarchy, connected the manner of construction with Imperial rituals during the period of rule as well as the period after the abdication. The glorification of the Emperor as the all-powerful master and a god underlies this concept of construction.

The connection with divine rituals is especially clear in the construction of buildings intended for the Emperor's residence after abdication. All construction symbolises Roman gods and the preparation of the Emperor to become a divinity himself upon death. This ideological programme reached the peak of its materialisation in Galerius's unique fortified palace and the memorial complex.

The integrity and authenticity of Gamzigrad-Romuliana are clearly demonstrated. Relatively few excavations have been carried out to date and there has been no attempt to reconstruct the much degraded remains. There are no plans for reconstruction beyond what is needed for conservation and can be substantiated through research, as these would diminish the level of authenticity.

The major threat to the integrity of the property is constituted by archaeological excavation because, even when needed, this is by nature destructive. Before any further excavation is conducted, ICOMOS considers that it would be advisable to carry out a detailed analysis of all the data from previous excavations and to continue with an intensive programme of exploration by geophysical and other non-destructive means. Subsequently, excavation could be limited to 'surgical incisions' at precisely targeted places in order to solve specific research questions and to avoid creating conservation problems.

ICOMOS considers that the conditions of integrity and authenticity are met. It recommends that priority be given
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to the analysis of the data from previous excavations and that new investigations be conducted using preferably non-destructive means and targeted surgical incisions.

Comparative analysis

The fortified palace of Galerius and its decoration can be directly compared with other constructions of the period.

The remains of Galerius's imperial residence in Thessaloniki lie for the most part underneath the contemporary city and detailed examination of the buildings is not possible.

More suitable elements for comparative analysis are to be found in Diocletian's Palace in Split (which is already on the World Heritage List). The context of the construction of both palaces gives rise to comparison, since both were commissioned by Tetrarchy Emperors as parts of the ideological programme of rule, relating specifically to the period after their abdication. Both palaces were designed to be representative Imperial residences housing Emperors who renounced power but retained its symbols. Within magnificent ramparts with watchtowers and gates, they possessed palaces, temples and ancillary buildings.

However, the differences between the two palaces stem from the practical realisation of the same ideological scheme. The fortification of Diocletian's palace complex is of regular, almost quadrangular shape. Polygonal towers emphasise the entrances into the compound while quadrangular towers stand at the corners and along the ramparts. A similar design can be identified in the earlier fortification of Galerius's construction. However, owing to the terrain, the fortification ended up of irregular shape. The later fortification, which embraced and incorporated the older one, also had to follow the lie of the land.

Although, like Diocletian, Galerius rose from the military ranks to the status of Emperor, the concept of an army stronghold, which was strictly followed for Diocletian's palace, was rejected here.

The later fortification, constructed after Galerius had become Emperor, greatly surpasses that of Diocletian's palace in grandeur and decoration. All its towers are polygonal, protrude from the ramparts, and take up much space. The gates and the ramparts above them are decorated by decorative niches in several levels with distinctly symbolical architectural decoration connected to the Emperor's person and the Tetrarchy system of rule.

Substantial differences can also be found in the interior layout of the two palaces. In Diocletian's palace, two thoroughfares set at right angles divide the space into four segments, reminiscent of Roman army camps. In Galerius's palace, however, a single thoroughfare connects the western and the eastern gates, dividing the space into southern and northern parts; the division seeks to emphasise the duality of the space.

There are numerous other ways in which the two palaces are significantly different. The architecture and layouts highlight the often contrasting aspirations and achievements of the two Tetrarch Emperors.

There is another Imperial palace of the same period in Sicily, the Villa Romana del Casale at Piazza Armerina, which is also on the World Heritage List. This differs strikingly from either of the Balkan examples. The design principles are fundamentally similar, but the Sicilian palace vividly demonstrates the cultural differences that had evolved between the western and eastern parts of the Roman Empire.

The individual characteristics of the palace of Galerius are of sufficient intrinsic quality and significantly distinct from the other two Roman Imperial palaces that are already on the World Heritage List. ICOMOS therefore considers that the comparative analysis justifies consideration of this property for inscription on the World Heritage List.

Justification of the Outstanding Universal Value

The State Party considers that the property is of Outstanding Universal Value for the following:

Gamzigrad is a single architectural and spatial ensemble constructed according to a complex ideological and cult programme which resulted from a specific concept of the Imperial rule embodied in the person of an Emperor and his connection with the Roman gods. The programme was given material form through the construction of an imposing fortification comprising an ensemble of buildings with various purposes. The constructions within the ramparts are grouped spatially and thematically in relation to the Emperor Galerius and his mother Romula. Such a composition of the fortifications and the buildings with residential and cult purposes is a unique example of Roman architecture. The memorial complex on the nearby hill, although spatially set apart, is an indivisible part of the fortified palace.

This cultural property is also exceptional in so far as it is the only example of a construction of this kind from the Second Tetrarchy. It is fundamentally different from a comparable construction dating back to the First Tetrarchy, Diocletian's Palace in Split, or the example from the western part of the Empire at Piazza Armerina. By virtue of the artistic merit of its mosaics and decorative architectural elements, it ranks among the supreme works of the Late Roman period. The complex is distinguished for its strong symbolism, carried out consistently through architectural design and decoration.

The position of the Palace on the territory of former *Dacia Ripensis* demonstrates the importance once attached to this area within the Roman Empire. In the Late Roman period, the centres of power shifted from west to east; this area was under both western and eastern creative influences, which is reflected in the architectural freedom in general as well as in the design of particular constructions.

Criteria under which inscription is proposed

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

Criterion i: The State Party justifies this criterion on the basis that Caius Valerius Galerius Maximianus commissioned this architectural complex for his residence after his abdication from the Imperial throne; it is the only one built for such a purpose for the needs of an Emperor of

the Second Tetrarchy. The realisation of a complex ideological programme here was enriched with the idea of the spatial separation of the fortified palace and the memorial area.

All the architectural objects of the complex are deeply symbolic of the ruling programme of the Tetrarchy and the relationship between the Emperor and the divinities of the Roman pantheon.

The sheer size of the fortification by far surpasses the functional requirements of protection. The ideological programme of the Tetrarchy, enriched with the emphasised symbolism concerning Roman gods and their connection with the Emperors was carried out in the construction of the fortified palace and the memorial complex. The idea and its material realisation present the apex of the spiritual and material creativity of the late Roman period and by the end of the age of Roman civilisation.

ICOMOS does not consider that this property sufficiently represents a masterpiece of human creative genius. The Palace of Diocletian in Split is not inscribed on the basis of this criterion and there is no case to be made for Gamzigrad being superior in this regard. The Villa Romana del Casale was inscribed on the basis of this criterion due to the exceptional quality of its mosaics.

ICOMOS considers that this criterion has not been justified.

Criterion ii: The State Party justifies this criterion on the basis that this complex represents the highest point of the idea of glorification of an Emperor in the Late Roman period.

The V Macedonian Legion, the military unit at whose head Galerius had won a great victory over the Persians, was the main labour force in the construction of the complex. Galerius and his army had learnt about the architecture of the Near East and Asia Minor when fighting there. This is reflected primarily in the form of the Temple of Jupiter, which is atypical of the rest of the Roman Empire.

The mixture of eastern and western influences, acquired all over the Roman Empire, gives spontaneity and freedom to the architecture of the fortification, the palace, and the other buildings. The complex also indicates how much importance was attached to the province of *Dacia Ripensis* in Late Roman times as well as its unity with the cultural area of the rest of the Empire.

Although the property is of unquestionable cultural value, ICOMOS does not consider that the property exhibits an important interchange of human values in an exceptional way.

ICOMOS considers that this criterion has not been justified.

Criterion iii: According to the State Party, the fortified palace of Galerius indicates the development of the Imperial rule programme of the Second Tetrarchy. The idea underpinning the programme was that the Emperor abandoned the throne after twenty years of rule. He would

build himself a suitable residential palace where he could retire in his birthplace.

The idea that the palace should be fortified comes from the fact that the Tetrarchy Emperors were all senior military leaders and so the residences were to allude to military strongholds. However, the magnitude and the decoration of Gamzigrad surpass those of a military fortress.

The fortification, the palace, and the memorial complex are unique testimony of the Roman construction tradition penetrated by the ideological programme of the Second Tetrarchy and Galerius himself as their builder.

ICOMOS is in full agreement with this analysis of the historical significance of the site.

ICOMOS considers that this criterion is justified.

Criterion iv: According to the State Party, the group of buildings comprising the architectural complex of the Emperor Galerius is unique in the way that it interweaves the ceremonial and the memorial programme. This idea is reflected in the spatial and visual correlation of the fortified palace and the memorial complex. The palace and all the buildings within the compound are oriented towards the hill where the mausoleums of the Emperor and his mother are located, as well as the tumuli for the *apotheosis*. ICOMOS is in full agreement with this analysis of the architectural and structural significance of the site.

ICOMOS considers that this criterion is justified.

Criterion vi: According to the State Party, Galerius's fortified palace is the only example of a specific manner of construction from the Second Tetrarchy period. It is also unusual that during the archaeological exploration supporting evidence was found for the name of the complex as well as the name of the person who had commissioned it.

However, Gamzigrad-Romuliana cannot be judged to be superior in any way to the Split Imperial villa, which is not inscribed on the List on the basis of criterion (vi), and so ICOMOS considers that it would be invidious and illogical to apply this criterion in the present case.

ICOMOS considers that this criterion has not been justified.

ICOMOS considers that the Outstanding Universal Value has been demonstrated and the nominated property meets criteria iii and iv.

4. FACTORS AFFECTING THE PROPERTY

The nomination dossier includes an identification of the following factors:

Development Pressures

The immediate surroundings of the property are agricultural in character. The use of farming machinery such as tractors, which move on the existing roads, but also make new routes, can compromise the presentation of the archaeological site by damaging its visual setting and

causing noises and vibrations. About 30km to the north of the property lies the Bor copper mining and metalworking complex, but this is sufficiently remote to minimise the threat to the property.

A constant though infrequent threat is posed by unofficial diggers using metal detectors and other instruments in the hope of finding valuable movable artefacts. This illegal exploration is fuelled by popular legends about underground halls and tunnels with buried treasure.

Environmental Pressures

The archaeological and architectural remains are constantly exposed to precipitation, with the mosaics at special risk. Under certain weather conditions, fumes from the Bor plant can reach the property, and acid rain is also possible.

Natural disasters and risk preparedness

The property does not lie in an earthquake zone and threats of this kind are not expected. Even at the highest recorded water level, the watercourse along the eastern rampart of the fortification offers no threat to the property.

Visitor/tourism pressures

Visitors to the property can be divided into two categories. The first, smaller category comprises individual visitors, about 6,800 a year, who, weather permitting, visit all year round. Most come from the surrounding towns, but there are others from further afield, even from abroad. These visitors do not constitute a threat.

Tourist groups coming by coach form the second category. They mostly come in spring and autumn. Older visitors do not present a problem to the preservation of the property, but school visitors (some 23,000 annually) do pose certain problems, since they move around the property without restraint, causing damage. For this reason, only one busload (c 50 people) is allowed on the property at a time. Tourism has increased in recent years – c 30,000 at the property itself and c 8,000 at the museum).

ICOMOS considers that there are no serious threats to the property, although serious consideration must be given by the State Party to the potential impact of increased visitor numbers.

5. PROTECTION, CONSERVATION AND MANAGEMENT

Boundaries of the nominated property and buffer zone

The exact definition of the boundaries of the nominated property is to some extent arbitrary because the precise area that was used in the past has not yet been explored in detail, but this does not imply they are unfounded or that they need any correction.

The proposed boundaries make sense from a landscape perspective and from archaeological experience. They probably encompass the most important features of the ensemble constituted by the palace/fortress and its surrounding elements.

The buffer zone encompasses an area that from a landscape point of view is part of the nominated territory. It ensures that no development takes place within the valley and that views from and to the centrally located palace remain intact. The valley as such is a valuable cultural landscape – a virtually untouched rural area.

ICOMOS considers that the boundaries of the core and buffer zone are adequate.

Ownership

The Gamzigrad–Romuliana archaeological site is state property. The land on which it lies is the property of the National Museum in Zaječar.

Protection

The property is protected by:

- The Decision by the Institute for the Preservation and Scientific Examination of the Cultural Goods of the PR of Serbia No 407/48, 19 March 1948.
- The Decision on the Identification of Immovable Cultural Goods of Outstanding and of Great Importance (Official Gazette 14/79): the remains of the Roman city of Gamzigrad were awarded the status of a cultural monument of outstanding importance.
- The Cultural Properties Law, *The Official Gazette of the Republic of Serbia*, No 71/94 (the law in force governing the preservation of cultural properties).

Legal regulations are binding for the Institution for the Protection of Cultural Property, which is required to plan, specify, and carry out technical protection of the monument, to issue decisions on protective measures, to collect and retain the required documentation concerning the monument, to monitor its protection and use, to prevent unplanned demolition, reconstruction, and rebuilding of a cultural property and its protected surroundings. Penalties for breaches of regulations are provided for by:

- the Cultural Properties Law;
- the Law on Building Construction;
- the Penal Law of the Republic of Serbia.

A third level of protection is provided by the *Spatial Plan of the Special Purpose Area of the Archaeological Site Gamzigrad-Romuliana*, developed at the initiative of the Municipality of Zaječar and officially adopted in 2004. The regulations in this plan are adequate and allow further development outside the nominated property and its buffer zone and in a controlled way.

ICOMOS considers that the protective measures for the property are adequate.

Conservation

History and Current State of Conservation

Of the older fortifications, work is in progress on clearing and conserving three towers, but a considerable part is awaiting clearance on archaeological examination. Work is needed urgently on some facades, which are deteriorating rapidly. The situation on the later fortifications is similar.

The palace and the basilicas have been well conserved, and work is in progress on the temples and the baths. No conservation work has been carried out on the two mausoleums, awaiting a decision regarding the construction of cover structures, but the two consecration buildings are in the process of restoration.

On the whole, it can be said that the conservation of the remains is satisfactory, though it could be much improved by sufficient finances. The available expert staff is well qualified and fully capable, qualified workmen are hired locally, and technical solutions are available. All that is missing is sufficient funding, and this has recently been increased.

ICOMOS considers that the state of conservation is adequate, although could be much improved through increased financial resources.

Active Conservation measures

Great care is taken to improve general conservation conditions. Recent additional funding by the Ministry of Culture (a grant of 600,000 euros) has helped to improve the presentation and conservation.

The condition of the built structures is carefully monitored, but although every effort is made to stabilise walls and floors, the available means are just barely sufficient to keep up with the ongoing degradation processes, mainly caused by winter conditions. Protection of the floors with mosaics *in situ* is effective.

Some parts of the property, such as the west gate, have been restored in an appropriate manner, and great care has been taken to limit restoration to parts for which solid archaeological evidence is available.

ICOMOS considers that the state of conservation of the remains is adequate, although it would benefit greatly from increased funding.

Management

Management structures and processes, including traditional management processes

The property is managed at the level of the Republic of Serbia by the Institute for the Protection of Cultural Monuments of Serbia. The Institute has produced a *Plan for the Management, Exploration, Protection and Presentation of the Archaeological Site Gamzigrad* (June 2005) defining necessary legal and technical protection measures and listing activities for the conservation, restoration and presentation of the site.

The National Museum in Zaječar is in charge of the maintenance and the promotion of the site. Its obligations are set out in an annual plan.

According to the Law on the Activities of Public Interest in the Area of Culture and the Law on Cultural Goods, funds for preservation are provided from the budget of the Republic of Serbia through the Ministry of Culture.

An effort is being put forward to secure donations from international funds dealing with the preservation of cultural properties.

Management plans and arrangements, including visitor management and presentation

There is as yet no complete management plan for the property, although there is a management system in place.

On-site management is responsibility of the branch of the National Museum in Zaječar, which has a professional director and an archaeologist on the site. Decisions that may have an impact on the site or its buffer zone are taken by the Institute for the Protection of Cultural Monuments in Belgrade, which is the management authority for all conservation issues relating to the immovable heritage. Decisions relating to the conservation of movable heritage on the site are taken by a commission at the Ministry of Culture, on which the National Museum and the Archaeological Institute in Belgrade are represented.

Involvement of local communities

The Municipality of Zaječar as a local government authority takes an interest in the maintenance of the property and co-finances preservation work through the National Museum in Zaječar. The Museum has a close and effective relationship with the Municipality and with the local population.

ICOMOS considers that the present management structure for the property is minimal and recommends that it be further developed and formalised within the minimum delay, and backed by adequate financial resources.

6. MONITORING

The Institute for the Protection of Cultural Monuments of Serbia is in charge of the monitoring of the conservation condition of the architecture and the mosaics of the site. It submits an annual condition report to the Ministry of Culture. An effective system of key indicators is in place and there is a five-year review.

The Ministry monitors the archaeological investigations, the conservation of buildings and mosaics, the development of the site, and its presentation and popularisation.

ICOMOS considers that the monitoring measures for the property are adequate.

7. CONCLUSIONS

Gamzigrad-Romuliana, the Palace of the Roman Emperor Galerius, possesses outstanding universal value in terms of political and cultural history in classical antiquity. ICOMOS is satisfied with the authenticity and integrity of the nominated property. The core zone proposed by the State Party includes the essential elements of this remarkable monumental complex and the buffer zone encompasses an area which ensures that no development takes place within the valley and that views from and to the centrally located palace remain intact. The valley as such is a valuable cultural landscape – a virtually untouched rural area.

Recommendations with respect to inscription

ICOMOS recommends that Gamzigrad–Romuliana, the Palace of Galerius, Serbia, be inscribed on the World Heritage List on the basis of ***criteria iii and iv***.

Recommended Statement of Outstanding Universal Value

Gamzigrad-Romuliana is a Late Roman palace and memorial complex built in the late 3rd and early 4th centuries, commissioned by the Emperor Galerius Maximianus. The strong fortifications of the palace are an allusion to the fact that the Tetrarchy Emperors were all senior military leaders. The spatial and visual relationships between the palace and the memorial complex, where the mausoleums of the Emperor and his mother Romula are located, are a unique one.

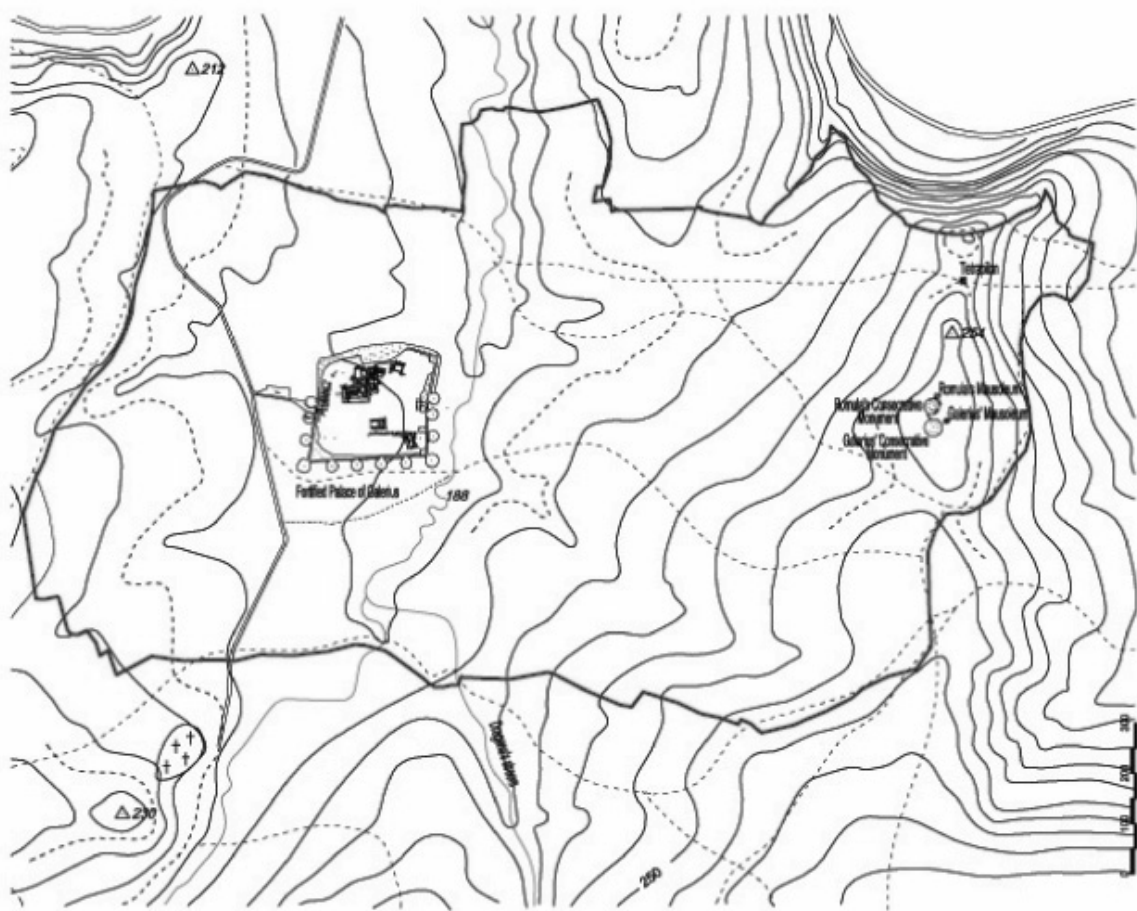
Criterion iii: The fortifications, the palace, and the memorial complex are a unique testimony of the Roman construction tradition pervaded by the ideological programme of the Second Tetrachy and Galerius himself as their builder.

Criterion iv: The group of buildings comprising the architectural complex of the Emperor Galerius is unique in the fashion that it intertwines the ceremonial and the memorial programme. The relation between two spatial ensembles is stressed by placing the *Tetrapylon* on the crossroads between the worldly fortification with the palace and the other-worldly mausoleums and consecration monuments.

ICOMOS recommends that the State Party be requested to further develop its management system and allocate sufficient resources to its implementation.

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

- Give priority to the analysis of the data from previous excavations and conduct any new investigations using non-destructive means and targeted surgical incisions.
- Adopt measures to avoid any negative impact of increased visitor numbers on the property.



Map showing the boundaries of the nominated property



Aerial south-east view



Atrium with well



Remains of the great temple



Remains of older fortification

Lavaux (Switzerland)

No 1243

Official name as proposed

by the State Party: Lavaux, vineyard terraces overlooking the lake and the Alps

Location: Canton de Vaud, région de Lavaux

Brief description:

The Lavaux wine terraces stretch for about 30km along the south-facing northern shores of Lake Geneva from the Chateau de Chillon, just south of Montreux, to the eastern outskirts of Lausanne in the heart of the Vaud Region. The steep, narrow stone walled terraces cover the lower slopes of the mountain side between the villages and the lake's edge. Above are forests and pasture and across the Lake, the high peaks of the Alps. The chalky limestone soils and benevolent climate, improved by the sun reflecting off the Lake and stone terrace walls, are ideal for the production of Chasselas grapes.

Although there is some evidence that vines were grown in the areas in Roman times, the origins of the present vine terraces can be traced back to the 11th century, when Benedictine and Cistercian Monasteries controlled this area.

The Lavaux has always been a highly prized area for wine and one that has been controlled and developed to optimize its returns to monasteries, cantons or wealthy owners. Its landscape of villages, small towns and intensively planted vines reflect the changing system of production and patronage over ten centuries. It is now a functioning and thriving landscape that has been adapted to allow partly mechanised production. Extensive remains of houses, mills, fortified towers, and much of the landscape structure, provide an expansive reflection of the way wine production has evolved during that time.

Category of property:

In terms of the categories of cultural property set out in Article 1 of the 1972 World Heritage Convention, this is a *site*. In terms of the *Operational Guidelines for the Implementation of the World Heritage Convention* (2 February 2005, annex 3) paragraph 47, it is also a *cultural landscape*.

1. BASIC DATA

Included in the Tentative List: 28 December 2004

International Assistance from the World Heritage Fund for preparing the Nomination: No

Date received by

the World Heritage Centre:

21 December 2005

Background: This is a new nomination.

Consultations: ICOMOS has consulted its International Scientific Committee on Historic Gardens – Cultural Landscapes.

Literature consulted (selection):

Étude thématique Thematic Study: *Les Paysages culturels viticoles dans le cadre de la Convention du Patrimoine mondial de l'UNESCO*, ICOMOS, March 2004.

Technical Evaluation Mission: 21 - 24 August 2006.

Additional information requested and received from the State Party: None

Date of ICOMOS approval of this report: 21 January 2007

2. THE PROPERTY

Description

Extending along the edge of Lake Geneva for some 30 km, the Lavaux wine terraces reflect a region that has been growing grapes for fine wine for more than ten centuries.

The Lavaux is not a remote rural area where times have stood still, nor do the wine terraces exemplify traditional unchanging viticultural practices: its history is one of innovation and development to optimise and control the wine growing potential of an area whose wine has for long been highly prized. The wine growers of the Vaud Region have in the last fifty years successfully adapted their ways to ensure the survival of their industry, and theirs is the most recent of several adaptations over the past three centuries.

Wine making was probably practised in the area in Roman times; by the 11th century it was well organised by monasteries on parcels of land given by the Prince-Bishop of Lausanne, and in the 14th century, as a written description attests, there were already terraces supported by stone walls.

In the intervening centuries, the high value of the wine (in 1397 a quarter of the incomes of the Bishop of Lausanne came from Lavaux) attracted control of, and investment in, the vine terraces by variously the monasteries, the Bishops and merchants of Lausanne, the wealthy families of Bern, the Canton of Vaud and finally the Federal Government. The terraces were worked by wine growers who lived in villages, in narrow houses above cellars built tightly in order to encroach as little as possible on land suitable for vine terraces. The growers were also farmers until after the Second World War, keeping animals, growing crops and working the forests. Many of those who now manage the vineyards are descended from those who worked the areas in the 16th century and some even earlier.

The value of the wine and the interest of its patrons are reflected in the rich assembly of buildings within the nominated area: churches, castles, cellars and houses. The buildings reflect the history of the landscape from monastic

holdings, fortified dwellings, to small scale mixed farms with grain, animals and vines right down to the changes made in the last fifty years when the landscape achieved its present form.

The nominated area covers fourteen communes and six wine producers and encompasses the following appellation controllees: The Villette, Saint-Saphorin/Lavaux, Epesses, Dézaley and Chardonne. Within the nominated area are small towns of Lutry and Cully, seven villages of Aran, Grandvaux, Riex, Epesses, Rivaz, Villette and Saint-Saphorin, as well as the hamlets of Savuit, Châtelard, and Treytorrens with together a population of some 5,600 people. There are now between 400 to 450 kilometres of retaining walls, supporting more than 10,000 terraces.

The nominated property covers 898ha in the communes of Lutry, Villette, Grandville, Cully, Riex, Epesses, Puidoux, Chexbres, Rivaz, Saint-Saphorin, Chardonne, Corseaux, Corsier-sur-Vevey, and Jongny, all of which are located with the Canton of Vaud.

The nominated property includes the following:

- *Wine terraces*
- *Villages*

Wine terraces

The terraces present regular lines mostly parallel to the Lake. Below is the Lake and above more rectangular fields originally used for arable crops. Roads cut diagonally across the terraces. The property has been surveyed and mapped in detail and the dossier provides information on the way the terracing has evolved.

The terraces were traditionally constructed of local limestone laid with lime mortar. The earliest documentation for the construction of terraces dates back to the 14th century, when there was clearly a huge expansion of land under vine cultivation. Consolidation and even abandonment in the 15th and 16th centuries was followed by improvements in the 18th and late 19th centuries when major rebuilding was carried out to improve the efficiency and drainage of the land, and in response to the *phylloxera* outbreak (see history). Further rationalisation has been carried out in the past twenty years with smaller parcels being removed to allow better mechanised access and thus sustain terrace cultivation. Today some of the terraces are constructed of concrete with stone facings. Concrete has been used in particular by the public authorities for strengthening terraces that underpin roads or railways.

Villages

The boundary includes most of the settlements within the 30km stretch of vineyard. Excluded are areas of post-World War II development near the urban centres of Lausanne and Vevey–Montreux. These include the area to the north of Grandvaux and the north-east of Villette, that to the south of Chexbres, and most of the *commune* of Corseaux. On the other hand, the small historic town of Lutry has been included as an enclave lying outside the nominated area by virtue of its significance for the history

and development of Lavaux and the high quality of its architecture and urban fabric.

History and development

A chance find of Latin inscription on the worship of wine in antiquity, together with many Roman remains - Saint-Saphorin overlies what survives of a substantial Roman villa built along a main Roman highway, and Lausanne was a Roman settlement - suggests that the area was probably cultivated for wine in Roman times.

The city of Lausanne grew from the Roman camp and was ruled by the Dukes of Savoy and the Bishop of Lausanne and then later by Bern before joining the Swiss Federation in 1803.

The oldest written testimonies to attest to the culture of the vine date from the 9th century and mention various places of the current canton of Vaud. By the 12th century several large abbeys had been given land in the area by the Bishops of Lausanne – such as the Cistercian Abbeys of Hauterive, (1138), Hautcrêt (1141) and Montheron (1142), and over the next four centuries until the Reformation, it was the Abbeys that managed these fertile lands and shaped the landscape, introducing terraces and developing roads to export their wines. Many of the current boundaries and roads follow these mediaeval structures.

By the 14th century, the growth and extent of work had encouraged the monks and brothers of the monasteries to let out most of their land to tenants who cultivated the land as mixed farmers – as well as vines they also had arable fields, grazing animals and orchards – against the payment of a percentage of their crops (a half, a third or two fifths of the fruit) to the monasteries. By this time many of the families who still farm the area had become established. For instance the Chappuis family history records vine growers back to 1335.

A document of 1331 is the first to describe the structures created for the vines: terraces 10 to 15 metres wide, supported by walls up to 5 or 6 metres in height. Terms requiring vine growers to maintain walls and the ‘slides’ for heading the water run-off appeared in 1391.

In 1536 Lausanne came under the control of Bern and several wealthy patrician families from Bern started to acquire land in Lavaux. Bern carried out improvements to the roads, for instance from Vevey to Moudon.

Wine growing was carefully controlled to keep up quality: first by the Prince-Bishops of Lausanne and later by the Bernese. The first testimonies for this control dates back to 1368. Wine cellars were defined and local wines were encouraged, while ‘foreign’ wines and distillation (which would deprive the vines of manure and take too much wood) were discouraged. The value of the land on which the vines were grown was much higher than that for arable fields resulting in much interest from the middle-class of Lausanne and pressure to extend the wine growing areas. In response, there was much legislation to try and prevent this and maintain quality, often doomed to failure.

