PERIODIC REPORTING ON THE APPLICATION OF THE WORLD HERITAGE CONVENTION

SECTION II: STATE OF CONSERVATION OF SPECIFIC WORLD HERITAGE PROPERTIES

EXECUTIVE SUMMARY

II. 1. Introduction

- a. State Party: INDIA
- b. Name of the World Heritage property: ELLORA CAVES
- c. Geographical coordinates to the nearest second: 20° 1' 35" N; 75° 10' 45" E
- d. Date of inscription on the World Heritage List: 9th December 1983.
- e. Organisation(s) or entity(ies) responsible for the preparation of the report:

 Archaeological Survey of India
- f. Date of report: December 2002.
- g. Signature on behalf of the State Party: Director General, Archaeological Survey of India.

II.2. Statement of Significance

It is said at Ellora more than 100 caves exist of which 34 sanctuaries / cave temples are largely visited by all. The Ellora caves are located about 28 km from Aurangabad in Maharashtra. These magnificent caves were excavated on the western high basaltic cliff extending more than 2 km from the southern to the northern end, in a somewhat sub-crescentic valley. Ellora, with its uninterrupted sequence of monuments dating from 600 to 1000 A.D. revives the civilization of ancient India. Not only is the complex of Ellora is a unique artistic creation and a technological exploit, with its sanctuaries devoted to Buddhism, Brahmanism and Jainism, together it illustrates the spirit of tolerance characteristic of ancient Indian civilization.

II.3. Statement of authenticity / integrity

The authenticity and integrity of the World Heritage Property is maintained without any change since its inscription on the World Heritage List.

II.4. Management

The monument is maintained by the Archaeological Survey of India and governed by its rules and regulations. Archaeological Survey of India maintains and manages the property as per the provisions laid out in the Ancient Monuments and Archaeological Sites & Remains Act 1958 and Rules 1959.

II.5. Factors affecting the site

- 1. Certain leakages inside the caves,
- 2. General deterioration of rock surface,
- 3. Entry of bat into the cave interior,
- 4. Minor human agencies who at times try to scribble their names on the rock surface.

II.6. Monitoring

The monitoring of the property is carried out periodically by the administrative set up of Archaeological Survey of India through its various branches like Conservation, Science and Horticulture.

II.7. Conclusions and recommended action

a. Main conclusions regarding the state of the World Heritage values of the property (see items II.2 and II.3 above)

The World Heritage Values and authenticity / integrity of the site is well maintained since its inscription on the World Heritage List.

b. Main conclusions regarding the management and factors affecting the property (see items II.4 and II.5 above)

The present set up of the Archaeological Survey of India is well equipped with the management and other issues related to the monitoring the factors affecting the property and implementing the remedial measures.

c. Proposed future action / actions.

- 1. As per the recommendations of the Expert Committee and approved plan by Government of India.
- 2. Consideration and implementation of Geological Survey of India recommendations of their study of geophysical and geomorphological aspects of the cave area.
- 3. The remedial measures as suggested by Geological Survey of India.
- 4. Enhancing of awareness among the masses.

d. Timeframe for implementation.

Next five years, i.e., 2002-03 to 2007-08.

e. Needs for international assistance.

The international assistance is required in the area of any technical know how providing information and methodology for surface treatment of rock surface which should be transparent on application.

II.8 Assessment of the Periodic Reporting exercise for Section II

The Periodic Reporting exercise was very useful in understanding the various issues related to the maintenance, conservation, and management of the monument in a better way.

II.9 Documentation attached

- 1. Photographs showing certain important conservation activities at the monument.
- 2. Maps showing the prohibited and core area of the monument.

- 3. Compact Disc containing slides in Powerpoint on the various conservation activities of the monument, maps, etc.
- 4. Extracts of relevant laws and regulations concerning the protection of cultural and natural heritage.
- 5. Perspective plan of the proposed activities during the next five years.
- 6. Indicative bibliography.

