# The Jantar Mantar, Jaipur

# 1. World Heritage Property Data

# 1.1 - Name of World Heritage property

The Jantar Mantar, Jaipur

# 1.2 - World Heritage property details

### 1.3 - Geographic information table

Name	Coordinates	Property (ha)	Buffer zone (ha)		Total (ha)	Inscription year
The Jantar Mantar, Jaipur	26.925 / 75.825	1.865	14.666		16.531	2010
Total (ha)		1.865	14.666		16.531	
1.4 - Map(s)						
Title		Da	ate	Link to s	ource	
Map of inscribed property		20	009			

### 1.5 - Web and Social Media data of the property (if applicable)

1. www.museumsrajasthan.gov.in www.bookrajmonuments.in\_

### 2. Other Conventions/Programmes under which the World Heritage property is protected (if applicable)

# 2.1 - Records indicate that your World Heritage property (in whole or in part) is designated and/or protected under the Conventions/programmes shown in the prefilled table below. Please check and amend as necessary.

		The World Heritage property (in whole or in part) <u>is</u> designated and/or protected under this convention/programme	The World Heritage property (in whole or in part) <u>is not</u> designated and/or protected under this convention/programme
2.1.1	International Register of Cultural Property under Special Protection (1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict)		×
2.1.2	List of Cultural Property under Enhanced Protection (Second Protocol to the 1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict)		×
2.1.3	The List of Wetlands of International Importance (The Ramsar List) (Convention on Wetlands of International Importance (Ramsar Convention))		×
2.1.4	World Network of Biosphere Reserves Man and the Biosphere (MAB) Programme		×
2.1.5	Global Geoparks Network UNESCO Global Geoparks		×

# 2.2 - Please provide comments on 2.1 if necessary

The World Heritage property is additionally protected under UNESCO Jaipur World Heritage city inscription in July 2020.

2.3 - Do your national authorities intend to request the granting of Enhanced Protection (if relevant) under the Second Protocol to the 1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict for the World Heritage property in the next three years?

No

2.4 - Do your national authorities intend to designate whole or part of the World Heritage property for inclusion in the List of Wetlands of International Importance (The Ramsar List), if relevant, in the next three years?

2.5 - Do your national authorities intend to designate whole or part of the World Heritage property as a Man and Biosphere Reserve (if relevant) in the next three years?

No

2.6 - Do your national authorities intend to apply for whole or part of World Heritage property to be designated as a UNESCO Global Geopark (if relevant) in the next three years?

# 2.7 - Please indicate the level of cooperation at property level between designations under different Conventions/Programmes

2.7.1	1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict	
2.7.1	There is <b>no contact</b> with the Focal Point(s) of this designation/programme.	×
2.7.2	The World Heritage Site Manager occasionally communicates with the Focal Point(s) of this designation/programme.	
2.7.3	The World Heritage Site Manager regularly communicates with the Focal Point(s) of this designation/programme.	
2.7.4	The World Heritage Site Manager also manages this designation/programme.	
2.7.2	Second Protocol to the 1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict	
2.7.1	There is <b>no contact</b> with the Focal Point(s) of this designation/programme.	×
2.7.2	The World Heritage Site Manager occasionally communicates with the Focal Point(s) of this designation/programme.	
2.7.3	The World Heritage Site Manager regularly communicates with the Focal Point(s) of this designation/programme.	
2.7.4	The World Heritage Site Manager also manages this designation/programme.	
2.7.3	Convention on Wetlands of International Importance (Ramsar Convention)	
2.7.1	There is <b>no contact</b> with the Focal Point(s) of this designation/programme.	×
2.7.2	The World Heritage Site Manager occasionally communicates with the Focal Point(s) of this designation/programme.	
2.7.3	The World Heritage Site Manager regularly communicates with the Focal Point(s) of this designation/programme.	
2.7.4	The World Heritage Site Manager also manages this designation/programme.	
2.7.4	Man and the Biosphere (MAB) Programme	
2.7.1	There is <b>no contact</b> with the Focal Point(s) of this designation/programme.	×
2.7.2	The World Heritage Site Manager occasionally communicates with the Focal Point(s) of this designation/programme.	
2.7.3	The World Heritage Site Manager regularly communicates with the Focal Point(s) of this designation/programme.	
2.7.4	The World Heritage Site Manager also manages this designation/programme.	
2.7.5	UNESCO Global Geoparks	
2.7.1	There is <b>no contact</b> with the Focal Point(s) of this designation/programme.	×
2.7.2	The World Heritage Site Manager occasionally communicates with the Focal Point(s) of this designation/programme.	
2.7.3	The World Heritage Site Manager regularly communicates with the Focal Point(s) of this designation/programme.	
2.7.4	The World Heritage Site Manager also manages this designation/programme.	

# 2.8 - Please add any further comments on cooperation with the other designation(s)/programme(s)

The World Heritage property of Jantar Mantar, Jaipur is integrated with Jaipur city's designation as a 'UNESCO Creative City of crafts and folk arts' (inscribed in 2015) and regular promotional and outreach activities are planned and executed on the World heritage property related to dissemination of OUV since 2015.

# 2.9 - Are you aware of any elements associated with the World Heritage property that have been inscribed on the Representative List of the Intangible Cultural Heritage?

No

2.10 - Please list any elements associated with the World Heritage property inscribed under the Convention for the Safeguarding of the Intangible Cultural Heritage of which you are aware

Not applicable

2.11 - Are you aware of any documentary heritage listed under the Memory of the World Programme associated with the World Heritage property?

No

2.12 - Please list any documentary heritage associated with the World Heritage property listed under the Memory of the World Programme of which you aware.

Not applicable

### 3. Statement of Outstanding Universal Value

3.1 - Statement of Outstanding Universal Value for the property as adopted by the World Heritage Committee

# Statement of Outstanding Universal Value

#### Brief synthesis

The Jantar Mantar, Jaipur, is an astronomical observation site built in the early 18th century. It includes a set of some twenty main fixed instruments. They are monumental examples in masonry of known instruments but which in many cases have specific characteristics of their own. The Jantar Mantar is an expression of the astronomical skills and cosmological concepts of the court of a scholarly prince at the end of the Mughal period.

The Jantar Mantar observatory in Jaipur constitutes the most significant and best preserved set of fixed monumental instruments built in India in the first half of the 18th century; some of them are the largest ever built in their categories. Designed for the observation of astronomical positions with the naked eye, they embody several architectural and instrumental innovations. The observatory forms part of a tradition of Ptolemaic positional astronomy which was shared by many civilizations. It contributed by this type of observation to the completion of the astronomical tables of Zij. It is a late and ultimate monumental culmination of this tradition.

Through the impetus of its creator, the prince Jai Singh II, the observatory was a meeting point for different scientific cultures, and gave rise to widespread social practices linked to cosmology. It was also a symbol of royal authority, through its urban dimensions, its control of time, and its rational and astrological forecasting capacities. The observatory is the monumental embodiment of the coming together of needs which were at the same time political, scientific, and religious.

Criterion (iii): The Jantar Mantar in Jaipur is an outstanding example of the coming together of observation of the universe, society and beliefs. It provides an outstanding testimony of the ultimate culmination of the scientific and technical conceptions of the great observatory devised in the Medieval world. It bears witness to very ancient cosmological, astronomical and scientific traditions shared by a major set of Western, Middle Eastern, Asian and African religions, over a period of more than fifteen centuries.

Criterion (iv): The Jantar Mantar in Jaipur is an outstanding example of a very comprehensive set of astronomical instruments, in the heart of a royal capital at the end of the Mughal period in India. Several instruments are impressive in their dimensions, and some are the largest ever built in their category.

#### Integrity and authenticity

The observatory of Jantar Mantar in Jaipur has been affected by its outdoor situation in a tropical area, and then by its temporary abandonment in the 19th century, which has resulted in frequent maintenance interventions and then various restorations over a period of more than a century. Nevertheless, the general integrity of the site has been essentially maintained and partially restored.

On the other hand, establishing the authenticity of each individual instrument is more complex, as a result of the many interventions which have taken place. While authenticity is generally unquestionable with regard to the astronomical function, it is more difficult to establish with regard to plasters, instrument graduations, some architectural interpretations and the immediate landscape environment of elements of the property.

#### Protection and management measures

The Jantar Mantar is protected under the Rajasthan Monuments Archaeological Site and Antiquities Act, 1961, under Sections 3 and 4. It was designated a monument of national importance in 1968.

The main challenges for the property, which could potentially represent a threat, are controlling the development of tourism, and allowing for urban development in the immediate vicinity of the Jantar Mantar. Major projects to upgrade the district and modify traffic have been announced, and these may affect the buffer zone, and more generally the landscape and cultural environment of the property. It is in particular necessary to specify the measures taken to protect the buffer zone, and to include these measures in the upcoming Master Plan of the municipality of Jaipur. The system for the management of the property is appropriate, provided that it includes a genuinely overarching management body and provided that the Management Plan is promulgated. Furthermore, it is necessary to strengthen the scientific expertise of the bodies in charge of managing the property.

# 3.2 - Please list the key attributes of Outstanding Universal Value of your property and give an assessment of their condition. As a guideline, it is suggested to focus on approximately five key attributes (no more than 15 overall).

	Brief identification of attribute	Preserved	Compromised	Seriously compromised	Lost
3.2.1	Location & setting within Jaipur city	×			
3.2.2	The most significant in being the best-preserved conglomerate of pre-telescopic masonry astronomical instruments.	×			
3.2.3	18 Astronomical Instruments - Physical state	×			
3.2.4	18 Astronomical Instruments - Calibrations & measurements	×			
3.2.5					
3.2.6					
3.2.7					
3.2.8					
3.2.9					
3.2.10					
3.2.11					
3.2.12					
3.2.13					
3.2.14					
3.2.15					

### 3.3 - Comments, conclusions and/or recommendations related to Statement of Outstanding Universal Value

India represents five observatories belonging to the same historic cultural group, within the framework of thematic initiative "Astronomy and World Heritage", at Jaipur, Delhi, Ujjain and Varanasi. Jantar Mantar, Jaipur amongst this group is the most extant, best preserved and has maximum number of observational instruments in functional condition and is an icon that has contributed significantly to astronomy, architecture, urban planning, political history and cultural distinctiveness.