By the 1800s there were many small plots and a huge diversity of landowners (including some monasteries such as Hauterive associated with Freiburg, who had managed

to hold onto land after the Reformation), as well as many representatives of wealthy secular and ecclesiastical families. This patchwork of often very small land-holdings meant that work on the land was inefficient. After 1803 when Lausanne had become the capital of the newly formed Swiss canton Vaud, and joined the Swiss Federation, a period of agricultural improvement was ushered in. Terraces were rationalized and larger walls created and new drainage of whole sectors created to limit erosion.

In 1849 the Great Council of Vaud agreed to the improvement and widening of the road connecting Lausanne to Vevey by the edge of the lake. At the end of the 19th century, the Corniche road along the Lake made it possible to connect the villages between Cully and Chexbres. Finally the railway arrived in 1861; it was enlarged in 1862 and again in 1904 and the lines now form a triangle round the site.

One of the biggest changes to vine growing was brought about by the *phylloxera* vine disease imported from North America; it arrived in Lavaux in 1886. To recover from this, the growers changed their methods to allow easier access to the vines for chemical treatment in order to prevent a recurrence of the disease. In order to have better access, many of the old methods disappeared as new grafted vines were planted along lines rather than 'goblet' fashion.

Change came also at a Canton level: in response to the crisis, the authorities intervened to support the industry at canton and federal level. In return the industry was much more tightly regulated with the introduction of Statutes of Wine to maintain quality but also a decent income for the wine growers. This brought to an end the relative freedom of the wine growers.

Following the Second World War, the expansion of Lausanne and other towns attracted growers to leave their plots and at the same time, improved transport offered the possibility of growers living in towns. Mixed farming finally disappeared and with it the orchards and cows and pigs. Between 1957 and 1977 legislation was introduced to sustain what had come to be seen as part of Swiss culture (see below). Resisted by many initially, it is now seen as the saviour of the industry in protecting not only wine making but also the vineyard landscape.

The final major alteration to the landscape was the building of the A9 *Autoroute* along the upper edge of the site, in the proposed Buffer Zone.

3. OUTSTANDING UNIVERSAL VALUE, INTEGRITY AND AUTHENTICITY

Integrity and Authenticity

Integrity

The nominated boundaries include all the elements of the wine growing process, and the extent of the traditional wine growing area since at least the 12th century. Development is controlled and the area does not suffer from neglect. The energy and commitment of the vineyard

proprietors ensures that neglect of the terraces is not a problem.

An intrusion into the landscape is the A9 *Autoroute* which delineates the northern boundary of the nominated property over much of its length, within the proposed buffer zone. This does impact somewhat on the visual integrity of the whole area.

Authenticity

As explained above, the terraces have evolved over several centuries to their present form. There is now agreement that change needs to be tempered by respect for local traditions. Terrace walls are now stone or stone faced. Some terraces have been amalgamated over the past half century to improve access to the vines, but further amalgamation is resisted unless there are exceptional circumstances.

In places there are stretches of massive strengthening of vineyard walls, particularly those below a road or railway; using reinforced concrete. These were constructed and funded by the public authorities. They are however in the minority and new walls are all stone faced, the stone proving much more beneficial in landscape and environmental terms, than concrete. Overall ICOMOS considers that the nominated areas of vine terracing and related settlements display adequate authenticity.

In conclusion, ICOMOS considers that the nominated areas display integrity and adequate authenticity.

Comparative analysis

The Comparative Analysis put forward by the State Party compares Lavaux with other sites where vines are grown on terraces, both those already inscribed and those that are not. It does not include comparison with other World Heritage sites such as St Emilion (1999) or Tokaj (2002) where vines are grown on the plains without terracing, or Pico (2004) where vines are grown in small fields and parts of the landscape are abandoned. The analysis considers the values of the Lavaux landscape, in tangible and intangible terms and then makes comparison with the values of other comparable sites where the land is terraced and the landscapes are still thriving.

The following values were considered:

1. The area offers panoramic sights of extraordinary beauty;
2. The cultural landscape is preserved and protected as one territory, clearly distinguished in the landscape;
3. The wine terraces are constructed on steep slopes;
4. Settlements are protected as part of the landscape;
5. Wine making has a long tradition identified with the inhabitants of the area.

Reference was made to the ICOMOS Thematic Survey on vineyards (2004).

The conclusions were set out in tabular form. What this showed was that no one landscape could be said to demonstrate exclusively all these values: most sites demonstrated some. In the case of Lavaux what emerges is the strength of the living landscape, and its readability.

The first value, related to beauty, is not applicable to cultural criteria as, under the World Heritage convention beauty is seen as a natural attribute. Nevertheless the harmonious aspect of a site can contribute to its value as it attracts artists, writers and visitors, as Lavaux did in the 18th and early 19th centuries, which in turn heightened its value and supported its protection.

The analysis highlighted the relevance of the following terraced sites:

- Cyprus: due to the integration of the terraces in the rock exposures and with the presence of villages and hamlets.
- Banyuls-Collioure (France): the viticulture goes back to Roman times, and is associated with the culture of olive-trees. The sparse vineyards are arranged in terraces on the buttresses of Albères.
- Carema (Italy): the vineyard has inclined terraces built up to 700 meters in altitude and cultivation goes back to Roman times. Antique pillar stones support the vines.
- Valteline (Italy): the terraces of the vineyards are arranged on the escarpment slopes of the southern slope of the Alps. The production of wines probably goes back to Roman times.
- Madeira (Portugal) in the volcanic islands of Madeira, Oporto Santo and Desertas, many vineyards are arranged in terraces.

The conclusion drawn was that the cultural landscape of Lavaux is not distinguished from other wine areas by specific values, but rather by a combination of all these values. The analysis also draws the conclusion that Lavaux constitutes an exceptional example of the protection of a living thousand-year-old tradition near to urban areas and strongly supported by its local communities as demonstrated by the citizens of Vaud who have twice voted for its protection within the Canton of Vaud.

ICOMOS considers that the Lavaux landscape is unquestionably a continuing organically evolved landscape of significance. There is abundant visual evidence of its historical development from the Roman period to the present day, and also of its complex socio-economic evolution. This information can be 'read' in the layout and diversity of form of the individual vineyard parcels, in the communication system (from the Roman road to the contemporary *autoroute* and the railway lines), and in the architecture and layouts of the communities (in the case of Saint-Saviorin based on an extensive Roman villa).

Lavaux is also a landscape 'which retains an active social role in contemporary society closely associated with the traditional way of life, and in which the evolutionary process is still in progress'. It possesses these qualities to a

far higher degree than any of the other vineyard regions already on the World Heritage List. The only exception might be Cinqueterre (Italy), the socio-economic trajectory of which is similar to that of Lavaux. Its contemporary role is, however, much diminished by the fact that a high proportion of the terraced vineyards are no longer being cultivated. There are some similarities with the Wachau (Austria), but the vineyards there are much more widely dispersed than those of Lavaux, and a number have been converted for fruit production (principally apricots). Perhaps because Swiss wines for the most part are not exported, its vineyard landscapes have received less attention than their more renowned contemporaries elsewhere in Europe and so Lavaux is for the moment, less well-known.

In conclusion, ICOMOS considers that Lavaux can be distinguished from other vineyard landscapes both inscribed and not, as a major, extensive and coherent thriving vineyard landscape, which demonstrates evolution and progress over almost ten centuries and a strong role in contemporary society.

Justification of the Outstanding Universal Value

The State Party justifies the Outstanding Universal Value of Lavaux as:

- a built landscape that is highly representative of a human work perfectly integrated in its natural environment;
- the living illustration of its important socio-economic history which continues to the present;
- an unusually well protected landscape in the context of its location near a fast growing urban area, strongly reinforced by popular support; and,
- a man-made landscape, facing the lake and the Alps, with a beauty that has attracted workers and artists.

Criteria under which inscription is proposed

The property is nominated on the basis of criteria iii, iv and v.

Criterion iii: The State Party justified this criterion on the basis that the Lavaux landscape is of exceptional beauty and vitality, testifying to its difficult exploitation over nearly one millennium. Its harmony has inspired many poets and artists. The landscape is underpinned by the deep traditions of the local communities as manifest in the vine growers' festivals.

ICOMOS considers that the Lavaux vineyard landscape demonstrates in a highly visible way its evolution and development over almost a millennia, through the well preserved landscape and buildings that demonstrate a continuation and evolution of longstanding cultural traditions, specific to its locality.

ICOMOS considers that this criterion has been justified.

Criterion iv: The State Party justified this criterion on the grounds that the evolution of this landscape represents a significant period in the history of the country.

ICOMOS considers that the evolution of the Lavaux landscape, as evidenced on the ground, illustrates very graphically the story of patronage, control and protection of this highly valued wine growing area all of which contributed substantially to the development of Lausanne and its Region and played a significant role in the history of the geo-cultural region.

ICOMOS considers that this criterion has been justified.

Criterion v: The State Party justifies this criterion on the basis that the Lavaux landscape, as an exceptional example of vineyard terraces, is vulnerable through its position next to fast-growing settlements and that this vulnerability has prompted the exceptional protection, confirmed by popular votes, of a large 900 ha area in a zone with a high population density.

ICOMOS considers that Lavaux is an outstanding example of vineyard landscape that displays centuries of interaction between people and their environment in a very specific and productive way, optimising the local resources to produce a highly valued wine that was a significant part of the local economy. Its vulnerability in the face of fast-growing urban settlements has prompted protection measures strongly supported by local communities.

ICOMOS considers that this criterion has been justified.

4. FACTORS AFFECTING THE PROPERTY

Terrace maintenance

Vine terraces are very expensive to maintain in terms of repairing stone walls and the difficulty of access to the vines. Their costs are therefore much greater than for vine plantations on the plains. On the other hand, maintenance of the terraces are a crucial element for the value of the property. The added value placed by consumers on the way the wine is produced and its relation to landscapes and traditions is therefore a crucial factor.

Tourism

Tourism could be a threat if falling incomes persuade vineyards to look for alternative sources of income. The possibility of large-scale tourism developing is being given serious consideration by bodies such as the *Association pour l'inscription de Lavaux au patrimoine mondial de l'UNESCO* (AILU) and the *Commission CIUL-UNESCO* (CCU), and one of its four working groups (see below). The objectives include the development of an integrated tourism marketing strategy that will avoid the perceived pitfalls of too precipitate and uncontrolled a tourism policy.

Some method of imparting basic information, for the benefit of inhabitants and visitors alike, about certain key points within the nominated area would be desirable, given the wealth of information that has been gathered for the area.

Services

All overhead cables for different services (electrical supply, telephones, cable television,) are now underground; whilst the buildings have no television antennae of any kind on their roofs (this service is now available by means of underground cables).

A recent innovation that is somewhat contentious locally is the provision of underground car parks in small villages such as Rivaz, mainly for the use of local residents. Those already in place have been sympathetically sited and designed. There is a need for continued strict control by the relevant planning bodies so as to ensure that future projects of this kind do not, by virtue of their size, location, or design, adversely and irreparably impact on the overall landscape.

Natural impacts

The area is only very seldom threatened by natural phenomena apart from landslides. Like all areas of Europe, it periodically suffers from storms, sometimes accompanied by hail, which can destroy part of harvests – as happened in 2005. Although the area is near the seismic zone of the Alps, the ground tremors are rare and of low intensity.

ICOMOS considers that the main risks to the property are economic in terms of a falling market price of wine. Adding value to the wine produced on the basis not only of its quality but also of its provenance may help to counter this threat.

Climate change

The vineyard landscape developed in response to a very particular micro-climate on the south facing slopes next to the lake which produces a kind of Mediterranean climate much suited to the ripening of vines. The vineyards could be vulnerable to climatic changes which brought colder weather to the area or which raised the height of the lake. The terraces could also be vulnerable to bursts of very wet weather or higher than usual winds.

Risk preparedness

No formal arrangements are set out for reacting to foreseen or unforeseen risks and hazards.

5. PROTECTION, CONSERVATION AND MANAGEMENT

Boundaries of the nominated property and buffer zone

Considerable care has been taken when defining the boundaries to exclude areas of post-World War II development in what are in effect overspill from the major urban centres of Lausanne and Vevey–Montreux. To the north of the wine-growing area that constitutes the heart of the nominated property, the buffer zone has been selected so as to protect the nominated landscape against intrusive developments that may encroach up on its visual aspect. As a result it follows the line of the Alpine crests where appropriate. Where there has been encroachment upon the sight-lines below these crests by unsympathetic post-war

building development, the visual qualities of the nominated landscape are protected from further adverse impacts by the imposition of strict planning and building controls.

There is an industrial area running north-west from Chexbres which lies below the crest and so is not visible from the nominated area. For a short stretch there is no buffer zone here, since it lies beneath the crest. There is, however, some justification for the incorporation of the reverse slope of the crest here so as to ensure that there could be no possibility of unsympathetic constructions here at some time in the future which would be visible from within the nominated property and from the lake.

ICOMOS considers that the boundaries of the core zone are adequate and that there should be a slight extension of the buffer zone in order to close the small gap overlooking the industrial area located roughly between Chexbres and Epesses.

Ownership

The vineyards and buildings are almost entirely privately owned. Within the nominated areas there are 1,840 owners and 1,153 economic units covering the 702 hectares of vines.

Protection

Legal Protection

Strong protection has evolved as a reaction to the creeping urbanization from the growing towns of Lausanne to the west and the Vevey–Montreux conurbation to the east, in both of which a number of multinational and national companies have established substantial operational centres over recent decades. It was in response to this phenomenon that the movement which led to the *Loi sur le plan de protection de Lavaux* (LPPL) emerged, at a time when only the Grandvaux–Villette, Chexbres, and Corseaux areas had been adversely impacted.

The Federal *Loi sur l'aménagement du territoire* (LAT) lays down the fundamental principles for land-use planning in Switzerland. Lavaux is inscribed on the *Inventaire fédéral des paysages, sites et monuments naturels* (IFP) resulting from the LAT, in which it is described as '... a large wine-producing region characteristic of the Lake Geneva region with picturesque villages overlooking the lake'. The perimeter of the area protected by the IFP, from Lutry to the eastern boundaries of the *communes* of Corseaux and Saint-Saphorin, coincides with that of the area covered by the cantonal LPPL. Within it almost all the villages, hamlets, and vineyards are registered and protected.

The Confederation also has its *Inventaire fédéral des sites construits* (ISOS) which covers sites and monuments of national importance. The number and density of the protected sites in Lavaux is high. Over 1,228 buildings are listed in the central zone, with nearly 400 of national interest.

Whilst there are Federal services with overall responsibility for the implementation of these measures, it is the corresponding cantonal services that are responsible for day-to-day monitoring and application.

Lavaux landscape is not simply on the cantonal statute book, but its protection is also embodied within the Constitution of the Canton of Vaud. In 1977 a campaign entitled *Sauvez Lavaux* was set up and became the subject of a referendum by the people of the Canton. The successful outcome of this vote resulted in the enactment of the *Loi sur le plan de protection de Lavaux* (LPPL) that year. The strong wish of the people of Vaud to protect this region, the qualities of which they deeply appreciated, was confirmed again in November 2005 by the result of a second referendum, the object of which was to incorporate the protection of Lavaux permanently into the cantonal constitution.

The cantonal *Inventaire des monuments naturels et des sites* (IMNS), which came into force in 1972, provides another level of protection for the nominated property. It covers more than two hundred buildings, as well as the villages of Aran (Villette), Grandvaux, Riex, Epesses, Rivas, and Saint-Saphorin, the hamlets of Châteland and Treytorrens, and a substantial proportion of the vineyards.

The Communes

The nominated property comes under the provisions of the cantonal land-use plan (*Plan général d'affectation* – PGA) and its building regulations (RPGA). It is, however, the authorities at *commune* level that are responsible for the application of these regulations and for authorizing projects coming within their scope. This ensures that there is in practice virtually no possibility of any new construction or other form of intervention being made in the landscape. On the very rare occasions when such interventions have to be authorized, they are subject to strong architectural and landscape constraints.

The buffer zone

Within the buffer zone a considerable measure of regulation is in place, notably in respect of the designated building areas (*territoires urbanisés*). All projects relating to construction require authorization at *commune* level and are subject to restrictions relating to size, location, and appearance.

The farming and forest areas within the buffer zone are covered by Federal legislation designed to protect and conserve the non-urban landscapes. Authorization of new non-rural projects is very rare.

In conclusion, ICOMOS considers that the protective measures for the property are adequate.

Conservation

History of Conservation

The history of conservation of the property goes back through several centuries and is outlined under *History* (above).

Present state of conservation

The state of conservation of the villages, individual buildings, roads and footpaths, and vineyard plots within the nominated area is high. The standards of conservation

of individual buildings, both public and private, within the villages and among the vineyards are very high with great care taken, both inside and out, to ensure proper conservation by using authentic materials and techniques on private and public buildings. Advice is available from cantonal monuments and architectural services on materials and techniques, and some proprietors avail themselves of it.

The retaining walls of the terraces are kept in immaculate condition, primarily for practical reasons, since degradation and collapse of these walls would be disastrous for the vines, but also in a spirit of *émulation*, each proprietor wishing to maintain the walls in a condition that vies with that of neighbouring proprietors. In many cases, flowers such as roses embellish the ends of the rows of vines.

Active Conservation measures

On-going conservation of the buildings and landscape by private owners is the major way in which the overall cultural landscape is maintained. As outlined above this is very effective.

ICOMOS considers that the conservation of the property is satisfactory.

Management

The body which promoted this nomination to the World Heritage List, the *Association pour l'inscription de Lavaux au patrimoine mondial de l'UNESCO* (AILU), charged a body which had been in existence for more than thirty years, the *Commission intercommunale d'urbanisme de Lavaux* (CIUL) with the preparation of a management plan. Detailed work on this project was entrusted to a *Commission CIUL-UNESCO* (CCU), chaired by the President of CIUL and composed of the chairmen of four working groups on research and culture, economy, land-use planning, and tourism respectively. The intention is that this body will expand its activities and redefine its role in the event of Lavaux being inscribed on the World Heritage List in 2007.

The overall objectives of CCU were identified as:

1. Identifying the key elements making it possible to identify both the vulnerabilities of the Lavaux landscape and opportunities for its protection and promotion;
2. Establishing recommendations for the future management of the site and its vineyards so as to preserve the essential character of the cultural landscape;
3. Increasing the information available to the general public and inciting their interest in Lavaux, and developing its educational and cultural value as well as its essential character as 'the terraced vineyards between the Lake and the Alps';
4. Developing a management plan common to all the local stakeholders (landowners, residents, wine producers, merchants, population) in order that they

may put into practice action plans both as individuals and in partnership;

5. Setting up systems of surveillance, reactive monitoring, coordination, and information.

The remit of the four working groups was to establish working methods and to identify shortcomings and risks and to propose lines of research that would respond to the requirements of World Heritage listing.

A Management Plan has been drawn up and approved for the property. The Plan provides an analysis of socio-economic data such as population growth, economic activities, '*pendularisme*' (the phenomenon of being poised between two large conurbations), land use, jobs in the area (viticulture, craft activities, tourism), and transportation.

There follows a series of management strategies for each of the areas assigned to the four working groups. This is followed by a project list detailing aims, methodologies, proposed actions, dates for initiation of projects, and assigning responsibility to specific bodies or institutions.

The 'Research' group, for example, proposes the creation of a relevant and coherent image of Lavaux by encouraging an academic institute to register on an inventory all the research carried out on Lavaux from which to develop research programmes and produce appropriate literature.

The 'Culture' group has projects for encouraging a series of cultural events and for improving the presentation of Lavaux to the general public; whilst the proposals emanating from the 'Economy' group are concerned with the optimization of production techniques relating to wine and developing an institutional entity for the site (*Lavaux-Région*). The Management Plan is commendable since it seeks to put management of the area into a new dimension, looking beyond the conventional (yet essential) approach of official bodies and local administrations.

Interpretation and presentation

At the present time there is little formal presentation of the history and economy of Lavaux, since it has been little visited by outsiders, even from within Switzerland. There are, however, plans for educational, promotional, and tourist projects within the Management Plan, emanating from all four working groups.

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

6. MONITORING

The documentation for all aspects of the history, architecture, and socio-economic evolution of Lavaux is of a high quality.

A number of static and dynamic indicators are in place. The static ones cover state of conservation of terraces and walls, and number of buildings restored, while the dynamic ones include methods of cultivation, methods of harvesting (mechanization), methods of protection against diseases and parasites, and local information (web site) fostering

local traditions. The former involve quantitative measurements, while the latter need qualitative assessment. Both are carried out as part of the Management Plan process.

7. CONCLUSIONS

The living vineyard landscape of Lavaux is testimony to the combined determination of local people and the authorities to protect the area as a living working landscape. The standard of research, surveys and documentation produced for the nomination dossier is impressive and the State Party is to be congratulated.

The main vulnerability for the landscape is the maintenance of the terraces and the associated costs, which potentially impact on the economic viability of the wine production. Lavaux needs to sell high quality wine in order to counter the high cost of production associated with terrace cultivation. Lavaux is not as well known as some other vineyards and currently there is little effort to pass on knowledge to visitors or buyers on the detailed provenance of the wine.

ICOMOS commends the objectives of the Cultural, Research and Economic Groups which, as part of the Management Plan, aim to promote and disseminate research into the history of the viticulture of the area, and its production techniques, strengthen its identity and investigate optimal production methods for the future. All this could help add value to the products of the landscape, and make them better known, both of which in the long term might help to secure its future.

In order to protect the boundaries of the nominated property, ICOMOS recommends a slight extension to the Buffer Zone in order to close the small gap overlooking the industrial area located roughly between Chexbres and Epesses.

Recommendations with respect to inscription

ICOMOS recommends that Lavaux, vineyard terraces overlooking the lake and the Alps, Switzerland, be inscribed on the World Heritage List as a cultural landscape on the basis of *criteria iii, iv and v*.

ICOMOS recommends that the Buffer Zone is enlarged between Chexbres and Epesses.

ICOMOS further recommends that the name of the property be changed to “Lavaux, vineyard terraces”.

Recommended Statement of Outstanding Universal Value

The Lavaux vineyard landscape is a thriving cultural landscape that:

- demonstrates in a highly visible way its evolution and development over almost a millennia, through the well preserved landscape and buildings, and also the continuation and adaptation of longstanding cultural traditions, specific to its locality;

- illustrates very graphically the storey of patronage, control and protection of this highly valued wine growing area, all of which contributed substantially to the development of Lausanne and its Region and played a significant role in the history of the geo-cultural region; and,
- has prompted, in response to its vulnerability next to fast-growing settlements, exceptional popular protection.

Criterion iii: The Lavaux vineyard landscape demonstrates in a highly visible way its evolution and development over almost a millennia, through the well preserved landscape and buildings that demonstrate a continuation and evolution of longstanding cultural traditions, specific to its locality.

Criterion iv: The evolution of the Lavaux vineyard landscape, as evidenced on the ground, illustrates very graphically the story of patronage, control and protection of this highly valued wine growing area, all of which contributed substantially to the development of Lausanne and its Region and played a significant role in the history of the geo-cultural region.

Criterion v: The Lavaux vineyard landscape is an outstanding example that displays centuries of interaction between people and their environment in a very specific and productive way, optimising the local resources to produce a highly valued wine that was a significant part of the local economy. Its vulnerability in the face of fast-growing urban settlements has prompted protection measures strongly supported by local communities.



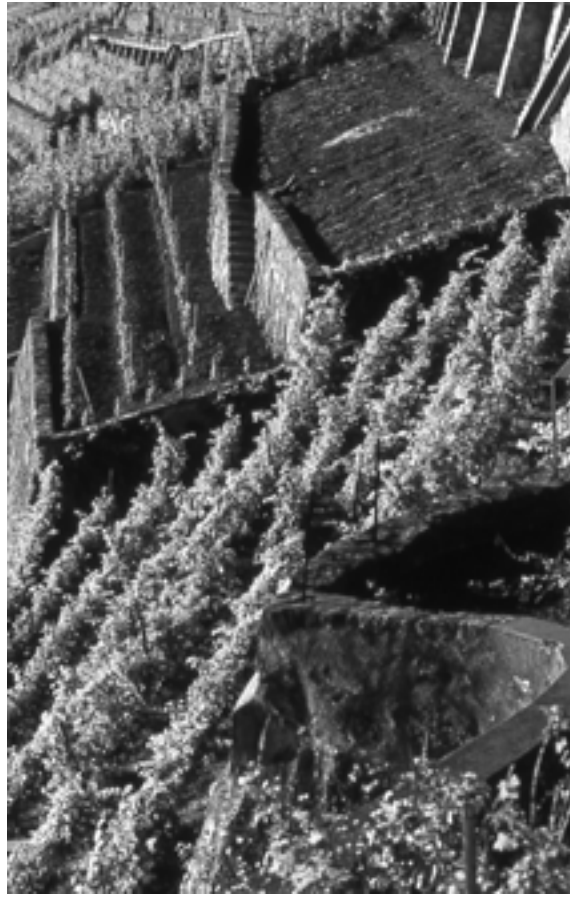
Map showing the boundaries of the nominated property



Cully's Bay



Rivaz village



Walls near Rivaz



Saint Saphorin

Darwin at Downe (United Kingdom)

No 1247

Official name as proposed

by the State Party: Darwin at Downe

Location:

London Borough of Bromley,
England

Brief description:

This property consists of a country villa and its grounds, together with the surrounding natural and agricultural landscape. It was lived in for four decades by the scientist Charles Darwin and it was there that he carried out the work that led to his theory of evolution by natural selection, and where he wrote his most famous treatise, *On the Origin of Species by means of Natural Selection*.

Category of property:

In terms of the categories of cultural property set out in Article 1 of the 1972 World Heritage Convention, this is a *site*. In terms of the *Operational Guidelines for the Implementation of the World Heritage Convention* (2 February 2005) paragraph 47, it is also a *cultural landscape*.

1. BASIC DATA

Included in the Tentative List: 21 June 1999

International Assistance from the World Heritage Fund for preparing the Nomination: No

Date received by the World Heritage Centre: 12 January 2006

Background: This is a new nomination.

Consultations: ICOMOS has consulted its International Scientific Committee on Historic Gardens – Cultural Landscapes. IUCN has provided desk reviews of the property.

Literature consulted (selection):

Bowler, P. J. *Charles Darwin, the man and his influence*, Cambridge, 1990

Desmond, A and J. Moore, *Darwin*, London, 1991

Technical Evaluation Mission: 11-13 September 2006

Additional information requested and received from the State Party: None

Date of approval of this report: 21 January 2007

2. THE PROPERTY

Description

The nominated property is the area used by Charles Darwin for 40 years to develop and demonstrate his theory of evolution through the study of plants and animals in natural settings and under human management. He lived there from 1842 to 1882, using his home and surroundings as his scientific research station.

Darwin was the originator of the theory of evolution by natural selection. His scientific writings are valued around the world and form the basis of the modern understanding of the patterns of natural life, human and animal origins, biodiversity, and needs for nature conservation.

The property includes Darwin's house, his experimental garden, and the countryside immediately around his property, the three areas which he used for almost all of his most important scientific investigations after his early years on the round-the-world voyage of HMS *Beagle*. It was Darwin's workplace and field study area during the 40 years of his greatest productivity, including his main investigation work on the theory of evolution and his historic contribution to the understanding of plant life.

Darwin shaped his garden and grounds and surveyed the wider landscape in preparation for his use of the two areas for his science. He spent 86% of the following 40 years at Downe and carried out almost all of his scientific work during that period at Down House, in the garden and grounds and in the surrounding countryside. These were of importance for his scientific work for the fundamental reason that his subject was the processes and patterns of natural life and he needed to be able to examine the realities of both at close quarters in order to develop his ideas. He kept full and detailed records of his observations and experiments in all the different parts of the property as an essential part of his scientific inquiries. He used his study at Down House for work with his microscope on specimens from the *Beagle* voyage and his collecting in the grounds and countryside, and also for many plant experiments.

The nominated property contains all the features of Darwin's property and the landscape that are required to show facets of his work at Downe and how he drew it all together to develop the global understanding of natural life.

The Landscape

There are two principal settlements in the property, the villages of Downe on the high ground between the two valleys, and Cudham on the western shoulder of the Cudham Valley. Both date from the medieval period. Two small areas of housing development since Darwin's time have been excluded from the area proposed for designation, a length of ribbon development on the road south from Downe, and an early 20th century housing estate north of the village.

Darwin's House

Down House is an 18th century country villa with 19th century additions set in a 16-acre (6.5ha) estate on the edge of the village of Downe. It is now owned by English Heritage and the house and grounds are open to the public.

The layout and appearance of the house and grounds have been restored to closely reflect how they were in the last years of Darwin's life. This has been based on contemporary accounts and documentary research carried out by English Heritage for their restoration of the property in 1996. It was an essential aspect of Darwin's scientific work that he could carry it out in his domestic surroundings-

The house that survives is the building as Darwin acquired it in 1842 with the four additions he made – a three-storey bay on the garden front in 1843, a new drawing room in 1858, a verandah in 1872, and a new study in 1876.

The most noteworthy features are:

- The *Old Study*, where Darwin carried out almost all of his scientific work. It is furnished and arranged as it was when he wrote *The Origin of Species* there in the late 1850s. Many of the scientific instruments, pictures, books, and furnishings are his originals.
- The *Drawing Room*, also used by Darwin for experiments. Among the plants in the flower containers now are azaleas and *Deutzia gracilis* which were grown there in the 1870s in a plant-case obtained by Darwin for cultivation of specimens.
- The *External Walls and Verandah*: he used for his botanical researches. In the 1870s he added a verandah outside the drawing room.

The Grounds

Down House has a flower garden, kitchen garden, laboratory, three-compartment greenhouse, orchard, meadow and copse with a circuit path, all of which Darwin used in his scientific research. Many of the features are characteristic of a modest 'gentry villa' of the 19th century.

Other features such as the 'experimental beds', the greenhouse, the garden laboratory, and the 'worm-stone' installation in the lawn were created for Darwin's science alone. Taken as a whole, the grounds at Down House formed an 'experimental garden', one of the most important of the small number created by individual botanists in the 18th and 19th centuries for major advances in the understanding of plant reproduction and physiology before the development of the two subjects into a laboratory science in the 1860s and 1870s.

The Grounds contain the following features:

- The *Flower Garden* south-west of the house: created by Darwin in the early 1840s.
- The *Orchard* north-west of the house, a replanting by English Heritage of the orchard which Darwin had established there in 1843 to provide fruit for the household but later adapted for use in his research.
- The *Kitchen Garden*, stretching from the western end of the flower garden along the northern side of the meadow for growing fruit and vegetables for

the household. Darwin created a special area for his outdoor plant experiments, his 'experimental beds'.

- The *Greenhouse* along the northern wall of the kitchen garden is the original and main part of the range built by Darwin between 1855 and the 1870s for his botanical researches into non-native plants.
- The *Garden Laboratory* at the back of the greenhouse, built to Darwin's specification in the last months before he died, for experiments on the effects of different light conditions on plant growth and movement.
- *Great House Meadow*, used by Darwin for a long-term scientific experiment on the working of soil by earthworms.