II.1 Introduction

a.	Country (and State Party if different): INDIA	001
b.	Name of World Heritage property: ELLORA CAVES	002
C.	In order to locate the property precisely, please attach a topographic map showing scale, orientation, projection, datum, site name, date and graticule. The map should be an original print and not be trimmed. The site boundaries should be shown on the map. In addition they can be submitted in a detailed description, indicating topographic and other legally defined national, regional, or international boundaries followed by the site boundaries.	003
	The State Parties are encouraged to submit the geographic information in digital form so that it can be integrated into a Geographic Information System (GIS).	
	On this questionnaire indicate the geographical co-ordinates to the nearest second (in the case of large sites, towns, areas, etc., give at least 3 sets of geographical co-ordinates):	
	Center point: 20 ⁰ 1' 35" N; 75 ⁰ 10' 45" E	
	North-west corner: 20 ⁰ 02' 00" N; 75 ⁰ 10' 30" E	
	South-east corner: 20 ⁰ 1' 10" N; 75 ⁰ 11' 00" E	
d.	Give the date of inscription on the World Heritage List and subsequent extension (if applicable): 9 th December 1983	004
e.	Organisation(s) or entity(ies) responsible for the preparation of this report.	005
	ARCHAEOLOGICAL SURVEY OF INDIA	
	Organisation(s) / entity(ies)	
	AURANGABAD CIRCLE, ARCHAEOLOGICAL SURVEY OF INDIA	
	Person(s) responsible: DR.S.K.MITTRA, SUPERINTENDING ARCHAEOLOGIST	
	Address: AURANGABAD CIRCLE, BIBI-KA-MAQBARA	
	City and post code: AURANGABAD, MAHARASHTRA, 431004	
	Telephone : 0091-0240-400620	

	Fax: 0091-240-400009.	
	E-mail: asiabad@sancharnet.in	
f.	Date of preparation of the report:	006
g.	Signature on behalf of the State Party	007
	Signature:	
	Name: Mrs. KASTURI GUPTA MENON, I.A.S.	
	Function: DIRECTOR GENERAL, ARCHAEOLOGICAL SURVEY OF INDIA	

II.2 Statement of Significance

At the time of inscribing a property on the World Heritage List, the World Heritage Committee indicates its outstanding universal value(s), or World Heritage value(s), by deciding on the criteria for which the property deserved to be included on the World Heritage List, Circle the criteria retained for the inscription: Cultural criteria: (i) –(iii) – (vi)	008
Were new criteria added by re-nominating and / or extending the property after the original inscription? YES / NO	009
If YES, please explain:	010
Not applicable	
Please quote observations concerning the property made by the Advisory Body(ies) during the evaluation of the nomination: The ICOMOS has proposed that the Cultural Property be inscribed on the World Heritage List on the basis of Criteria I, III and VI.	011
Quote the decisions and observations / recommendations, if appropriate, made by the World Heritage Committee at the time of inscription and extension (if applicable):	012
The Committee recommended that the authorities establish a protection zone which would safeguard the surrounding landscape and cliff, and provide a map indicating the delimitation of this zone.	

Identify the actions taken as follow-up to these observations and / or decisions:

As per the recommendations, a protection zone has been established around the cave complex and proper fencing has been provided for the safeguarding of the surrounding landscape and the cliff.

Please propose a statement of significance by providing a description of the World Heritage value(s) for which the property was inscribed on the World Heritage List. This description should reflect the criterion (criteria) on the basis of which the Committee inscribed the property on the World Heritage List and it should also detail what the property represents, what makes it outstanding, what the specific values are that distinguish the property as well as what its relationship with its setting is, etc:

The magnificent group of rock hewn temples at Ellora, representing three different faiths, Buddhist, Brahmanical and Jain, marks the culmination of the Cave Temple architecture in Western India.

Ellora remained in oblivion for centuries but the cave temples of Ellora were known to the civilized world through the ages as living example of Indian religion and art. Mention of these caves has been made by travellers from time to time. The Baroda Copper Plate grants of Karka II refer to the magnificent excavations at Elapura (i.e., Ellora). The Arab traveller Al-Masudi and the historian Farishta were the two early authorities of the Muslim period to record about Ellora in their accounts.

The entire group of more than 34 caves was excavated during the period from the $5^{th}-6^{th}$ centuries to $12^{th}-13^{th}$ centuries A.D. The Buddhist Caves (nos. 1-12) were excavated between the 5^{th} and the 8^{th} centuries A.D. when the Mahayana sect of Buddhism flourished in this region. The Brahmanical group of Caves (nos. 13-29) was excavated between 7^{th} and 10^{th} centuries A.D. The famous Kailasa temple in this group is attributed to the Rashtrakuta king, Krishna I (circa. A.D. 757-783). The Jain group of Caves (nos. 30-34) was excavated between 10^{th} and 13^{th} centuries A.D.