# 4. Factors Affecting the Property

# 4.1. Buildings and Development

# 4.1.1 - Housing

- Previous answer Cycle 2 (29/07/2011):
  - Relevant, Positive, Current, Outside

X Relevant				Not relevant				
	Impact		Origin		Trend of impact			
Impact	Current	9 Potential	<ul> <li>Inside</li> </ul>	Cutside	> Decreasing	⇒ Stable	Increasing	
O Positive X	×			×		$\rightarrow$		
Negative								

# 4.1.2 - Commercial development

- Previous answer Cycle 2 (29/07/2011):
  - Relevant, Positive, Current, Outside

X Relevant				Not relevant				
	Impact		Origin		Trend of impact			
Impact	4 Current	Potential	Inside	C Outside	Secreasing	⇒ Stable	Increasing	
O Positive X	×			×		$\rightarrow$		
Negative								

### 4.1.3 - Industrial areas

- Previous answer Cycle 2 (29/07/2011):
  - Not relevant

Relevant

× Not relevant

# 4.1.4 - Major visitor accommodation and associated infrastructure

Previous answer Cycle 2 (29/07/2011):

• Relevant, Positive, Current, Potential, Outside

× Relevant			1	Not relevant			
	Impact		Origin		Trend of impact		
Impact	4 Current	Potential	Inside	Outside	> Decreasing	⇒ Stable	Increasing
O Positive X	×	×		×		$\rightarrow$	
Negative							

### 4.1.5 - Interpretative and visitation facilities

- Previous answer Cycle 2 (29/07/2011):
  - Not relevant

X Relevant			1	Not relevant			
	Impact		Origin		Trend of impact		
Impact	4 Current	9 Potential	Inside	Cutside	Solution Decreasing	⇒ Stable	Increasing
O Positive X		×		×		$\rightarrow$	
Negative							

# 4.1.6 - Please comment as necessary on how the factors selected as relevant in 4.1 are affecting the property either negatively or positively

Overall the impact of the factors listed above is being controlled through regular site-visits of the property area and meetings are held for monitoring the impact (if any) as outlined in the Management Plan. Factors like housing and commercial development which can impact the buffer area of the property is being regularly monitored by the authority. It has been insured that no negative impact is caused affecting the OUV of the World Heritage property of Jantar Mantar.

# 4.2. Transportation Infrastructure

# 4.2.1 - Ground transport infrastructure

Previous answer Cycle 2 (29/07/2011):

• Relevant, Positive, Current, Potential, Outside

X Relevant				Not relevant				
	Impact		Origin		Trend of impact			
Impact	4 Current	Potential	<ul> <li>Inside</li> </ul>	Cutside	> Decreasing	⇒ Stable	Increasing	
O Positive X	×	×		×		$\rightarrow$		
Negative								

### 4.2.2 - Underground transport infrastructure

Previous answer Cycle 2 (29/07/2011):

• Relevant, Positive, Current, Outside

X Relevant			I	Not relevant						
	Impact		Origin	igin Trend		Trend of impact				
Impact	Gurrent	9 Potential	Inside	Cutside	> Decreasing	⇒ Stable	Increasing			
O Positive X		×		×		<b>→</b>				
Negative										
<ul> <li>4.2.3 - Air transport infrast</li> <li>Previous answer Cycle 2 (29/07/</li> <li>Not relevant</li> </ul>										
Relevant	elevant				X Not relevant					
<ul> <li>4.2.4 - Marine transport inf</li> <li>Previous answer Cycle 2 (29/07/</li> <li>Relevant, Negative, Poter</li> </ul>	2011):									
Relevant			X Not relevant							
<ul> <li>4.2.5 - Effects arising from</li> <li>Previous answer Cycle 2 (29/07/</li> <li>Not relevant</li> </ul>	-	rtation infrastru	cture							
Relevant			× Not relevant							
4.2.6 - Please comment as necessary on how the factors selected as relevant in 4.2 are affecting the property either negatively or positively										

#### positively

It has been proposed that the movement the buffer zone is to be pedestrianized as per the Management Plan of the property. In due course proposed pedestrianization integrated with ground and underground transport infrastructure is to be implemented as per Comprehensive Mobility Plan for World heritage site of Jantar Mantar.

# 4.3. Services Infrastructures

### 4.3.1 - Water infrastructure

Previous answer Cycle 2 (29/07/2011):

Not relevant

Relevant

× Not relevant

Not relevant

### 4.3.2 - Renewable energy facilities

Previous answer Cycle 2 (29/07/2011):

• Relevant, Positive, Potential, Inside, Outside

× Relevant

	Impact		Origin		Trend of impact		
Impact	4 Current	Potential	<ul> <li>Inside</li> </ul>	Outside	Solution Decreasing	⇒ Stable	Increasing
OPositive X		×	×	×		<b>→</b>	
Negative							

# 4.3.3 - Non-renewable energy facilities

Previous answer Cycle 2 (29/07/2011):

Not relevant

Relevant

- XC	Not relevant	

# 4.3.4 - Localised utilities

Previous answer Cycle 2 (29/07/2011):

• Relevant, Positive, Current, Potential, Outside

X Relevant			I	Not relevant			
	Impact		Origin		Trend of impact		
Impact	Current	9 Potential	<ul> <li>Inside</li> </ul>	Cutside	> Decreasing	⇒ Stable	Increasing
O Positive X	×	×		×		$\rightarrow$	
Negative							

# 4.3.5 - Major linear utilities

Previous answer Cycle 2 (29/07/2011):

Not relevant

Relevant

🗙 Not relevant

# 4.3.6 - Please comment as necessary on how the factors selected as relevant in 4.3 are affecting the property either negatively or positively

All adequate services and public infrastructure for energy utilities was planned and is functioning properly. New amenities and service requirements have been introduced and regularly upgraded and an Interpretation centre post inscription is in place and is functioning effectively for site orientation.

# 4.4. Pollution

### 4.4.1 - Pollution of marine waters

Previous answer Cycle 2 (29/07/2011):

Not relevant

Relevant			× Not relev	ant			
4.4.2 - Ground water pollut Previous answer Cycle 2 (29/07/ • Not relevant							
Relevant			× Not relev	ant			
4.4.3 - Surface water pollut Previous answer Cycle 2 (29/07/ • Not relevant							
Relevant			× Not relev	ant			
4.4.4 - Air pollution Previous answer Cycle 2 (29/07/ • Not relevant	/2011):						
Relevant			× Not relev	ant			
<ul> <li>4.4.5 - Solid waste</li> <li>Previous answer Cycle 2 (29/07/</li> <li>Relevant, Negative, Curre</li> <li>X Relevant</li> </ul>	,	ide		Not relevant			
	Impact		Origin		Trend of impact		
Impact	4 Current	9 Potential	Inside	C Outside	> Decreasing	⇒ Stable	Increasing

O Positive					
Negative X	×		×	<b>→</b>	
<ul> <li>4.4.6 - Input of excess ener</li> <li>Previous answer Cycle 2 (29/07/2</li> <li>Not relevant</li> </ul>					
Relevant		× Not relevant			

# 4.4.7 - Please comment as necessary on how the factors selected as relevant in 4.4 are affecting the property either negatively or positively

The factors listed above which are relevant and can impact the property are regularly checked and monitored. Solid waste management which can have a negative impact in the buffer area of the property is also periodically monitored by the relevant government body.

# 4.5. Biological resource use/modification

# 4.5.1 - Fishing/collecting aquatic resources

- Previous answer Cycle 2 (29/07/2011):
  - Not relevant

Relevant	X Not relevant
<ul><li>4.5.2 - Aquaculture</li><li>Previous answer Cycle 2 (29/07/2011):</li><li>Not relevant</li></ul>	
Relevant	X Not relevant
<ul> <li>4.5.3 - Land conversion</li> <li>Previous answer Cycle 2 (29/07/2011):</li> <li>Not relevant</li> </ul>	
Relevant	X Not relevant
<ul> <li>4.5.4 - Livestock farming/Grazing of domesticated animals</li> <li>Previous answer Cycle 2 (29/07/2011):</li> <li>Not relevant</li> </ul>	
Relevant	X Not relevant
<ul> <li>4.5.5 - Crop production</li> <li>Previous answer Cycle 2 (29/07/2011):</li> <li>Not relevant</li> </ul>	
Relevant	X Not relevant
<ul> <li>4.5.6 - Commercial wild plant collection</li> <li>Previous answer Cycle 2 (29/07/2011):</li> <li>Not relevant</li> </ul>	
Relevant	X Not relevant
<ul> <li>4.5.7 - Subsistence wild plant collection</li> <li>Previous answer Cycle 2 (29/07/2011):</li> <li>Not relevant</li> </ul>	
Relevant	X Not relevant
<ul><li>4.5.8 - Commercial hunting</li><li>Previous answer Cycle 2 (29/07/2011):</li><li>Not relevant</li></ul>	
Relevant	X Not relevant
<ul><li>4.5.9 - Subsistence hunting</li><li>Previous answer Cycle 2 (29/07/2011):</li><li>Not relevant</li></ul>	
Relevant	X Not relevant

### 4.5.10 - Forestry/Wood production

Previous answer Cycle 2 (29/07/2011):

Not relevant

Relevant

× Not relevant

4.5.11 - Please comment as necessary on how the factors selected as relevant in 4.5 are affecting the property either negatively or positively

### Not applicable

# 4.6. Physical resource extraction

# 4.6.1 - Mining

Previous answer Cycle 2 (29/07/2011):

Not relevant

Relevant × Not relevant 4.6.2 - Quarrying Previous answer Cycle 2 (29/07/2011): Not relevant Relevant × Not relevant 4.6.3 - Oil and gas Previous answer Cycle 2 (29/07/2011): Not relevant Relevant × Not relevant 4.6.4 - Water (extraction) Previous answer Cycle 2 (29/07/2011): Not relevant Relevant × Not relevant

4.6.5 - Please comment as necessary on how the factors selected as relevant in 4.6 are affecting the property either negatively or positively

The factors listed above have no impact on the World heritage property.