Sand-Walk Copse, created by Darwin on the south-western side of Great House Meadow, with his famous 'thinking path', the Sand Walk, for his daily walks and scientific reflection in the solitude of the Downe countryside.

The Rural Landscape

Darwin made almost all his recorded scientific observations during the 40 years he spent at Downe in his grounds and the immediately surrounding landscape. His observations in the natural and semi-natural settings of the countryside were of importance for his science; his work on plants under cultivation in his garden was often only supplementary to his examination of natural phenomena. Some parts of the landscape have changed but, taken as a whole, the two quiet valleys and the high land between are still recognizable as the setting in which he worked, and there are many specific places within the area where the wildlife and plants that he studied are still present.

The landscape of the property has the defining features of the ancient countryside of lowland England. There have been significant changes over the years in the balance of land uses, with wheat and sheep farming dominant and peaks of arable in the early 14th and 19th centuries. The land north of Downe was brought into communal cultivation with the 'open field' system of medieval agriculture, and marginal land on the steep sides of the chalk valley north of Cudham was also ploughed.

Famine and subsequent outbreaks of plague devastated the local population during the 14th century and led to widespread changes in the landscape. The open fields north of Downe were enclosed with boundaries and hedges, some of which preserved the outlines of the medieval strip fields. Farms were built within the newly consolidated land-holdings, creating the pattern of dispersed settlement that characterizes the landscape today.

The period from 1700 to 1900 was one of general farming expansion which contributed significantly to the national economy. In the early 1800s, harvests improved but prices fell during the Napoleonic wars. In the early 20th century, with the development of the London suburbs, cheap public transport, and more leisure time for working people through Parliamentary action, people from the South London suburbs and nearby towns made increasing use of

the rural landscape around Downe for walking and other leisure pursuits.

Among the areas of the nominated property that are significant for their role in Darwin's studies are the following:

- Great Pucklands Meadow
- The Downe Valley
- Cudham School Pond
- Keston Common
- Estates
- The Cudham Valley
- Downe Bank

History and development

Down House and Grounds

When Darwin acquired Down House in 1842 it was already a complex structure with fabric of different periods. Building analysis, archaeological investigation, documentary records, and cartographic research suggest that the first house was built in the mid-17th century. It appears to have been substantially rebuilt in the 1730s or 1740s and much of the fabric of the central main block dates from that period. It was modernized in the late 18th century and a new kitchen and service block was built on the southern end. Further modernization was carried out in the early 1800s. Shortly after acquiring the property and moving in, Darwin added a three-storey rear bay. He made further minor extensions in later years for his growing family and in 1872 he added a verandah outside the drawing room.

There are few records of the garden prior to the Darwins' occupation, but the tithe map of 1840 shows that there was then a pleasure garden to the west of the house planted with laurels, and a kitchen garden beyond, walled on three sides with a hedge for the southern boundary. The drive and turning circle was north of the house and was divided from the road by a wall and a row of large trees. In 1843, the drive was moved from the north of the house to its present location. The road was lowered and the spoil was used to construct a bank to the north of the house and mounds to the west on the lawn. A new orchard was established to the north of the house where the old drive had been. Paths were also improved and new ones made, and the kitchen garden was brought back into full production. In 1846 Darwin leased a strip of land adjoining Great House Meadow, laid a path, round it, and planted it with woodland trees and native flowers. The path became known as the Sand Walk. In 1855-56 Darwin built a greenhouse in the kitchen garden, adding two heated compartments in 1863 and 1864.

Following Darwin's death, his wife Emma used Down House as a summer retreat, but lived for the rest of the year in Cambridge. She maintained the garden and there are no surviving records of any alterations. After her death in 1896 Down House remained in the ownership of the

family. The greenhouse was renovated during 1898. Furniture was removed in 1899 and from 1900 to 1906 the property was let to a tenant.

In 1907 the property housed Downe House School, and some minor changes took place. From 1922 to 1924 the property was empty and neglected. From 1924 to 1927 it was let to another school. Nothing is recorded about any alterations to the garden.

In 1927 Down House was presented to the British Association for the Advancement of Science for use as a Darwin museum. The house was repaired; the old study was restored, and the Museum was opened in 1929. In 1953 the property was taken over by the Royal College of Surgeons. The garden was restored in 1959 by two of Darwin's granddaughters, according to their memories of visits to the house during their childhood in the 1890s.

English Heritage acquired the freehold of Down House in 1996 and took over the running of the property. They carried out documentary, cartographic, and pictorial research, archaeological investigations, and analysis of the building fabric, historic wallpapers and paint scrapes, and undertook a major restoration of the property, including the old study and drawing room. The garden and grounds were restored according to historic photographs, family documents, Darwin's scientific notes, and his published writings. Visitor facilities were provided in a new single-storey building next to the old coach house, and a car park was created on a plot of land adjoining Darwin's property.

The rural landscape

There have been several significant changes in the use of the land since Darwin's death and losses of historic features, but the overall consequences have been limited. Since the early 1800s, the woodland in the property has been a mixture of semi-natural ancient woodland with coppicing and plantations. In general, the increasing amenity use of the whole landscape has favoured the retention and extension of the historic woodland.

The general character of the landscape today is broadly similar to its character in Darwin's time in that it is still based on mixed farming in small units with hedges, wood banks, and woodland in a quiet rural setting. The two wooded valleys and the open high ground between that were the key features of the landscape for Darwin are still clearly present. The quiet character of the two valleys in Darwin's time is partially preserved in Downe Valley, and fully preserved in Cudham Valley.

3. OUTSTANDING UNIVERSAL VALUE, INTEGRITY AND AUTHENTICITY

Integrity and authenticity

Integrity

The comments of the State Party to the requirements set out in the *Operational Guidelines* are as follows:

- Completeness: The nominated property includes all the elements necessary to express the outstanding universal value of the property (Darwin's house,

garden, grounds, and countryside). It covers almost the entire area around Downe in which Darwin observed and collected plants and insects during his years there. It includes all the places that were important for his research, representative areas of all the habitats in which he worked, and locations for all the major elements of his investigations at Downe.

- The nominated property is of adequate size to ensure the complete representation of those features and processes which convey the property's significance. It includes almost the whole area that Darwin worked in as a naturalist, and all the habitats that he studied.
- Condition: The physical fabric of Down House and the other historic buildings is in good condition and the effects of deterioration processes on Down House and its gardens are controlled by strict conservation management. Appropriate management is undertaken of the wider landscape in the nominated property.
- Cultural landscapes: Darwin had a range of links with the land-owners, other gentry, local farmers, tradesmen, and labourers in the neighbourhood that were important for him in his work. Those relationships are reflected in the surviving buildings.

Whilst the landscape remains substantially unchanged since Darwin's time, there have been three adverse effects of development or neglect: the electricity pylons which cross the northern part of Cudham Valley; the cars parked on the road of Downe village during busy periods; and the low noise of aircraft using London Biggin Hill Airport and flying to Gatwick and Heathrow.

It is undeniable that the property is 'legible' because considerable effort has been put into making it legible again. However, all missing elements (interior decoration, the study, plants in the greenhouse and in the garden) have been 'reconstructed,' whilst that do not fit into the appearance of the area in Darwin's time have been excluded.

ICOMOS considers that this does not conform to the World Heritage Committee's perception of what is meant by integrity.

Authenticity

For a property of this kind, authenticity is a function of what is known about the relevant historical facts and whether the relevant features survive.

According to the State Party, authenticity for the nominated property depends on its cultural value being truthfully and credibly expressed through attributes of:

- Location: The property is the location in which Darwin did a substantial amount of the work of great global significance, as outlined in the nomination document.

- Setting: Enough survives of those features of the landscape setting of Darwin's work at Downe that are essential for an understanding of his achievement.
- Form and design: Enough survives of those features of Darwin's property that are essential for an understanding of his achievement.
- Spirit and feeling: Enough survives of what attracted and inspired Darwin in the landscape and his grounds, whilst there has been meticulous reinstatement in other areas.

However, the house having been abandoned by the family, it has been used as a school before becoming the Darwin museum. ICOMOS notes that the house and the garden have been refurbished, following detailed research and with as much original material as possible. The object has been to present everything as seen through Darwin's eyes: even experiments are recreated.

ICOMOS considers that many elements of the property have been restored depriving the property of overall sufficient authenticity.

ICOMOS considers that the nominated areas do not display the requisite levels of integrity and authenticity.

Comparative analysis

There are very few properties relating to science on the World Heritage List, and the World Heritage Committee has called for 'nominations which recognize and celebrate achievements in science'. This property is nominated by the State Party as a prime example for the life sciences.

According to the State Party, places of value for science heritage can be grouped according to the particular aspects of scientific work that were carried out there. The groups include astronomical observatories, areas for field studies, institutions with collections of animals, plants or other specimens, hospitals and other medical establishments, places for experiments with plants, physical and biological laboratories, studies and other places for reading, discussion and writing, and places for instruction and communication of ideas. Because of the mainly practical nature of scientific work, many places of science have been changed when the work came to an end and the space was needed for another purpose. For these reasons and some others, the survival of physical features for science heritage is generally poor, as it is with industrial heritage, and unlike palaces, cathedrals, and other buildings which are valued for their appearance as well as their practical uses. Very few scientific achievements of comparable value to Darwin's can be associated with a place where major features representing the essence and range of the achievement survive.

The State Party claims that there is no location meeting those criteria, for example, for Copernicus's astronomy, Boyle's chemistry, Newton's physics, Galileo's mechanics, Mendel's genetics, Einstein's physics or Watson and Crick's molecular biology.

There are eight properties on the current World Heritage List that have features associated with science heritage:

- The Galápagos Islands (Ecuador);
- The Royal Botanic Gardens, Kew (UK);
- The Dorset and East Devon Coast (UK);
- Classical Weimar (Germany);
- Botanical Garden (Orto Botanico), Padua (Italy);
- The Struve Geodetic Arc (European transfrontier serial property);
- Maritime Greenwich (UK);
- Samarkand – Crossroads of culture (Uzbekistan).

There are a number of World Heritage and other properties sites which are associated with the development of theories of significance in different fields. These include experimental and botanical gardens, laboratories, etc.

Compared with these properties and monuments, the nominated property is well documented. Despite its compromised authenticity, some surviving features are of value in displaying the heritage it represents.

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

Justification of the Outstanding Universal Value

According to the State Party, the nominated property is of outstanding universal value because of its unique cultural significance as the open-air laboratory in which Darwin developed his theory of evolution by natural selection, and because of the unique insights it provides into the scientific understanding of natural life and biodiversity that he gained there and gave to the world. The ideas Darwin developed from his observations and experiments at Downe have had a profound influence on the life sciences, medicine, agriculture, philosophy, religion, the creative arts, and general views of humankind's relation to other living creatures in the natural world.

Down House and its surroundings were of fundamental importance for Darwin's science as they were his home and workplace for the four decades of his scientific maturity and his most widely and deeply influential writings. The house, its grounds, and the surrounding countryside were the settings for the observations and experiments from which he drew his most important insights during those years. Together they encompass the full range of his scientific investigation at Downe.

Criteria under which inscription is proposed

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

Criterion iii: The State Party justifies this criterion on the basis that Darwin's theory of evolution by natural selection stands together with Galileo's mechanics, Newton's physics, Lavoisier's chemistry, and Pasteur's microbiology as one of the supreme scientific achievements. His home

and its grounds contain many features which he created and used in his scientific work there. The property itself was essential for his achievements as it was his main workplace and open-air laboratory. The surrounding area preserves the main features of the farmed and wooded landscape which attracted the 33-year old Darwin to spend all the further years of his life at Downe, and which he used for his natural history in many ways.

ICOMOS considers that criterion iii is used when properties bear testimony to a cultural tradition or a civilization. Using this criterion to scientific discoveries would be a new interpretation with far-reaching implications, especially since the nominated property as such does not possess the necessary quality in monumental or landscape terms for inscription on the World Heritage List.

ICOMOS does not consider that this criterion has been justified.

Criterion vi: The State Party justifies this criterion on the basis that the nominated property is directly and tangibly associated with Darwin's theory of evolution by natural selection, his explanation of global biodiversity as a fundamental principle of the natural world, and his demonstration of the ecological interdependence of all life forms. The three insights are closely intertwined and together provide the central principles for the present scientific understanding of the history of life on earth, the web of interrelations between organisms in ecosystems of all ranges, the influence of human pressures on the natural world, and global needs for survival.

ICOMOS considers that while the intellectual significance of the property and of Charles Darwin are not in question, the importance of the property lies its educational rather than its heritage context.

ICOMOS does not consider that this criterion has been justified.

4. FACTORS AFFECTING THE PROPERTY

Urban fringe pressures

Urban fringe pressures include:

- the use of agricultural land and premises for purposes not associated with agriculture or forestry;
- the sale of agricultural land and premises, the establishment of quasi-agricultural units and resulting urbanization proposals, including the construction of new 'agricultural' dwellings that lack a true agricultural function;
- the sub-division of agricultural land into recreational paddocks and the proliferation of small ancillary buildings;
- *ad-hoc* open-air market events (boot sales, fun fairs, Sunday markets, and auctions) which generate traffic problems on the country roads;

- inappropriate leisure pursuits; unauthorized waste disposal, and fly-tipping;
- unauthorized traveller encampments.

Relatively few of these pressures have a major influence within the nominated property. Statutory local policies contained within the London Borough of Bromley's Unitary Development Plan ensure such pressures are controlled. As the entire nominated property is designated Green Belt land and significant areas are locally or nationally designated for their environmental importance, pressures from development are further reduced.

There are three major development pressures on the property and its setting:

Housing pressures: The London Plan 2004, produced by the Greater London Authority, states that Bromley must achieve 573 housing completions per year between 1997 and 2016. Owing to the character of the Borough and the large proportion of Green Belt land, this target has not been achieved. Suitable sites are limited, which potentially puts Green Belt land under pressure. Downe and Cudham villages are Conservation Areas, so any new development or change to the existing infrastructure must be in keeping with the current state of the built environment.

London Biggin Hill Airport, formerly a RAF fighter station, is beyond the western boundary of the nominated property and has existed since 1917. Bromley Council purchased the freehold from the Ministry of Defence in 1974 with the declared purpose of continuing to protect the environment of the area to the greatest practicable extent, compatible with the presence of a long-established airport. A recent application to redevelop the former RAF married quarters adjoining the Airport but within the Major Developed Site was accepted, since it will positively enhance the setting of the site and has less visual impact on the openness of the Green Belt than the existing development.

Amenity: Being close to the capital, the countryside is popular for day excursions by Londoners for walking and riding. If mismanaged, these activities can cause damage to the natural habitats and biodiversity. Conversely, these leisure activities provide an opportunity for participants to get close to, and enjoy nature.

Agriculture: Approximately 75% of the nominated property is defined as agricultural, a similar proportion to that in Darwin's time. Today, there are eight main farms in the nominated property, four owned by the Council and leased to local farmers. They are run using modern methods of cultivation which, unlike in other parts of lowland Britain, have not resulted in the extensive removal of hedgerows and woodland.

Environmental pressures

Biodiversity: The area generally has high biodiversity value, protected in many areas by nature conservation designations. Reduced grazing in the last 50–70 years has led to scrub invasion in some areas, and where woodland has developed at Keston, this has resulted in loss of lowland heath and valley mire.

Air and noise pollution: As there is no heavy industry in operation near to or within the nominated property, air and noise pollution is minimal. The London Borough of Bromley has the cleanest air in London. However, as stated above, the property suffers from aircraft noises.

Visual pollution: The nominated property contains one small disused landfill site which was filled in the 1970s, landscaped, and is now used for Downe Riding School.

Climate change: Climate change is likely to have subtle, but potentially significant impacts on the biodiversity of the nominated property. Although this cannot be resolved at the local level, the impacts need to be managed and mitigated. Once damaged, established habitats such as species-rich chalk grassland, old hedgerows, and ancient woodland cannot be easily recreated.

Natural disasters

The south-east of England suffered two hurricanes (1987 and 1990), which had a large impact on local trees and woodlands, causing some damage to built properties. The loss of large trees, leading to changes in habitats, is a natural phenomenon which provides opportunities to observe the evolutionary struggle for life as flora and fauna adapt to the change.

Owing to its elevated position and underlying chalk geology, flooding is currently and likely to remain only a minor local issue and most apparent on the roads after heavy rainfall.

A Fire Risk Assessment of Down House has been undertaken and is regularly reviewed. Staff are trained in action to be taken in the event of fire and other serious incidents. The gardens, estate, and countryside properties are at little risk from fire.

ICOMOS considers that there are no major adverse factors affecting the property that cannot be addressed.

5. PROTECTION, CONSERVATION, AND MANAGEMENT

Boundaries of the nominated property and buffer zone

The boundary of the nominated property has been set to conform to landscape features and roads. It excludes the main areas of housing developed since Darwin's death, at Holwood, north of Downe, at Luxted and Single Street. Two golf courses have also been established and, whilst contained within the nominated property, they are identified as internal buffer zones. The construction of clubhouses, car parks, tees, fairways, and greens are intrusions into the landscape, although the overall appearance is not too dissimilar to the pasture that Darwin would have seen.

The setting is the environment or surroundings around the nominated property. It includes those sites, monuments, buildings, and landscape components that provide additional historical context and a physical space in which events could affect the visual appreciation of the property.

For the proper conservation of the property an external buffer zone is not being proposed. The immediate setting and important views are strongly protected by planning designations, particularly London's Green Belt, whilst most of the property is defined by ridge lines which form a natural visual barrier. The UK government has also made it clear that the concept of setting is a material consideration in cultural heritage planning policy. *Planning Policy Guidance Note 15: Planning and the Historic Environment* supports the concept of setting. Development proposals affecting these sites or their setting may be compatible with this objective, but should always be carefully scrutinized for their likely effect on these or its setting in the longer term.

ICOMOS considers that the boundaries of the core zone are adequate, although it does not fully support the practice of exempting certain parts of the main nominated property from inscription and treating these as 'internal buffer zones.' Furthermore, it feels that, despite the strong statutory protection that is in place, it would be advisable to have in addition a clearly defined buffer zone.

Ownership

About 45% of the nominated property is owned and managed by the Local Authority, the London Borough of Bromley with the remainder in private ownership. Most of this Council-owned land is farmed, whilst a significant proportion is managed for nature conservation. English Heritage owns and manages Down House Estate.

Protection

The nominated property's sites cultural and natural heritage is safeguarded through a wide range of overlapping protective measures provided under established planning legislation, policies, and practice. Much of the flora and fauna is protected under the Wildlife and Countryside Act.

Principal national statutes providing protective measures include the *Town and Country Planning Act 1990*, the *Planning and Compulsory Purchase Act 2004*, the *Planning (Listed Buildings and Conservation Areas) Act 1990*, the *Greater London Authority Act 1999*, the *Wildlife and Countryside Act 1981*, the *Countryside and Rights of Way Act 2000*, *Ancient Monuments and Archaeological Areas Act 1979*, the *Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999*, and the *Hedgerow Regulations 1997*. These protective measures are largely implemented through Local Authorities.

To assist the planning process and means of implementing protective measures, the UK Government has produced a series of Planning Policy Guidance Notes (PPGs). These are given great weight in the determination of planning applications and listed building consent.

ICOMOS considers that the protective measures for the property are adequate.

Conservation

The quality of the conservation work that has been undertaken at the property and the subsequent monitoring and maintenance programmes is of high quality.

ICOMOS considers that the conservation measures for the property are adequate.

Management

The principal objectives of the Management Plan are:

- to protect, conserve, and enhance the inspirational landscape important to Charles Darwin's scientific ideas on the understanding of the natural world and humankind's role;
- to promote the importance of the property to local, national, and international audiences;
- to realize the educational potential of the property for people of all ages and backgrounds;
- to promote and implement sustainable development within the property;
- to work in partnership with organizations and stakeholders involved in the property.

The Plan includes:

- a description of the essential features, values, and significance of the property, which would be maintained, conserved, and enhanced;
- an evaluation of the key management issues facing the property;
- a clear vision for the property's future that seeks to achieve sustainable management and promotion of the property through the conservation of its outstanding universal values;
- holistic and coherent objectives to guide the future management and conservation of the property;
- an agreed management framework and implementation strategy to be achieved over the short, medium, and long term.

Assurance of effective implementation of the Management Plan is through:

- the commitment of the London Borough of Bromley and the inclusion of the Management Plan as a Supplementary Planning Document in the forthcoming Local Development Framework;
- the continued functioning of a World Heritage Team responsible for the implementation of the Plan. Its core management functions are to co-ordinate action, monitoring, and evaluation across the property;
- the continued monitoring of the management of the property by the Steering Group.

Action on, for example, the extension of the airport or housing development within the area is taken by individual stakeholders within the framework of both the

Management Plan and the relative planning policies and procedures. Concerted decision making is coordinated by means of the Steering Group, in consultation with the World Heritage team.

Involvement of local communities

Both the nomination document and the Management Plan have been produced in consultation with the local community, businesses, and relevant organizations. Ensuring local communities were clearly informed and involved in the bid process was achieved through press coverage, both local and national, the two World Heritage websites, questionnaires and leaflets to all those living within the property and significant organizations and business within the London Borough of Bromley. In addition to public consultation, local communities will be actively involved in developing and implementing agreed strategies and management.

ICOMOS considers that the management system for the property is adequate.

6. MONITORING

Key indicators for measuring the state of conservation have been established in the World Heritage Property Management Plan for Down House and Estate, the built heritage, and the rural landscape to monitor progress with:

- (i) conservation and enhancement of natural sites;
- (ii) preservation of the built environment;
- (iii) education and interpretation of the property.

These indicators will be SMART (Specific, Measurable, Action-oriented, Realistic, and Time-related) and of both a quantitative and qualitative nature. They will be used to assess the implementation of the Strategic Action Plans detailed in Section 7 of the Management Plan and should determine the extent to which the vision, aims, and objectives of this bid are met. They will be undertaken within the 6-year timescale of the World Heritage Convention periodic reporting exercise and guided by best practice.

ICOMOS considers that the monitoring proposals for the property are adequate.

7. CONCLUSIONS

ICOMOS acknowledges that the property proposed for inscription on the World Heritage List is of considerable cultural significance by virtue of its association with the great scientist, Charles Darwin. However, it believes that this significance is represented today primarily by a dwelling and its grounds that are no longer authentic, as that quality is conceived by the World Heritage Committee. For example, the interiors of a number of the rooms have been re-created to conform with their appearance during the occupancy of Down House by Darwin and his family. The same caveat applies to much of the grounds and subsidiary buildings. In similar fashion, the landscape around the house has undergone substantial

changes in use, and hence of appearance, since the second half of the 19th century and so it is by no means the landscape that aided Darwin in his studies.

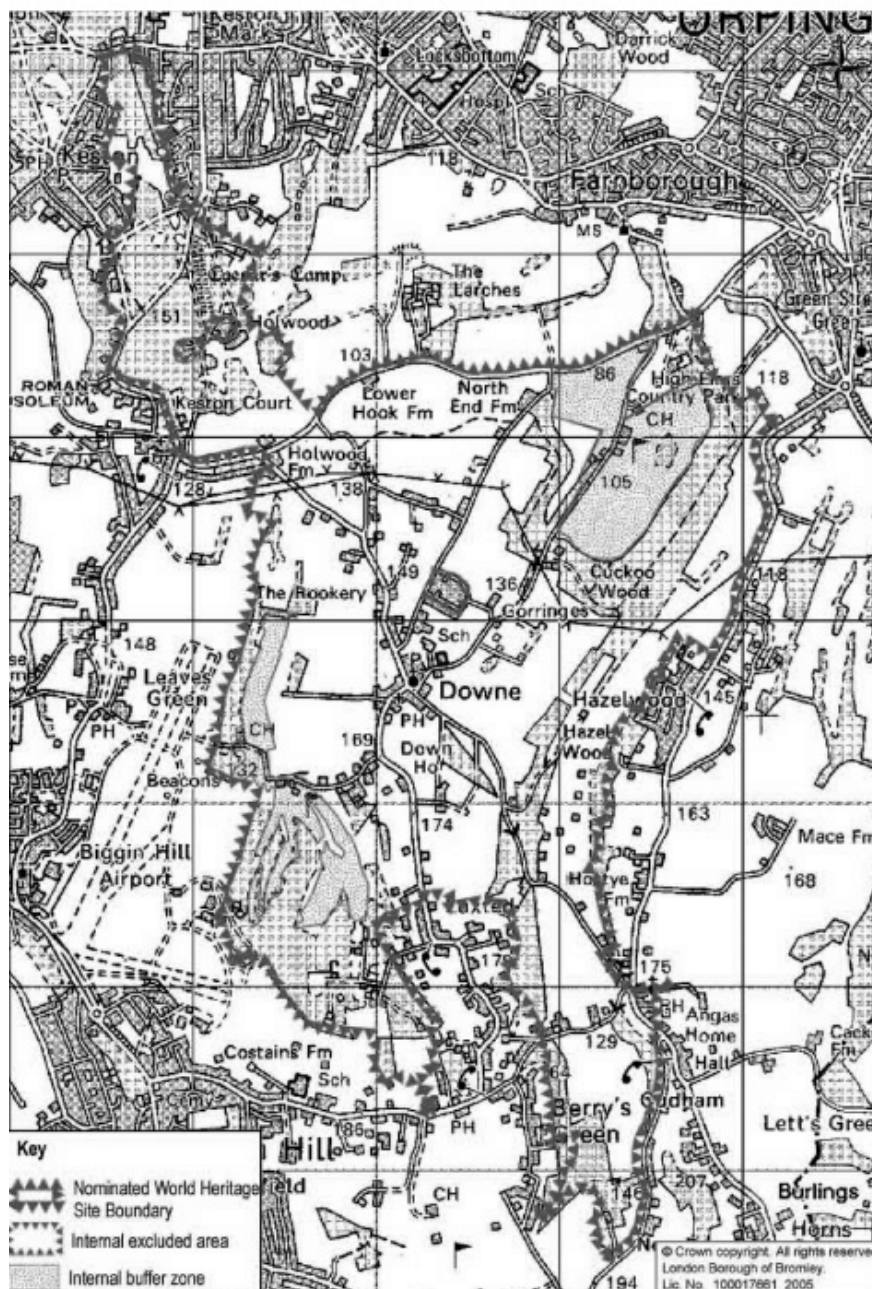
Down House is of great educational and scientific importance and value, but it cannot be considered to conform with the fundamental requirements of the World Heritage Convention.

ICOMOS considers that the nominated property, while of substantial interest in educational, historical, and scientific terms, does not conform with the objectives of the World Heritage Convention.

Recommendation with respect to inscription

ICOMOS recommends that Darwin at Downe, United-Kingdom, should ***not be inscribed*** on the World Heritage List.

The nominated Site boundary on the 1:50,000 Ordnance Survey map of 2005



Map showing the boundaries of the nominated property



Aerial view of Downe House



Interior of Downe House



Insectivorous plants in the greenhouse



Downe Village

Berat (Albania)

No 568 rev

Official name as proposed

by the State Party: The Historic Centre of Berat (City of 25 Centuries Cultural Continuity and Religious Coexistence)

Location: District of Berat in the County of Berat (Central Albania)

Brief description:

The Historic Centre of Berat is located in the Osum river valley in Central Albania. The site has evidence of early occupation from the Neolithic period. A permanent fortified settlement developed here from the 4th century BC, accumulating historical layers that represent the Illyrian, Roman, Byzantine, Ottoman and Albanian cultures. The vernacular housing dates from the 18th and 19th centuries, representing an innovative and open version of the Balkan housing typology, adjusted to the needs of merchants. The wall paintings of the medieval churches of Berat have been recognized especially for the 16th century painting school established by Onufri.

Category of property:

In terms of the categories of cultural property set out in Article 1 of the 1972 World Heritage Convention, this is a *group of buildings*. In terms of the *Operational Guidelines for the implementation of the World Heritage Convention* (2 February 2005) Annex 3 (14, ii), the property is an inhabited historic town.

1. BASIC DATA

Included in the Tentative List: 11 October 1996

International Assistance from the World Heritage Fund for preparing the Nomination: No

Date received by the World Heritage Centre: 16 January 2006

Background:

This is a revised version of a nomination submitted in 1991 to the 15th session of the Bureau of the World Heritage Committee (Paris, June 1991). "The Bureau *deferred* the examination of these nominations, but approved the proposal of ICOMOS to organize a mission to the two sites in order to help the Albanian authorities to redefine the perimeters of protection of Berat and Gjirokastra and to identify the limits and the legal protection of buffer zones, essential for the safeguarding of the two sites."

Consultations: ICOMOS has consulted its International Scientific Committees on Historic Towns and Villages and on Vernacular Architecture.

Technical Evaluation Mission: 24-30 September 2006.

Additional information requested and received from the State Party: ICOMOS sent letters to the State Party on 20 December 2006 and on 30 January 2007 to have further information on the comparative analysis carried out for the nomination. The State Party provided further information on 17 January and on 26 February 2007.

Date of ICOMOS approval of this report: 11 March 2007

2. THE PROPERTY

Description

The small historic town of Berat is located in southern Central Albania, some 50km from the Adriatic Sea. The area has a typical Mediterranean climate. The town has some 64,000 population. Berat is located on the Osum River, between the mountain of Tomorri in the east and the valley of Myzeqe in the west. The Osum River has cut a deep gorge through the limestone rock in the valley to form a natural promontory, around which the town was built on several river terraces.

The nominated core zone (58.9 ha) consists of three parts: The Castle of Berat (locally called Kala) on a hill on the north side of the river is the oldest part of the town. The Mangalem quarter is located at the foot of the castle hill, and the houses are built on terraces that rise from the river. The fortress of Gorica is located on the south side of the river.

The castle hill of Berat has been continuously inhabited from the Neolithic era, 2nd or 3rd millennium B.C. The Castle has a triangular plan (*ca.* 200m x 100m) and is located on the top of the hill in a strategic position. Its origins go back to 4th century B.C., though it was renovated or rebuilt several times, representing the Illyrian, Byzantine, feudal Albanian, Ottomans and Great Albanian Paschalik cultures. The present structures, partly in ruins, date mainly from the 13th century. Most of Berat inhabitants were living within the surrounding fortification, that measured *ca.* 600m north-south, and 300m east-west. The current housing stock dates mainly from the 18th and 19th centuries.