I. Buddhist Group (Caves 1 – 12)

Important in this group are Caves 5, 10 and 12. The Cave 10 is a chaitya hall and is popularly known as "Visvakarma" or Sutar-ki-Jhopari (Carpenter's hut). It has a highly ornamental façade provided with a gallery. The usual chaitya window has undergone modification and has assumed the shape of a trefoil. Inside the chaitya hall there is a beautiful image of Buddha placed against a huge stupa. Of the viharas Cave 5 is the largest. The most

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014

impressive vihara is the three storied cave called Teen Thal (Cave 12). It has a large open court in front which provides access to the huge monastery. In the upper most storey are contained huge sculptures of Buddha.

II. Brahmanical Group (Caves 13 - 29)

Among the Brahmanical group of Caves 15, 16 and 29 are of special interest. Cave 15 known as Dasavatara, is a double storied cave, its upper storey being embellished with large and forceful sculptures in deep sunken panels in the side walls. The sculptures depicting the death of Hiranyakasipu, Nataraja Siva, etc., attract ones attention on account of the delicacy of treatment and vigour of action. Cave 16 is the well-known Kailasa temple. It is one of the most remarkable of all cave temples in India on account of its striking proportion, elaborate worksmanship of architectural members and sculptural treatment. It shows in a great court 82 m x 46 m at the level of the base, entirely cut out of solid rock with a scarp 32 m at the back. The whole temple consists of a Linga shrine with Dravidian sikhara, flat-roofed mandapa supported by sixteen pillars, a separate porch for Nandi surrounded by court entered through a low gopuram. There are five detached shrines on the edge of the detached chapel in one of the corners of the court dedicated to the three river goddesses, Ganga, Jamuna and Saraswati. There are two dhvajastambhas or pillars bearing the emblems in the courtyard with two elephants at a slightly lower level. This temple is decorated with some of the boldest and finest sculpture compositions to be found in India. The sculpture depicting the Ravana attempting to lift the mount Kailasa, the abode of Siva is specially noteworthy. In the Rang Mahal of this sabhamandapa are preserved some beautiful paintings belonging to two different periods.

Ramesvara (Cave 21) is adorned with massive pillars with pot and foliage capitals and beautifully decorated with bracket figures of Devatas accompanied by dwarf under mango trees in full blossom. The sculptures of river goddesses Ganga and Jamuna at the end of the verandah and the four armed dancing Siva in the right chapel are master-pieces of sculptural art.

Dumar Lena (Cave 29) is a great excavation containing a separate linga shrine and a row of massive pillars having square bases, fluted shafts and cushion capitals. Among the sculptures special attention is to be invited to the panel depicting the marriage of Siva and Parvati, Ravana shaking Kailasa, the dvarapala figures around the central linga shrine. The beautiful waterfall by the side of this Cave lends great charm to this magnificent excavation.

III. Jaina Group (Caves 30 - 34)

The final group of the excavated shrines at Ellora (circa. 10th to 12th – 13th centuries A.D.) is attributed to the Jains. The Indra Sabha which is a two-storied shrine is an attempt to copy the great Kailasa cave. The sculptures of Jain Tirthankaras, Yakshas and Yakshinis are carved with admirable skill. There are traces of paintings on the ceiling and walls of this cave and are of great importance in the history of the art paintings in India. Adjoining to this

cave is the Jagannath Sabha similar in plan to the Indra Sabha but smaller size. The pillars in the Jaina cave are very massive, well proportioned decorated beautifully with pot and foliage motifs.	
For the extension of a property or the inclusion of additional criteria a submission of the property may be considered. This might be regar as necessary in order to recognise cultural values of a natural W Heritage property, or vice-versa, become desirable following substantive revision of the criteria by the World Heritage Committed due to better identification or knowledge of specific outstand universal values of the property. Should a re-nomination of the property be considered? YES / NO	rded forld the e or ding
If YES, please explain:	016
Not applicable	
Are the borders of the World Heritage property and its buffer zone (sadequate to ensure the protection and conservation of the proper World Heritage values: YES / NO	
If NO, please explain why not, and indicate what changes should made to the boundaries of the property and / or its buffer zone (ple indicate these changes also on a map to be attached to this report): Not applicable	
Is the State Party actively considering a revision of the prop boundaries or the buffer zone?	erty 019
YES /	NO
If YES, indicate what is being done to that end:	020
Not applicable	

II.3 Statement of authenticity / integrity

Have the World Heritage values identified above been maintained since	021
the property's inscription?	
YES) / NO	

If NO, please describe the changes and name the causes:

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Apart from maintaining the values mentioned above, the only notable changes are in the way of providing pathways in front of the caves; connecting roads to different cave groups; bridge in front of the Ganesh Lena group for access during rainy season; grilled doors and windows for safety and security of caves; provision of drinking water in the cave complex for the benefit of the visitors.