# 4.7. Local conditions affecting physical fabric

#### 4.7.1 - Wind

- Previous answer Cycle 2 (29/07/2011):
  - Not relevant

Relevant	× Not relevant
<ul><li>4.7.2 - Relative humidity</li><li>Previous answer Cycle 2 (29/07/2011):</li><li>Not relevant</li></ul>	
Relevant	X Not relevant
<ul> <li>4.7.3 - Temperature</li> <li>Previous answer Cycle 2 (29/07/2011):</li> <li>Relevant, Negative, Potential, Inside</li> </ul>	
Relevant	X Not relevant
<ul><li>4.7.4 - Radiation/Light</li><li>Previous answer Cycle 2 (29/07/2011):</li><li>Not relevant</li></ul>	
Relevant	X Not relevant
<ul><li>4.7.5 - Dust</li><li>Previous answer Cycle 2 (29/07/2011):</li><li>Not relevant</li></ul>	
Relevant	X Not relevant

# 4.7.6 - Water (rain/water table)

### Previous answer Cycle 2 (29/07/2011):

Not relevant

Relevant	X Not relevant
<ul><li>4.7.7 - Pests</li><li>Previous answer Cycle 2 (29/07/2011):</li><li>Relevant, Negative, Potential, Inside</li></ul>	
Relevant	X Not relevant
<ul><li>4.7.8 - Micro-organisms</li><li>Previous answer Cycle 2 (29/07/2011):</li><li>Not relevant</li></ul>	
Relevant	X Not relevant

# 4.7.9 - Please comment as necessary on how the factors selected as relevant in 4.7 are affecting the property either negatively or positively

The factors listed above have no impact on the World heritage property.

# 4.8. Social/Cultural uses of heritage

# 4.8.1 - Ritual/Spiritual/Religious and associative uses

- Previous answer Cycle 2 (29/07/2011):
  - Relevant, Positive, Current, Potential, Inside, Outside

× Relevant			1	Not relevant			
	Impact		Origin		Trend of impact		
Impact	4 Current	Potential	<ul> <li>Inside</li> </ul>	Cutside	> Decreasing	⇒ Stable	Increasing
O Positive X	×	×	×	×			
Negative							

# 4.8.2 - Society's valuing of heritage

- Previous answer Cycle 2 (29/07/2011):
  - Relevant, Positive, Current, Potential, Inside, Outside

X Relevant			1	Not relevant			
	Impact		Origin		Trend of impact		
Impact	4 Current	9 Potential	Inside	Cutside	Solution Decreasing	⇒ Stable	Increasing
Positive X	×	×	×	×			
Negative							

# 4.8.3 - Indigenous hunting, gathering and collecting

Previous answer Cycle 2 (29/07/2011):

Not relevant

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Relevant
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X Not relevant

# 4.8.4 - Changes in traditional ways of life and knowledge system

Previous answer Cycle 2 (29/07/2011):

• Relevant, Positive, Current, Potential, Inside, Outside

× Relevant			I	Not relevant			
	Impact		Origin		Trend of impact		
Impact	4 Current	Potential	Inside	Cutside	Secreasing	⇒ Stable	Increasing
O Positive X	×	×	×	×		$\rightarrow$	
Negative							

### 4.8.5 - Identity, social cohesion, changes in local population and community

Previous answer Cycle 2 (29/07/2011):

• Relevant, Positive, Current, Potential, Outside

X Relevant			I	Not relevant			
	Impact		Origin		Trend of impact		
Impact	Current	9 Potential	Inside	Cutside	> Decreasing	⇒ Stable	Increasing
O Positive X	×	×		×		<b>→</b>	
Negative							

# 4.8.6 - Impacts of tourism/Visitation/Recreation

Previous answer Cycle 2 (29/07/2011):

• Relevant, Positive, Negative, Current, Potential, Inside, Outside

× Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	4 Current	Potential	<ul> <li>Inside</li> </ul>	C Outside	Solution Decreasing	⇒ Stable	Increasing
O Positive X	×	×	×	×		<b>→</b>	
Negative							

# 4.8.7 - Please comment as necessary on how the factors selected as relevant in 4.8 are affecting the property either negatively or positively

Regular promotional and outreach activities and workshops on related subjects like science, astronomy and architecture are planned in a collective manner with government bodies, NGOs and educational organisations for awareness and dissemination of OUV and helps strengthen the involvement of society with the World heritage property.

# 4.9. Other human activities

# 4.9.1 - Illegal activities

Previous answer Cycle 2 (29/07/2011):

<ul> <li>Not relevant</li> </ul>
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Relevant	X Not relevant
<ul> <li>4.9.2 - Deliberate destruction of heritage</li> <li>Previous answer Cycle 2 (29/07/2011):</li> <li>Not relevant</li> </ul>	
Relevant	X Not relevant
<ul><li>4.9.3 - Military training</li><li>Previous answer Cycle 2 (29/07/2011):</li><li>Not relevant</li></ul>	
Relevant	X Not relevant
<ul><li><b>4.9.4 - War</b></li><li>Previous answer Cycle 2 (29/07/2011):</li><li>Not relevant</li></ul>	
Relevant	X Not relevant
<ul> <li>4.9.5 - Terrorism</li> <li>Previous answer Cycle 2 (29/07/2011):</li> <li>Relevant, Negative, Potential, Inside, Outside</li> </ul>	
Relevant	X Not relevant
<ul> <li>4.9.6 - Civil unrest</li> <li>Previous answer Cycle 2 (29/07/2011):</li> <li>Not relevant</li> </ul>	
Relevant	× Not relevant

# 4.9.7 - Please comment as necessary on how the factors selected as relevant in 4.9 are affecting the property either negatively or

# positively

The factors listed above have no impact on the World Heritage property.

# 4.10. Climate change and severe weather events

# 4.10.1 - Storms

Previous answer Cycle 2 (29/07/2011):

Not relevant

• Not relevant	
Relevant	X Not relevant
<ul> <li>4.10.2 - Flooding</li> <li>Previous answer Cycle 2 (29/07/2011):</li> <li>Not relevant</li> </ul>	
Relevant	X Not relevant
<ul> <li>4.10.3 - Drought</li> <li>Previous answer Cycle 2 (29/07/2011):</li> <li>Not relevant</li> </ul>	
Relevant	X Not relevant
<ul> <li>4.10.4 - Desertification</li> <li>Previous answer Cycle 2 (29/07/2011):</li> <li>Not relevant</li> </ul>	
Relevant	X Not relevant
<ul> <li>4.10.5 - Changes to oceanic waters</li> <li>Previous answer Cycle 2 (29/07/2011):</li> <li>Not relevant</li> </ul>	
Relevant	X Not relevant
<ul> <li>4.10.6 - Temperature change</li> <li>Previous answer Cycle 2 (29/07/2011):</li> <li>Not relevant</li> </ul>	
Relevant	X Not relevant
<ul> <li>4.10.7 - Other climate change impacts</li> <li>Previous answer Cycle 2 (29/07/2011):</li> <li>Not relevant</li> </ul>	
Relevant	X Not relevant
4.10.8 - Please comment as necessary on how the factors positively The factors listed above have no impact on the World heritage property	selected as relevant in 4.10 are affecting the property either negatively or
4.11. Sudden ecological or geological events	
<ul> <li>4.11.1 - Volcanic eruption</li> <li>Previous answer Cycle 2 (29/07/2011):</li> <li>Not relevant</li> </ul>	
Relevant	X Not relevant
<ul> <li>4.11.2 - Earthquake</li> <li>Previous answer Cycle 2 (29/07/2011):</li> <li>Not relevant</li> </ul>	
Relevant	X Not relevant

# 4.11.3 - Tsunami/Tidal wave

### Previous answer Cycle 2 (29/07/2011):

Not relevant

Relevant

# 4.11.4 - Avalanche/Landslide

Previous answer Cycle 2 (29/07/2011):

Not relevant

Relevant	X Not relevant
<ul> <li>4.11.5 - Erosion and siltation/Deposition</li> <li>Previous answer Cycle 2 (29/07/2011):</li> <li>Not relevant</li> </ul>	
Relevant	X Not relevant
<ul><li>4.11.6 - Fire (wildfire)</li><li>Previous answer Cycle 2 (29/07/2011):</li><li>Not relevant</li></ul>	
Relevant	X Not relevant
<ul> <li>4.11.7 - Please comment as necessary on how the factors positively</li> <li>The factors listed above have no impact on the World heritage property</li> <li>4.12. Invasive/alien species or hyper-abundant species</li> <li>4.12.1 - Translocated species</li> <li>Previous answer Cycle 2 (29/07/2011): <ul> <li>Not relevant</li> </ul> </li> </ul>	
Relevant	X Not relevant
<ul> <li>4.12.2 - Invasive/Alien terrestrial species</li> <li>Previous answer Cycle 2 (29/07/2011):</li> <li>Not relevant</li> </ul>	
Relevant	X Not relevant
<ul> <li>4.12.3 - Invasive/Alien freshwater species</li> <li>Previous answer Cycle 2 (29/07/2011):</li> <li>Not relevant</li> </ul>	
Relevant	X Not relevant
<ul> <li>4.12.4 - Invasive/Alien marine species</li> <li>Previous answer Cycle 2 (29/07/2011):</li> <li>Not relevant</li> </ul>	
Relevant	X Not relevant
<ul> <li>4.12.5 - Hyper-abundant species</li> <li>Previous answer Cycle 2 (29/07/2011):</li> <li>Not relevant</li> </ul>	
Relevant	X Not relevant
<ul> <li>4.12.6 - Modified genetic material</li> <li>Previous answer Cycle 2 (29/07/2011):</li> <li>Not relevant</li> </ul>	
Relevant	X Not relevant
<b>positively</b> The factors listed above have no impact on the World heritage property	selected as relevant in 4.12 are affecting the property either negatively or
4.13. Management and institutional factors	

# 4.13.1 - Management system/Management plan

X Relevant			Not relevant	
	Impact	Origin		Trend of impact

Impact	4 Current	9 Potential	Inside	Cutside	Secreasing	⇒ Stable	Increasing
Positive X	×	×	×	×			1
Negative							

# 4.13.2 - Legal framework

X Relevant	Not relevant						
	Impact		Origin		Trend of impact		
Impact	4 Current	Potential	<ul> <li>Inside</li> </ul>	Cutside	Solution Decreasing	⇒ Stable	Increasing
O Positive X	×	×	×	×		<b>→</b>	
		~~					

# 4.13.3 - Governance

× Relevant	X Relevant						
	Impact Origin			in Trend of impact			
Impact	4 Current	Potential	<ul> <li>Inside</li> </ul>	Cutside	Secreasing	⇒ Stable	Increasing
O Positive X	×	×	×	×		$\rightarrow$	
Negative							

# 4.13.4 - Management activities

- Previous answer Cycle 2 (29/07/2011): Relevant, Positive, Current, Potential, Inside, Outside