This citadel area used to have 20 Byzantine churches many dating from the 13th century. In their architectural form the churches are fairly simple, often based on a nearly square plan. Several of them contain valuable wall paintings and icons, such as those in: St. Todri, Shën Triadha (St. Trinity), St. Mary Vllaherna, Shën Kolli (St. Nicholas), Shën Konstandini dhe Helena (St. Constantine and Helena) and the Cathedral of St. Mary, in the Castle quarter. A particularly significant artist was Onufri, who founded a school of painting in the 16th century. The treasures of Berat also include the Codex Beratinus, ancient manuscripts of Gospels, dating from the 6th and 9th centuries. Two Codices are included in UNESCO's register of *Memory of the World* (inscribed in 2005).

After the Turkish occupation, in 1417, a majority of the population was converted to Islam, and several mosques were built in the town. Among the first mosques is Xhamia e Kuqe (The Red Mosque), built in the 15th century by Sultan Bayazit, today in ruins. The domed Lead Mosque (Xhamia e Plumbit) was built in the 16th century by local feudal lords, the Skurajs. It is distinguished by its decorative cloisonné technique, representing a significant example in Berat. Berat also has religious gathering houses, used especially by Sufi brotherhood, such as Teqeja Helvetive, which was built at the end of the 18th century and is one of the most important Islamic monuments of the town. It is built in finely carved stone and has rich interior decoration.

The existing residential houses of Berat date mainly from the 18th and 19th centuries. Many of the houses suffered from a serious earthquake in 1851, and their upper stories were destroyed. Before the earthquake the buildings were all built in stone. In the reconstruction, however, the upper floors were built in timber, while maintaining the surviving stone structures of the ground floor. The houses are classified depending on their type: houses with *çardak* (with front gallery), closed houses, and buildings with special solutions. The *çardak* houses belong to the period from the 17th to early 19th centuries.

On either side of the river, housing has developed in two separate quarters, Mangalem and Gorica, whose urban morphologies have been preserved over the centuries. The housing is of architectural homogeneity, using numerous large and regularly spaced windows, which led to Berat being known as the "town of a thousand windows".

History and development

The town of Berat is one of the oldest in Albania, with the earliest traces of settlement from 2600-1800 BC. There are also ceramics from the 7th or 6th century BC. The Berat people were first called Illyrians, then Arbër, and finally Albanians. The castle area had stone fortifications by the middle of the 4th century, and the Gorica quarter was set up some time later. In antiquity, Berat was known as Antipatreia, a fortified centre that stood up against the Romans, and has been mentioned by Polybius and Titus Livius. During the Byzantine period, in 533, Berat is called Pulcheriopolis, after the 5th century Byzantine Empress Pulcheria. The town is mentioned in the list of fortifications of Justinian Emperor.

In the middle ages, the town was under Bulgarian occupation (860-1018), growing in importance. The name Berat is first mentioned in 1018. From the Crusader period onward, 13th century, Berat had various occupants, including the Angevins, the Serbs, and the Muzakaj Princedom. During the 13th and 14th centuries three important churches were built: St. Mary Vllaherna, Holy Trinity, and St. Michael. From the 15th to 17th centuries, the town became part of the Ottoman Empire. In this period, Berat had to face some damage. Its fortifications were repaired and new towers were built to strengthen them. After the uprising against the Turks in 1834, the Castle of Berat suffered and lost its defensive function. Nevertheless, it has retained much of the historic fabric. Until 1961, the condition of Berat remained practically the

same. The historic town was then recognized as an important heritage property and was listed for protection.

3. OUTSTANDING UNIVERSAL VALUE, INTEGRITY AND AUTHENTICITY

Integrity and Authenticity

Integrity

The settlement represents 24 centuries of history. From 1834, when the fortification lost its defence function, the site has not suffered substantial change. The biggest change has been the reconstruction in timber of the upper floors of the houses after the 1851 earthquake. However, the spatial qualities of the buildings were retained.

Generally, the integrity of the core zone of Berat has been well preserved both as a whole and in its different structural units: Kala, Mangalem, Gorica. There are nevertheless a few cases, which can be subject to criticism. They concern a school, a theatre and some unauthorised structures, which the authorities have agreed to remove.

The buffer zone has a larger number of structures considered unsuitable for the character of the ensemble. It will be subject to future management to find appropriate solutions for each case.

Authenticity

Conservation measures affecting the property since its protection in 1961 have respected the historic material and form according to accepted international principles.

Many authentic built structures and the morphology of the quarters and the citadel have been preserved, portraying the various heritage features of the town:

- the fortification system,
- the architecture of the different religions, particularly the 16th century Orthodox churches and their wall paintings,
- the vernacular architecture of the 18th and 19th centuries,
- the homogeneous urban landscape of the two residential quarters.

The general planning concept of Berat has been well preserved, including green zones between the built areas. The minor material changes that have taken place in the historic buildings can be considered acceptable as part of the living function of the town.

ICOMOS considers that the urban fabric of the town of Berat is authentic as it has not undergone any major alterations down the centuries. However the vernacular housing dates essentially from the 18th and 19th centuries.

Comparative analysis

According to the State Party, the fact that Berat represents a continuous use over 24 centuries is considered unique in the Balkans. Several castles have residential quarters within them, but none have developed into an urban ensemble like Berat.

Berat is comparable primarily with the museum-town of Gjirokastra, located in the same State Party. This is already inscribed on the World Heritage List. The historical and architectural character of Gjirokastra is however different. Gjirokastra is an imposing fortress in whose perimeter original fortified urban housing has developed, built by the main landowners of the surrounding area. It is made up of fortified houses constructed on the principle of tall buildings, or towers, which defy the classical rules of architecture and town planning. It is the image of a powerful military and administrative centre, at the apogee of the classical Ottoman period; Gjirokastra bears very certain witness to the Balkan fortress-town of the 15th and 16th centuries.

Berat on the contrary is a centre which has been continually inhabited over a very long historical period, whose functions are primarily related to handicraft and commerce. Berat is above all a town given over to functional private housing. Its defensive constructions are for the town and its inhabitants; it is not a military centre. The urban space remains open, and is interspersed with green zones. The houses are predominantly horizontal in layout; they make use of abundant daylight entering through large and regularly spaced windows. The ensemble has great architectural unity, and is perfectly adapted to the site's position on a hill, which lends the urban landscape its specific and elegant quality. Berat illustrates, to a greater extent than Gjirokastra, the diversity of urban life, its different periods, and different cultures. Berat is a precious witness to the coexistence of Christians and Muslims, that allowed the creation of specific and flourishing cultural elements, which are particular to each group, such as the Christian churches, frescoes and icons during the Ottoman period.

Several comparative studies have been undertaken also in relation to World Heritage List nominations, where Berat is distinguished as a significant example. In the region of the Balkans there are specific cultural phenomena, referring to Roman provincial architecture, Orthodox monasteries, Muslim culture and vernacular architecture. In different parts of the region, specific conditions have produced great diversity. The vernacular architecture of Berat is earthbound. Similarly, the wall paintings that have been preserved in Berat complement the understanding of Balkan artistic heritage. Compared to other important centres in the region, such as Ohrid, Kotor, Thessaloniki, Plovdiv and Istanbul, Berat is considered by the State party as a new and complementary example contributing to the interethnic dialogue.

In Berat there is no specific feature of vernacular architecture which is characteristically Christian or Muslim. The housing is extremely homogeneous, which results in a very coherent urban landscape. The general morphology of the quarters has been preserved with great integrity. Berat is a remarkable example of housing in the inner Balkan countries.

ICOMOS considers that the town of Berat is an example of the specific architectural and urban values of the Balkans region, in a context of great historical continuity. It also has its own specific architectural value and overall aesthetic quality. ICOMOS considers however that its outstanding value in comparison to other towns in the Balkans has not been established.

Justification of the Outstanding Universal Value

The State Party considers that the property is of Outstanding Universal Value for the following reasons:

The historic settlement of Berat with its fortress of Gorica has survived from the 4th century BC until today, while many other powerful centres in the region have vanished, such as Apollonia, Nikae, Bylis, Dimal. Since the 13th century Berat developed into an open city, which reflects the relationship with the grounds, the functional road system, the abundant sunlight and the stylistic units. The design solutions are free with a lot of space and spontaneity.

The historic town of Berat represents several elements, including the system of fortifications, the cult architecture and associated mural paintings, and the vernacular architecture of the 18th to 19th centuries. Within the Balkan cultural region, the fortified settlement of Berat represents an exceptionally significant example of a continuous use from the Illyrian and Roman times to Byzantine and Ottoman periods.

The churches and mosques are integrated into the urban fabric. They have been well preserved, particularly the Christian churches and their frescoes, and they bear witness to the coexistence of the different communities.

While of relatively recent date (18th to 19th centuries), the vernacular buildings settled in terraced quarters also bring a new and significant contribution to the understanding of Balkan architecture. The architectural and morphological unity of the town suggests there is no distinction between the housing of the Christians and of the Muslims.

The Historic Centre of Berat represents an exceptional testimony to cultural traditions that have fundamentally formed the Albanian culture over some 24 centuries, from the Illyrian and Roman period to Byzantine and Ottoman eras. These traditions have left their marks in the historical layers, still witnessed by the fortifications and historic buildings of the settlement. The current vernacular building stock of Berat represents the Balkan type of an Ottoman house, which is distinguished by its openness and its creativity in finding new solutions to the requirements of the rocky terrain.

Criteria under which inscription is proposed

The property is nominated on the basis of criteria ii, iii and vi:

Criterion ii: Berat displays a variety of considerable influences during 24 centuries, among which Illyrian, Roman, Byzantine and Ottoman influences, preserving simultaneously the unity of the inhabited centre.

ICOMOS considers that Berat bears witness to an Ottoman urban ensemble including a strong Christian presence, and that the multiple influences reflected in Berat are shared by other sites in the region.

ICOMOS considers that this criterion has not been justified.

Criterion iii: The remains of buildings and constructions of Berat pay witness to 24 centuries of continued life. The subsoil still preserves valuable traces of civilisations which wait to be uncovered by archaeologists.

ICOMOS considers that the historic presence of many cultures over a long period is not specific to Berat in the Balkan and Mediterranean regions.

ICOMOS considers that this criterion has not been justified.

Criterion vi: During the 16th century, the well-known painter Onufri established an iconographic school which had for a long time a vast influence. Berat has also preserved the Codices recognized by UNESCO Memory of the World Programme: *Codex Purpureus* (6th century) and *Codex Aureus*.

ICOMOS considers that the outstanding universal significance of the described artistic trends relating to the material features of the property has not been demonstrated.

ICOMOS considers that this criterion has not been justified.

ICOMOS notes a discrepancy between the declared universal value and the actual inhabited centre today. The authenticity and integrity of the site are important elements which are linked to the criteria mentioned, but their outstanding universal value has not been fully demonstrated.

ICOMOS considers that the criteria and the Outstanding Universal Value of the property have not been justified.

4. FACTORS AFFECTING THE PROPERTY

The nomination dossier includes an identification of the following factors:

Number of inhabitants within property

There are 4070 persons living in the core zone and 9850 in the buffer zone. The population of the town reached 64,000 in 2005, and is growing relatively fast.

Development pressures

The area of the fortifications is well controlled, but there are development pressures in the residential quarters. This means requests for expansion of existing buildings and the reconstruction of ruined structures. Some illegal works have been undertaken in 1997. However, the heritage values have been increasingly appreciated in recent years.

Natural disasters and risk preparedness

Berat is included in a seismic hazard zone (potentially 7-8 Richter). Special attention needs to be given to the monitoring and consolidation measures, as well as to strict control of changes in the historic fabric. There are records of the river flooding though only rarely.

Fire

Fire is the most important basic risk for the urban housing. Fire protection measures have been taken by both legal and regulatory means. They should however be effectively implemented. The fire protection system should in particular be adapted to the urban characteristics of Berat, and this means that the firemen should be better prepared for this purpose.

Tourism is not creating any pressure at the moment.

ICOMOS considers that the main risk that could affect the property is insufficiently controlled urban development in the peripheral zones. ICOMOS recommends that particular care should be taken in controlling urban development in the buffer zone. ICOMOS also recommends improving the fire protection measures.

5. PROTECTION, CONSERVATION AND MANAGEMENT

Boundaries of the nominated property and buffer zone

Compared to the 1991 nomination, the boundaries have been extended. The core zone (58.9 ha) includes the three elements of the property: Kala, Mangalem and Gorica as well as the green areas in between. The buffer zone has been enlarged from the first nomination, and consists of four sub-zones related to the specific character of each area. The buffer zone (136.2 ha) surrounds the core zone on all sides by *circa* 100m, except in the urban area to the east, where it extends to ca. 800m.

ICOMOS considers that the boundaries of the core and buffer zones are adequate and reflect the proposed OUV.

Protection

Legal Protection

The historic areas of Berat are legally protected under the following laws: decree by the Council of Ministers, no. 172 of 2 June 1961; the law on cultural heritage, No. 9048 of 7 April 2003; Regulations for the management of the City-Museum of Berat: decree of the Council of Ministers of 30 December 2005.

ICOMOS considers that the legal framework is adequate for the needs of the historic town of Berat. ICOMOS considers however that special attention should be paid to developing local legal competencies over the coming years, in conjunction with the setting up of the plan for the management and protection of the authenticity and the value of the property.

Conservation

History of Conservation:

The property has survived fairly well since the 19th century, maintaining its qualities. Nevertheless, especially historic monuments of the second category are sometimes in poor state of conservation. According to law, this category is less strictly controlled. Therefore, there have been some interventions which are not suitable for the historic character of the place.

Conservation work on the historic urban centre and its main monuments began in 1966, and has continued on an irregular basis up to the present time. The work has been carried out in a spirit of authentic conservation, by limited interventions of cleaning, reinforcement and restoration with traditional materials. Some rather hypothetical reconstruction work did however take place in the 1970s.

Present state of conservation

Generally speaking, conservation has been the sole responsibility of the Institute of Cultural Monuments. However, there have not been enough qualified conservators to undertake all the works. Moreover, due to scarce resources, the rhythm of the works is not always sufficient to meet the requirements caused by weathering and decay processes.

Active Conservation measures

At present, the conservation management system only allows work to be carried out under the control of the Institute of Cultural Monuments. The institute is currently drawing up a plan for future town conservation interventions. The plan must in particular define needs in terms of human resources, which are still insufficient, and material needs.

ICOMOS considers that the state of conservation of the nominated site is acceptable overall, but substantial maintenance and restoration work needs to be planned in the near future, in order to better present the values of Berat. For this purpose, conservation measures should be significantly stepped up in terms of both human and material resources. A guide to renovation is necessary for the owners of traditional housing stock, whether the housing is used today for residential, handicraft or commercial purposes.

ICOMOS considers that care should be taken to control housing in the buffer zone, and particularly existing illegal constructions, in order to restore or preserve the unity of architecture and landscape in the approaches to the site.

Management

Management structures and processes, including traditional management processes

The Ministry of Culture, Youth and Sports is in charge of the management system, and the implementation is in the hands of the Institute of Cultural Monuments. In addition, other organizations are involved: Institute of Archaeology,

the General Direction of State Archives, The National Centre of Inventory of Cultural Property, the Academy of Sciences. The 2005 decree improves the management system through the establishment of a Consultative Committee for the Historic Centre at the Municipality of Berat.

While some problems of coordination are observed between the different stakeholders, initiatives have been taken, e.g. to merge the Institute of Monuments and the Institute of Archaeology to improve coordination. The system is very centralised, and the municipal institutes have no decision making power.

Management plans and arrangements, including visitor management and presentation

The following plans exist: Management Plan prepared by an Italian consultant in 2005; General Regulatory Plan for Berat (1983), Urban City Centre Study (2005); as well as several more detailed studies on the urban area.

The Management Plan has established strategic objectives for management, and it has also contributed to the clear definition of the boundaries of the World Heritage property. The General Regulatory Plan of 1983 recognizes the declared "City-Museum" area, but needs to be updated to take into account the requirements of the Management Plan. While these plans exist, there is still need to establish planning instruments to implement and coordinate field work, to achieve the scope of integrated conservation.

Until recently, Albania has been relatively isolated. Now, however, it is opening to tourism. This will mean that initiatives are required to provide new visitor facilities and services, involving the historic town area. It is considered that the three quarters of the town have great potential to facilitate this process and also to provide more overnight accommodation.

The proposed improvements in services and visitor facilities should be strictly assessed within the framework of the management plan.

Involvement of local communities

The 2005 decree foresees the establishment of a Consultative Committee for the Municipality of Berat, which will guarantee participation of citizens.

Due to the recent history of Albania, there is little involvement of the local population in the management. Nevertheless, the 2005 decree does imply a certain participation of citizens.

Resources, including staffing levels, expertise and training

In the past all expenses were covered by the State. At the moment Albania is in a transition period into democracy, where the participation of the building owners is expected to grow.

The Architecture College at Tirana University has started a programme of Higher Education Curricula Development. In 2005, the Ministry of Culture and UNESCO have also signed an agreement for the creation of a Centre of

Restoration in Albania. This will offer two-year courses for restorers, especially in painting and icon restoration, which are important for Berat.

The financial resources are weak (82,000 euro/2006). Nevertheless, one can observe a gradual participation of the private sector even though this is still small (9,000 euro/2006).

In conclusion, ICOMOS considers that Berat has made much progress in the establishment of an appropriate management structure and relevant plans. Nevertheless, there is need to :

- work for better coordination between the different stakeholders;
- upgrade the requirements of the General Regulatory Plan on the basis of the 2005 regulations;
- consider a more decentralised system of decision making;
- take measures to stop illegal constructions; and
- provide the necessary resources for the implementation of the conservation management system.

- consider a more decentralised system of decision making;
- take measures to stop illegal constructions; and
- provide the necessary resources for the implementation of the conservation management system.

Recommendations with respect to inscription

ICOMOS considers that the outstanding universal value of Berat has not been demonstrated, despite the efforts of the comparative study.

ICOMOS recommends that the examination of the nomination of The Historic Centre of Berat (City of 25 Centuries Cultural Continuity and Religious Coexistence), Albania, to the World Heritage List be *deferred* in order to allow the State Party to :

- reconsider the question of outstanding universal value, either for the property on its own, or in conjunction with the values of another fortified town, such as Gjirokastra.

6. MONITORING

Indicators will be used to monitor the condition of historic buildings according to risks. The Institute of Cultural Monuments with its regional offices will be in charge of monitoring.

ICOMOS considers that the monitoring measures are adequate for the time being. At the same time, it is considered necessary to update them according to eventual changes in management and administration.

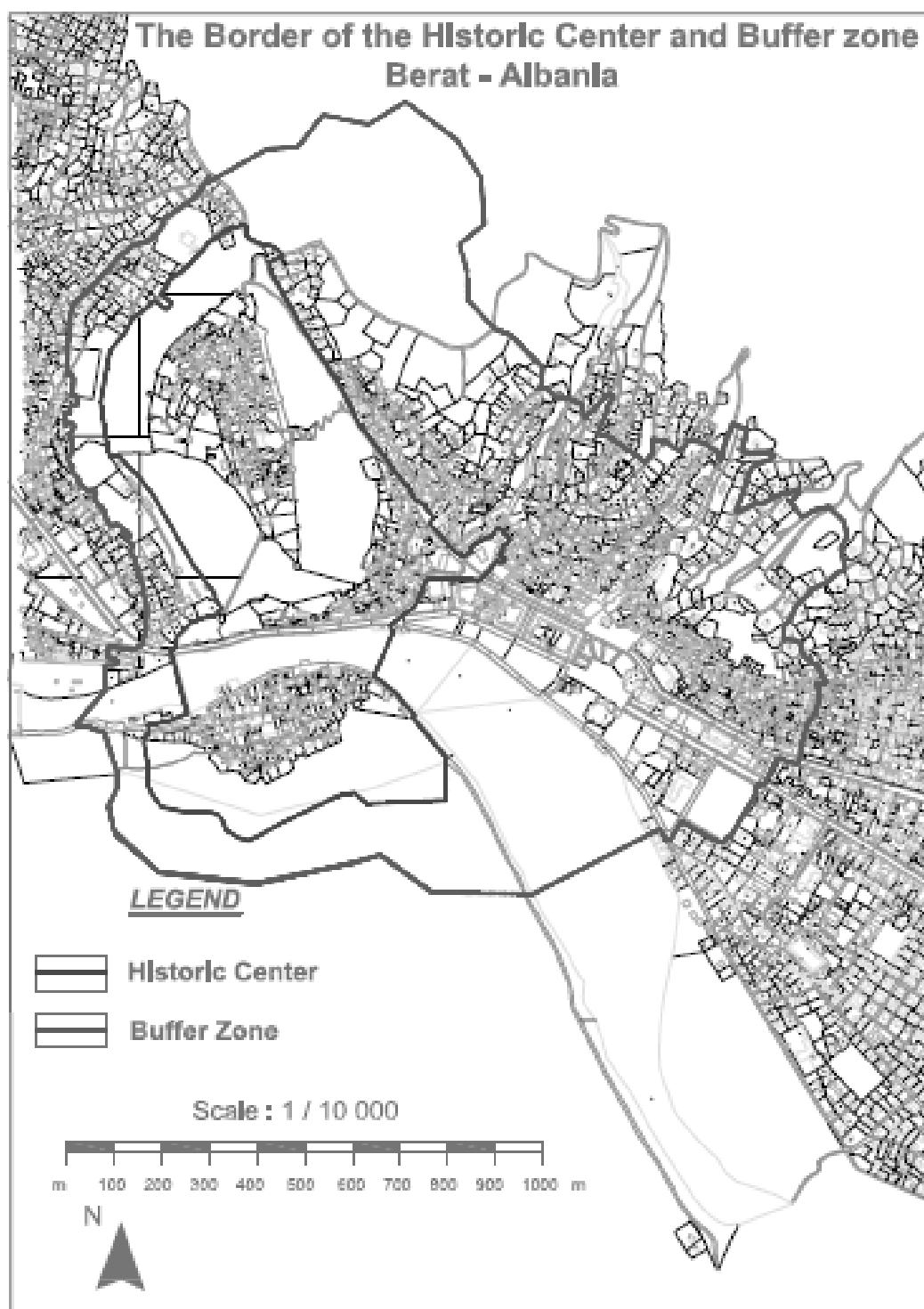
7. CONCLUSIONS

ICOMOS notes that the State Party has supplied the documents requested which are necessary for the comparative study, even if the study does not fully demonstrate the outstanding universal value of the property.

ICOMOS considers that the management plan should be strengthened in terms of resources, as well as reinforcing the coordination and effective implementation.

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

- work for better coordination between the different stakeholders;
- upgrade the requirements of the General Regulatory Plan on the basis of the 2005 regulations;



Map showing the boundaries of the nominated property



General view of the town



Street of Berat



Castle



Church of Saint Mary Vllaherna

Gobustan (Azerbaijan)

No 1076 rev

Official name as proposed

by the State Party: Gobustan Rock Art Cultural Landscape

Location: Garadagh District and Apsheron District, Baku City Administrative Territory

Brief description:

Rising out of the semi-desert of central Azerbaijan, above shattered cliffs bordering the Caspian Sea, is a plateau of rocky boulders hosting an extensive collection of some 6,000 rock engravings, which are a testimony to a warm, wet period after the last ice-age when people lived in caves, harvested food from the savannah grasslands of the plains, and fished in the greater Caspian Sea, then linked to the Aral and Black Seas.

Category of property:

In terms of the categories of cultural property set out in Article 1 of the 1972 World Heritage Convention, this is a *site*. In terms of the *Operational Guidelines for the Implementation of the World Heritage Convention* (2 February 2005) paragraph 47, it is also a *cultural landscape*.

1. BASIC DATA

Included in the Tentative List: 30 September 1998

International Assistance from the World Heritage Fund for preparing the Nomination: No

Date received by the World Heritage Centre: 27 January 2003

Background:

This is a deferred nomination (28 COM, Suzhou, 2004).

A first nomination dossier was examined by the World Heritage Committee at its 28th session (Suzhou, 2004). At the time, ICOMOS recommended that the property “*be deferred to allow the State Party to try and gain support for a research programme for the site, using the methodologies, which are now emerging, in other rock art sites in the region.*”

The World Heritage Committee adopted the following decision (28 COM 14B.37):

“The World Heritage Committee,

1. Defers the nomination of the Gobustan Rock Art Cultural Landscape, Azerbaijan, to allow the State Party

to undertake a research and analysis programme for the site, using methodologies which are now emerging in other rock art sites in the region, in order to quantify the site's significance in the wider world context.”

In 2005, the management plan was revised and on 30 January 2006 a new revised nomination document was submitted to UNESCO. This was supplemented by a plan of action in March 2006.

Since 2004 the Azerbaijani National Commission for UNESCO has initiated advisory missions from Norwegian experts. This resulted in a plan of action in 2005 that is very concrete in respect of what must be done on the property both immediately and in a long-term perspective. The Azerbaijani authorities have adopted the plan and submitted it as additional information to the nomination dossier.

Consultations: ICOMOS has consulted its International Scientific Committee on Rock Art.

Literature consulted (selection):

Anati E, with J Rustamov, F. Muradova, & M. Farajova, *Gobustan Azerbaijan*, 2001.

Dzhafarzade I M, *Gobustan : naskalnye izobrazheniia*, Baku 1973.

Qobustan, Catalogue of the exhibition, Council of Europe, Strasbourg, October 2002.

Rüstämöv Jäfärqulu, *Gobustan diynyasi*, Baku 1994.

Technical Evaluation Mission: 1-6 November 2003
6-10 November 2006

Additional information requested and received from the State Party: ICOMOS sent a letter to the State Party on 30 January 2007 and the State party submitted supplementary information on 28 February 2007.

Date of ICOMOS approval of this report: 11 mars 2007

2. THE PROPERTY

Description

The revised nomination provides extra material on the site and its documentation and management and this material is incorporated in the text below.

The nominated property is set above cliffs, part of a low plateau running north south, parallel to the Caspian Sea, a spur of the lower Caucasus Mountains. The property is approximately 65 km south of Baku and 6 km inland from the coast. The dramatic cliffs are highly visible from the main road south from Baku towards the Iranian border.

The property is set apart from the surrounding cliffs by a curious geological fragmentation in the rocks. The volcanic landscape rises up at the eastern end of the central Shirvan Steppe semi-desert of central Azerbaijan. The property spans three flat-topped hills covered by large calcareous blocks of Absheron limestone, which became detached as softer rocks eroded below them. This collapse formed

caves and rock shelters, mostly reached by sunlight, which could be used for shelter and habitation.

Within the property are upwards of 6,000 rock engravings, as well as the remains of settlement sites and burials, all reflecting an intensive use of the property stretching from the Upper Palaeolithic to the Middle Ages. These sites reflect a warmer and wetter climate than now prevails.

The property covers three areas of the plateau:

- Jinghirdagh Mountain-Yazylytepe hill
- Boyukdash Mountain
- Kichikdash Mountain

Together the three sites cover an area of 537.22 ha (a reduction in comparison to the initial nomination). They are now linked by buffer zones covering 3,096.34 ha (compared to 2,356.26 ha in the initial nomination). The area nominated is only a small part of the much larger protected Gobustan Reservation which covers some 4,000 ha.

The nominated property consists of the following:

- *Rock Art – Engravings*
- *Prehistoric and Bronze Age sites*
- *Ancient sanctuaries and associations with traditions, ideas and beliefs*

These are considered in turn:

- *Rock Art - Engravings*

The 2004 dossier stated that the wider plateau area had not been fully explored, with rock art sites and other archaeological settlements only being found in the eastern part of the plateau - that is the area put forward for nomination. This situation still prevails in the more recent dossier.

Currently there are 1,000 known rocks with carvings and these contain over 6,000 separate images. Within the nominated property there are archaeological remains that are not recorded. For example, in the northern part of the Jinghirdagh area where the BP pipeline cuts through the buffer zone, archaeological excavations have uncovered new sites, but as the nomination dossier points out, the exploration of the area is only partial.

The known images cover a wide range of animal and human figures: bovines, equines, mother figures, hunters, fishes, reptiles and insects as well as numerous boats. The images are realistic and large – sometimes larger than life-size - for instance one fisherman image is almost 4.3 m long, and several oxen images are over 2 m.

Most of the images are engraved through pecking, incisions or sometimes rubbing. A well-analysed and dated sequence for images on the property is yet to be achieved – this is said to be a goal.

The nomination dossier groups the images into six groups related to possible ages for the work. These span from the Paleolithic to the modern period. It is suggested that the earliest images are those of boats, mother figures, wild animals, fishes and hunters. Many of the male images show hunters with bows and arrows and details of their loin cloths. The boats are like canoes with people paddling, some are small for 2-4 people while others are much larger, apparently accommodating around forty people and with the boat prow crowned with sun motifs.

The earliest images of females show fat, steatopigic « mother » figures. What is called the undisputed masterpiece of Gobustan is an image of a woman full face and one in profile. In one cave only tattooed women appear, while in another pregnant women are found.

The animals depicted such as wild buffalo, goats, deer, wild pigs, horses and lions are animals that need a moister climate than exists today. It is suggested that at the time of the earliest rock drawings the climate was wetter with verdant vegetation in the area. These images also suggest that the Caspian Sea was at a higher level – probably making the three hills virtually islands – which would explain the prevalence of boat engravings and fishes. These factors make the rock engravings an extraordinary record of climate change.

It is suggested that these early sites can be dated by their relationship to excavated material and the known levels of the Caspian Sea which has risen and fallen by many metres over several millennia.

Pollen analysis has shown that the area in pre-historic times was heavily wooded. Traces of this ancient pine-oak forest are still found in crevices around the rocks and it is said that until recently such trees were growing in the neighbourhood of Gobustan.

The Neolithic period is said to be characterised by scenes of ritual and magic such as dancing and sacrifice as well as deer, goat and the first images of domesticated animals. During the Bronze Age the images become sketchier and include more deer, goats with rolled horns and deer and cattle pens as well as carriages and riders. Also evident are images of the dismemberment of animals similar to those on Mongolian petroglyphs.

In the Iron Age, armless anthropomorphic figures appear and the most recent images from the Middle Ages include a camel caravan, armed riders, and images with Islamic themes.

- *Prehistoric and Bronze Age sites*

In Gobustan, thick cultural layers are found in and in front of many of the rock art caves and shelters. To a certain degree, the layers overlap the rock art panels and this gives a unique situation for dating.

The nomination dossier mentions that excavations have been carried out in more than 20 pre-historic sites and that « numerous » Bronze Age burials have been discovered. No further precise details are given of location of sites, dates and finds.

- *Ancient sanctuaries and associations with traditions, ideas and beliefs*

The nomination dossier states that the « ancient sanctuaries indicate Gobustan was an important place of worship... the mountains... acquired the status of holy places', and that the 'rock art is directly and tangibly associated with the events, living traditions, ideas and beliefs of the population which have live in the area for more than 10,000 years » The dossier suggests that images of headless goats testify to sacrificial sites and that documentary evidence exists in Persian manuscripts for the use of sites as cult sites in the Middle Ages. Furthermore it is suggested that images sited high up suggest that they were deliberately placed to be seen. It is also stated that the local community still reveres certain places around Gobustan as sacred and some are used as cult sites, where wishes are made and rags hung on bushes. It is suggested that the cult sites are linked to manmade depressions to collect offerings and specific rock art images – ox, sun and goat images – and particularly goats without heads suggesting sacrifices. A Persian engraved inscription of the 13th-14th century records the use of the site for cult purposes.