What was the evaluation of the authenticity / integrity of the property at the time of inscription? (Please quote from ICOMOS / IUCN evaluation):

The thirty four caves of Ellora, cut side by side in the wall of a high basaltic cliff not far from Aurangabad and extending for more than two kilometers, constitute one of the most invaluable properties of the World Heritage.

This rupestral ensemble is not, like that of Ajanta, the expression of a single belief, rather it is the product of the three principal religions of ancient India. Progressing from south to north along the cliff, one discovers successively the twelve caves of the Buddhist group, which appear to be the oldest (between ca. 600 and 800) and comprise monasteries and a single large temple (cave 10); then the 26 caves of the Brahmanical group (ca. 600 to 900) which are no doubt the most well-known of Ellora with the "Cavern of the ten avatars" (Cave 15) and especially the Kailasha Temple (cave 16), an enormous complex, most likely undertaken during the reign of Krishna I (757-783); and, finally, the Jain group (caves 30-34) whose sanctuaries were created by the sect of the Digambara towards ca. 800-1000. The Jain caves, the last to be excavated, drew their inspiration from the art already existing at Ellora: cave 32 recalls by certain of its dispositions the Kailasha Temple.

The necessity to inscribe Ellora on the World Heritage List is so evident that ICOMOS would simply hesitate over the choice of criteria to justify this inscription.

- -Criterion I. The ensemble of Ellora is a unique artistic achievement, a masterpiece of the creative genius of man. If one considers only the work of excavating the rock, a monument such as Kailasha Temple is a technological exploit without equal. However, this temple, which transposes models from "constructed" architecture, offers as well an extraordinary repertory of sculpted and painted forms of a very high plastic quality and an encyclopedic program.
- -Criterion III. Ellora brings to life again the civilization of ancient India with its uninterrupted sequence of monuments from 600 to 1000.
- -Criterion VI. The Ellora Caves not only bears witness to three great religions: Buddhism, Brahmanism, and Jainism, but they illustrate the spirit of tolerance, characteristic of ancient India, which permitted these three religions to establish their sanctuaries and their communities in a single place, which thus served to reinforce its universal value.

Have there been changes in the authenticity / integrity since inscription	on? 024
If YES, please describe the changes to the authenticity / integrity name the main causes?	and 025
Not applicable.	
Are there (further) changes foreseeable to the authenticity / integrity the property in the near future?	y of 026
Yes / C	No
If YES, please explain and indicate how these changes might affect World Heritage values of the property:	the 027
Not applicable.	

II.4 Management

How could the arrangements for the protection and the management of the property best be defined (more than one indication possible)?	028
Legal (√)	
Contractual ()	
Traditional ()	
Please describe and assess the implementation and effectiveness of these arrangements for the preservation of the values described under item II. 2 at the national, provincial and / or municipal level:	029
Legal: The monuments are governed under various Acts and Rules passed by the Parliament of India. These legislations were passed during different periods upon the requirements and it encompasses all requirements for the proper safeguard of monuments. These Acts and Rules include Ancient Monuments and Archaeological Sites & Remains Act 1958; Ancient Monuments and Archaeological Sites & Remains Rules 1959; Antiquities and Art Treasures Act 1972; Antiquities and Art Treasures Rules 1973 and the subsequent amendments.	
The other laws and regulations of the State Government of Maharashtra and Forest Department like The Indian Forest Act, 1927, Bombay Forest Rules 1947, Maharashtra Tree Felling Act 1967, Wildlife Protection Act 1972, Forest	