X Relevant				Not relevant			
	Impact		Origin		Trend of impact		
Impact	4 Current	Potential	<ul> <li>Inside</li> </ul>	C Outside	Solution Decreasing	⇒ Stable	Increasing
O Positive X	×	×	×	×			~
Negative							

# 4.13.5 - Financial resources

X Relevant	Not relevant							
	Impact Origin			Trend of impact				
Impact	4 Current	Potential	<ul> <li>Inside</li> </ul>	C Outside	> Decreasing	⇒ Stable	Increasing	
O Positive X	×	×	×			$\rightarrow$		
Negative								

# 4.13.6 - Human resources

X Relevant			1	Not relevant				
	Impact		Origin		Trend of impact			
Impact	Gurrent	9 Potential	Inside	Coutside	> Decreasing	⇒ Stable	Increasing	
O Positive X	×		×				1	
Negative								

# 4.13.7 - Low impact research/monitoring activities

Previous answer Cycle 2 (29/07/2011):

• Relevant, Positive, Current, Inside

× Relevant	Not relevant						
	Impact		Origin		Trend of impact		
Impact	4 Current	9 Potential	<ul> <li>Inside</li> </ul>	C Outside	Secreasing	⇒ Stable	Increasing
O Positive X	×	×	×			$\rightarrow$	
Negative							

### 4.13.8 - High impact research/monitoring activities

Previous answer Cycle 2 (29/07/2011):

Not relevant

Relevant

× Not relevant

# 4.13.9 - Please comment as necessary on how the factors selected as relevant in 4.13 are affecting the property either negatively or positively

Management system and related management activities are carried out as per the Updated Management Plan (2014-2020) for the World Heritage property. Legal framework and governance is as per the State governing body. Financial resources required for the management and upgradation of the property is appropriate though there has been an increase in human resources. There are low scale on-going research activities related to science and astronomy with local schools and research scholars.

# 4.14. Other factor(s)

#### 4.14.1 - Other factor(s)

No other significant factors affect the property.

# 4.15. Factors Summary Table

# 4.15.1 - Factors Summary Table

Name	Impact	:		Origin		Trend
4.1 Buildings and Development						
4.1.1 Housing	٢	9			Ċ	<b>→</b>
4.1.2 Commercial development	٢	9			Ċ	$\rightarrow$
4.1.4 Major visitor accommodation and associated infrastructure	٢	9	9		Ċ	<b>→</b>
4.1.5 Interpretative and visitation facilities	٢		9		Ċ	<b>→</b>
4.2 Transportation Infrastructure						
4.2.1 Ground transport infrastructure	٢	9	9		Ċ	<b>→</b>
4.2.2 Underground transport infrastructure	٢		9		Ċ	<b>→</b>
4.3 Services Infrastructures						
4.3.2 Renewable energy facilities	٢		9	٢	Ċ	<b>→</b>
4.3.4 Localised utilities	٢	9	9		Ċ	<b>→</b>
4.4 Pollution						
4.4.5 Solid waste						
	0		9		Ċ	<b>→</b>
4.8 Social/Cultural uses of heritage						
4.8.1 Ritual/Spiritual/Religious and associative uses	٢	9	9	٢	Ċ	/
4.8.2 Society's valuing of heritage	٢	9	9	٢	Ċ	1
		~				
4.8.4 Changes in traditional ways of life and knowledge system	٢	4	4	٢	Ċ	<b>→</b>

4.8.5 Identity, social cohesion, changes in local popul	lation and commu	unity		٢	9	9		٢	<b>→</b>
4.8.6 Impacts of tourism/Visitation/Recreation				٢	9	9	۲	Ċ	<b>→</b>
4.13 Management and institutional factors									
4.13.1 Management system/Management plan				0	9	9	۲	Ċ	
4.13.2 Legal framework				٢	9	9	۹	C	<b>→</b>
4.13.3 Governance				٢	9	9	۹	C	<b>→</b>
4.13.4 Management activities				0	9	9	۲	Ċ	
4.13.5 Financial resources				٢	9	9	۲		<b>→</b>
4.13.6 Human resources				$\odot$	9		۲		
4.13.7 Low impact research/monitoring activities				٢	9	9	۲		<b></b>
Legend  I Current I Potent	tial	Negative	Positive	<li>Insi</li>	do		C Outsi	do	
Legena Current Potent	uai		V Positive	() Insi	ue		C Outsi	ue	

4.16. Assessment of current and potential positive and negative factors

# 4.16.1 - Assessment of current and potential negative and positive factors

4.1 Buildings and Development

Name		Impact		C	Drigin		Trend
4.1.1 Housi	ng	٢	4			Ċ	<b>→</b>
Spatial sca	e - Area affected by the factor						
×	Restricted						
	Localised						
	Extensive						
	Widespread						
Temporal s	cale - Occurence of the impact						
×	One off or rare						
	Intermittent or sporadic						
	Frequent						
	On-going .						
Impact - Im	pact on the attributes						
×	Insignificant						
	Minor						
	Significant						
	Major						

# Management response - Capacity of management to respond

·····j····	
×	High capacity
	Medium capacity
	Low capacity
	No capacity and / or resources
Trend - De	velopement over the last 6 years
	Decreasing
×	Static
	Increasing

Name	Impact	÷	Origin		Trend
4.1.2 Commercial development	٢	9		Ċ	<b>→</b>

# Spatial scale - Area affected by the factor

Spatial sca	le - Area affected by the factor
×	Restricted
	Localised
	Extensive
	Widespread
Temporal s	cale - Occurence of the impact
×	One off or rare
	Intermittent or sporadic
	Frequent
	On-going
Impact - Im	pact on the attributes
×	Insignificant
	Minor
	Significant
	Major
Manageme	nt response - Capacity of management to respond
×	High capacity
	Medium capacity
	Low capacity
	No capacity and / or resources
Trend - Dev	velopement over the last 6 years
	Decreasing
×	Static
	Increasing

Name	Impact	:		Origin		Trend
4.1.4 Major visitor accommodation and associated infrastructure	٢	9	9		Ċ	<b>→</b>

# Spatial scale - Area affected by the factor

~	Postrictod					
×	Restricted					
	Localised					
	Extensive					
	Widespread					
Temporal s	cale - Occurence of the impact					
×	One off or rare					
	Intermittent or sporadic					
	Frequent					
	On-going					
Impact - Im	pact on the attributes					
×	Insignificant					
	Minor					
	Significant					
	Major					
Manageme	nt response - Capacity of management to respond					
×	High capacity					
	Medium capacity					
	Low capacity					
	No capacity and / or resources					
Trend - Dev	elopement over the last 6 years					
	Decreasing					
×	Static					
	Increasing					
Name		Impact		Origin		Trend
4.1.5 Interp	retative and visitation facilities	٢	9		Ċ	<b>→</b>

Spatial sca	le - Area affected by the factor
	Restricted
×	Localised
	Extensive
	Widespread
Temporal s	scale - Occurence of the impact
	One off or rare
×	Intermittent or sporadic
	Frequent
	On-going
Impact - Im	pact on the attributes
×	Insignificant
	Minor
	Significant
	Major

Manageme	Int response - Capacity of management to respond
×	High capacity
	Medium capacity
	Low capacity
	No capacity and / or resources
Trend - De	velopement over the last 6 years
	Decreasing
×	Static
	Increasing

# 4.2 Transportation Infrastructure

Name		Impact			Origin		Trend
4.2.1 Grou	ind transport infrastructure	٢	4	9		Ċ	<b>→</b>
Cratial as							
Spatial Sc	ale - Area affected by the factor						
	Restricted						
×	Localised						
	Extensive						
	Widespread						
Temporal	scale - Occurence of the impact						
	One off or rare						
×	Intermittent or sporadic						
	Frequent						
	On-going						
Impact - Ir	npact on the attributes						
×	Insignificant						
	Minor						
	Significant						
	Major						
Managem	ent response - Capacity of management to respond						
×	High capacity						
	Medium capacity						
	Low capacity						
	No capacity and / or resources						
Trend - De	evelopement over the last 6 years						
	Decreasing						
×	Static						
	Increasing						
Name		Impact			Origin		Trend
4.2.2 Und	erground transport infrastructure	0		9		Ċ	<b>→</b>

<ul> <li>Restricted</li> <li>Localised</li> <li>Extensive</li> <li>Widespread</li> </ul> <b>Temporat:</b> - Occurence of the impact <b>1</b> One off or rare Intermittent or sporadic Fequent On-going
Extensive       Widespread       Certain of the impact       *     One off or rare       Intermittent or sporadic       Frequent
Widespread       Temporal - Occurence of the impact       X     One off or rare       Intermittent or sporadic       Frequent
Temporal       Occurence of the impact         X       One off or rare         Intermittent or sporadic       Intermittent or sporadic         Frequent       Frequent
Ne off or rare       Intermittent or sporadic       Frequent
Intermittent or sporadic Frequent
Frequent
On-going
Impact - Impact on the attributes
X Insignificant
Minor
Significant
Major
Management response - Capacity of management to respond
₩ High capacity
Medium capacity
Low capacity
No capacity and / or resources
Trend - Developement over the last 6 years
Decreasing
X Static
Increasing

# 4.3 Services Infrastructures

Name		Impact		Origin		Trend		
4.3.2 Rene	wable energy facilities	٥	9	٢	Ċ	<b>→</b>		
Spatial sca	ale - Area affected by the factor							
×	Restricted							
	Localised							
	Extensive							
	Widespread							
Temporal	Temporal scale - Occurence of the impact							
×	One off or rare							
	Intermittent or sporadic							
	Frequent							
	On-going							
Impact - In	pact on the attributes							

×	Insignificant
	Minor
	Significant
	Major
Manageme	ent response - Capacity of management to respond
×	High capacity
	Medium capacity
	Low capacity
	No capacity and / or resources
Trend - De	velopement over the last 6 years
	Decreasing
×	Static
	Increasing

Name Impact		Origin	Origin	
4.3.4 Localised utilities 3	9 9		Ċ	<b>→</b>

# Spatial scale - Area affected by the factor

×	Restricted					
	Localised					
	Extensive					
	Widespread					
Temporal s	Temporal scale - Occurence of the impact					
×	One off or rare					
	Intermittent or sporadic					
	Frequent					
	On-going					
Impact - Im	apact on the attributes					
×	Insignificant					
	Minor					
	Significant					
	Major					
Manageme	Int response - Capacity of management to respond					
×	High capacity					
	Medium capacity					
	Low capacity					
	No capacity and / or resources					
Trend - Dev	velopement over the last 6 years					
	Decreasing					
×	Static					
	Increasing					