History and development

Initial discoveries were made in 1939-40 and systematic explorations were conducted by I. M. Djafarsade from 1947 onwards. He recorded and analysed more than 3,500 images on 750 rocks. This early inventory was expanded by R. Djafarguly who made further discoveries and carried out excavations.

Since 1965, excavations have been carried out in more than 20 prehistoric sites and numerous Bronze Age structures have been discovered. Excavations carried out by D. Rustamov of one cave uncovered a 2 m stratigraphy covering 10,000 years. This material included a fallen engraved fragment that gave a *terminus ante quem* for this anthropomorphic figure – although no further details are given.

In 1966 the property was protected as a state Historical-Artistic Reservation as part of the wider Gobustan rock art reservation.

3. OUTSTANDING UNIVERSAL VALUE, INTEGRITY AND AUTHENTICITY

Integrity and Authenticity

Integrity

Integrity refers to the wholeness and intactness of the cultural values of the property. Since 2004 although extra work has been conducted on creating a sound documentation base for the rock art images, the knowledge of the site does not extend evenly across the whole rock art reservation and therefore it is still difficult to assess whether the boundaries of the site are logical and encompass the core of the rock art images.

ICOMOS can therefore only reiterate its recommendation that it would be desirable for a large-scale survey of the wider environment to be carried out to justify the corpus of the rock art and thus the extent of protection needed.

Authenticity

Authenticity varies in the three areas due to disturbances through time. The most serious intrusive element is the graffiti that is found on several of the rock surfaces. The problem will be addressed as part of the conservation of the property.

The most remote and undisturbed landscapes are without doubt the Jinghirdag Mountain-Yazylytepe hill and Kichikdash Mountain. These areas need to be fully protected in order to ensure they keep their authenticity.

The most visited site, Boyukdash, has more disturbances in the form of installations such as a prison and stone quarry.

The numbering of sites with incised numbers chiselled into the rock surface is part of the documentation system from Soviet times. In the Management Plan this is described as a disturbing element and methods of masking by conservation will be considered. Although this is a form of disturbance and an impact on the authenticity of the rock engravings, it may also be regarded as part of the site history and the scientific history connected to the property .

More serious however, is the practice of highlighting of incised lines with toothpaste (also a custom from the Soviet period), and this should be removed as part of the conservation program in Gobustan Reserve.

In conclusion ICOMOS considers that authenticity of the property is adequate. However, the integrity of the property has not been sufficiently established due to the continuing need for a large-scale survey of the wider area.

Comparative analysis

The nomination makes stylistic comparisons with sites in the Near East, Central Asia and Europe. It suggests that Palaeolithic rock engravings exist in Gobustan, which therefore gives the property an importance, as these oldest sequences are not present elsewhere in Europe.

However as a detailed analysis of the wider Gobustan images has yet to be carried out and a sequence has yet to be established, it is currently not possible to draw these conclusions and say with certainty that Palaeolithic images exist.

Within Azerbaijan there are three other major rock art complexes:

- Absheron peninsular near Baku, where around 200 images of hunting, cult rituals, humans and different animals are carved rather like bas-reliefs on limestone blocks.
- Kelbadjar region at the feet of Delidag mountain in the west where an expedition in 1967 recorded scenes of hunting and cultivation, and images of deer and leopards. In all there are about 4,000 rock images dated to the Bronze Age.
- In the south-west, in Nakhchivan, 60 kms from the city of Ordubad, on the highest peak of the Small Caucasus-Gapijik, are thousands of petroglyph images dating apparently from the 7th to 1st

millenniums BC. These display humans, goats, oxen, ibex, deer and other animal images, as well as different « written signs ».

In terms of density of petroglyphs, cultural continuity, variety and preservation of images, it is suggested in the dossier that these are not comparable with Gobustan. However ICOMOS considers that further exploration of the wider Central Asian Region might reveal complementarities with Gobustan.

In terms of technique and style Gobustan oxen have many similarities with rock images of the Foz Côa Valley (Portugal) and bone engravings from Laugerie-Basse (France). Gobustan images of tattooed women bear some resemblance to images from sites in Russia, Moravia and North Africa, while some of the early hunters particularly the large size animal figures, display stylistic analogies to Western European examples. A specific comparative analysis between Gobustan Reserve Rock Art sites and Spanish Levante rock art has been carried out by Dr. G. Burger (University of Tübingen, Germany, 1999).

During the Bronze and Iron Ages the rock art images relate to other cultures around the Black Sea and, especially, to the « Kurgan culture ». In this regard there is interest in carrying out more work on comparing finds and images from Gobustan with sites on the eastern coast of the Caspian.

It is unquestionable that the Gobustan area contains a major corpus of rock art, in terms of the number and density of rock art sites. Few have such a long time sequence as Gobustan. The horizons of Early Hunters are concentrated in Gobustan: this could indicate its role as a transit area along the great migration routes of Eurasia.

However on the basis of current knowledge, it is difficult to place Gobustan precisely within the wider Central Asian context. Nevertheless the scale and scope of the images, the potential for further finds over a wider area, the links with other sites in Azerbaijan and the wider Kurgan area, and the particular early hunting images in Gobustan all combine to give it high value.

The need to carry out further thematic studies on rock art, including Central Asia has been acknowledged by ICOMOS and a global programme of studies is under preparation.

ICOMOS considers that the current comparative analysis reflects the current state of knowledge.

Justification of the Outstanding Universal Value

The Gobustan Rock Art Cultural Landscape is justified by the State Party as being of outstanding universal value for:

- its rich cultural landscape that reflects millennia of human evolution;
- the outstanding quality and concentration of the extensive rock engravings, and their state of conservation;
- the evidence for habitation from the Upper Palaeolithic to the Middle Ages;

- the way Gobustan is a meeting place between Europe and Asia, which provides evidence for the roots of European and Asian civilisations.

Criteria under which inscription is proposed

The property is nominated on the basis of criteria ii, iii and vi.

Criterion ii: This criterion is put forward by the State Party in connection with the Palaeolithic images. It also suggests that the property displays an outstanding range of rock engravings.

ICOMOS does not consider that sufficient information is known about the context for the rock engravings to assess whether they reflect an interchange.

ICOMOS does not consider that this criterion has been justified.

Criterion iii: The State Party justifies this criterion on the basis that the property demonstrates rock art over 40,000 years.

ICOMOS considers that the rock engravings are an exceptional testimony to a way of life that has disappeared and particularly in the way they graphically represent activities connected with hunting and fishing which reflect a time when the climate and vegetation of the area were quite different from today.

ICOMOS considers that this criterion is justified.

Criterion vi: The State Party justifies this criterion on the grounds that the ancient sanctuaries on the property were places of worship.

ICOMOS considers that with further evidence of the cult places, their disposition and use, and how they are related to the mountains, this criterion might be justified. Currently the beliefs and cult sites are not substantiated in sufficient detail in the nomination dossier to enable them to be seen as outstanding.

ICOMOS does not consider that this criterion has been justified.

ICOMOS considers that the Outstanding Universal Value has been demonstrated and that the nominated property meets criterion iii and might justify criteria ii and vi.

4. FACTORS AFFECTING THE PROPERTY

Development pressure

There is said to be no risk to the nominated area as no people live in the property.

In 2003 it was noted that there was an external development threat from an oil pipeline, which was then under construction across the northeast corner of the property's buffer zone. The pipeline is part of the line from Azerbaijan to Turkey, which was brokered by the USA

Government. The trench is 10 m wide and 4 m deep. This pipeline is now complete and during its construction further archaeological sites were identified. The pipeline has therefore impacted on the integrity of the property through damaging as yet unrecorded archaeological remains. There would seem to have been a good case for diverting this pipeline further away from the nominated property.

A further development threat is the spread of development along the coast from Baku. At the moment this development spreads from Baku beyond the property but there is currently no development between the main road and the cliff face – that is the approach to the property. However the proposed Buffer Zone does not cover this area (see below).

Lack of knowledge of the property

This is considered to be a difficult problem given the vast area of the property. Disseminating knowledge and also promoting involvement of local people would seem to be essential components in a strategy to engage the widest support for the property and thus try and give it community protection. This is addressed by the Action Plan.

Environmental pressures

Climate change and air pollution are listed as contributing towards erosion. This would be another reason to limit the nearness of industrial development to the property.

A solid waste dump near the jail adjoining the property is another problem as this prohibits reclamation of this area.

Natural disasters and risk preparedness

The main threat is from the Kaniza Volcano in the Buffer Zone, which is active, the latest eruption being in 1998. There is clearly little that can be done to mitigate the damage caused by eruptions.

Visitor/tourism pressures

At the moment visitor numbers are small – from between 2,002 to 7,260 visitors per year (estimation carried out during the period 1998-2005). Tourists are normally accompanied by guides. However it is said that school visits can cause problems with graffiti. Given the large size of the property, accompanying visitors at all times can be a problem.

Wheeled vehicles used to cause some damage being able to get close to the rock engravings, but measures have now been put in place to limit access.

In conclusion, ICOMOS considers that the main risks to the property are a future increase in visitor numbers without sufficient resources to limit access to the property and before a more detailed survey has been undertaken to identify the sensitive areas across the nominated property.

5. PROTECTION, CONSERVATION AND MANAGEMENT

Boundaries of the nominated property and buffer zone

The boundaries are linear and drawn to roughly encompass the main known sites in three separate areas around the highest areas of the property. However it is acknowledged that the wider area is unexplored – and even inside the nominated property. The boundary cannot be said to represent the extent of the rock art or even the main part of it. ICOMOS considers that the boundaries will need to be reconsidered once further information is known on the scope and extent of the site.

The Buffer Zone encompasses most of the wider Gobustan Reservation – a protected area. The Buffer Zone does not include the area between the main Baku road and the cliff face, currently undeveloped but with development pressure to the north and south. ICOMOS considers that consideration should be given to enlarging the Buffer Zone to include the cliff face and the flat land between it and the main road as these form the approach to the property.

The recently constructed oil pipeline cuts across the buffer zone and does therefore impinge to an extent on the wider protected area.

Although determination of the appropriate boundary and buffer zone requires further survey, ICOMOS considers that it is likely that the boundaries of the core and buffer zone are not sufficient to enclose the main occurrences of rock art and to ensure adequate protection.

Ownership

The property including the buffer zone is owned by the State.

Protection

Legal Protection

The Gobustan State Historical-Artistic Reservation is protected by a decree of 1966.

The archaeological sites within the nominated property are included in the Reservation.

This general protective law is reinforced by laws concerning the protection of historical and cultural monuments and their utilisation (1978 and 1998), and by decrees concerning the implementation of these laws (1998) and on special authorisation of excavations (2000).

A decree of 1950 put the property under the control of the State Authorities and closed all stone quarries in the area.

ICOMOS considers that the protective measures for the property are adequate.

Conservation

History of Conservation

Little formal work has been carried out so far at the property in terms of active conservation. Instead measures have been aimed at preventative conservation through protecting the property by Decree and through the presence of custodians on the property. Such work that has been carried out is said to not currently be ideal and this is

linked to lack of training of the staff – something to be addressed in the action plan.

Present state of conservation

The dry semi-desert climate and the degree of remoteness of the area both help its protection. However it is noted that differences can be found between the Boyukdash area and the other two areas, which are accessible by road. Since 2003 a detailed survey of the state of conservation of the site images has been carried out.

Active Conservation measures

Custodians are tasked with regular inspections of the area, but given the size of the property, and the number of images, this is an almost impossible task. During the first evaluation mission it was noted that shepherds were assisting in surveillance: this is a very positive way of involving the local population in the management of the property to great advantage, and would seem to be the only feasible way to broaden monitoring on the property.

In conclusion, ICOMOS considers that special attention is needed to establish active conservation measures on the property.

Management

Day to day management for the property is the responsibility of the Director of the Gobustan State Historic-Artistic Reservation. A scientific advisory body has been appointed to monitor the state of implementation of the conservation and management policies for the nominated property. This is “Azerberpa” within the Scientific Research Institute for the Restoration of Architectural Monuments.

Thirty-one people work in the Reservation. These include 7 Researchers, 5 Custodians, 2 Tourist Guides and a Museum Monitoring Officer. Since 1996, five members of staff have attended workshops on tourism and museum management organised by the Ministry of Culture of Azerbaijan.

A strategic management plan was submitted in February 2004. This did not set out detailed actions to follow from objectives. The objective on archaeology included the need to establish an archaeological map and prepare a framework for future archaeological work. The plan acknowledged that funding to pursue these objectives was a key issue and the Steering Group was tasked with investigating sources of funding from potential partners, nationally and internationally.

During 2005 a revised nomination dossier was produced together with an Action Plan, developed with assistance of Norwegian experts in March 2006. This plan was submitted as additional information to the previous Management Plan. The Action Plan includes three sub-plans:

1. Documentation and conservation
2. Management, monitoring and maintenance
3. Presentation: Education, Information and Tourism

Management strategies are listed and actions proposed. The most important objective will be to establish and develop the Gobustan Reserve Museum as an operational and effective base for future work in the area, including management, monitoring and maintenance. The future Museum and Visitor Centre will function both as a base for presentation and as a base for research.

ICOMOS considers that it is important that all data connected to the Reserve, both documentation and artefacts from excavations are gathered in the centre and kept in depots with adequate conditions for climate and security. Modern and professional archives and storage for old site records, photographs and sketches need to be established.

Documentation

In the plan of action, a documentation program for archaeological, geological, botanical and zoological data is set out. The program has short and long-term dimensions. The program also includes international workshops that will enable the staff to increase their competence and establish networks.

Many of the known engravings and archaeological sites are mapped with GPS and recorded in a data base. This work has been carried out since the arrival of computer equipment in 2004. It is a goal that all images on the site will be recorded by this method. This is an improvement compared to the last evaluation mission in 2004. However, no site map showing the disposition of the rock art or the archaeological sites was provided with the nomination dossier.

Conservation

The Action Plan proposes that « damage » documentation should be carried out before any conservation activities are accomplished. The plan points to the fact that one of the reasons why the conservation tasks are so poor is because the competence among the staff is poor. One of the most important tasks will therefore be to increase competence.

Some of the rock walls and boulders, especially on the lower terrace in Boyukdash, seem to be overgrown by lichen, which make it very difficult to carry out good documentation procedures by tracing or by photo. The management plan does not discuss this problem, which could be solved either by washing the surface in ethanol, by covering it for some time, or by other methods.

Presentation: Education, Information and Tourism

The third sub-plan contains issues concerning both the internal education of staff, research and presentation for the public. Important aspects will be the improvement of the on-site presentation with boards and educated guides, as well as further research. Archaeological investigation has been going on for a long time in the area and a lot of data has been collected which could be used. Development of tourism is an important issue for the Azerbaijani authorities. The Presentation and Information strategies and actions will be an important part of this development.

Development plans of tourist installations such as hotels and restaurants are being planned in the Gobustan area. ICOMOS considers that it is important to stress that this

kind of infrastructure should be kept outside the buffer zone of the property.

Resources

The Action Plan is very ambitious and aims to solve most of the problems in a period of ten years. However the success of the Plan will depend on the financial support from the government and international actors, which is not yet in place. The Department for Culture of the Executive Power of Baku has up until now had financial responsibility for the Reserve. However, the Ministry of Culture and Tourism will assume the responsibility for financial means in the coming year.

Under the Baku City Executive Power, Department of Culture annual budgets of between \$19,000 and \$24,000 were allocated between 1999 and 2002. On top of this the property is allowed to keep admission income and sales income.

ICOMOS requested assurances from the State Party that the Ministry of Culture and Tourism is committed to implementing the Action Plan and will provide the necessary resources to begin implementing the Action Plan immediately, in particular the short-term actions related to documentation, training in conservation, interpretation and visitor management as set out in the sub-plans.

In response the State Party said that The Ministry of Culture and Tourism had addressed the Government of the Republic of Azerbaijan to allocate financial resources from the state budget for the Gobustan Rock Art Cultural Landscape. However no assurances were given that this request had been met.

ICOMOS considers that the Action Plan analyses well the main issues affecting the property and suggests appropriate actions to address these. This Action Plan as yet is unfunded. ICOMOS considers that commitment is needed to implement the Plan in order to: complete the documentation, put in place more appropriate conservation and technical support, improve the competence of staff and carry out necessary urgent conservation work.

6. MONITORING

The nomination dossier states that the latest inventory was undertaken in 2001, but also says that since 2004 staff has been working on creating a GIS database for the property, with the assistance of newly installed computers.

Monitoring of visitors and the micro-climate of the property is carried out regularly. Recently a start has been made in comparing the state of conservation of the property with its condition over the last 50-60 years through the use of photographs.

7. CONCLUSIONS

Since 2004 there have been improvements in the sense of more professional management, documentation strategies and commitment to the development of a database. Most crucially an Action Plan has been developed that addresses the needs of the site and sets out short and long term

actions. The proposed actions are in the future and if implemented will lead to a better understanding of what exists, what the values are, appropriate conservation and management methods and better training for staff.

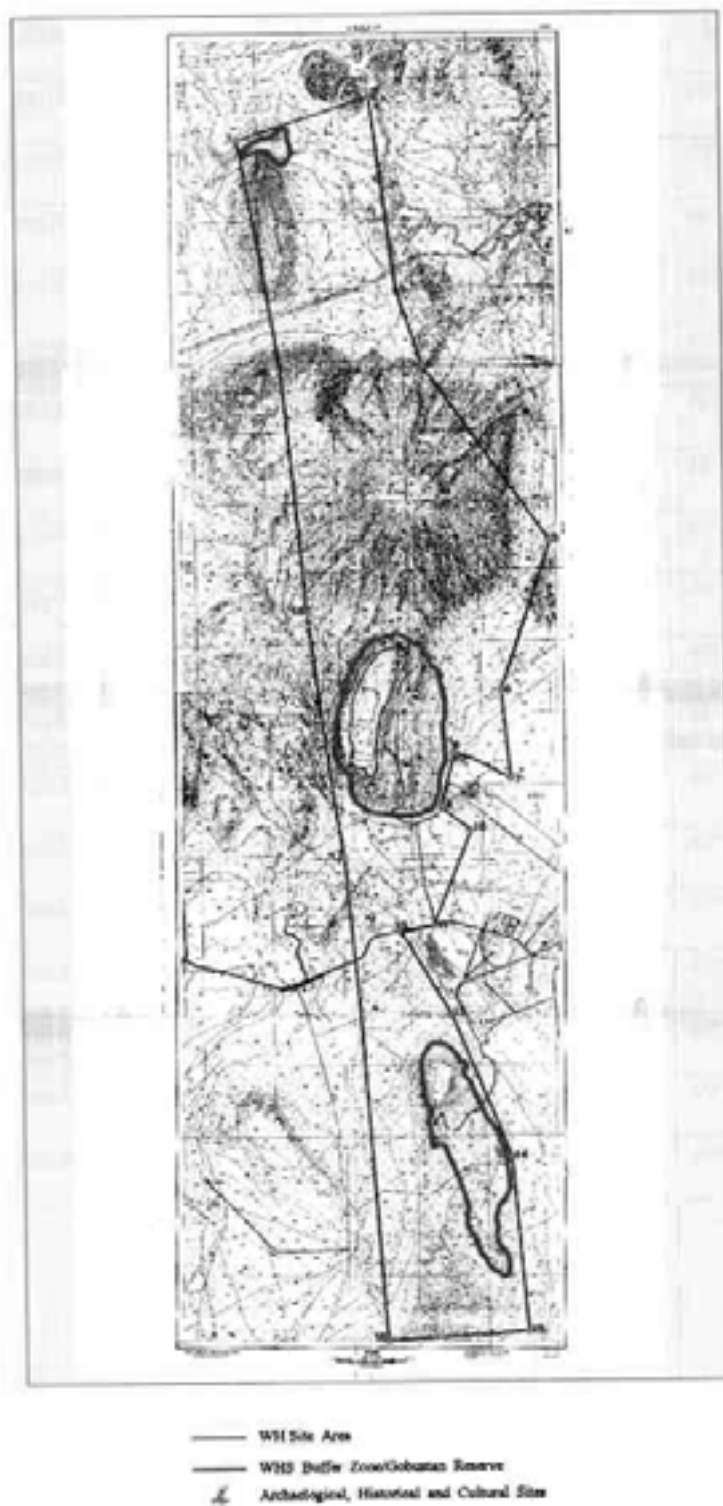
The crucial point is whether there are likely to be resources to follow up the plan of action. The general impression is that all levels in the Ministry of Culture and Tourism as well as the National Commission for UNESCO and the Heydar Aliyev Foundation will be supportive in the sense of development and money.

Currently however there is no definite commitment from the State Party to provide the necessary resources to implement this Action Plan.

Recommendation with respect to inscription

ICOMOS recommends that the nomination of Gobustan Rock Art Cultural Landscape, to the World Heritage List be *referred* back to the State Party of Azerbaijan in order to allow it to:

- put in place support for the implementation of the Action Plan drawn up as part of the Management Plan and in particular to indicate a timeframe within which the property will be documented;
- consider reviewing the boundaries of the core zone in the light of a more detailed assessment of the scope and extent of the site;
- consider extending the Buffer Zone to cover the approach to the site from the east.



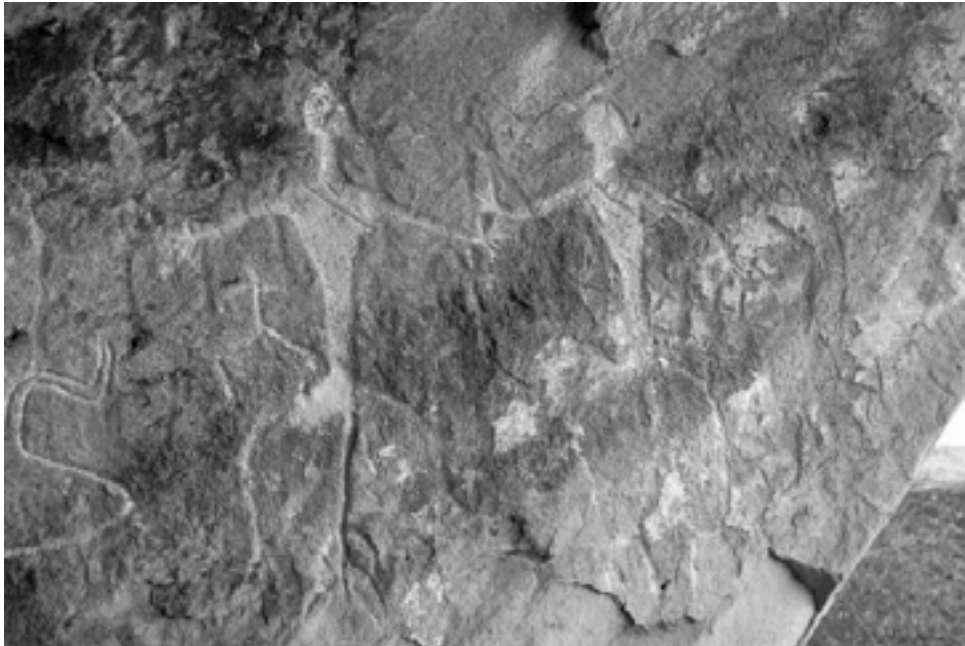
Map showing the boundaries of the nominated property



General view of the site



Ana Zaga Cave at Boyukdash



Anthropomorphs at Boyukdash



Inscriptions of bulls at Boyukdash

Heidelberg (Germany)

No 1173 rev

Official name as proposed

by the State Party : Heidelberg Castle
and Old Town

Location:

State of Baden-Württemberg,
Karlsruhe Administrative
Region

Brief description:

The university town of Heidelberg is situated in south-western Germany on the alluvial south bank of the river Neckar in a relatively narrow valley; the north side of the river is characterised by abruptly rising hills. The nominated property consists of the Old Town with its Old Bridge, the Heidelberg Castle and the *Hortus Palatinus Garden*. The Heidelberg Castle, situated in a strategic position on the hillside south-east of the historic town centre, is characterised by the remains of old towers and fortifications. The *Hortus Palatinus* was praised as a “marvel garden” in its time, though it was never completed. The Old Town was destroyed in a fire in 1693, and the present-day town results mainly from the reconstruction in Baroque style in the 18th and 19th centuries whilst maintaining the 13th century pattern of streets and land plots. The principal streets follow the direction established by the geography: the main street, *Hauptstrasse*, forms the east-west backbone. The modern city of Heidelberg has developed towards the west of the historic town, in the plain of the Rhine valley.

Category of property:

In terms of the 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* (2 February 2005) Annex 3 (14, ii), the property is an inhabited historic town.

1. BASIC DATA

Included in the Tentative List: 20 September 1999

International Assistance from the World Heritage Fund for preparing the Nomination: No

Date received by the World Heritage Centre:
29 September 2003

Background: This is a referred nomination.

A first nomination dossier for Heidelberg Castle and Old Town was examined by the World Heritage Committee at its 29th session (Durban, 2005). At the time, ICOMOS recommended to *defer the examination of the nomination to the World Heritage List to allow the State Party to:*

- *Demonstrate the Outstanding Universal Value of the property as an ensemble;*
- *Highlight the main importance of the Castle and to refer to the universal significance of the debates over preserving or reconstructing Heidelberg Castle (that raged during the last third of the 19th century and the beginning of the 20th century);*
- *Highlight the outstanding significance of the university tradition.*

The World Heritage Committee adopted the following decision (**29 COM 8B.39**):

The World Heritage Committee,

1. Having examined Documents WHC-05/29.COM/8B, WHC-05/29.COM/8B.Add2 and WHC-05/29.COM/INF.8B.1,

2. Refers back to the State Party the nomination of Heidelberg Castle and Old Town (Germany) to the World Heritage List on the basis of cultural values to allow the State Party to:

- a) demonstrate the outstanding universal value of the property as an ensemble;*
- b) highlight the main importance of the Castle and to refer to the universal significance of the debates over preserving or reconstructing Heidelberg Castle (that raged during the last third of the 19th century and the beginning of the 20th); and*
- c) highlight the outstanding significance of the university tradition.*

In response to this decision, the State Party supplied the following amendments to the initial nomination: a revision of the criteria for inclusion on the World Heritage List and three expert opinions concerning the landscape, the significance of the restoration debates around 1900, and the significance of the university.

In response to a letter from the World Heritage Centre dated 17 November 2006, the State Party confirmed on 25 January 2007 the revised boundaries for the buffer zones and the areas for the core and buffer zones.

The new information provided is rather limited and not substantially different from the initial nomination.

Consultations: ICOMOS consulted its International Committee on Historic Towns and Villages (CIVVIH).

Literature consulted (selection):

Bohn, Emmanuel u.a. (Hg.), *Heidelberger Reportagen. Ein Portrait der Stadt* (Communale-Journal), Heidelberg, 1984.

Busse, Hermann E. (Bearb.), *Heidelberg und das Neckartal* (Badische Heimat 26), Freiburg im Breisgau, 1939.

Merz, Ludwig, *Die Residenzstadt Heidelberg*, Heidelberg, 1986.

Mittler, Elmar (Hg.), *Heidelberg. Geschichte und Gestalt*, Heidelberg 1996.

Benz, Richard, *Heidelberg und die Romantik*, Heidelberg, 1948.

Ehmer, Hermann, *Heidelberg – Residenz der Pfälzer Kurfürsten bis 1720*, in: Andermann, Kurt (Hg.), *Residenzen – Aspekte hauptstädtischer Zentralität von der frühen Neuzeit bis zum Ende der Monarchie* (Oberrheinische Studien 10), Sigmaringen, 1992, S. 297-321.

Heidelberg um 1900. Stadt und Universität in einer Phase der Expansion, Ausstellungskatalog, Kurpfälzisches Museum der Stadt Heidelberg, bearb. von Jörn Bahns, Heidelberg, 1986.

Levin, Herbert, *Die Heidelberger Romantik*. Preisschrift der Corps-Suevia-Stiftung der Universität Heidelberg, München, 1922.

Technical Evaluation Mission: Since this is a referred nomination, no new evaluation mission has been undertaken. The initial technical evaluation mission took place from 28 August to 2 September 2004.

Additional information requested and received from the State Party: None

Date of ICOMOS approval of this report: 21 January 2007

2. THE PROPERTY

Description

The university town of Heidelberg is situated in south-western Germany on the alluvial south bank of the river Neckar in a relatively narrow valley which breaks through from the Odenwald hills to the Rhine valley. The north side of the river is characterised by abruptly rising hills.

As in 2005, the nominated property consists of:

- The Old Town of Heidelberg and its Old Bridge
- The Castle of Heidelberg
- The *Hortus Palatinus*

These are considered in turn:

The Old Town of Heidelberg and its Old Bridge

The nominated core zone mainly consists of the Old Town, including the Old Bridge, an area of ca. 2 km by 0.5 km. The form of the urban fabric developed from the 13th century. The town was destroyed in a fire in 1693, and the present-day town results mainly from the reconstruction in Baroque style in the 18th and 19th centuries. The principal streets follow the direction established by the geography: the main street, *Hauptstrasse*, forms the east-west backbone. The streets on the riverside and at the foot of the hills are linked by a series of small streets in north-south direction. The eastern section is the oldest part of the town and corresponds

largely to the 13th century urban form. At its centre is the Market place (*Marktplatz*) with the town hall (18th-19th century), the church of the Holy Spirit (*Heiliggeistkirche*), built from the 13th to 16th centuries, as well as the Boisserée Palace, where the brothers Sulpiz and Melchior Boisserée had an important collection of German paintings in the early 19th century. The 18th century Old Bridge (*Karl-Theodor Brücke*) is the fifth on the site and it is accessed through the Karl Gate (*Karlstor*). Some 500m to the west on the *Hauptstrasse* there is the University Square with the *Old University Building* (early 18th century). The new university building and library date from the early 20th century. The western limit of the core zone is formed by the *Sophienstrasse* linked with the *Theodor-Heuss Bridge*.