Conservation Act 1980, The Maharashtra Regional and Town Planning Act, 1966, etc also have certain provisions for control of illegal activities in the area in which the monument is located. The local governments are entrusted with the law and order problem and are	
bound by the legislations passed by the Parliament.	
In general terms, can this legislative, contractual and / or traditional protection be considered sufficient?	030
YES / NO	
Please explain:	031
As explained above in 029 the legislations passed by the Parliament of India covers the entire nation and it encompasses all requirements for safeguarding the interests of the monuments.	
Provide a list and summaries of laws and regulations concerning cultural and natural properties protection and management (including extracts of relevant articles from the Constitution, Criminal Law, Law / Regulations on Land-use, Environment Law and Forestry Law, amongst others). Please also attach any documentation available concerning these points:	032
Indian Treasure Trove Act 1878	
An Act to safeguard and protect any buried treasure of ancient character.	
Land Acquisition Act 1892	
An Act through which lands adjoining to the monuments and other premises can be acquired after compensating and settlement procedures.	
Ancient Monuments Preservation Act 1904	
An Act to provide for the preservation of Ancient Monuments and objects of archaeological, historical, or artistic interest.	
Ancient Monuments Preservation Rules 1937	
Rules framed based on the provisions of Ancient Monuments Preservation Act 1904 for its implementation.	
Export Control Act 1947	
An Act to control the export of antiquities.	

The Ancient Monuments and Archaeological Sites & Remains (Declaration of National Importance) Act 1951

An Act to declare certain ancient and historical monuments and archaeological sites and remains in (Part A States and Part B States) to be of national importance and to provide for certain matters connected therewith.

Ancient Monuments and Archaeological Sites & Remains Act 1958

An Act to provide for the preservation of ancient and historical monuments and archaeological sites and remains of national importance, for the regulation of archaeological excavations and for the protection of sculptures, carvings and other like objects.

Ancient Monuments and Archaeological Sites & Remains Rules 1959

Rules framed as per the provisions of Ancient Monuments and Archaeological Sites & Remains Act 1958.

Antiquities and Art Treasures Act 1972

An Act to regulate the export trade in antiquities and art treasures, to provide for the prevention of smuggling of, and fraudulent dealings in, antiquities, to provide for the compulsory acquisition of antiquities and art treasures for preservation in public places and to provide for certain other matters connected therewith or incidental or ancillary thereto.

Antiquities and Art Treasures Rules 1973

Rules framed as per the provisions of Antiquities and Art Treasures Act 1972.

The Indian Forest Act, 1927

An act to consolidate the law relating to forests, the transit of forest-produce and the duty leviable on timber and other forest produce.

Bombay Forest Rules 1947

Maharashtra Tree Felling Act 1967

Wildlife Protection Act 1972

An act to provide for the protection of wild animals, birds and plants and for matters connected therewith or ancillary or incidental thereto.

Forest Conservation Act 1980	
An act to provide for the conservation of forest and for matters connected therewith or ancillary or incidental thereto.	
The Maharashtra Regional and Town Planning Act, 1966	
An act to make provision for planning the development and use of land in Regions established for that purpose and for the constitution of Regional Planning Boards therefore; to make better provisions for the preparation of Development plans with a view to ensuring that town planning schemes are made in a proper manner and their execution is made effective; to provide for the creation of new towns by means of Development Activities; to make provisions for the compulsory acquisition of land required for public purposes in respect of the plans; and for purposes connected with the matter aforesaid.	
Describe the administrative and management arrangements that are in place for the property concerned, making special mention of the institutions and organisations that have management authority over the property as well as of the arrangements that are in place for the coordination of their actions:	033
Administrative and Management Arrangement	
The Aurangabad Circle, Aurangabad of the Archaeological Survey of India is directly responsible for the administrative, management and all other matters connected with the day-today maintenance of the monument and cave complex area. The administration is carried out through a Sub-Circle located at Ellora Cave headed by a Senior Conservation Assistant who assess and executes the functions as directed by the Superintending Archaeologist.	
Institution / Organisation having management authority	
The Archaeological Survey of India is the only institution / organisation having the management authority.	
The Archaeological Survey of India has demarcated the core area of the monument complex and also fenced the land adjoining the monument for the effective maintenance of the cave complex.	
Please indicate under which level of authority the property is managed:	034
Local ()	
Regional (√)	
National ()	