# 4.4 Pollution

Name		Impact		Origin		Trend
4.4.5 Solid	waste					
		٢	9		Ċ	<b>→</b>
Spatial sca	le - Area affected by the factor					
×	Restricted					
~	Localised					
	Extensive					
	Widespread					
Temporal s	cale - Occurence of the impact					
×	One off or rare					
	Intermittent or sporadic					
	Frequent					
	On-going					
Impact - Im	pact on the attributes					
×	Insignificant					
	Minor					
	Significant					
	Major					
Manageme	nt response - Capacity of management to respond					
×	High capacity					
	Medium capacity					
	Low capacity					
	No capacity and / or resources					
Trend - Dev	relopement over the last 6 years					
×	Decreasing					
	Static					
	Increasing					

# 4.8 Social/Cultural uses of heritage

Name		Impact O		Origin	Origin		
4.8.1 Rit	ual/Spiritual/Religious and associative uses	٢	9	9	٢	Ċ	
Spatial s	scale - Area affected by the factor						
	Restricted						
×	Localised						
~							
	Extensive						
	Widespread						
Tempora	al scale - Occurence of the impact						
	One off or rare						

	Intermittent or sporadic			
×	Frequent			
	On-going			
Impact - Im	ppact on the attributes			
×	Insignificant			
	Minor			
	Significant			
	Major			
Manageme	nt response - Capacity of management to respond			
×	High capacity			
	Medium capacity			
	Low capacity			
	No capacity and / or resources			
Trend - Dev	velopement over the last 6 years			
	Decreasing			
×	Static			
	Increasing			
Name		Impact	Origin	Trend

Name	Impact	;		Origin	Trend	
4.8.2 Society's valuing of heritage	٢	9	9	۲	Ċ	

# Spatial scale - Area affected by the factor

Spatial sca	ale - Area affected by the factor
	Restricted
	Localised
×	Extensive
	Widespread
Temporal s	scale - Occurence of the impact
	One off or rare
	Intermittent or sporadic
	Frequent
×	On-going
Impact - Im	npact on the attributes
	Insignificant
	Minor
×	Significant
	Major
Manageme	ent response - Capacity of management to respond
×	High capacity
	Medium capacity
	Low capacity
	No capacity and / or resources
Trend - Dev	velopement over the last 6 years
	Decreasing

X Increasing

Name		Impact	t		Origin		Trend
4.8.4 Ch	anges in traditional ways of life and knowledge system	٢	4	9	۲	Ċ	<b>→</b>
Spatial s	scale - Area affected by the factor						
	Restricted						
×	Localised						
	Extensive						
	Widespread						
Tempora	al scale - Occurence of the impact						
	One off or rare						
×	Intermittent or sporadic						
	Frequent						
	On-going						
Impact -	Impact on the attributes						
	Insignificant						
	Minor						
×	Significant						
	Major						
Manage	ment response - Capacity of management to respond						
×	High capacity						
	Medium capacity						
	Low capacity						
	No capacity and / or resources						
Trend - I	Developement over the last 6 years						
	Decreasing						
×	Static						
	Increasing						

Name	Impact C		Origin		Trend	
4.8.5 Identity, social cohesion, changes in local population and community	٢	9	9		Ċ	$\rightarrow$

Spatial sca	Spatial scale - Area affected by the factor				
×	Restricted				
	Localised				
	Extensive				
	Widespread				
Temporal s	scale - Occurence of the impact				
×	One off or rare				
	Intermittent or sporadic				

	Frequent
	On-going
Impact - Im	npact on the attributes
×	Insignificant
	Minor
	Significant
	Major
Manageme	ent response - Capacity of management to respond
×	High capacity
	Medium capacity
	Low capacity
	No capacity and / or resources
Trend - De	velopement over the last 6 years
	Decreasing
×	Static

Name		Impact			Origin	
4.8.6 Impacts of tourism/Visitation/Recreation		4	9	۹	Ċ	<b>→</b>

# Spatial scale - Area affected by the factor

Spatial sca	le - Area affected by the factor				
	Restricted				
×	Localised				
	Extensive				
	Widespread				
Temporal s	cale - Occurence of the impact				
	One off or rare				
	Intermittent or sporadic				
	Frequent				
×	On-going				
Impact - Im	Impact - Impact on the attributes				
	Insignificant				
	Minor				
×	Significant				
	Major				
Manageme	nt response - Capacity of management to respond				
×	High capacity				
	Medium capacity				
	Low capacity				
	No capacity and / or resources				
Trend - Dev	velopement over the last 6 years				
	Decreasing				
×	Static				

# 4.13 Management and institutional factors

Name		Impact			Origin		Trend
4.13.1 Mai	nagement system/Management plan	٢	9	9	۲	Ċ	
Spatial sc	ale - Area affected by the factor						
	Restricted						
×	Localised						
	Extensive						
	Widespread						
Temporal	scale - Occurence of the impact						
	One off or rare						
	Intermittent or sporadic						
×	Frequent						
	On-going						
Impact - In	npact on the attributes						
	Insignificant						
	Minor						
×	Significant						
	Major						
Managem	ent response - Capacity of management to respond						
×	High capacity						
	Medium capacity						
	Low capacity						
	No capacity and / or resources						
Trend - De	evelopement over the last 6 years						
	Decreasing						
	Static						
×	Increasing						
Name	al framework		9	9	Origin	Ċ	Trend →
				,	3	3	
							_
Spatial sc	ale - Area affected by the factor						
	Restricted						
×	Localised						
	Extensive						
	Widespread						
Temporal	scale - Occurence of the impact						
	One off or rare						
	Intermittent or sporadic						

×	Frequent
	On-going
Incore the	
Impact - Im	pact on the attributes
	Insignificant
	Minor
×	Significant
	Major
Manageme	nt response - Capacity of management to respond
×	High capacity
	Medium capacity
	Low capacity
	No capacity and / or resources
Trend - Dev	velopement over the last 6 years
	Decreasing
×	Static
	Increasing

Name		:		Origin		Trend
4.13.3 Governance		9	9	٢	Ċ	<b>→</b>

# Spatial scale - Area affected by the factor

Spatial sca	le - Area affected by the factor
	Restricted
×	Localised
	Extensive
	Widespread
Temporal s	scale - Occurence of the impact
	One off or rare
	Intermittent or sporadic
×	Frequent
	On-going
Impact - Im	pact on the attributes
	Insignificant
	Minor
×	Significant
	Major
Manageme	nt response - Capacity of management to respond
×	High capacity
	Medium capacity
	Low capacity
	No capacity and / or resources
Trend - Dev	velopement over the last 6 years
	Decreasing
×	Static

Increasing

Name				Origin	Trend	
4.13.4 Management activities		9	9	۲	Ċ	1

# Spatial scale - Area affected by the factor

Spatial sca	le - Area affected by the factor
	Restricted
×	Localised
	Extensive
	Widespread
Temporal s	scale - Occurence of the impact
	One off or rare
	Intermittent or sporadic
×	Frequent
	On-going
Impact - Im	pact on the attributes
	Insignificant
	Minor
×	Significant
	Major
Manageme	nt response - Capacity of management to respond
×	High capacity
	Medium capacity
	Low capacity
	No capacity and / or resources
Trend - Dev	velopement over the last 6 years
	Decreasing
	Static
×	Increasing

Name		Impact			Trend
4.13.5 Financial resources		9	9	۲	<b>→</b>

# Spatial scale - Area affected by the factor

Spatial Sca	e - Alea allected by the factor
	Restricted
×	Localised
	Extensive
	Widespread
Temporal s	icale - Occurence of the impact
	One off or rare
	Intermittent or sporadic
×	Frequent

	On-going
Impact - Im	pact on the attributes
	Insignificant
	Minor
×	Significant
	Major
Manageme	nt response - Capacity of management to respond
×	High capacity
	Medium capacity
	Low capacity
	No capacity and / or resources
Trend - Dev	velopement over the last 6 years
	Decreasing
×	Static
	Increasing

Name	Impact Origin		Trend		
4.13.6 Human resources	٢	9		0	

Spatial sc	ale - Area affected by the factor
	Restricted
×	Localised
	Extensive
	Widespread
Temporal	scale - Occurence of the impact
	One off or rare
	Intermittent or sporadic
	Frequent
×	On-going
Impact - In	npact on the attributes
	Insignificant
	Minor
×	Significant
	Major
Manageme	ent response - Capacity of management to respond
×	High capacity
	Medium capacity
	Low capacity
	No capacity and / or resources
Trend - De	evelopement over the last 6 years
	Decreasing
	Static

Name	Impact			Origin	Trend
4.13.7 Low impact research/monitoring activities	٢	4	9	۲	<b>→</b>

# Spatial scale - Area affected by the factor

	Restricted
×	Localised
	Extensive
	Widespread
Temporal s	scale - Occurence of the impact
	One off or rare
	Intermittent or sporadic
×	Frequent
	On-going
Impact - Im	apact on the attributes
	Insignificant
	Minor
×	Significant
	Major
Manageme	nt response - Capacity of management to respond
×	High capacity
	Medium capacity
	Low capacity
	No capacity and / or resources
Trend - Dev	velopement over the last 6 years
	Decreasing
×	Static
	Increasing

4.17. Serial inscriptions (national or transnational)

# 4.17.1 - If your property is a serial inscription (national or transnational) please identify which components of the property are impacted by each factor

Not applicable.

4.18. Prediction of the state of conservation at next cycle of Periodic Reporting.

# 4.18.1 - Please predict what the state of conservation of each attribute will be approximately 6 years from now (at the time of the next cycle of Periodic Reporting)

	Attribute	Preserved	Compromised	Seriously compromised	Lost
4.18.1.1	Location & Setting within Jaipur city	×			
4.18.1.2	The most significant in being the best-preserved conglomerate of pre-telescopic masonry astronomical instruments.	×			
4.18.1.3	18 Astronomical Instruments - Physical state	×			
4.18.1.4	18 Astronomical Instruments - Calibrations & measurements	×			
4.18.1.5					

# 5. Protection and Management of the Property

### 5.1. Boundaries and Buffer Zones

5.1.1 - Are the boundaries of the World Heritage property adequate to maintain the property's Outstanding Universal Value? The boundaries are adequate to maintain the property's Outstanding Universal Value

### 5.1.2 - Are the boundaries of the World Heritage property known and recognised?

The boundaries are known by both the management authority and local communities/landowners

### 5.1.3 - Are the buffer zone(s) of the World Heritage property adequate to maintain the property's Outstanding Universal Value?