The Castle of Heidelberg

Heidelberg Castle is situated on the Königstuhl hill. The castle is characterised by the remains of old towers and fortifications. The ensemble consists of buildings grouped around a central courtyard, which is entered from the south over a bridge. Most of the buildings date from the 16th century, with some alterations in the 17th century, but are now in ruins after the fires in 1689, 1693 and 1764. On the west side of the yard, there is the earliest residential building, the Ruprecht palace, dating from the early 15th century. Its vaulted ground floor is built in stone, while the upper storey was originally a timber-frame structure, modified in stone in the early 16th century. Next to this, there are the remains of the Library building and Women's House dating from the 1520s. Next to the entrance, there are the Soldier's building, the working quarters, and the open well house with classical Roman columns. On the east side of the yard, there are the remains of the Ludwig Palace and the Ottheinrich Palace (*Ottheinrichsbau*) with its decorative Renaissance façade still standing. The north side is taken by the Frederick Palace (*Friedrichsbau*), the first building to feature ornate façades according to the Vitruvius canon, and the Glass Hall Palace (*Gläserner Saalbau*).

The Hortus Palatinus

The *Hortus Palatinus* was praised as a "marvel garden" in its time. It was commissioned by Friedrich V in 1616 and laid out in the Italian Renaissance style by Salomon de Caus on the south-eastern side of the castle. The garden was never completed but its plan is known from a lavishly illustrated work left by de Caus. During the Thirty Years' War the garden was neglected and fell into disrepair; the subsequent repairs were ruined by the ravages of 1689 and 1693.

History and development

Heidelberg was first mentioned in a document in 1196. Its medieval plan dates from the early 13th century and the first fortifications were built on the west and south sides. The town belonged to the territory of the counts palatine, who served as stewards of the lands of the Holy Roman Empire. In the 12th century the lands of the counts palatine of Lotharingia (Lorraine) were formed into the separate territory of the Rhenish Palatinate, and Heidelberg became its capital. It was the residence of the electoral counts until 1720. Count Ruprecht I (1353-90), one of the seven

imperial Prince Electors, founded Heidelberg University in 1386. The western part of today's Old Town resulted from an extension in 1392, on the initiative of the elector, followed by the renovation in the 15th century. The construction of the fortifications continued until the beginning of the 17th century. The Palatinate remained Roman Catholic during the early Reformation but adopted Calvinism in the 1560s under Elector Frederick III. Catholic troops devastated the Rhenish Palatinate during the Thirty Years' War. In 1689 and 1693, during the War of the Grand Alliance (1689-97), Heidelberg was almost completely destroyed by French troops. In 1720, the Elector Carl Philipp decided to transfer his residence to Mannheim. After the destruction, the city was rebuilt, assuming its present-day form in the 18th and 19th centuries.

The Old Town of Heidelberg survived the Second World War without damage but lost some of its character since then, particularly in the western part, when many historic buildings were modernised and turned into commercial or tourism facilities.

The Old Town is also separated from the river due to the construction of a highway along the river front.

The new documentation provided by the State Party includes an expert opinion on the significance of the university but contains neither detailed information on the history and development of the university and its buildings, nor explanation of the relationship between the different components of the property.

3. OUTSTANDING UNIVERSAL VALUE, INTEGRITY AND AUTHENTICITY

Integrity and Authenticity

According to the State Party, the techniques employed in restoring Heidelberg historic buildings meet the requirements set down in the Nara Document. The dispute that raged about the restoration of Heidelberg Castle is symbolic of the transition from a concept of caring for cultural monuments that focused solely on reconstruction to one intent on preserving structures that have evolved over time. The authentic nature of Heidelberg Castle in this respect is verified by extensive records dating from the 19th century onwards. With the exception of a very few streets, the medieval ground plan of Heidelberg has survived. Several historic plans and views bear witness to the fact. The appearance of the city is characterised by a large number of Baroque buildings erected on this ground plan, following the devastation of 1693. The list of historic monuments provides proof of the wealth of buildings that still retain all or part of their authentic shape, design, materials, substance, situation and surroundings. The list was fully revised in 2002-2003 in accordance with the guidelines of the responsible authority (Landesdenkmalamt) and in co-operation with the local authority (Untere Denkmalschutzbehörde) of the City of Heidelberg.

According to the State Party, the university ensures through its continued existence and continuous contributions to the intellectual life of Europe and the world that Heidelberg represents the authentic image of an old and venerable German university city.

Nonetheless, ICOMOS considers that all issues relevant for a proper and complete assessment of Integrity and Authenticity are not adequately addressed in the statement provided by the State Party.

Integrity

As mentioned before, ICOMOS considers that the new information provided by the State Party does not reposition the property as an ensemble. Therefore, an assessment of integrity can only be made for the separate components, with the exception of the university buildings.

According to the original nomination dossier, in general terms, the integrity of the townscape of the old historic town as it resulted from the reconstruction in the 18th and 19th centuries has been relatively preserved. This includes also the natural area, even though some of the view points from the romantic walkway across the river have been overgrown with vegetation.

ICOMOS considers that, it is undeniable that the Old Town has suffered from adverse effects from large-scale and low-quality development projects after World War II.

In the area close to the castle, along the road joining with the old bridge, one can still find a sense of historical integrity.

The Old Castle is basically a ruin. The possibility of its reconstruction was debated at the end of the 19th century, making it a reference for a more conservative approach to safeguarding historic structures. After this, it has retained its historical integrity as a ruined structure.

The *Hortus Palatinus* was never completed and has suffered from various destructive periods and abandonment.

Monitoring the various public functions, such as the university, would be essential for the integrity and the meaning of the property.

ICOMOS considers that the conditions of integrity are met by the Old Castle and its surroundings but less so in other parts of the nominated property. A full assessment of the conditions of integrity can only be made once the information on the university buildings has been made available.

Authenticity

The State Party's statement on the authenticity of the Old Town is mainly centred on the urban layout and the list of remaining historic buildings whereas considerations on design and materials are very general. ICOMOS expressed already its concerns about changes in materials and design for windows, façades and roofs.

In the long run, such trends will obviously reduce the authenticity of the historic fabric and therefore they should be carefully monitored.

As mentioned before, the debates that raged during the last third of the 19th and the beginning of the 20th century over

preserving or reconstructing the Heidelberg Castle led to a conservative approach of the ruins and these principles are still in force today.

Of the *Hortus Palatinus* only the earthen terraces remain; the garden itself is lost, and the place is now a sort of “English garden”. There are proposals for a ‘didactical’ reconstruction of the old Renaissance form based on drawings that have been preserved. This would obviously be a reconstruction and would be based, at least in part, on hypotheses.

As for the university buildings, it is not possible to assess their authenticity at this stage due to lack of information.

ICOMOS considers that the conditions of authenticity should be assessed in relation to the values of the property and due to lack of information this cannot be done at this stage.

Comparative analysis

The initial nomination dossier included a comparative analysis between Heidelberg and four other German towns. Part of the analysis was based on a comparative study carried out in 1973, when the group of cities considered comparable to Heidelberg was restricted to Bamberg, Regensburg and Lübeck. The criteria applied included comparable size and – with the exception of the special case of Lübeck – the condition that the city must have been spared major damage during World War II. Quedlinburg was added to the list of towns both comparable to Heidelberg and spared by World War II. The original group of comparable cities was well chosen: today Bamberg, Lübeck and Regensburg are included on the World Heritage List.

In the case of Bamberg as in Heidelberg, an essentially medieval ground plan combines with Baroque buildings. Bamberg’s appearance, as befits its function as a spiritual centre, is dominated by a large number of churches while Heidelberg, a secular centre, is dominated by the castle. The average quality of the Baroque buildings is higher in Bamberg, but the differences in quality are less blatant in Heidelberg, especially considering the unified appearance of the eastern part of the Old Town. There are also differences in Baroque architecture with regards to influences; the Palatinate region developed its own distinctive brand of Baroque architecture, which can only still be experienced in Heidelberg.

Despite the heavy damage it suffered during World War II, the old town of Lübeck still represents the archetypal large medieval Hanseatic city. Neither its topography nor its history nor its artistic traditions lend themselves to a meaningful comparison with Heidelberg. Certain analogies might be discovered between the lengthwise-crosswise street plans of Lübeck and Heidelberg, but the similarities are very general. Lübeck occupies a low hilltop surrounded by watercourses on all sides, which also provides a comprehensive view of the city. The separation of areas according to their differing jurisdictions is less marked than it is, for example, in Bamberg; the cathedral precincts form a separate area within the city but hardly a dominant one. The architecture of Lübeck is characteristic of northern Germany and the Baltic, brick being the preferred

and predominant building material. The use of forms is consistent with the limited possibilities brick building affords.

A comparison of the old towns of Heidelberg and Regensburg will necessarily result in differences rather than similarities being stressed. In the case of Heidelberg, it was not the large Roman camp that became the nucleus of the medieval town but a site further up the river that had been left unoccupied by the Romans; in Regensburg, despite all of the alterations and expansions the city has gone through, the Roman *Castrum Regina* has created a continuity that is still noticeable today. Regensburg has retained a large part of its medieval buildings over the centuries while Heidelberg has kept a few solitary exceptions. Structures that are largely original in Regensburg can be found in a transformed form in Heidelberg (such as the idiosyncratic re-use of medieval structures in the Baroque Age). The diversity of the ground plans of Regensburg, Bamberg and Heidelberg, each of them a perfect embodiment of its type, is in itself an important argument in favour of carefully protecting all three cities. As regards the appearance of the city as a whole, there is only one aspect that lends itself to a direct comparison between Regensburg and Heidelberg: Heidelberg, too, has a fine river front, the one facing the north bank of the Neckar. It does not present the city as a clear-cut silhouette, though; instead it is set against the unifying background of the hillside which adds another dominant element, and characterised by the castle towers above all, dwarfing the lively lines of roofs and gables. In Regensburg the inter-play of the river and city is the chief characteristic, and the outline of the city provides change and interest.

Quedlinburg has been spared large-scale destruction since the Middle Ages. Accordingly a large number of buildings have survived, some from the mid-16th century. In 1995 Quedlinburg was included on the World Heritage List. The ground plan of the Old Town dates from a time before 1200; the town itself was first mentioned in a document from 922. Quedlinburg also has a castle hill on the outskirts of its old town, although it is hardly comparable to Heidelberg either topographically or architecturally. However Quedlinburg does boast a large number of half-timbered houses dating from the 16th to the 20th centuries. The terraces of half-timbered houses may be considered representative of what was lost at Heidelberg. Only a very few half-timbered houses have survived at Heidelberg and they are all post-1693. This emphasises the unusual nature of the situation in Heidelberg, with the ground plans of the old half-timbered townhouses having been re-used by the new Baroque city.

Taking into account the qualities of Heidelberg as a university town, and one with late baroque or neo-classical architecture, there are – as already mentioned in the 2005 evaluation – various other references that could be taken. These include the likes of Prague, Krakow, Vilnius, Salzburg and Vienna, which are already on the World Heritage List.

The ruin of Heidelberg Castle is very famous. The importance of the *Hortus Palatinus* does need to be pointed out: there is no comparable garden in all of Germany. On the whole pre-Baroque gardens with more than the mere

site or some architectural elements are extremely rare. The nomination dossier includes comparisons with gardens in Munich, Stuttgart and Kassel. Only “Queen Anna’s Garden” on the Hradchin at Prague with its belvedere, ball house and “Singing Well” and its specific terrain including the “Hirschgraben” moat boasts surviving elements of comparable size; however, the specific variety of Mannerism characteristic of Middle and North Europe which Heidelberg represents is part of a different cultural background. Italy boasts remarkable ensembles from the time of the Hortus Palatinus, which consist of palaces, gardens and the surrounding landscape. Direct comparison, however, shows up not only the well-known influences on detail but also the fundamentally different character of gardens south of the Alps (Pratolino, Castello, Florence, Tivoli, Bagnaia). Looking at French and Dutch examples one finds common elements typical of the time but also unmistakable differences (Meudon, Saint-Germain-en-Laye).

ICOMOS reiterates that, while recognising the value of Heidelberg Castle as a ruined ensemble, it is necessary to extend the comparative analysis of the property as an ensemble and of the Old Town in particular in order to include properties located outside Germany.

ICOMOS considers that the comparative analysis is not sufficient to demonstrate the Outstanding Universal Value of the nominated property, since it is limited to German towns. ICOMOS reiterates its initial recommendation to further explore and demonstrate the Outstanding Universal Value of the property as an ensemble by an in-depth and more comprehensive comparative analysis.

Justification of the Outstanding Universal Value

The State Party considers that the property is of Outstanding Universal Value in relation to the Castle, the Court and University, the Old Town, the ensemble cultural and intellectual life:

The Castle represents an outstanding example of the transformation of a late medieval noble seat into a modern fortified palace.

The debate over preserving or reconstructing the Castle that raged during the last third of the 19th century and the beginning of the 20th century has proved to be of significance for the care of historic monuments.

Among the capitals of the four secular electorates established by the Golden Bull of 1356, only Prague and Heidelberg boast an uninterrupted tradition as electoral seats. The appointment of the German kings by the electoral princes represents a unique cultural tradition that shaped four and a half centuries of Middle European history.

An unusually large number of historic structures and buildings have survived in the Old Town. The town is a remarkable example of the gradual architectural growth of a university city and the development of a new urban centre. The ensemble consisting of the castle, the town and the surrounding countryside as viewed from *Philosophenweg*, has become an image that is imprinted on the cultural memory of the world. Cultural and intellectual

life is marked by the University, which is Germany’s oldest, founded in 1386. The Reformed Protestant University, from the 16th to 17th centuries, along with the Palatine and the electoral seat, became important centres of the Reformed faith in Europe. The so-called Heidelberg Catechism, of 1563, is a key document in this. Heidelberg is not just a historic town but also a cultural landscape in its uncommonly picturesque location at the mouth of Neckar Valley.

Criteria under which inscription is proposed

The property is nominated on the basis of the same criteria as in 2005, namely criteria ii, iii, iv and vi but the justification is slightly different:

Criterion ii: According to the State Party, this criterion applies to the Old Castle: the palaces of Heidelberg Castle and the Ottheinrichsbau (“Ottheinrich Palace”) in particular, are among the earliest examples of German Renaissance architecture and have contributed significantly to the dissemination of this style north of the Alps. The intense debate over whether the ruins of the Heidelberg Castle should be restored or preserved had already resulted in the formulation of fundamental principles on the care and preservation of historic monuments by 1900.

ICOMOS considers that Heidelberg has been an important cultural centre in Western Europe. As such, it has been subject to influences. The Renaissance-baroque castle, the Hortus Palatinus and Biblioteca Palatina, can be taken as an evidence of this. However, of the Hortus Palatinus remain only the earthen terraces and the library collection has been taken to the Vatican long time ago.

While recognising that the Castle constitutes one of the earliest examples of German Renaissance architecture, it is still necessary to demonstrate for the property as an ensemble that the different phases of the construction and the transformation are testimony to the various influences, including especially the Renaissance and the Baroque.

ICOMOS does not consider that this criterion has been justified.

Criterion iii: According to the State party, Heidelberg is the last surviving example of a largely intact electoral seat in Germany, and its traditions, reaching back to the Middle Ages, are still clearly visible in the town’s appearance today. Heidelberg was a political and spiritual centre at European level, one manifestation of this being the founding of the first German university here in 1386.

While recognising the regional importance of the cultural and political traditions in Heidelberg, ICOMOS considers that it has not been demonstrated how this condition is expressed in material heritage components.

ICOMOS does not consider that this criterion has been justified.

Criterion iv: According to the State Party, Heidelberg Castle is an outstanding example of an electoral residence. The *Hortus Palatinus* is the most important example of a

German Mannerist garden, and the only one of its kind which still preserves substantial original elements. With regard to quality, size and historical importance, the Old Town constitutes a unique example of a Baroque town reconstructed on a medieval ground plan. Thanks to their magnificent situation at the mouth of the Neckar valley, the castle and Old Town harmonise with the surrounding countryside to create a unique ensemble that has been admired through the ages and has been immortalised by countless works of literature and art.

ICOMOS recognises the importance of the Castle in its ruined state. At the same time, considering that the *Hortus Palatinus* was lost centuries ago, it is not considered that it would now justify this criterion. The Old Town is presented as a “unique example of a Baroque town reconstructed on a medieval plan”. ICOMOS does not consider that there are sufficient elements to justify such a claim.

ICOMOS does not consider that this criterion has been justified.

Criterion vi: According to the State Party, the university has repeatedly provided the genesis for cultural phenomena of universal importance. The *Heidelberger Katechismus* (Heidelberg Catechism) of 1563 is the most common and widely acknowledged confessional document of the reformed church. Its title, unaltered to the present day, has carved a place for the great era of the Palatinate and its capital, the city of Heidelberg, in the cultural memory of the world. In the 19th century, Heidelberg was one of the centres of the German Romantic Movement. Collective memory has wrapped Heidelberg in a myth of sorts, based on a romantic appreciation of the history, natural surroundings and appearance of the city. This view of Heidelberg has been prominent in the media for several centuries and has made the city one of the most popular and enduring destinations in all of Europe.

While accepting the possibility of application of this criterion, ICOMOS considers that justification of criterion vi does not provide sufficient substance to these claims, and that all these issues should be clearly demonstrated in a proper comparative analysis.

ICOMOS does not consider that this criterion has been demonstrated.

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

4. FACTORS AFFECTING THE PROPERTY

The nomination dossiers report that there are no environmental nor development pressures. There are however occasional floods in the vicinity of the Old Bridge due to high water levels in the River Neckar. There is no threat to the historic buildings, but the City has developed a flood protection plan containing precise information on the protective measures to be taken depending on the water level reached.

The city of Heidelberg is a major tourist destination. There are some 3 million visitors per year. This means that there are necessarily pressures from tourism and commercial development. Measures have been taken in order to control tourism activities and their impacts on the values of the nominated property. Among them, the “Heidelberg Card”, parking spaces on the outskirts of the Old Town, tourist information office at the railway station and an adequate system of public transportation.

ICOMOS considers that the main risks to the property are related to tourism pressures. Information provided by the State Party demonstrates that efforts to control the impact of tourism are adequately implemented. Although the nomination dossier makes no reference to development pressures, ICOMOS recommends particular attention to the forces of development and change in order to maintain the city’s historic character and functions.

5. PROTECTION, CONSERVATION AND MANAGEMENT

Boundaries of the nominated property and buffer zone

The nominated core zone encloses the castle and the old town area, according to the historical boundaries after the expansion of the city in 1392. The boundaries follow a natural border in regard to the setting and layout of the built-up area of the Old Town and the Castle.

Two buffer zones are proposed; the inner buffer zone follows the outline of the later built-up areas surrounding the south, east and north sides of the nominated core zone. The outer buffer, defined by a visual concept, follows the highest points of the surrounding landscape and the most visual axes.

The original nomination dossier did not include an inner buffer zone to the west of the core zone and the outer buffer zone to this direction was very limited. The State Party provided in January 2007, documents concerning a revision of the buffer zones. In the new plan, the buffer zone is extended to the west, including restrictions concerning the allowed height of new buildings.

ICOMOS considers that the new buffer zone is adequate to protect the nominated core zone and responds to the concern expressed in the previous evaluation. However, the definition of both nominated and buffer zones must always be the expression of the Outstanding Universal Values, Integrity and Authenticity of the property. Since those features are not still sufficiently demonstrated, further clarification of Outstanding Universal Value could lead to a revision of the boundaries.

Ownership

Public buildings are owned by the City of Heidelberg, represented by the Liegenschaftsamt (Real Estate Office); the Castle and University buildings by the State of Baden-Württemberg represented by the State Property and Construction Office. Some buildings are owned by the Catholic and Protestant Church. In addition, all private landowners are recorded and can be accessed in the City of

Heidelberg's Geographical Technical Information System (GTIS).

Protection

The City of Heidelberg and the State of Baden-Württemberg are regional authorities under public law. The City of Heidelberg is responsible for the preservation of monuments and historic buildings owned by the State or by church institutions. Decisions are made in conjunction with the State Office for Historic Monuments of Baden-Württemberg. The Heidelberg Castle complex forms part of the property assets, which are owned and managed by the State of Baden-Württemberg. Numerous laws and regulation provide for the protection and conservation of the nominated area. Among them:

- Federal Building Code (*Baugesetzbuch-BauGB*), Aug. 1997. The Federal Building Code is a legal provision of German federal law and includes general and specific urban development laws. It establishes the legal framework for urban land use planning, renovation and urban development. Outside the areas of Heidelberg Old Town determined by land use planning, planning is generally carried out in accordance with sec. 34 of the Federal Building Code, which states that construction projects may not detract from the appearance of the area.
- Federal Nature Conservation Act (*Bundesnaturschutzgesetz-BNatSchG*), March 2002. The Federal Nature Conservation Act is a legal provision of German federal law. It defines nature and landscape as the resource base for human existence, and contains relevant regulations on the conservation of natural resources and protection of the landscape with a view to sustainability in order to preserve these resources for future generations. For areas of land that belong to public bodies, such as the Castle complex with the *Hortus Palatinus*, there is a particular obligation to comply with these objectives pursuant to sec. 7 of the Federal Nature Conservation Act.
- Regional Building Code for Baden-Württemberg (*Landesbauordnung-LBO*), Aug. 1995. The Regional Building Code is a legal provision of the State of Baden-Württemberg. The law applies to building complexes and the products of construction. Section 11 of the Regional Building Code requires that building complexes should not be at variance with their surroundings, and that account should be taken of cultural and natural monuments (cp. A 7).
- Act on the Protection of Cultural Monuments of Baden-Württemberg (*Denkmalschutzgesetz-DSchG*), Dec. 1983. The Monument Protection Act is a legal provision of the State of Baden-Württemberg. It describes the tasks involved in protecting monuments and lays down the responsibilities of the various authorities. It contains regulations for classifying monuments and for organising conservation of the monuments in

Baden-Württemberg. Sections 2, 12 and 19 of this law are particularly significant for Heidelberg Castle and the Old Town, as they contain provisions regarding the conservation of ordinary and special cultural monuments and the preservation of the overall site.

- Ordinance for the protection of the "Alt Heidelberg" area as an overall site in accordance with sec. 19 of the Monument Protection Act (Overall Protection Ordinance, *Gesamtanlagenschutzsatzung*), Jan. 1998. This ordinance governs the application and spatial delimitation of sec. 19 of the Monument Protection Act for the area of Heidelberg Old Town. The legislation protects the existing appearance of Heidelberg Old Town, including the surrounding hillsides and the River Neckar. It also covers the appearance of the Old Town as seen from outside and the appearance of the streets and squares, characterised by their historic buildings, together with the view of the hills from the Old Town.
- Ordinance on a right of pre-emption of the local authority pursuant to sec. 25 of the Federal Building Code in the area of Heidelberg Old Town, Aug. 1977. This ordinance gives the local authority a right of pre-emption in order to ensure that urban development in the area of the Old Town is well managed.

In addition, local Ordinances control specific aspects in the nominated area, among them advertisements, vending machines, canopies, satellite dishes, motor vehicles in the pedestrian zone and protection of trees.

The preservation of archaeological monuments is an essential part of City and State policy on art and culture. The City of Heidelberg, represented by the Archaeological Department of the Palatinate Museum, helps preserve archaeological monuments by providing specialist personnel.

ICOMOS considers that the protective measures for the property are adequate.
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Conservation

History of Conservation

The Old Town of Heidelberg has survived through World War II without damage. However, post-war development has caused changes in the urban fabric. The relationship with the river has been cut by a highway along the riverside. The overall use of the area has remained more or less unchanged, but there has been upgrading of the equipment and utilities in old buildings. Changes to the building stock due to commercial use have occurred particularly in the western part. In 1975, the City Council decided that the preservation of the historic area would be one of the general goals of the development plan. This has involved particular attention to the protection of the natural setting as well.

Present state of conservation

The general state of conservation of the historic fabric and of the surrounding natural setting is reported to be good. ICOMOS considers that there are some issues related to the replacement of lime mortar with cement mortar for wall rendering, as well as replacing old types of windows with industrial production. As mentioned before, such trends will obviously reduce the authenticity of the historic fabric, and should be carefully monitored.

Active Conservation measures

There is a proposal to build a tunnel along the Old Town Neckar riverfront so as to eliminate 90% of the visual impact of the present highway and to link the Old Town again with the river. ICOMOS considers that the tunnel would be a welcome improvement. At the same time, particular attention is required to monitor any alterations to the functions and fabric of the existing building stock so as to maintain the quality of the environment.

ICOMOS recommends that a special programme for improving the knowledge and understanding of traditional building techniques and materials, as well as appropriate methods for conservation of the historic buildings, be organised, and information material elaborated. Special attention should be paid to plaster, paint and keeping the old windows. This should be followed by appropriate information sessions for property owners.

For the castle area, an archaeological research programme, concentrating on the *Hortus Palatinus* and the recording of sub-surface remains through non-destructive archaeological investigations, is considered necessary.

It would also be desirable to open up the old viewpoints of the romantic painters and writers on the hillsides, overlooking the castle and the town.

In conclusion, while recognising that the general state of conservation of the property is quite acceptable, ICOMOS considers that special attention is needed for monitoring and controlling the materials and techniques employed in the restoration of historic buildings.

Management

Management structures and processes, including traditional management processes

The City of Heidelberg is responsible for the preservation of monuments and historic buildings owned by the State or by church institutions. Decisions are made in conjunction with the State Office for Historic Monuments of Baden-Württemberg. The care of archaeological sites is based on collaboration between the Palatine Museum of the City of Heidelberg and the State Office for Historical Monuments.

ICOMOS considers that the general management of the historic town and the castle is well organised.

Management plans, including visitor management and presentation

A management plan has been prepared for the nominated property. In addition, the *Land Utilisation Plan* (ratified in

1983, and presently being updated) and the *Heidelberg City Development Plan 2010* (adopted in 1996) also concern the nominated property. The *Model of Spatial Order* (MSO) implements the aims of the *Heidelberg City Development Plan 2010*, and it is approved by the City Council. The Old Town of Heidelberg also has the *City District Plan*, designed to promote a decentralised planning process with the participation of citizens.

The management of the castle is based on three documents: *Overall Concept for Heidelberg Castle* (2003), *Maintenance of the castle*, structural and financial situation (2002), and *Heidelberg Castle gardens* (2003).

ICOMOS considers that the management plan is satisfactory.

Involvement of local communities

Local communities have a high level of awareness of the values of the property. A number of associations work for the preservation of heritage and the extension of knowledge and research. They organise a variety of activities and publish books and writings and also function as forum for discussion and sometimes sponsor practical works.

Resources, including staffing levels, expertise and training

Public appropriations cover an important part of the costs of preservation projects and the promotion of urban regeneration in the Old Town. Funds are made available by: the Federal Republic of Germany, the State of Baden-Württemberg, the City of Heidelberg, and religious Foundations. In addition, private investments are also available.

ICOMOS considers that the management system for the property is adequate. The clarification of Outstanding Universal Values of the property could eventually lead to revision of some measures.

6. MONITORING

Indicators have been identified for monitoring the townscape, the state of conservation of listed buildings, the progress of work on historic buildings, the general city development as well as the development of traffic and tourism. The nomination dossier includes a complete list of indicators and the periodicity of inspection and report.

ICOMOS considers that the indicators are adequate in general terms. At the same time, ICOMOS again stresses the need to maintain the traditional character of the city, including the presence of academic and cultural institutions as well as residents.

It further recommends that indicators concerning restoration techniques be incorporated in order to include the conservation of the character of historic buildings, their authenticity and integrity.

7. CONCLUSIONS

ICOMOS regrets that the new information provided by the State Party after the nomination was referred back in 2005 is not substantial and does not adequately respond to the issues raised in the World Heritage Committee decision. ICOMOS, whilst acknowledging efforts made by the State Party in order to fulfil the decision 29 COM 8B.39 of the World Heritage Committee, considers that the Outstanding Universal Value of Heidelberg Castle and Old Town has not been demonstrated through the submitted materials.

Recommendations with respect to inscription

ICOMOS recommends that the examination of the nomination of Heidelberg Castle and Old Town, Germany, to the World Heritage List be *deferred* in order to allow the State Party to:

- Demonstrate the Outstanding Universal Value of the property, by means of a more comprehensive comparative analysis, including not only German cities but other European cities inscribed on the World Heritage List; and also to demonstrate how the spiritual or intangible values are expressed in material components by strengthening the arguments used for the appliance of the proposed criteria;
- Highlight the main importance of the Castle and to refer to the universal significance of the debates over preserving or reconstructing Heilderberg Castle that raged during the last third of the 19th century and the beginning of the 20th century;
- Highlight the outstanding significance of the university tradition;
- Check whether the protection, conservation and management measures need revision based on any further justification of the Outstanding Universal Value as an ensemble.

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

- Continue with plans to build the tunnel along the Old Town Neckar riverfront so as to link the Old Town again with the river and limit the visual impact of the highway;
- Incorporate in the monitoring process indicators concerning restoration and renovation techniques, and the forces of development and change in order to maintain the city's historic character and functions;
- Organise a programme for improving the knowledge and understanding of traditional building techniques and materials (with special attention for plaster, paint and maintenance of windows), and appropriate information sessions for property owners.
- For the castle area, develop an archaeological research programme for the *Hortus Palatinus* and the recording of sub-surface remains through non-destructive archaeological investigations.

GTIS-HD
Geographisch-Technisches Informationssystem der Stadt Heidelberg



Stadt
Heidelberg

Amt für Baurecht und
Denkmalschutz

Projekt: Pufferzonen Weltkulturerbeantrag der Stadt Heidelberg
The outer bufferzone of the world heritage area of Heidelberg

10. Januar 2006
Maßstab 1:25000

Map showing the boundaries of the nominated property



Market Place



Old University



Heidelberg Castle



Courtyard

La Plata (Argentina)

No 979

Official name as proposed

by the State Party : Foundational City Area
of La Plata

Location: Province of Buenos Aires

Brief description:

The City of La Plata represents an example of a planned new capital city, based on the realisation of an ideal urban scheme. The foundational city area consists of a square plan with a monumental axis and regular grid patterns. Its design followed planning criteria that were developing in the late 19th century, providing a setting for significant public functions, and framework for the quality of life of its residents. The nominated property concerns only the municipal public domain: avenues, streets and public spaces.

Category of property:

In terms of the categories of cultural property set out in Article 1 of the 1972 World Heritage Convention, this is a *group of buildings*. In terms of the *Operational Guidelines for the implementation of the World Heritage Convention* (2 February 2005) Annex 3 (14, ii), the property is an inhabited historic town.

1. BASIC DATA

Included in the Tentative List: 30 June 1998

International Assistance from the World Heritage Fund for preparing the Nomination: No

Date received by the

World Heritage Centre: 26 January 2006

Background:

A first nomination dossier for La Plata was submitted by the State Party for examination by the World Heritage Committee at its 24th session (Cairns, 2000). At the time, ICOMOS recommended to the World Heritage Committee not to inscribe the property. The nomination was withdrawn by the State Party before the 24th session of the World Heritage Committee.

The new nomination is not essentially different from the first dossier. It presents above all a more in-depth management plan and the first signs of efforts to, for instance, communicate with the population. It also presents a better comparative analysis.

Consultations: ICOMOS has consulted its International Scientific Committee on Historic Towns and Villages.