Other(please describe):	
Please provide the full name, address and phone / fax / e-mail of the entity(ies) directly responsible for the management (conservation, preservation, visitor management) of the property:	035
Superintending Archaeologist Archaeological Survey of India Aurangabad Circle, Aurangabad 431004. Phone: 91-0240-2400624; 2400009 (f) E-mail: asiabad@sancharnet.in	
Is it necessary to revise the administrative and management arrangements for the property?	036
YES / NO	
If YES, explain why this is the case:	037
Not applicable	
Is there a management plan for the property?	038
YES / NO	
If YES, please summarise, indicating if the plan is being implemented and since when:	039
The management and conservation plan of the Ellora Caves are carried out under various categories and various branches of the Archaeological Survey of India. The Chemistry Branch executes all the matters related to chemical cleaning and preservation of paintings; mending of sculptures; monitoring the effect of RH, climatic variations, etc. The Garden Branch executes the matters related to maintaining greenery and gardens in the vicinity of the monument. The Conservation Branch of the ASI executes all the matters related to the structural conservation, preservation, of the monument.	
In this regard, the Archaeological Survey of India chalks out periodical plans and programmes for executing the conservation works upon the approval of a competent authority. The ASI also chalks out long term plans for executing them. For example, recently the ASI carried out various conservation and developmental measures under the loan extended by Japan Bank of International Cooperation (JBIC) extending over a period of 10 years from 1992 – 2002 under Phase I.	

Please report on legal and administrative actions that are foreseen for the future, to preserve the values described under item II.2 (e.g. passing of legislation, adjusting administrative and management arrangements, implementing or drawing up of a (new) management plan, etc.):	040
Passing of legislation	
The existing laws and regulations of the Archaeological Survey of India are sufficient for the maintenance and upkeep of the cultural heritage.	
Administrative and Management Arrangements	
The existing administrative set-up of conservation staff headed by archaeologists is considered effective and only the number of staff needs to be increased.	
The staff and other technical people of the ASI may be given exhaustive training in recent advances in conservation, their execution and implementation for better preservation of monuments.	
Please provide detailed information, particularly in cases where changes have occurred since the inscription of the property, on the following matters: • Conservation Make reference to all major interventions at the property and describe its present state of conservation	041
 a. Construction of pathways b. Conservation of fallen and broken pillars c. Conservation of fallen and collapsed facades d. Conservation of ceilings and cells in certain cases e. Construction of approach road connecting different cave groups f. Provision of wooden doors and windows for safety and security of caves and prevention of the entry of bats g. Landscaping and development of garden in front of Cave 16 	042
Ownership	
Make reference to all major changes in ownership of the property and describe the present status of ownership:	

Group B Group C Group D	
(i) Regular Nil 3 26 (ii) Temporary Status Nil Nil Nil Nil (iii) Private Nil Nil 22	
Is the staffing level sufficient for adequate management of the property?	(
Yes / No	
If NO, what should be done to improve the situation?	(
Not applicable	
Does the staff need additional training?	(
YES/ NO	
If YES, what are the training needs for your staff?	(
The staff requires training in the areas of recent advances i Conservation Techniques; computer applications in archaeology an conservation; recent advances in photo-documentation & photogrammetr including application of GPS, GIS; cartography, etc.	k
Describe the funding and financial situation of the property, indication sources, level and regularity of financing:	ו (
All the funding for the property is through the Archaeological Survey of India Department of Culture, Ministry of Tourism & Culture.	,
The funds are made available both on yearly basis and also to cope u emergency situations.)
Is the available funding sufficient for adequate management of th property?)
YES/ NO	
If NOT, describe the financial resources that would be required for the management of the property:) (
Not applicable	
Indicate International Assistance from which the property has benefited:	(

World Heritage Fund: -	
UNESCO International Campaign: -	053
 National and / or regional projects of UNDP, the World Bank or other agencies: 	054
The Japan Bank of International Cooperation (JBIC) formerly named as Overseas Economic and Cultural Fund (OECF) has extended a loan for the Ellora-Ellora Conservation and Tourism Development Programme of which the first phase was completed recently in 2002.	055
Bilateral co-operation: -	
Other assistance: -	
Describe the IT (computer) equipment of the site and / or management office and assess its effectiveness:	056
At present there is no equipment at the Ellora Caves, the management office at Aurangabad is having computers but basically meant for normal office functioning and not dedicated entirely to the aspects of maintenance of the Ellora Caves.	
Are you using (multiple indications are possible):	057
PC (√)	
Apple ()	
Mainframe ()	
Please give the number of available computers:	058
At the Aurangabad office at present 4 PCs are available.	
Does an operational access to the Internet exist?	059
At the Aurangabad Office	