The buffer zones are **adequate** to maintain the property's Outstanding Universal Value

### 5.1.4 - Are the boundaries of the buffer zones known and recognised?

The buffer zones of the World Heritage property are known and recognised by both the management authority and local communities/landowners

#### 5.1.5 - Comments, conclusions and/or recommendations related to boundaries and buffer zones of the World Heritage property

The existing boundary of the World heritage property and the designated Buffer zone are appropriate for effective protection, management and monitoring of the property and its Outstanding Universal Value.

### 5.2. Protective Measures

#### 5.2.1 - Protective designation (legal, regulatory, contractual, planning, institutional and/or traditional).

The Jantar Mantar is protected under the Rajasthan Monuments Archaeological Site and Antiquities Act, 1961, under Sections 3 and 4.

It was designated a monument of state level importance in 1968, and is thus protected by the Department of Archaeology and Museums. This protection takes the form of administrative and scientific monitoring of the conservation of the property and the provision of financial and human resources carrying out works.

The Rajasthan Monuments Act (1961) applies to the historic parts of the buffer zone. The landuse framework law of the municipal authority (1970)

results in the application of a series of existing urban regulation texts:

• the municipal street plan,

- the joint conservation plan for the Jantar Mantar and the Hawa Mahal,
- the future management plan for the district, which provides for an upgrading of the eastern part of the buffer zone.
- the new Master Plan for Jaipur, which should be promulgated for the period 2010-2025.

Source: Periodic Reporting Cycle 2

# 5.2.2 - Please list any legislation and other measures (regulatory -including spatial planning- contractual, institutional or traditional) not included in 5.2.1 and indicate the category

# 5.2.3 - Is the legal framework (i.e. legislation and/or regulation including spatial planning) adequate for maintaining the Outstanding Universal Value including conditions of Integrity and/or Authenticity of the property?

The legal framework for maintaining of the Outstanding Universal Value including conditions of Authenticity and/or Integrity of the World Heritage property provides an adequate basis for effective management and protection

# 5.2.4 - Is the legal framework (i.e. legislation and/or regulation) adequate in the buffer zone for maintaining the Outstanding Universal Value including conditions of Integrity and/or Authenticity of the property?

The legal framework in the buffer zone for the maintenance of the Outstanding Universal Value including conditions of Authenticity and/or Integrity of the World Heritage property provides an adequate basis for effective management and protection

# 5.2.5 - Is the legal framework (i.e. legislation and/or regulation) in the broader setting of the World Heritage property adequate for maintaining the Outstanding Universal Value including conditions of Integrity and/or Authenticity of the property?

The legal framework for the broader setting of the World Heritage property provides an **adequate basis for** effective management and protection of the property, contributing to the maintenance of its Outstanding Universal Value including conditions of Authenticity and/or Integrity

### 5.2.6 - Can the legal framework (i.e. legislation and/or regulation) be enforced?

There is adequate capacity/resources to enforce legislation and/or regulation in the World Heritage property

### 5.2.7 - Please provide a short summary of how the legislation, including spatial planning and other regulation, works in practice

The Jantar Mantar, Jaipur is marked as a key historic landmark in the master plan of Jaipur city. The historic walled city of Jaipur is demarcated as a historic zone in the master plan of Jaipur with special bylaws applicable for the area. The site of Jantar Mantar, Jaipur is also ear marked as an important monument in the Special Area heritage plan for UNESCO World heritage Jaipur city (in process). These are key documents to guide any work on site.

# 5.2.8 - Comments, conclusions and/or recommendations about the information related to the measures taken to protect the World Heritage property

The World heritage property is already well protected and legal protection is also working well. Hence, there is no requirement of extra measures for legal protection.

### 5.3. Management System/Management Plan

5.3.1 - Please check the box which most closely match the character of the governance and management system of the property Public management system joint regional/local

# If 'Other', please specify

# 5.3.2 - Management System: Please indicate which of the various management tools listed below are used to help protect the property.

A statutory Management Plan or zoning plan for the property.
An integrated management plan combining World Heritage and any other designations
A management plan
A disaster, climate or conflict risk management plan
A visitor/visitation management plan
An environmental management framework

#### 5.3.3 - Please give a brief description of the management system currently in place at your property

The works related to secondary plans as validated in the above list like Interpretation, Use & Visitor Management Plan; Landscape & Environment Plan; Comprehensive Mobility Plan and Risk Management plan included in the Management plan are carried with phased implementation and accordingly management activities are undertaken on the site.

#### 5.3.4 - Management Documents

Title	Status	Available	Date	Link to source
Management Plan 2009-2013 January2009	N/A	Available	2009	

### Comment

The Management Plan 2009-2013 has been revised and updated as 'Jantar Mantar Management plan 2014 - 2020' which is further detailed and serves as the latest document to guide the protection and management of the site.

# 5.3.5 - Has any use been made of the 2011 Recommendation on the Historic Urban Landscape in developing policies and best practices for the protection of this property?

Some use has been made of the 2011 Recommendation on the Historic Urban Landscape

# 5.3.6 - If the Historic Urban Landscape Recommendation has been used at this property, please describe briefly what has been done.

The proposals related to Landscape and Environment Plan for Jantar Mantar is as per the Historic Urban Landscape Recommendations, some of which has been executed on site.

# 5.3.7 - Has any use been made of the Policy Document on the Impacts of Climate Change on World Heritage Properties at the property?

No use has been made of the World Heritage Policy for Climate Change

# 5.3.8 - If the Climate Change policy has been used, please briefly describe what has been done along with any research on the impacts of Climate Change on the property:

Monitoring of scientific instruments and readings will consider climate change impact from 2020 onwards. Jantar Mantar will follow Rajasthan State Action Plan guidelines on Climate Change.

### 5.3.9 - Has any use been made of the Strategy for Reducing Risks from Disasters at World Heritage Properties at the property ?

The risk management policy is fully based on the agreed Strategy for Reducing Risks from Disasters at World Heritage Properties

# 5.3.10 - If the Strategy for Reducing Risks from Disasters at World Heritage Properties has been used, please briefly describe what has been done

The strategy for reducing risks from disasters at World heritage property is as per the Risk management Plan and regular drills are carried out to ensure effectiveness and preparedness for mitigation at the time of possible disaster.

### 5.3.11 - Rate the coordination between the various levels of administration (i.e. national/federal; regional/provincial/state;

### local/municipal etc.) involved in the management of the World Heritage property

There is adequate coordination between all bodies/levels involved in the management of the property

# 5.3.12 - Is the management system/plan adequate to maintain the property's Outstanding Universal Value?

The management system/plan is fully adequate to maintain the property's Outstanding Universal Value

### 5.3.13 - Is the management system being implemented?

The management system is being fully implemented and monitored

### 5.3.14 - Is there an annual work/action plan and is it being implemented?

An annual work/action plan exists and all of its activities are being implemented and monitored

# 5.3.15 - Does the management system include formal mechanisms and procedures that ensure participation and contribution of the following groups, living within or near the World Heritage property and/or buffer zone in management decisions that maintain the Outstanding Universal Value of the property?

		Not applicable	No mechanisms for participation	Some participation	Direct participation	Transformative participation in all relevant decision processes
5.3.15.1	Local communities				×	

5.3.15.2	Local authorities				×	
5.3.15.3	Landowners in the property and the buffer zone				×	
5.3.15.4	Indigenous peoples				×	
5.3.15.5	Women				×	
5.3.15.6	Other specific groups				×	
	If you selected, 'Other specific groups' please specify	Science & Astr	onomical groups & Universal	access for differently a	bled	

# 5.3.16 - Please rate the cooperation/relationship between the World Heritage property managers/coordinators/staff and the following groups

		Not applicable	Non-existent	Poor	Fair	Good
5.3.16.1	Local communities					×
5.3.16.2	Local/Municipal authorities					×
5.3.16.3	Indigenous peoples					×
5.3.16.4	Landowners					×
5.3.16.5	Women					×
5.3.16.6	Youth/Children					×
5.3.16.7	Researchers					×
5.3.16.8	Local Visitors/Tourists					×
5.3.16.9	National/International tourists					х
5.3.16.10	Tourism Industry					х
5.3.16.11	Local businesses and industries					х
5.3.16.12	NGOs					×
5.3.16.13	Other specific groups					×
	If you selected 'Other specific groups', please specify	Astronomy & Arc	hitecture			

# 5.3.17 - Please rate the extent to which the management system of your property contributes towards achieving the objectives of the World Heritage Committee's Policy for the Integration of a Sustainable Development Perspective into the Processes of the *World Heritage Convention*

		Not applicable	No contribution	Limited	Significant	Full achievement
5.3.17.1	The management system of the property contributes to gender equality				×	
5.3.17.2	The management system of the property provides ecosystem services/benefits to the local community (e.g. fresh air, water, food, medicinal plants)				×	
5.3.17.3	The management system of the property contributes to social inclusion and equity, improving opportunities for all, irrespective of age, sex, disability, ethnicity, origin, religion or economic or other status				×	
5.3.17.4	The management system of the property integrates a human rights-based approach				×	
5.3.17.5	The management system of the property contributes to fostering inclusive local economic development, and to enhancing livelihood				×	
5.3.17.6	The management system of the property contributes to conflict prevention, including respect for cultural diversity within and around the World Heritage property				×	

# 5.3.18 - Please provide further details on the ratings of the management system given in the table above

The management system is as per the updated Management Plan and is good and effective for the World heritage property.

# 5.3.19 - Comments, conclusions and/or recommendations related to the management system/plan

The Management plan is quite well structured and operational and it is recommended to continue in the same manner and now there is also a need to merge the system of management within the larger context of Jaipur UNESCO World Heritage city.

### 6. Financial and Human Resources

6.1. Funding

# 6.1.1 - If your funding sources do not exactly fit those shown, put the relevant amounts against the funding type that most closely represents your situation, and use the comment box below to provide more details.