Literature consulted (selection):

The Urban Architectural Heritage of Latin America, an ICOMOS thematic and comparative study, 1998.

Technical Evaluation Mission: 4-7 September 2006

Additional information requested and received from the State Party: None

Date of approval of this report: 21 January 2007

2. THE PROPERTY

Description

The Foundational Urban Plan of La Plata was built to an entirely new design in 1882 as the capital city of the Province of Buenos Aires. It covers an area of 2,729ha; about 5 x 5km, consisting of 40 x 40 blocks of buildings, each about 120m square (smaller in the central area). The area is surrounded by a ring boulevard on its periphery, and linked with the harbour area close to the La Plata River in the north. The main axis of the square city plan was oriented from south-west to north-east, ending originally with a large landscape-park, the Paseo del Bosque. This city park has since accommodated a series of recreational structures, including a large hippodrome, the National History Museum, and university buildings. The city centre is marked by the main square, the Plaza Moreno, with the Town Hall and the Cathedral. Other public buildings are grouped along the main axis. The grid pattern is further subdivided by a rhythm of slightly wider streets, dividing the enclosure into areas of 6 x 6 blocks (about 850m square) and by a set of diagonal streets. A series of public squares and gardens were designed at the crossings of main streets, following a symmetrical pattern. The grid of the original enclosure was later extended outwards, continuing a similar pattern but becoming less formal.

According to the State Party, the town plan includes the following components:

- The overall urban enclosure, consisting of a regular, geometric pattern of streets limited by peripheral ring roads and linked with a railway on the harbour side;
- A large-scale pattern of high-quality public spaces of functional character, providing for traffic circulation, ventilation, green areas, recreation, public services, urban infrastructures, and public ornament;
- A system of rapid, diagonal connections between the periphery and the city centre;
- A clear distinction between public and private spaces, articulated in compact equilateral blocks with compatible building typology adapted to a temperate, humid climate, and providing the cityscape with stylistic diversity within morphological unity;
- Streets with wide pedestrian walkways and rows of trees, allowing for ventilation and freshness;

- Monumental axes, accentuated by means of public buildings and promenades laid out with trees, providing a focus for the civic life of the city;
- Monumental public buildings and their gardens as institutional landmarks constituting a system of civic growth centres ;
- Distribution of activity centres as places for social communication and cultural activities.

The main public buildings include:

- the Town Hall, built in 1883-86 to the design of Hubert Stiers from Germany;
- the Neo-Renaissance Government Palace begun in 1882 to the design of Julio Dormal;
- the Neo-Classical Law Court designed by Gustav Heine and Georg Hagemann from Hanover, and built in 1883-88;
- the Neo-Gothic Cathedral designed by Pedro Benoit (its construction lasted from 1885 to 1932);
- the Palace of Justice, founded in 1883 and designed by Adolf Buttner in a rather severe Classical style;
- and the astronomical observatory in the City Park, established in 1884 and designed by Pedro Benoit.

In the first phase of its development, and following the guidelines of the original master plan, the city of La Plata was of relatively low construction, which enabled the public buildings to stand out from their context. On the main streets, the buildings were built to fairly uniform classicist styles, two or three storeys high.

In the peripheral areas, the housing was of a more modest, vernacular type. Since the 1960s, the area around the main square has had the strongest economic pressure, resulting in a large number of high-rise office and commercial buildings. This has caused a loss of the original relationship between open and built areas. At the same time, there have also been alterations in the residential quarters and the originally rural context has been partly urbanised.

History and development

Since the city of Buenos Aires had gradually been assigned more and more functions at the national level, being first proposed as the capital of the Republic of Argentina in 1861, the decision was made in 1880 to find a new capital city for the Province of Buenos Aires. After a selection process, and following the proposal of Dr Dardo Rocha, governor of the province, the site on the river, the Río de La Plata, some 50km south-east of Buenos Aires, was chosen as the seat of the provincial government. The name was decided on historical grounds, with references to previous administrations. The plan of the city was prepared at the Faculty of Engineering of Buenos Aires under the direction of Eng. Pedro Benoit. In 1881, an international competition was announced for the design of four public

buildings: the Government Palace, the Law Court, the Town Hall, and the Cathedral. On 19 November 1882 the foundations were laid for the new provincial capital.

The construction of the basic infrastructure, opening of the harbour, and the construction of the principal public buildings and facilities started immediately. The city grew rapidly, and by 1889 there were already 60,000 inhabitants, consisting essentially of construction workers and employees in public administration. The next twenty years were used for the completion of the construction of public facilities, private residences, and service structures. By 1910 the city had become an important centre of administration, politics, university and harbour activities. The main commercial activity in the refrigerating industry developed in the harbour area. The city's development continued strictly according to the established master plan up to 1957, respecting rural land use in the surrounding buffer zone, as well as the functions of the harbour area.

In 1957 the administrative district of La Plata was divided into three districts (La Plata, Ensenada, and Berisso), remaining, however, united as the Gran Plata. The original agricultural zone was then developed into a suburban residential area. In the period between 1970 and 1990 there were several changes, such as the closing of the harbour and many industrial activities, and the reduction of the welfare of public employees as a result of severe economic crises, with consequent gradual impoverishment. Population increase to 550,000 had negative consequences, especially in suburban areas that were not properly planned and lacked services.

Since 1990 some initiatives have slowly begun changing the panorama. These have included improved services, such as the motorway to Buenos Aires, the recuperation of green areas, the consolidation of open areas, etc. Such projects should be seen in the framework of the new identification of La Plata as the Regional Capital, which proposes to re-establish the significance of the city, reviving the principles that guided its founding fathers in 1882.

The original town plan of La Plata has been preserved in its street network and principal functions. This is understood to result from its juridical status as municipal public property and from civic consciousness of the city's identity until the 1940s. Up to that time, the economy of the city was mainly based on public administration, university, and harbour activities. After a period of crisis, there were strong economic pressures for change. From the 1960s to the 1980s, earlier values were superseded by new priorities in the steel and petrochemical industries. At the same time, with the growth of population, the city expanded into the periphery beyond the original ring-road boundary, growing from a medium-sized city into a small metropolis. There have thus been changes in the centre area in particular, but also in the periphery. While the general urban layout is still there, changes have occurred, particularly in the morphology of buildings and in the landscape. The relationship of the original urban area with its surrounding rural agricultural area has been lost owing to the expansion of urbanisation beyond the perimeter of the town. Furthermore, the monumental buildings with their gardens have lost much of their quality as a result of recent building activities. The lack of land use control in

recent decades has also made possible the construction of high-rise buildings in the central area, next to the main public square.

Beginning in 1949, the municipality has progressively introduced planning norms aiming at the control of the city. While these norms have had their impact on building practice in general, they have not been adequate from the viewpoint of conservation of the city as cultural heritage. A new approach in this regard mainly dates from 1996, when the idea of World Heritage nomination emerged and consequently a series of initiatives were taken, resulting in the approval by the municipality of a management plan in 1999-2000.

The current problems faced by the town include factors due to development pressures in the proximity of Buenos Aires, the extension of the built area, the dispersion of industrial activities, and the lack of coordination between different administrations. There is a fairly high turnover in land use and changes of owners. These have negative effects in particular on the monumental buildings and gardens, where institutional owners often build extensions.

3. OUTSTANDING UNIVERSAL VALUE, INTEGRITY AND AUTHENTICITY

Integrity and Authenticity

Integrity

The nomination dossier does not make reference to the conditions of integrity. However, various issues are discussed under the heading of “authenticity”. The State Party accepts that there have been changes to the city’s originally planned scheme. At the same time, it claims that these changes are only affecting a relatively small part of the city, and that there is still substantial evidence present of the original scheme.

For ICOMOS, considering that the nomination is presented as “the foundational city area of La Plata” – the “city structure” limited to its public avenues, streets and public spaces –, it is necessary to look at the criteria that guided the preparation of the master plan, and how well these ideas are still present. The scheme was proposed as an ideal urban form that consisted of a large square based on a regular grid with diagonals. It was conceived as an urban machine, which was fundamentally linked with the surrounding agricultural area. The main axis of the city was continued to the port on the Río de La Plata. Another key aspect of the plan was the design of the residential quarters that were supposed to be developed around green areas.

Until the mid 20th century, the town plan retained its original principles and scheme. Since then, however, the development has not been under control, and the original ideas of the master plan have been partly lost for the following reasons:

- The grid plan has been continued into the surrounding rural landscape thus obfuscating the strict distinction of the urban and rural areas;

- High-rise buildings in a large part of the central area of the city have upset the originally intended scale of the fabric;
- Many of the residential quarters have been altered to a degree that changes the original planning idea;
- The harbour area has been altered so much that it is not proposed as part of the nomination.

The nomination refers to the ideals of urban planning as developed in the Western world. It is therefore necessary to consider the foundational city area in its entirety rather than examining specifically selected parts of it. As noted above and taken as a whole, the foundational city area has lost some essential features and some of its essential parts have been excluded from the property.

ICOMOS considers that the foundational city is inextricably linked to the other components; the irreversible damage done to those components has also affected the global authenticity of the foundational city.

In conclusion, ICOMOS considers that recent developments have produced some irreversible changes and have altered the nominated property beyond the acceptable limits for it to be able to meet the conditions of integrity.

Authenticity

The nomination dossier presents a detailed analysis of the conditions of authenticity in the foundational city area. It refers to Annex 3 of the Operational Guidelines for the Implementation of the World Heritage Convention, and the category of “historic towns which are still inhabited and which, by their very nature, have developed and will continue to develop under the influence of socio-economic and cultural change”. The nomination then presents an analysis of areas and of the changes that have taken place there. The nomination claims that the street network has been retained, the main public functions are still there, and much of the residential area has kept its original design ideas.

The main quality of the city of La Plata is in its urban layout, representing the advances in ideas of urban planning of the second half of the 19th century. These concepts were combined with the Neo-Classical ideas of monumental axes and the inheritance of the grid-plans of the Mediterranean-Latin American foundations in the past. Originally, the city certainly represented high aesthetic and architectural values, as well as offering an environment for an elevated quality of life. As mentioned before, the recent development has produced some irreversible changes that alter the original concept and much of the original harmony of the ensemble.

The urban layout generally corresponds with the original design. ICOMOS noted however that the town has had changes following functional and commercial needs. As a result of the changes, the harbour has lost so much of its original quality that it has not been included in the nomination. The public parks and squares have retained their original form and provide a reference for future urban

improvement programs. The building typology has been changed, and some of the green areas have been constructed with incompatible structures. The general layout and alignment of public buildings and residential blocks have been retained. However, in the central area, high rise buildings have been constructed, introducing a completely new element in the urban landscape. The building typology has undergone various changes and the town has become more and more like many other modern metropolises. New constructions and excessively high buildings have continued to upset the urban landscape since the first nomination.

The original city plan of La Plata was undoubtedly of great significance, conceived almost as an organic machine, including the square grid plan, the harbour, the city park, and cemetery, as well as its relationship with the surrounding rural area. The relationship with the setting has been drastically changed.

While agreeing with the State Party that various aspects of the original foundational scheme are still present, ICOMOS considers that important architectural changes in the city have permanently altered the authenticity and integrity of the original plan.

ICOMOS therefore considers that the nominated property has been altered beyond the acceptable limits to be able to meet the conditions of authenticity.

Comparative analysis

The nomination dossier presents an extensive comparative study, which illustrates the evolution of town planning from antiquity, and the eventual influences that La Plata would have received and given over time. It compares La Plata with other capital cities in modern times, taking into account the earlier layouts of Washington (L'Enfant, 1792) and Barcelona (Ildefonso Cerda, 1859), as well as the later designs of Belo Horizonte (1897), Canberra (Griffin, 1913), Chandigarh (Le Corbusier, 1951), and Brasilia (Costa, 1957). There is no comparable site on the World Heritage List. La Plata and the somewhat later Belo Horizonte are the only two new capital cities to have been built in Latin America in the 19th century. It is clear that the design of La Plata owes much to Washington and Barcelona as well to the planning ideas evolved from previous Spanish colonial cities in Latin America.

The nomination dossier acknowledges that "La Plata does not constitute an isolated or fortuitous case. On the contrary, it inherits centuries of experience and utopia, from the Renaissance ideal cities (inherited, at the same time, from ideal urbanistic searches, dating from Hippodamus' design for Miletus onwards) and the great adventure of the cities of Hispanic foundation in America. Yet, it specially shares a search that was simultaneously taking place in the most advanced countries at the time. Such search was in the line of the progressive and hygienist urbanism in Europe and of the creation of new cities in the United States."

The original town-planning idea and realisation has been fully recognised in the ICOMOS comparative study on Latin American cities: the master plan of La Plata can indeed be seen as a late realisation of an ideal city plan.

The plan also took into account the development of modern planning ideals. In this development, as has been confirmed in the nomination, La Plata is not a unique case. While planned at the end of the 19th century, the city already points towards the 20th century modern movement in urban planning.

ICOMOS considers that the comparative analysis shows the exemplary nature of La Plata's urban planning and its regional importance as an outstanding landmark in the history of town planning in Latin America in the 19th century.

However, ICOMOS considers that, while La Plata continues to present an interesting example of city planning, the original ideas of the master plan have been altered to such an extent that it does not justify consideration for inscription on the World Heritage List.

Justification of the Outstanding Universal Value

The nomination dossier refers to the creative capacity of "recently freed republics" and that these demonstrate an extraordinary political, cultural and artistic progressivism. The State Party further asserts that the property is of Outstanding Universal Value for the following reasons:

- La Plata encompasses the ideal city of the Renaissance as well as Jules Verne's dreams.
- It is a large-scale unique experience of the best urban tradition of the second half of the 19th century and the early 20th century.
- La Plata proposes a model of a "hygienist and artistic city, bearing deep social content".

Criteria under which inscription is proposed

The initial nomination was proposed under criteria i, ii and vi, while the revised nomination is proposed under criteria i, ii, iv, and vi.

Criterion i: The State Party justifies this criterion on the basis that La Plata is a "model of a new city of the Modern Heritage due to its exceptional values as tangible testimony of progressive and hygienist urbanism ...".

ICOMOS considers that most Latin American towns are based on a regular grid: this feature does not make La Plata exceptional or outstanding. The revised nomination makes a reference to the Renaissance plans of ideal cities, and in terms of modern town planning schemes, La Plata also has clear precedents. The foundational city area of La Plata certainly represents high aesthetic and architectural values but does not represent a masterpiece of human creative genius. Furthermore, there have been irreversible changes.

ICOMOS considers that this criterion has not been justified.

Criterion ii: In justifying this criterion, the State Party refers to the legacy of the foundational model of Hispanic cities in America, together with the advances of the urbanistic science of progressiveness and hygienism.

La Plata is the result of the development of modern urbanism, and it has also influenced later planning schemes in Latin America. The nomination mentions various cases especially in Hispanic America. In this case, La Plata can be claimed to have particular significance, considering that it was an important example in the process of the evolution of ideas.

Taking into account that the original planning concepts have been altered in an irreversible way and are not legible in all their components, ICOMOS considers that the nominated property does not meet this criterion.

ICOMOS considers that this criterion has not been justified.

Criterion iv: In justifying this criterion, the State Party refers to La Plata as an illustration of the utopian character of the Western tradition, from the ideal city of the Renaissance to the ideal city of the 20th century hygienists.

Certainly the original planning scheme was of great interest as an example of an urban ensemble and planning. The question is: does it still respond to this criterion after the alterations in the late 20th century? ICOMOS considers that the original planning scheme has been affected by the alterations.

ICOMOS considers that this criterion has not been justified.

Criterion vi: In justifying this criterion, the State Party refers to the inventions and utopias of people such as Fournier, Owen, Saint Simon, Victor Hugo, Charles Dickens, José Martí and Jules Verne.

The references to the 19th century inventions and utopias of a more human and fair society might well be valid, but ICOMOS considers that they are too generic to justify this criterion.

In conclusion, ICOMOS considers that the nominated property does not meet the criteria establishing outstanding universal value. At the same time, ICOMOS recognises the qualities that are still present and recommends that due attention be given to the preservation and revalorisation of the characteristics of the foundational city area that have been retained.

It is worth recalling what the Operational Guidelines for the Implementation of the World Heritage Convention say about new towns of the 20th century: "New towns of the twentieth century which paradoxically have something in common with both the aforementioned categories: while their original urban organisation is clearly recognisable and their authenticity is undeniable, their future is unclear because their development is largely uncontrollable." (Annex 3, paragraph 14, (iii)), and: "It is difficult to assess the quality of new towns of the 20th century. History alone will tell which of them will best serve as examples of contemporary town planning. The examination of the files on these towns should be deferred, save under exceptional circumstances. Under present conditions, preference should be given to the inscription in the World Heritage

List of small or medium-sized urban areas which are in a position to manage any potential growth, rather than the great metropolises, on which sufficiently complete information and documentation cannot readily be provided that would serve as a satisfactory basis for their inscription in their entirety. In view of the effects which the inscription of a town on the World Heritage List could have on its future, such entries should be exceptional." (Annex 3, paragraph 15, (iii)).

4. FACTORS AFFECTING THE PROPERTY

The principal development pressures come from the close proximity of La Plata to Buenos Aires, from which La Plata has never really been separated in terms of administration.

The area of La Plata is not subject to particular natural hazards.

There are relatively low levels of tourism to La Plata.

Problems are detected in industrial pollution, control of rural land use, and forestation. There are problems in the lack of maintenance of park avenues and promenades, the monumental buildings and their gardens, as well as the forest areas.

ICOMOS considers that the main factor affecting the site, and its buffer zone, is the difficulty in controlling urban development in the long term due to the pressure of public and private development needs for buildings adapted to the population density and to the city's scale, nearby to a large capital with rapid population growth.

5. PROTECTION, CONSERVATION AND MANAGEMENT

Boundaries of the nominated property and buffer zone

The nomination consists of a large square plan, amounting to 2,729ha. It is surrounded by a buffer zone, which is 15,924ha.

ICOMOS accepts the principle of identifying the entire foundational city area as the core zone, considering that the values referred to are linked to this whole area. However, from that perspective, the harbour zone should have been part of the core zone instead of the buffer zone but, for the reasons mentioned above, this part has been excluded from the core zone.

The buffer zone surrounds the foundational city area, and efforts have now been undertaken to improve the context of the city area. As part of these efforts, the purpose is to improve the horticultural and garden city areas, in order to assure the transition, physically and psychologically, from La Plata to Buenos Aires.

Other than the issue concerning the inclusion of the harbour area in the buffer zone (discussed above), ICOMOS considers that the core zone and buffer zone are adequate for the nomination taking into account its

proposed significance. ICOMOS restates however the reservations to the points mentioned above in reference to the harbour area and to urban pressures exerted on the property and its environment.

Ownership

The State Party provides the following and only definition of the ownership of the nominated property: “The main object of this nomination is the foundational design of the Urban City Area of La Plata. All the property as a whole belongs to the municipal public domain and it is not alienable. For that reason, the ‘Ownership’ is circumscribed by the Organic Law of Municipalities.”

ICOMOS records this minimal definition of the ownership of the property and interprets it as being limited to non alienable land ownership of public domain by the municipality of La Plata (mainly streets, squares, and gardens) excluding all other properties within the nominated zone.

Protection

The nomination concerns the urban fabric. The dossier describes in detail applicable laws and regulations for the protection of its values. All three levels of public responsibility are involved to different degrees: national, provincial, and municipal. The municipal authority has nevertheless the principal responsibility, mainly due to its ownership of structural spaces and the construction permits it decides to deliver or not to other owners.

The main recent legal provisions (2000) concern:

- the land use and planning ordinance on areas that includes specific preservation zones (9231/00);
- the ordinance for the approval of the management plan for the nominated property, related to the previous ordinance (9232/00).

ICOMOS considers that the legal protection of the property’s heritage values is assured by the general legal provision, in accordance with their different levels of application, and by recent measures for the legal approval of the management plan for the nominated property.

However, ICOMOS notes that non municipal land, public or private, is not discussed in the dossier, nor the question of real estate property, public or private. The nomination concerns exclusively the municipal urban fabric. This may raise questions of interpretation in the application of protective measures to non municipal built areas and land. Developments which are incompatible with the original concepts, such as high rise buildings, illustrate this problem.

Conservation

History of Conservation

The development of the city and its surroundings took place according to the original master plan until the 1950’s, preserving the urban fabric, its functions and

public administration, and its overall architectural and environmental value.

With the administrative reorganization into three districts in 1957, an important urban, architectural, and environmental evolution was under way. Accompanied by population growth, it resulted in the transformation of the rural zone into a suburban residential zone, the appearance of high buildings with an abrupt change in style and changes to the harbour area. This urban evolution increased in pace between 1970 and 1990 while facing a severe economic crisis during which many harbour and industrial activities were abandoned and aggressive redeployment initiatives were undertaken. A general degradation affects the urban ensemble. Private initiatives do not pay attention to the heritage dimension of the urban ensemble and its historic values, especially in the heart of the city. Nevertheless, the urban fabric and public buildings have been preserved by public policies throughout these fifty years of urban change.

In the 1990s, things began to change, mainly in terms of sensibility to green areas and their conservation, and studies on traffic circulation and transportation. Planning rules have become more noteworthy and are better enforced. The dynamic of the first nomination for World Heritage listing constitutes an important step towards creating awareness of the historic values of the city for city officials and some of its inhabitants.

The core zone of La Plata was declared an historic site of national interest in 1999.

ICOMOS notes with interest the evolution of awareness of cultural heritage that begins in the mid-1990s and the implementation of planning policies seeking to protect the values of the city. However, ICOMOS considers that the urban landscape has suffered irreversible changes not only by the construction of high rise buildings and/or an abrupt change in style, but also by the transformation of peripheral rural and harbour zones.

Present state of conservation

The general pattern of the city, as far as streets and parcels are concerned, is on the whole in good state of conservation. However, the streets themselves and specifically pedestrian walkways left for a long time to the care of residents are often in a mediocre or even bad condition.

The vast majority of public squares, urban parks and street side vegetation have not been greatly affected by the city’s evolution. The overall state is relatively satisfactory, even if urban furniture, often authentic, is in poor conditions and damaged. Many adult trees are in place according to original plantations.

In terms of monuments, the buildings are in good state of conservation on the whole and serve the same functions they original fulfilled at the time of their construction.

Parcel limits have been respected and most often the alignment corresponds to the original plan. It is however the type of buildings of the 1950s, correlated to urban population density, that is most problematic in terms of

architectural forms, dimensions, and materials. The State Party recognizes these alterations, but believes they have not destroyed the essential significance of the initial urban project.

ICOMOS considers the current state of conservation of the nominated property is a direct consequence of the eventful history of its conservation during the second half of the 20th century. ICOMOS considers the pattern of the urban fabric is in good state of conservation overall, in keeping with the original plans and that it conveys the unquestionable historical and heritage value of the city. However, ICOMOS considers that the architectural alterations to the city's centre and the functional changes of former rural and port peripheral areas which are long-lasting and difficult to undo. These have deprived La Plata of truly outstanding universal value.

- *Active Conservation measures:*

The renovation of green areas and public spaces has been the priority of public policies over past years.

Responsibility for maintenance and restoration of walkways is being transferred to municipal authorities and the rehabilitation of squares has begun.

Other measures include:

- Recent changes to municipal regulations to regulate the maximum height of new buildings ;
- The definition of a priority core zone, with strong architectural and symbolic values, incorporating the central urban axis;
- The implementation of a Catalogue and inventory of the architectural heritage of the historic city, recently approved by local authorities.

ICOMOS considers that the measures specifically taken between the first and second nomination to the World Heritage List are good initiatives and that they should be applied in the long term.

Management

The municipality of La Plata works through management plans that have included the urban heritage dimension since the year 2000. A general action plan has been established for the 2006-2009 period, including the coordination of different sector plans and financing.

Municipal actions have been reinforced recently at national and regional levels.

CODESI, the site commission, acts as an advisory body of official interest groups concerned with the future of La Plata.

Financing of public urban and architectural rehabilitations is mainly supported by the municipality. It does receive, however, regional and national assistance.

Private buildings are the owner's responsibility. Tax aids may be granted by different public entities, particularly tax exemptions on the usual municipal residential taxes, depending on the heritage and historical interest of the property.

Management structures and processes, including traditional management processes:

The system of management has been improved by:

- National Committee for World Heritage (2001),
- Cultural Institute for the Province of Buenos Aires (2003),
- Municipal Direction for heritage management (2004).

The role of the site commission (CODESI) has been reinforced: it includes representatives of the different administrations concerned with La Plata.

Today, the effective system of management of the site depends on:

- Specialized municipal agencies, among others, the recent Direction for Heritage Conservation;
- CODESI, the site commission, with representatives from different administrative levels (national, regional, and municipal) and fields of competence (universities, NGO's...). CODESI consists of an Executive Commission and four thematic commissions (public spaces, heritage and architecture, management, education and communication).

ICOMOS considers that these initiatives are all very positive.

Management plans and arrangements, including visitor management and presentation

The management plan (9232/00) adopted in 2000, has been supplemented with an action plan for 2006-2009. It focuses on the different aspects of the foundational city area: city area, including the street network, the open spaces, the quarters, etc.

An inventory of heritage assets has been carried out by the National University of La Plata.

The action plan provides for the implementation of a policy for the development of tourism; however, today, priority is given to educational actions targeting the city's inhabitants.

ICOMOS considers that the actions taken by the La Plata authorities are positive contributions to the long-term conservation of the cultural heritage values. Nevertheless, the process of management is still at the beginning, and it will take time for the implementation to have concrete results.

Involvement of local communities

An educational programme on the heritage value of La Plata has been organised (“La Plata, heritage for all”) involving teachers, students and parents.

The existence of a federation of cultural and sports institutions may contribute to disseminate urban heritage values and promote the involvement of inhabitants.

ICOMOS compliments La Plata on these positive initiatives.

Resources, including staffing levels, expertise and training

Sources of expertise are:

- The National Commission of Museums, Historical Monuments and Sites.
- National universities, particularly the University of La Plata in charge of recording and studying the architectural heritage of the city. The four national universities teach heritage conservation and management, and town planning.
- Competent provincial authorities and institutions: the Provincial Direction on Cultural Heritage, the Cultural Institute of the Province of Buenos Aires and the Commission for Scientific Research of the Province of Buenos Aires (CIC), through a partnership agreement with local authorities.
- At a municipal level, the Municipal direction for heritage management of La Plata, in charge of urban rehabilitation actions.

ICOMOS considers the mobilisation of expertise at different levels, within the framework of strong local project management with the active involvement of the university, is favourable for the rehabilitation of the urban site and the gradual improvement of its historical value and significance.

6. MONITORING

The monitoring system planned takes into consideration five main indicators, subdivided into secondary indicators. Levels of quality have been determined for their evaluation and criteria will be periodically assessed, generally every two years. The main indicators concern:

- The general structure of the urban site, its modifications and their impacts;
- Environmental quality, from the viewpoint of green areas and facilities for urban transportation for the city’s inhabitants;
- Streets and public squares, their maintenance, usage and traffic circulation and parking facilities offered to the public;

- Real-estate management and architectural heritage management;
- Management and implementation of plans, information to the public and educational programmes.

ICOMOS considers these monitoring propositions suitable to improve in the long run and significantly the expression of the value of the property. ICOMOS notes however that it is a project within the management plan and recommends the effective and systematic implementation of such a project.

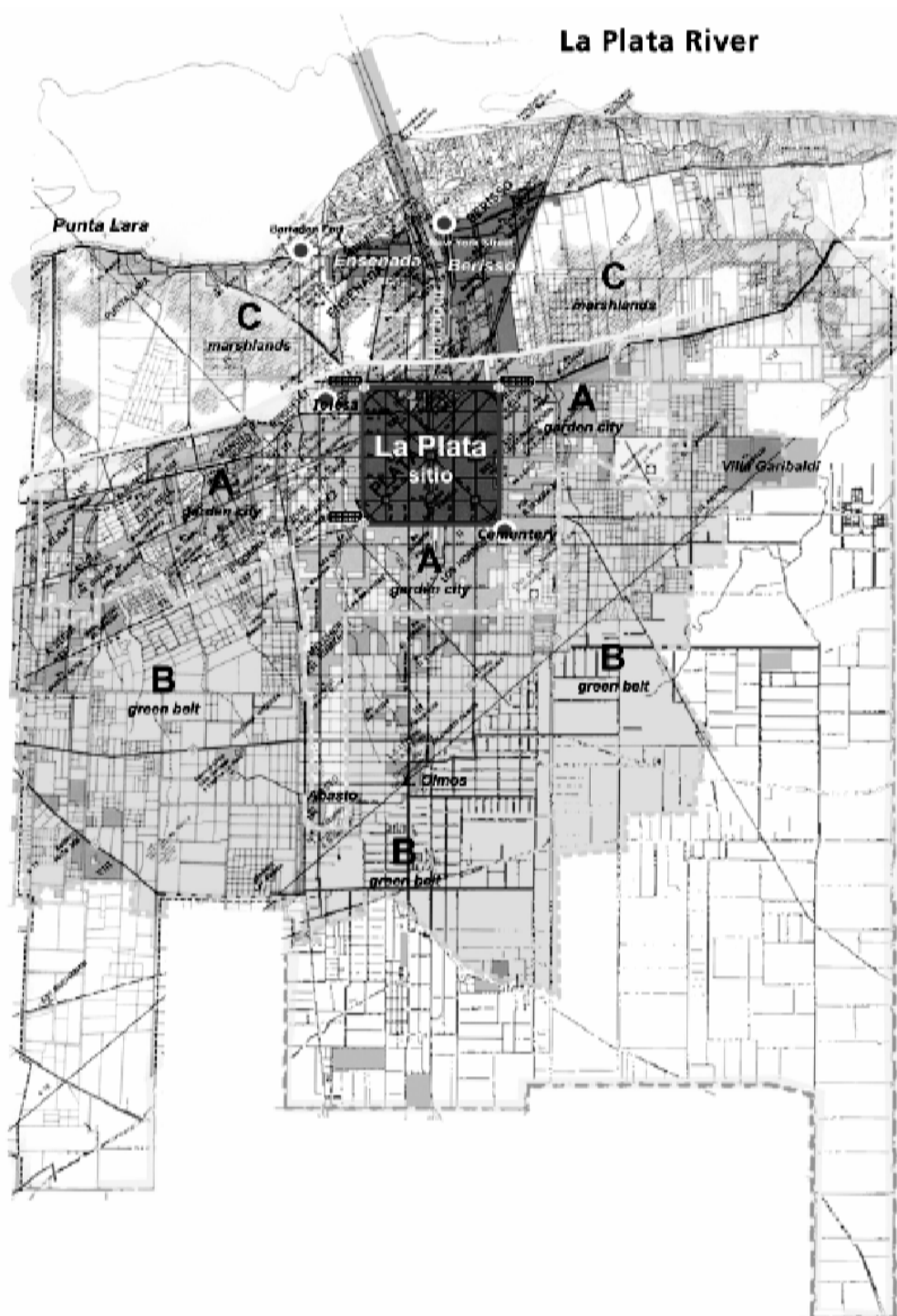
7. CONCLUSIONS

ICOMOS considers that important progress has been accomplished on the legal aspects related to heritage protection as well as on the system of management. They will be able to improve significantly the intrinsic value of the site of La Plata and to express the remarkable significance it conveys in the contemporary history of town planning and architecture in the Western world, and particularly in America.

ICOMOS strongly recommends the continuation of the heritage project of the city of La Plata, according to the guidelines mentioned and in a spirit of accord between the different public institutions and the city’s inhabitants, taking into consideration the recommendations presented in this evaluation.

Recommendations with respect to inscription

ICOMOS recommends that the foundational city area of La Plata, Argentina, should not be inscribed on the World Heritage List.



Map showing the boundaries of the nominated property



Town Hall



Cathedral



Example of building



Beriso 4

University City (Mexico)

No 1250

Official name as proposed
by the State Party:

Central University City
Campus of the *Universidad
Nacional Autónoma de
México* (UNAM)

Location:

Mexico City

Brief description:

The Central University City Campus of the *Universidad Nacional Autónoma de México* (UNAM) is an ensemble of buildings, sports facilities and open spaces located in the South area of Mexico City. It was constructed between 1949 and 1952 with the purpose of concentrating university schools and facilities, up to then dispersed in Mexico City's historic centre, and offering the possibility of improving the quality of life of the university community.

In the framework of a master plan, more than sixty architects, engineers and artists worked on the projects of buildings and open areas. The principles of modern urbanism and architecture were widely applied in the general conception of the campus, both in urban and architectural aspects, but at the same time there are references to local tradition, especially related to pre-Hispanic urban architectural ensembles. Modern Mexican architectural trends, like Historicist Regionalism and Plastic Integration were also incorporated; the latter through the inclusion of murals by renowned Mexican artists.

As a result, the Central University City Campus of UNAM constitutes a unique example of 20th century modernism, exhibiting the integration of urbanism, architecture, engineering, landscape design and fine arts, combined with references to local traditions.

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 *group of buildings*.

1. BASIC DATA

Included in the Tentative List: 1 February 2004

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

Date received by
the World Heritage Centre: 23 January 2006.

Background: This is a new nomination.

Consultations: ICOMOS has consulted its International Scientific Committee on 20th Century Heritage.

Literature consulted (selection):

AA. VV., *La Arquitectura de la Ciudad Universitaria*, UNAM – Facultad de Arquitectura, México, 1994.

Artigas, Juan Benito, *La Ciudad Universitaria de 1954: un recorrido a cuarenta años de su inauguración*, UNAM, México, 1994.

De Anda Alanis, Enrique Xavier, *Ciudad Universitaria: Cincuenta años, 1952-2002*, UNAM, México, 2002.

De Anda Alanis, Enrique Xavier, *Historia de la arquitectura mexicana*, Gustavo Gili, Barcelona, 2006.

Lazo, Carlos, *Pensamiento y destino de la Ciudad Universitaria de México*, M. A. Porrúa, México, 1983.

Pani, Mario; Del Moral, Enrique, *La construcción de la Ciudad Universitaria del Pedregal*, UNAM, México, 1979. UNAM, Dirección General de Obras y Servicios, *Testimonios de arquitectura y diseño: conservación y servicios 1997-1998*, UNAM, México, 1999.

Technical Evaluation Mission: 11-14 September 2006

Additional information requested and received from the State Party: ICOMOS requested additional information on the rationale for the definition of core and buffer zones and extension of the comparative analysis by a letter dated 15 December 2006. Additional information was provided by the State Party on 15 January 2007.

Date of ICOMOS approval of this report: 21 January 2007

2. THE PROPERTY

Description

The Central University City Campus of UNAM is located in the area known as *Pedregal* (stony soil), in the South area of Mexico City. The campus is traversed by Insurgentes Avenue, the main North-South circulation axis of the town. The campus is located in an area where rocky platforms define different spaces, which suggested the general concept of the master plan, designed by architects Mario Pani and Enrique del Moral.

The key component of the plan is an East-West axis that links the main areas of the campus: the Olympic Stadium, the schools area, general services, civic centre and the sports area. In the framework of the master plan, more than sixty architects and artists participated in the design of buildings, open spaces and works of art.

All buildings are located around vast open spaces: esplanades, courtyards and gardens; all them reserved for pedestrians. Motor traffic and parking are located in a peripheral ring. Transition spaces allow the harmonization between monumental and human scales. Differences in levels and types of pavements define diverse uses of open spaces.

The architecture of the Central University City Campus of UNAM means the physical expression of the cultural

policies of the post-revolutionary Mexico of the mid 20th century and aims for a vision of social development through education and culture. Both urban plan and buildings show the interpretation of the international Modern Movement together with the traditional Mexican architecture.

The main buildings of the campus constitute relevant architectural pieces in themselves: the Rector Tower, the Central Library, the Engineering and Medicine schools, the Olympic Stadium. The main principles of Modern architecture were employed in all buildings. Construction materials were chosen on the basis of durability and unity, and show at the same time modernism and tradition. The use of volcanic stone (both as structural and clad material) is related to the features of the property and to pre-Hispanic architectural structures.

One particular feature is the Plastic Integration, frequent in Mexican architectural history: art and architecture are understood as a whole. Some of the most relevant Mexican painters, sculptors and muralists participated in the projects, among them Diego Rivera and David Alfaro Siqueiros.

History and development

King Philip II of Spain established the Royal and Pontifical University of Mexico in 1551, which makes it, together with San Marcos University in Lima, Peru, the first universities in the New World. In 1865, Emperor Maximilian closed the University, which was re-opened in 1910 as the Mexico National University. After the Mexican Revolution, the University reached autonomy in 1929, in order to assure cultural development and scientific education. It was then renamed with the current denomination of the *Universidad Nacional Autónoma de México* (UNAM).

Since its creation, the University has occupied several locations in the historic centre of Mexico City. The creation of a University City was in mind since the 1920s. In 1943, it was decided that the University would be located in the area known as *Pedregal de San Ángel*, next to the village of Coyoacán, located south of Mexico City. The property was then apart from the urban settlement; the name *Pedregal* (stony ground) refers to the type of soil and resulting landscape, product of the eruption of a volcano.

The master plan for the campus was the result of an architectural competition, in which architects Mario Pani and Enrique del Moral were awarded. Their idea was based on the urban and architectural principles of the Modern Movement, with the incorporation of components stemming from national tradition, like local materials or references to pre-Hispanic urbanism and architecture. The then developing local architectural trend of “Plastic Integration” took the incorporation of works of fine arts, especially murals, to the buildings and open spaces. For the project of the buildings, sports facilities and open spaces, the most prominent Mexican architects were invited, together with advanced students. As a result, the project for the campus involved the work, in the framework of the master plan, of some sixty architects and artists.

The works of construction started in 1949 and the official opening of the new campus took place in 1952, with

courses starting in 1954. The physical conditions of the campus have not changed essentially since then; new buildings were constructed in neighbouring areas without disturbing the harmony of the original composition. At the same time, the University area includes part of the natural landscape of the *Pedregal*, which is protected as an ecological reserve.

3. OUTSTANDING UNIVERSAL VALUE, INTEGRITY AND AUTHENTICITY

Integrity and Authenticity

Integrity

All the original urban, architectural and landscape components are present, no one has been eliminated and they conserve the relationships among themselves foreseen in the original project. The physical components are in a good state of conservation, and the process of ageing is controlled by means of plans of maintenance and preservation of both free and constructed spaces.

Functions have not changed over time. New functions and buildings necessary to respond to the changes and needs concerning education and research have been added in defined areas next to the campus and do not jeopardise the integrity of the original ensemble. Some buildings have changed from their original dedication, but always in the frame of educational uses.

Authenticity

Taking into account that the campus was constructed between 1949 and 1952 and that no relevant alterations were introduced to the original ensemble, the sources of information are the buildings and open spaces themselves, together with the original documentation on urban, architectural and landscape projects. In this framework, it is not difficult to check that the campus conserves unaltered its essential physical components: urban design, buildings, open spaces, circulation system and parking areas, landscape design and works of art. The existing physical components therefore express the historic, cultural and social values of the ensemble, and its authenticity of design, materials, substance, workmanship and functions.

Original furniture has been replaced over time; only in a few spaces (e.g. Faculty of Medicine meeting room) is it possible to find the original interior finishes. In other buildings, the furniture was replaced over time, according to new necessities, tendencies and designs. This situation is considered acceptable taking into account the intense use of buildings and the fact that conservation principles on 20th century properties as a whole are relatively fresh in the realm of heritage preservation.

Functions have not changed over time. Even if the number of students has increased and new teaching techniques have been introduced, the buildings and open spaces have been able to adapt to new circumstances without alterations in their physical condition. Some buildings have been changed from their original assignment, but they continue to be devoted to teaching and research functions. All continue as university facilities.

The setting of the ensemble underwent important changes over time. Through the explosive expansion of Mexico City during the second half of the 20th Century, the campus is now surrounded by urban areas, and Coyoacán became a district of the present metropolitan megalopolis. This complete changing of the setting has nevertheless had a relative impact on the campus. Most surrounding urban areas are of low density and, as the campus has generous perimeter green spaces, there is only a minor visual impact. Only on the north side, in correspondence with Insurgentes Avenue, one of the main circulation axes of the town, high-rise buildings have started to appear on the skyline of surrounding areas.

ICOMOS considers that the conditions for integrity and authenticity of the nominated property are met.

Comparative analysis

The State Party includes in the nomination dossier a comparative analysis with other university campuses in Latin America and the Caribbean; one of them already inscribed on the World Heritage List (*Ciudad Universitaria* of Caracas, Venezuela, inscribed in 2000), while the others are *Ciudad Universitaria* of Bogotá, Colombia, and *Ciudad Universitaria Río Piedras*, Puerto Rico.

The *Ciudad Universitaria* of Caracas also responds to Modern Movement principles and includes significant works of fine arts. The urban and architectural designer is Carlos Raúl Villanueva, one of the most prominent Latin American modern architects. What makes the substantial difference if compared with the UNAM Campus is that the latter is a collective creation more than a personal project. References to local tradition are more evident in the Mexican case, especially taking into account that pre-Hispanic cultures in the present Mexican territory reached a high degree of development in urbanism and architecture.

The cases in Colombia and Puerto Rico present obvious differences with the UNAM Campus. The so-called “White City” in Bogotá was constructed from the mid 1930’s onwards; architecture is specifically influenced by the Middle European Modern Movement with no reference to local tradition. The Campus of Río Piedras, Puerto Rico, was erected from 1903 onwards, according to the models of 19th century American campuses, with the incorporation of Hispanic features in the expressive language of some buildings.

At the request of ICOMOS, the State Party extended the comparative analysis to another university campus (IIT Campus, Chicago) and an education ensemble (Bauhaus, Dessau). In Chicago, Mies van der Rohe applied rigorously the principles of modern urbanism and architecture. The extensive use of steel structures and glass panels constitutes a remarkable technological difference with the UNAM Campus. The property of the Bauhaus in Dessau, inscribed on the World Heritage List, is one of the masterpieces of modern architecture, merging functionalism with the influences of the 20th century avant-garde movements. It is basically only a main building, not a campus. The building underwent significant restoration to repair the alteration and damage of the 1930’s and World War II.

In conclusion, ICOMOS considers that the Central Campus of UNAM is a complex that exhibits in an original manner the universal scope of 20th Century modernism in urbanism, architecture, engineering, landscape design and fine arts and its integration to Mexican traditions.

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

Justification of the Outstanding Universal Value

The State Party’s view includes historic, urban-architectural, social, aesthetic, symbolic, technical, environmental and immaterial aspects to define the statement of Outstanding Universal Value of the Central University City Campus of UNAM.

The campus is the testimony of the presence of the University in the country for over 450 years, constituting the most ancient and prestigious Latin American University. Open spaces, location and relationships among buildings are presented as a tribute to Pre-Hispanic Mexico and, at the same time, as a promise towards the future. The campus bears testimony of the paradigms of urbanism and architecture of the 20th Century; but, behind this abstract aesthetic, national values and a typical Mexican identity are present.

The campus testifies to the modernisation of the country and the region; national modernity merges with ideals of the modern world and the universal man. Modernity is also expressed in the search of a high quality education addressed to the community as a whole.

The integration of fine arts allows the transmission of a message related to the immaterial aspects of the property. The construction on a specific type of landscape and topography shows the adaptation of master plan and design to the conditions of the property.

Criteria under which inscription is proposed

The property is nominated on the basis of criteria ii, iv and vi.

Criterion ii: The most important lines of architectural thinking from the 20th century converge in the Central University City Campus of UNAM: Modern Architecture, Historicist Regionalism, and Plastic Integration; the last two of Mexican origin.

ICOMOS considers that this criterion is justified.

Criterion iv: The Central University City Campus of UNAM is one of the few models around the world where the principles proposed by Modern Architecture and Urbanism have been totally applied; the ultimate purpose of which was to offer man a notable improvement in quality of life.

ICOMOS considers that this criterion is justified.

Criterion vi: The Central University City Campus is directly associated with the history of the *Universidad Nacional Autónoma de México*, first university of the Americas and main pillar of Mexican culture, with direct

influence in a great part of the continental universities. Some personalities related to UNAM are Nobel Laureates.

ICOMOS considers that although Nobel Laureates have been related to UNAM, it does not seem to be sufficient to justify criterion vi. While recognising the important influence and prestige of UNAM on Latin American academic and scientific fields, the reasons given by the State Party are not sufficient to demonstrate that the property bears testimony of a universal scope of influence.

ICOMOS considers that this criterion has not been justified.

ICOMOS proposes the inclusion of criterion i, on the basis of the consideration of the uniqueness of the case in the sense that it constitutes a collective creation in the framework of a master plan related to paradigms of social and cultural modernity.

ICOMOS considers that the Outstanding Universal Value has been demonstrated and that the nominated property meets criteria i, ii and iv.

4. FACTORS AFFECTING THE PROPERTY

The nomination dossier includes the identification of the following factors affecting the property:

Urban explosion

The urban explosion of Mexico City during the second half of the 20th century produced a complete transformation of the setting (as discussed above).

Pollution

Mexico City suffers a high degree of environmental pollution produced by the number of inhabitants and by the intense motor traffic. Even if this situation has an impact on the campus, the property constitutes a source of oxygen by the protected ecological area.

Earthquakes

Mexico City is located in a seismic region. Taking into account the composition of the soil in the campus, it is more resistant to earthquakes than other parts of the town. The conditions of the soil and the proper design of buildings mitigate against serious damage in the case of seismic activity.

Tourism

The impact of tourism is not a source of risk, since the campus does not constitute a target for mass tourism. As a university area, it does not have permanent inhabitants.

ICOMOS agrees with the views presented by the State Party but considers that special attention should be given to the control on the development of the surrounding urban areas, especially in relation to the north side of the campus, adjoining Insurgentes Avenue.

In conclusion, ICOMOS considers that the main risks to the property are related to the development of surrounding

urban areas, especially in relation to the connection with Mexico City downtown.

5. PROTECTION, CONSERVATION AND MANAGEMENT

Boundaries of the nominated property and buffer zone

The proposed core zone (176.5 hectares) includes the main components of the original ensemble, with three different areas: governance and schools, Olympic stadium and sports areas; and the circulation ring and parking areas. The core zone includes the total extension and components of the master plan designed in 1947 and constructed between 1948 and 1952.

The proposed buffer zone included in the nomination dossier was limited to university land encompassing the campus. Although adequate for most of the perimeter, no buffer zone was provided in an area near to the neighbouring urban district of Coyoacán.

At the request of ICOMOS, the State Party reviewed the definition of the buffer zone in December 2006-January 2007.

Additional information provided by the State Party in January 2007 includes a revision of the proposed Buffer Zone. Urban areas surrounding University land were added to the Buffer Zone. These areas are under the control of the Federal District Government and their inclusion in the Buffer Zone ensures the adequate protection of the property's setting.

The new Buffer Zone is defined in three parts: Buffer Zone 1 (553.5 hectares), which includes university land not included in the 1947 master plan and the ecological reserve; Buffer Zone 2 (649 hectares), including urban areas controlled by the Federal District Government where the height restriction is two storeys, among them the residential quarter *Pedregal*, designed by Luis Barragán; and Buffer Zone 3 (52 hectares), consisting of an urban area controlled by the Federal District Government with a height restriction of three storeys.

ICOMOS considers that the definition of the core zone is adequate in including the components of the original master plan, where the outstanding universal value of the Central University City Campus of UNAM is expressed. With regards to the buffer zone, ICOMOS considers that, the revisions indicated in the proposal of January 2007 are adequate.

Ownership

The *Universidad Nacional Autónoma de México* owns the property. As an autonomous organisation, the University has its own laws and procedures for the management of the property. There are no restrictions or fees for visiting the campus; there are no problems of accessibility, since the campus is easily reachable by private and public transportation, including a nearby metro station.

Protection

At the national level, the Central University City Campus of UNAM was listed as a National Artistic Monument in July 2005, in the framework of the Federal Law on Archaeological, Artistic and Historic Monuments and Zones. The responsible agency is the National Institute on Fine Arts and Literature (INBA), coming under the control of the National Council for the Culture and the Arts (CONACULTA).

At the local level, the UNAM Campus and the Olympic stadium are defined as heritage conservation zones in the framework of the District Programme for Urban Development (1997) of Coyoacán Delegation, one of the administrative units of Mexico City.

Since the University is an autonomous organization, it has its own programmes and norms. Among them, the Governing Plan for University City (1993) rules the future growth of the University facilities, uses of land and maintenance of the campus. The Integral Plan for the University City (2005) constitutes the current management plan for the campus. The responsible agency for the implementation of the Integral Plan is the Office for Special Projects. Trained specialists are available in national, local and university offices.

In conclusion, ICOMOS considers that the protective measures for the property are adequate. ICOMOS recommends that more specific protective measures be defined for the surrounding urban areas.
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Conservation

History of conservation

From its inauguration onwards, the campus was considered a significant urban and architectural case, both at national and international levels. There have been no significant changes or alterations over time. Some buildings changed their original function but always in the framework of education uses. Minor changes consisted in replacing or repainting material components without disturbing the essential features of buildings.

In 1993 the University adopted the Governing Plan for University City, whose main purpose is to regulate the future growth of the University facilities, the uses of the land and the maintenance of the campus. In 2005 the Integral Plan for the University City was adopted. This Plan, designed and implemented by the Office for Special Projects, is divided in three main topics: technological update, transport and road system and heritage management and preservation. This plan includes the permanent maintenance of the campus.

In the framework of the Integral Plan of 2005, some minor structures added over time, like commercial stands, were or are being removed; some material components, like parasols or curtain walls, are being replaced, in accordance with theoretical principles related to conservation and restoration of monuments.

In 2005 the UNAM Campus was listed as a National Artistic Monument by the Federal Government. The declaration decree recognizes the values of the property as testimony to Mexican architecture, as an urban example, as

a consolidation of the synthesis between modernity and tradition and as an example of plastic integration. According to the current Law on national monuments, no alterations or works on the property can be executed without the intervention of the corresponding authority, in this case the National Institute on Fine Arts and Literature (INBA).

Present state of conservation

The area designed as core zone for the nomination to the World Heritage List is in a very good state of conservation, both in buildings and open spaces. The state of free and green spaces and the works of fine arts included in buildings structures can be considered excellent. Recent works of restoration of the murals have been undertaken, including a lighting system.

Maintenance works are constantly carried out on buildings and open spaces. Works to replace technical components, necessary due to the fragility of some modern materials, are carried out with respect and consideration to the norms and documents that rule the conservation and restoration of monuments and ensembles.

Active Conservation measures

The campus, including open spaces, buildings and works of art, is continuously in the process of maintenance. Some specific plans and works are carried out with the purpose of improving the condition of the campus. Currently, in the framework of the Management Plan, works are developing to concentrate the parking services in the Stadium area, thus allowing the perimeter ring to improve functionally and environmentally.

Specific works are in progress on some buildings to restore the original appearance and improve functional conditions. Parasols and the library's curtain wall in the Medicine Faculty are examples of specific active conservation actions. These actions fulfil requirements for proper interventions on modern heritage: original materials must be replaced in order to respond to their fragility to aging; the new components respect the design and appearance of original ones, improving their functionality.

Management

Management structures and processes, including traditional management processes

Since the University is an autonomous organisation, it has its own offices in charge of maintenance and conservation of the campus. Among them are the Office for Special Projects, Works and Preservation General Office, and the General Services Office. The projected University City Management Plan (PROMACU, commented below) will co-ordinate the management of the campus.

At the local level, the Coyoacán Delegation controls the development of the surrounding urban areas through the Coyoacán District plan. At the national level the responsible agency is the Institute on Fine Arts and Literature (INBA), which is in charge of cultural heritage of the 20th Century.

ICOMOS considers that management structures are adequate to guarantee the conservation of the campus. ICOMOS recommends that a closer collaboration between the University and the Government of the Federal District be defined, in order to assure the proper development of the campus and its setting. It would be also important to implement the PROMACU as soon as possible.

Management plans, including visitor management and presentation

The Office for Special Projects of UNAM developed and implements the Integral Plan for the University City (September 2005). With the aim of implementing and monitoring the Plan, the University will create the University City Management Programme (PROMACU). It will be an office of the University General Secretary and acting as coordinator among the diverse offices related to the management of specific issues on campus. The PROMACU is not yet formally in place as the correspondent decree has yet to be signed by the UNAM Rector.

Once functioning, the PROMACU will act in agreement with the federal agencies related to heritage conservation (National Institute of Anthropology and History, National Institute of Fine Arts and Literature) and with the relevant University offices: Administrative Secretary, Works and Preservation General Office, General Service Office, Attention to Students General Office, Cultural Diffusion Office, Faculties and Schools Chairmen, Sports Activities General Office, General Attorney Office, *Pedregal de San Ángel* Ecological Reserve and Technical Committee.

The campus is not the target of mass tourism. Currently, the number of visitors does not cause any kind of damage to the property. There is a project to install a visitor centre next to the main entrance to the campus, related to the University Sciences and Arts Museum.

ICOMOS recommends that the appropriate information facilities for visitors be provided as soon as possible as a means of improving the experience of visiting the campus and to contribute to the proper interpretation of its heritage values.

Involvement of local communities

The University community has a high degree of awareness of the values and significance of the campus. The importance of the UNAM Campus is also recognised at a general level, as the main educational institution in the country and one of the icons of modern urbanism and architecture in Mexico. There are no specific community organizations related to the conservation and promotion of the values of the property, although UNAM is highly renowned at national and international levels.

Resources, including staffing levels, expertise and training

Financial resources for the conservation and management of the campus are the Operational Annual Budget of UNAM, special assignments of the UNAM Patronage through the "Integral Plan for the Central Campus", extraordinary income incorporated in the annual budget and financial resources stemming from private funds and organizations.

Several specific university offices are related to the maintenance and conservation of the campus. The leading role is undertaken by the Office on Special Projects, which has the professional and technical capacity to ensure the proper conservation of the property. Top level specialists and trained professionals are available at UNAM. Once in operation, the PROMACU will co-ordinate conservation and management of the campus.

In conclusion, ICOMOS considers that the management system of the property is adequate. ICOMOS recommends that the State Party and the University authorities should be urged to implement the PROMACU as a means of defining the definitive management unit.

6. MONITORING

The nomination dossier includes key indicators for the monitoring of the property. These include indicators for buildings, open spaces, circulation systems, commercial facilities, works of art, infrastructure and technical services. No regular monitoring system is currently implemented, although a monitoring programme, based on the proposed indicators, is foreseen through the PROMACU.

Administrative offices and academic centres will provide information for the completion and updating of the monitoring programme, overseen by PROMACU.

ICOMOS considers that the proposed indicators are adequate for the monitoring of the property, although it would be desirable for the indicators to also include functional aspects. The monitoring programme should be rapidly defined and implemented to adequately verify the persistence of Outstanding Universal Value, Authenticity and Integrity over time. Furthermore, ICOMOS recommends that the State Party informs on the progress on the monitoring system implementation and on results of the monitoring exercises.

7. CONCLUSIONS

The Central University City Campus of UNAM presents outstanding universal value from the point of view of sciences, arts and humanities. ICOMOS is satisfied with the authenticity and integrity of the nominated property. The core zone proposed by the State Party includes all the original components of the campus inaugurated in 1952; the buffer zone includes protected natural landscape and urban areas surrounding the Central University City Campus. Management arrangements and structures can be considered adequate to guarantee the proper conservation and enhancement of the campus.

Recommendations with respect to inscription

ICOMOS recommends to the World Heritage Committee that the Central University City Campus of the *Universidad Nacional Autónoma de México* (UNAM), Mexico, be inscribed on the World Heritage List on the basis of *criteria i, ii and iv*.

Recommended Statement of Outstanding Universal Value

The Central University City Campus of UNAM bears testimony to the modernization of post-revolutionary Mexico in the framework of universal ideals and values related to access to education, improvement of quality of life, integral intellectual and physical education and integration between urbanism, architecture and fine arts. It is a collective work, where more than sixty architects, engineers and artist worked together to create the spaces and facilities apt to contribute to the progress of humankind through education.

The urbanism and architecture of the Central University City Campus of UNAM constitute an outstanding example of the application of the principles of 20th Century modernism merged with features stemming from pre-Hispanic Mexican tradition. The ensemble became one of the most significant icons of modern urbanism and architecture in Latin America, recognised at universal level.

Since all the fundamental physical components of the original ensemble remain and no major changes have been introduced, the property satisfies the required conditions of integrity and authenticity.

Criterion i: The Central University City Campus of UNAM constitutes an unique example in the 20th century where more than sixty professionals worked together, in the framework of a master plan, to create an urban architectural ensemble that bears testimony to social and cultural values of universal significance.

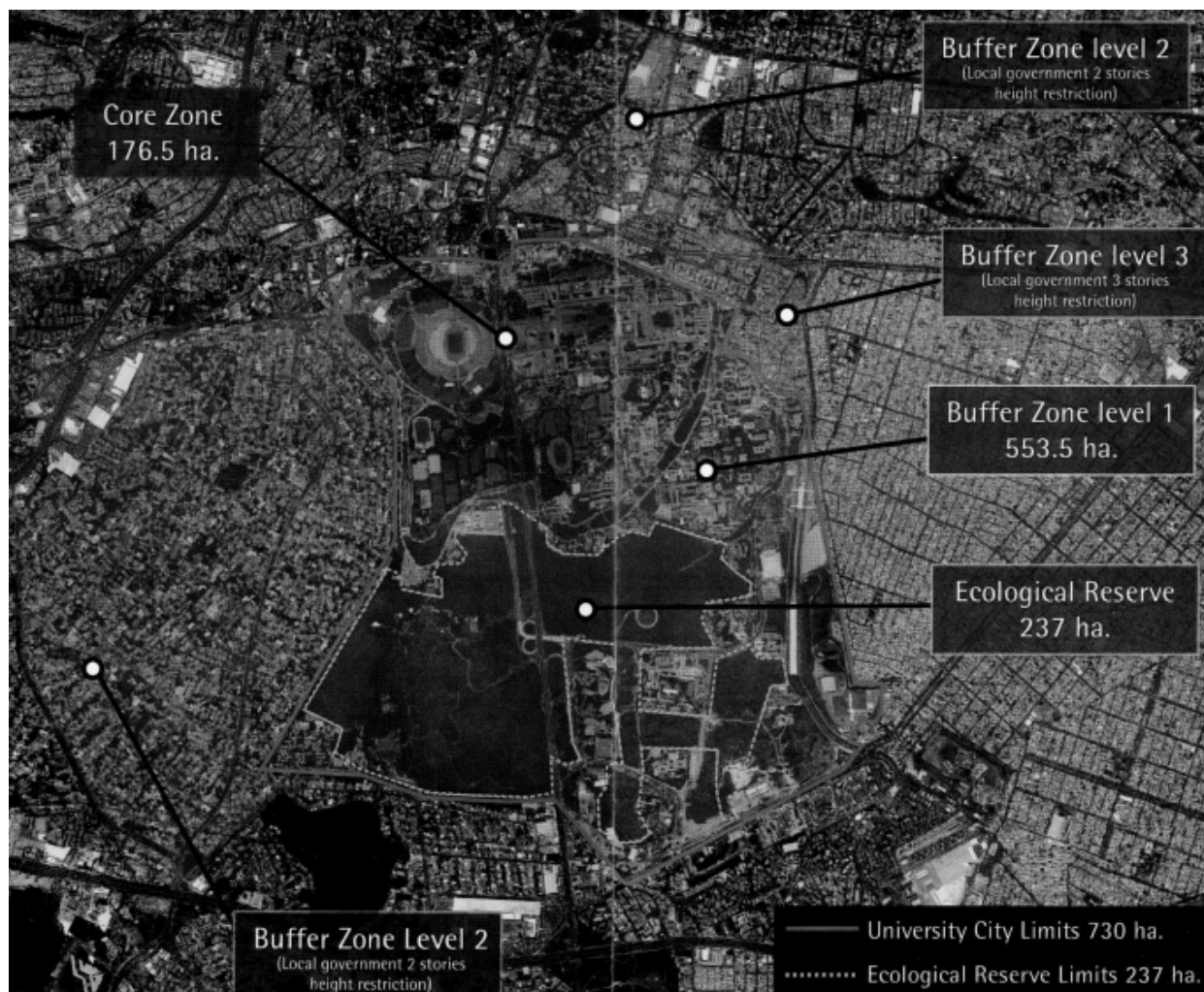
Criterion ii: The most important trends of the architectural thinking from the 20th century converge in the Central University City Campus of UNAM: modern architecture, historicist regionalism, and plastic integration; the last two of Mexican origin.

Criterion iv: The Central University City Campus of UNAM is one of the few models around the world where the principles proposed by the Modern Architecture and Urbanism were totally applied; the ultimate purpose of which was to offer man a notable improvement in the quality of life.

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

- A closer relationship should be established between the University and the government of the Federal District, in order to ensure a better management of the property and its buffer zone and the appropriate development of neighbouring urban areas, so that potential risks to the campus can be better controlled.
- The University authorities should formalise the Programme of Management of the University City (PROMACU) as a means of ensuring the proper implementation of the Integral Plan for the University City.
- The University authorities should also implement strategies for improved arrangements and information for visitors, in

order to ensure a better interpretation of the Outstanding Universal Value of the campus.



Map showing the boundaries of the nominated property



General view of the Campus



Murals in Rector Tower



Humanities II Tower



Olympic Stadium