		Project costs	Running costs
6.1.1.1	Multilateral funding (GEF, World Bank, etc.)	%	%
6.1.1.2	Bilateral international funding	%	%
6.1.1.3	World Heritage Fund (International Assistance)	%	%
6.1.1.4	Contribution from other conventions and programmes	%	%
6.1.1.5	International donations (NGOs, foundations, etc.)	%	%
6.1.1.6	Governmental (national/federal)	%	%
6.1.1.7	Governmental (regional/provincial/state)	100 %	100 %
6.1.1.8	Governmental (local/municipal)	%	%
6.1.1.9	In-country donations (NGOs, foundations, etc.)	%	%
6.1.1.10	Individual visitor charges (e.g. entry, toilets, parking, camping fees, etc.)	%	%
6.1.1.11	Commercial activities (e.g. merchandising and catering, filming permit, concessions, etc.)	%	%
6.1.1.12	Other	%	%
		Total 100 %	Total 100 %

6.1.2 - Please comment here on any other aspects of funding sources not covered in the table above No comments

### 6.1.3 - Is the current budget sufficient to manage the World Heritage property effectively?

The available budget is adequate for effective management of the World Heritage property

### 6.1.4 - Are the existing sources of funding secure and likely to remain so?

The existing sources of funding are secure over both the medium- and long-term

#### 6.1.5 - Comments, conclusion, and/or recommendations related to finance and infrastructure

The visitor footfall has been increased but during the COVID pandemic it was affected. Now with governmental measures the visitor numbers to the site is again getting better.

# 6.1.6 - Estimate the distribution of men and women involved in the management, conservation, interpretation of the World Heritage properties and the extent to which they are drawn from local communities.

		From local communities %	From elsewhere %
6.1.6.1	Men	50 %	%
6.1.6.2	Women	50 %	%
		Total 100 %	Total 0 %

# 6.1.7 - Are available human resources adequate to manage the World Heritage property?

Human resources are **adequate** for management needs

# 6.1.8 - Considering the management needs of the World Heritage property, please rate the availability of professionals in the following disciplines

Conservation	Good
Environmental sustainability	Good
Community participation and inclusion	Good
Risk preparedness	Good
Capacity development and education	Good
Administration	Good
Research and monitoring	Good
Awareness raising and public information/communication	Good
Marketing and promotion	Good
Interpretation	Good
Visitor management/tourism	Good
Enforcement (custodians, police)	Good

# 6.1.9 - Please rate the availability of training opportunities for the management of the World Heritage property in the following disciplines

Conservation	Good
Environmental sustainability	Good
Community participation and inclusion	Good
Risk preparedness	Good
Capacity development and education	Good
Administration	Good
Research and monitoring	Good
Awareness raising and public information/communication	Good
Marketing and promotion	Good
Interpretation	Good
Visitor management/tourism	Good
Enforcement (custodians, police)	Good

### 6.1.10 - Has any use been made of the World Heritage Strategy for Capacity Building at the property?

Training and capacity building at this property is fully based on the World Heritage Strategy for Capacity Building

# 6.1.11 - If the World Heritage Strategy for Capacity Building has been used, please briefly describe what has been done.

Organisation of workshops to educate students, professionals, locals and other related groups in astronomy and integration of these events related to Indian astrology culture is within the property program of events for capacity building and knowhow.

# 6.1.12 - Are there site-specific capacity building plans or programmes that develop local expertise and that contribute to the transfer of skills for the conservation and management of the World Heritage property?

A site-based capacity building plan or programme is in place and fully implemented; all technical skills are being transferred to those managing the property locally

### 6.1.13 - Comments, conclusions and/or recommendations related to human resources, expertise and training

There are regular site-specific capacity building programmes which help in strengthening local expertise related to traditional building construction knowledge and relative innovations required as a skill for conservation and activities related to effective management of the World Heritage property.

### 7. Scientific Studies and Research Projects

7.1 - Is there adequate knowledge (scientific or traditional) about the values and attributes of the World Heritage property to support planning, management and decision-making to ensure that Outstanding Universal Value is maintained? Knowledge about the values and attributes of the World Heritage property is adequate

# 7.2 - Is there a planned programme of research at the property which is directed towards management needs and/or improving understanding of Outstanding Universal Value?

There is a **comprehensive**, **integrated programme** of research, which is relevant to management needs and/or improving understanding of Outstanding Universal Value

#### 7.3 - Are results from research programmes publicly available and disseminated?

Research results are shared widely with active outreach to local communities and national and international audiences

#### 7.4 - Comments, conclusions and/or recommendations related to scientific studies and research projects

Routine measurements and calibrations are conducted of the 18 instruments by traditional knowledge experts and astro-physicists ranging from local to international groups to ensure their scientific functioning and also as a resource for extended research programmes. Activities related to other key attributes related to location and setting are also carried out for understanding of OUV of World heritage property.

### 8. Education, Information and Awareness Building

# 8.1 - Please rate the awareness and understanding of the existence and justification for inscription of the World Heritage property amongst the following groups

Local communities	Good
Local/municipal authorities	Good
Indigenous peoples	Good
Landowners	Good
Women	Good

Youth/children	Good
Researchers	Good
Local visitors	Good
National/international tourists	Good
Tourism industry	Good
Local businesses and industries	Fair
NGOs	Good
Other specific groups	Good
If you selected 'Other specific groups', please describe	Science & Astronomy

8.2 - Does the property have a heritage education programme(s) for children and/or youth, that can contribute to a better understanding of heritage, promote diversity and foster intercultural dialogue?

There is a planned and effective education and awareness programme for children and youth that contributes to the protection of the World Heritage property

8.3 - Who are the target audiences for education and awareness programmes at your property?

Local communities
Local/municipal authorities
Indigenous peoples
Landowners
Women
Youth/children
Researchers
Local Visitors
National/international tourists
Tourism industry
Local businesses and industries
NGOs
Other specific groups
Science, Astronomy and Architecture

8.4 - Please rate the adequacy of the following visitor facilities and services at the World Heritage property for education, information, interpretation and awareness building

Visitor centre	Good
Site museum	Good
Information booths	Good
Guided tours	Good
Trails/routes	Good
Printed information materials	Good
Online (website, social media, etc.)	Good
Transportation facilities	Good
Other	Good
If 'Other' is selected, please specify	App for AR/VR

#### 8.5 - Comments, conclusions and/or recommendations related to education, information and awareness building

Strategic approach with effective tools of interpretation of site and its OUV has been planned at multiple levels to ensure maximum engagement with as wide a range of visitors as possible and it is recommended that this continues with the same spirit in future.

#### 9. Visitor Management

# 9.1 - Please provide estimated annual visitor numbers (including national and international visitors) since the last Periodic Report

196219 / 1312792 / 1275054 / 1177540 / 110816 /

#### 9.2 - What information sources are used to collect visitor statistics?

Entry tickets and registries

#### Visitor surveys

9.3 - What is the average length stay of a visitor to the World Heritage property?

One to three hours

#### 9.4 - Please provide the source of information

Entry tickets and Registration

# 9.5 - What is the approximate average daily visitor expenditure? (Please provide an estimated monetary figure in USD)

40 / 11 / 10 / 2 / 12 /

### 9.6 - Please provide the source of information

Administration team, kiosks on site and visitors survey

# 9.7 - Does the management system/plan for the World Heritage property include a strategy with an action plan to manage visitors, tourism activity and its derived economic, socio-cultural and environmental impacts?

There is a planned and effective strategy to manage visitors, tourism activity and its derived impacts on the World Heritage property

#### 9.8 - Please provide any comments relating to the answer provided above in question 9.7

The government has accepted tourism as an important national industry and tourism in Rajasthan, specifically historic sites of Jaipur including Jantar Mantar has been an important generator of revenue. Interpretation, Use & Visitor Management plan is in place and is quite effective in managing visitors to site and it is recommended to continue in the same manner.

# 9.9 - Is visitor use effectively managed to maintain the Outstanding Universal Value of the property?

Visitor use of the World Heritage property is effectively managed and does not impact its Outstanding Universal Value

# 9.10 - Is the effectiveness of tourism management regularly monitored?

Yes, through the UNESCO Tourism Management Assessment Tool

# If a different system, please specify

State Tourism Department

# 9.11 - How does the tourism industry cooperate with the site management to improve visitor experiences and maintain the Outstanding Universal Value of the World Heritage property?

There is good cooperation between those responsible for the World Heritage property and the tourism industry to present the Outstanding Universal Value and increase appreciation

### 9.12 - How well is the information on the Outstanding Universal Value of the property presented and interpreted? The Outstanding Universal Value of the property is adequately presented and interpreted

### 9.13 - At how many locations is the World Heritage emblem displayed at the property?

In one location and easily visible to visitors

# 9.14 - How does visitor/tourism revenue (e.g. entry charges, permits) contribute to the management of the World Heritage property? Fees are collected and make a substantial contribution to the management of the World Heritage property

9.15 - Are there locally driven sustainable tourism initiatives? Not applicable

If 'Yes', please specify State Tourism Department

### 9.16 - Are the benefits of tourism shared with local communities?

Yes

# If 'Yes', please specify

State Tourism Department

# 9.17 - Comments, conclusions and/or recommendations related to visitation/tourism/public use of the World Heritage property

Aspects related to visitation, tourism and public and community use of the World heritage property are handled as per the Visitor Management Plan and is quite strategic and effective in implementation.

### 10. Monitoring

# 10.1 - Is there a monitoring programme at the property directed towards management needs and/or towards improving the understanding of the Outstanding Universal Value?

There is a **comprehensive**, integrated programme of monitoring, which is relevant to management needs and/or improving understanding of the Outstanding Universal Value

10.2 - Is necessary information available in order to define key indicators for measuring the state of conservation and are they used in

### monitoring how the Outstanding Universal Value of the property is being maintained?

Information on the values of the World Heritage property is **adequate and key indicators have been defined** for measuring the state of conservation and **are being used in monitoring** of how the Outstanding Universal value of the property is being maintained

# 10.3 - Are key indicators defined and in place for the following principal aspects of the property?

	Extend of indicators	Not applicable	No indicators	Indicators have been defined but are not yet in use	Indicators are in place and in use since the last Periodic Reporting cycle
10.3.1	State of conservation				×
10.3.2	Effectiveness of the management system				×
10.3.3	Character of governance				×
10.3.4	Appropriate synergy with other conservation designations				×
10.3.5	Contribution to sustainable development				×
10.3.6	Capacity development				×

# 10.4 - Please provide information on relevant key indicators adopted at the property

The relevant key indicators adopted for the property as well as on the implementation of property-related Committee Decisions are planning and policy, assessment and conservation and of building fabric, tourism and visitor management as well as effective site interpretation with research facilities. These are detailed in the Management plan and conducted in the same manner.

#### 10.5 - Please rate the level of involvement in monitoring of the following groups:

World Heritage managers/coordinators and staff	Good
Local/municipal authorities	Good
Local communities	Good
Indigenous peoples	Good
Landowners	Good
Women	Good
Researchers	Good
Tourism industry	Good
Local businesses and industry	Good
NGOs	Good
Other specific groups	Good
If you selected 'Other specific groups', please specify	Science & Astronomy

# **10.6 - Has the State Party implemented relevant recommendations arising from the World Heritage Committee?** Implementation is underway

# 10.7 - Please provide comments relevant to the implementation of recommendations from the World Heritage Committee.

8 out of 10 recommendations from the World Heritage Committee have been implemented in the World Heritage property. Recommendations related to consideration of present and potential constraints arising from urban development and traffic in the environment of the property, outside the current buffer zone and giving greater attention to the landscape impact of restructuring in the immediate vicinity of the property is underway.

#### 10.8 - Comments, conclusions and/or recommendations related to Monitoring

The monitoring of the World Heritage property has been done as per the regulatory framework provided in the Management Plan and secondary plans and it is recommended that the same monitoring system should be followed as per the Updated Management plan of 2014-2020.

### 11. Identification of Priority Management Needs

# 11.1 - Identification of Priority Management Needs

5.3	Management System/Management Plan	
5.3.5	Some use has been made of the Historic Urban Landscape Recommendation to develop policies and best practices for the protection of the property	
5.3.7	No use has been made of the Policy Document on the Impacts of Climate Change on World Heritage Properties at the property	×
Pleas	e select 1 more issues.	
Ple	ease save this question to reflect changes	

# 12. Summary and Conclusions

### 12.1. Summary - Factors affecting the Property

### 12.1.1 - Summary - Factors affecting the Property

4.4	Pollution						
4.4.5	Solid waste	No attribute is affected by this factor	Regular check has been monitored on site to foresee any impact caused due to this factor	Monitoring done as per the management plan by site administration team and local bodies	Regularly on a monthly basis	Jaipur Municipal Corporation Heritage, Government of Rajasthan.	No comments

Summary - Factors affecting the Property **completed** 

### 12.2. Summary - Management Needs

### 12.2.1 - Summary - Management Needs

5.3	Management System/Management Plan				
		Actions	Timeframe	Lead agency (and others involved)	More info / comment
5.3.7	No use has been made of the Policy Document on the Impacts of Climate Change on World Heritage Properties at the property	Monitoring of scientific instruments and readings will consider climate change impact from 2020 onwards. Jantar Mantar will follow Rajasthan State Action Plan guidelines on Climate Change.	5 years	Amber Development & Management Authority, GoR	No comments
Summary - Management Needs completed					

# 12.3. Conclusions on the State of Conservation of the Property

**12.3.1** - Following the analysis undertaken for this report, what is the current state of Authenticity of the World Heritage property? The Authenticity of the World Heritage property has been preserved

# **12.3.2 - Following the analysis undertaken for this report, what is the current state of Integrity of the World Heritage property?** The Integrity of the World Heritage property is **intact**

# 12.3.3 - Following the analysis undertaken for this report, what is the current state of the World Heritage property's Outstanding Universal Value?

The World Heritage property's Outstanding Universal Value has been maintained.

#### 12.3.4 - What is the current state of the property's other values?

Other important cultural and/or natural values and the state of conservation of the World Heritage property are intact

#### 12.3.5 - Comments. conclusions and/or recommendations related to the state of conservation of the property.

The Jantar Mantar observatory complex at Jaipur is presently in a good state of conservation. According to the updated Conservation Plan and assessments, the Department of Archaeology and Museums executes repair and restoration while adopting use of appropriate materials and traditional techniques. The instruments are also restored as per need along with circulation pathways. None of the instruments at Jantar Mantar show any structural damage or deterioration in the current situation.

# 13. Impact of World Heritage Status

#### 13.1 - Please rate the impacts of World Heritage status of the property in relation to the following areas

Conservation	Very positive
Research and monitoring	Very positive
Management effectiveness	Very positive
Quality of life for local communities and indigenous peoples	Very positive
Recognition	Very positive
Education	Very positive
Infrastructure development	Very positive
Funding for the property	Positive

International cooperation	Very positive
Political support for conservation	Very positive
Legal/Policy framework	Very positive
Advocacy	Very positive
Institutional coordination	Very positive
Security	Very positive
Gender equality	Very positive
Provision of ecosystem services/ benefits to local communities	Very positive
Social inclusion and equity, and improvement of opportunities for all, irrespective of age, sex, disability, ethnicity, origin, religion, or economic or other status	Very positive
Fostering inclusive local economic development and enhancing livelihood	Very positive
Contributing to conflict prevention, including respect for cultural diversity within and around heritage properties	Very positive
Other	Not applicable
If 'Other', please specify	

### 13.2 - Comments, conclusions and/or recommendations related to World Heritage status and its impacts

To ensure that the OUV of the site is maintained and to ensure a sustainable and integrated development of the site, the Management Plan has been further revised and updated for an extended period of five years from 2015-2020 and is being implemented.

### 14. Good Practice in the Implementation of the World Heritage Convention

# 14.1 - Example of good practice in World Heritage protection, identification, conservation or management at the property level

There are illustrated and executed activities related to the attributes and OUV of the property like regular readings and calibrations of all the 18 instruments of the astronomical observatory and involving local citizens in the annual festivals related to using the instruments while ensuring their functioning. Apart from this, promotional and outreach activities like orientation programmes related to science, astronomy and education is carried out with related organisations and NGOs to ensure local participation and site interpretation. Recently the department also initiated 'Night sky tourism' activity to study the sky conditions during night hours on special days like equinox, etc. Every year World Heritage day is celebrated as per the thematic content of the programme for extended local participation and there are future plans to carry similar endeavors on the World heritage property.

#### 14.2 - Define which topics are covered by this example of best practice at the property level

Sustainable Development	
State of Conservation	
Management	
Governance	
Capacity Building	

# 15. Assessment of the Periodic Reporting Exercise

### 15.1. Relevance of Periodic Reporting

#### 15.1.1 - Has the Periodic Reporting process improved the understanding of the following?

The World Heritage Convention
The concept of Outstanding Universal Value
The property's Outstanding Universal Value
The concept of Integrity and/or Authenticity
The property's Integrity and/or Authenticity
Management effectiveness to maintain the Outstanding Universal Value
Monitoring and reporting

# 15.1.2 - Please rate the follow-up to conclusions and recommendations from previous Periodic Reporting exercise by the following entities

State Party	Good
Site Managers	Good
UNESCO World Heritage Centre	Good
Advisory Bodies (ICOMOS, IUCN, ICCROM)	Good

#### 15.2. Use of Data

#### 15.2.1 - How do the authorities in charge of the property plan to use the data recorded from this cycle of Periodic Reporting?

Revision of priorities/strategies/policies for the protection, management and conservation of heritage

Update of management plan	S		
Fundraising			
Awareness raising			
Advocacy			

# 15.2.2 - Comments on use of data from the Cycle of Periodic Reporting

The exercise of cycle of Periodic Reporting has proved useful in management, protection, conservation and governance of key attributes and OUV of the World heritage property. All actions pertaining to site can be effectively planned and executed from the experience of this exercise.

#### 15.3. Timing and resources

#### 15.3.1 - Entities involved in the filling out of this online questionnaire (tick as many boxes as applicable)

Governmental institutions responsible for cultural and natural heritage

Site Manager/Coordinator World Heritage property staff

External experts

# **15.3.2** - Has a gender balanced contribution and participation been considered in the filling out of this questionnaire? Gender balance is explicitly considered and effectively implemented in the process.

# 15.3.3 - Were you given adequate time (i.e. roughly ten months) to gather necessary information and to fill in this questionnaire? Yes

### 15.3.4 - Please estimate the time (working hours) needed to complete this questionnaire

240 / 120 / 240 /

# 15.3.5 - Did you mobilise any additional resources to fill out this questionnaire?

	Additional resources	No	Yes
15.3.5.1	Human resources		×
15.3.5.2	Financial resources for organizing consultation meetings/ training	×	

# 15.4. Format and content of the Periodic Report

### **15.4.1 - How accessible was the information required to complete this questionnaire? All** required information was accessible.

#### 15.4.2 - Was the questionnaire easy to use and clear to understand?

		Very Difficult	Difficult	Easy	Very easy
15.4.2.1	Ease of use of questionnaire			×	
15.4.2.2	Clarity of questions			×	

#### 15.4.3 - Please provide suggestions for improvement of the Periodic Reporting questionnaire

Whereas the questionnaire relates to all fields and aspects related to world heritage property from micro to macro level, there is an overlap in the questions asked. The objectivity of the questionnaire is sound but the subjective description requires extensive research.

#### 15.5. Training and Guidance

#### 15.5.1 - Please rate the level of support in terms of training and guidance from the following entities in completing this questionnaire

UNESCO World Heritage Centre	Good
UNESCO (other sectors/field offices)	Good
UNESCO National Commission	Not applicable
ICOMOS International	Not applicable
IUCN International	Not applicable
ICCROM international/regional	Not applicable
ICOMOS national/regional	Not applicable
IUCN national/regional	Not applicable

### 15.5.2 - Please rate the level of support for completing the Periodic Reporting questionnaire from the following entities

UNESCO World Heritage Centre	Good
State Party Representative (national Focal Point)	Good
UNESCO other sectors (e.g. field office)	Not applicable
National Commission for UNESCO	Not applicable
ICOMOS International	Not applicable
ICCROM International/regional	Not applicable
ICOMOS national/regional	Not applicable
IUCN national/regional	Not applicable
IUCN International	Not applicable

15.5.3 - Were the online training resources prepared by the World Heritage Centre regarding Periodic Reporting adequate for you to complete this questionnaire?

Yes

15.5.4 - If you found that the online training resources were not adequate, what changes would you like to see implemented? Not applicable

15.6. Actions that will require formal consideration by the World Heritage Committee

# 15.6.1 - Summary of actions that will require formal consideration by the World Heritage Committee

No item were proposed for update

15.7. Comments, conclusions and/or recommendations related to the Assessment of the Periodic Reporting Exercise

**15.7.1 - Comments, conclusions and/or recommendations related to the Assessment of the Periodic Reporting Exercise** The assessment of the Periodic Reporting exercise is adequate enough to cover all points related to the management and promotion of World Heritage property.

15.7.2 - Thank you for having filled in all the questions. Please contact your National Focal Point for validation.