Is e-mail used for daily correspondence?	060
At the Aurangabad Office	
Is there a Geographical Information System (GIS) for the site?	061
YES / NO	
If YES, what software do you have and how is the GIS used?	062
Not applicable	
List scientific studies and research programmes that have been conducted concerning the site:	06
 Geophysical Investigations of the Ellora Group of Caves by the Geological Survey of India. Other periodical studies are conducted for carrying out conservation measures at the monument. 	
Describe financial and human resource inputs for the research programmes and or facilities:	064
The Archaeological Survey of India conducts various research programmes and survey projects including documentation studies as part of its functioning. Its various branches conducts studies in Archaeology and History; nature of the paintings, conservation problems, etc for proper understanding of the caves and to propose remedial measures.	
Describe how the information / result are disseminated?	06
The Archaeological Survey of India publishes a yearly journal named The Indian Archaeology A Review and through this medium all the studies and works carried out by various branches of the Survey are published for the general public and scholars alike.	
Are there any visitor statistics for the site?	060
If YES, please summarise the statistics and attach to this report:	06
The visitor statistics for the last five years is enclosed as Annexure.	
What visitor facilities do you have at the property?	068
The following visitor facilities are available at the site at present;	

 (i) approach road and pathway, the latter connecting each and every cave (ii) drinking water facility (iii) post office (iv) guide facilities (v) books, guide-books and brochures (vi) toilet facility (vii) descriptive signages (viii) sitting benches (ix) tree rounds, etc. 	
What visitor facilities are you in need of?	069
(i) public information system (ii) multimedia visualisation of the different cave groups and CDs	
Is a public use plan (tourism / visitor management plan) in existence for the property?	070
YES / NO	
A Public use plan is essentially required without hindering any aspect of heritage management of the monuments. As more and more concentration is given to tourism and visitor management related issues heritage management is given less importance and often at the cost of monuments. Hence a proper public use plan should be generated to facilitate the tourists as well as to educate and encourage them for protection of the heritage.	
Indicate how the property/'s World Heritage values are communicated to residents, visitors and the public (please attach examples of leaflets, videos, etc. and print-outs and / or the address of a web-page): The Archaeological Survey of India brings out brochures and booklets on the World Heritage Monuments and the importance of their conservation and heritage values. The ASI has also a web-site namely asi.nic.in highlighting all the activities of the organisation. Besides, through various programmes conducted round the year by way of cultural awareness, World Heritage Day (April 18), World Heritage Week (November 19 – 25) are some of the activities which communicates the residents, visitors and common public. Similarly by participating in other like natured programmes conducted by other organisations, delivering lectures and such activities by officers and staff also spread the message of heritage. The message is also spread through print and audio media.	072

Are there educational programmes concerning the proper schools?	∍rty air	med at	073
	YES/	NO	
If YES, please describe:			074
The Archaeological Survey of India observes World Heritage D of every year. During this day and consecutive two or th organises exhibitions, debates, painting competition, etc., aimed and college children so that they can actively participate in They can fully understand the objectives and values of World He the interaction with the ASI staff and also through the exhibit generally aimed to create awareness among the public importance of our heritage and the necessity to safeguard them.	ree dad at the these eritage to the these eritage to the	ys ASI school events. through hich is	
What roles does World Heritage inscription play for the sit the visitor number, the research programmes and / or the building activities?			
The inscription in the World Heritage imbibes a lot of responsibi	•	ong the	

II. 5 Factors affecting the property

Please comment on the degree to which the property is threatened by particular problems and risks, such as development pressure, environmental pressure, natural disasters and preparedness, visitor / tourism pressure, number of inhabitants. Also mention all other issues that you see as problematic.

a. Developmental Pressure: Any further developmental pressure can threaten the authenticity of the Ellora Caves.

b. Certain leakages inside the caves,
c. General deterioration of rock surface,
d. Entry of bat into the cave interior,

	inor human agencies who at times try to scribble their names on the	
ro	ock surface.	
	an emergency plan and / or risk preparedness plan for the	077
property	y in existence? YES / NO	
If YES, p	please summarise the plan and provide a copy:	078
Not appli	icable	
	escribe what is being done – and by whom – to counteract the that threaten or may threaten the property:	079
medium resource terrorist	naeological Survey of India has facilities to look after any small and ranged problems and to tackle them. However it does not have the s and manpower to tackle any large scale disaster like earthquake, threat, etc. Under those circumstances a collaborative strategy is to ted with the State Governments to tackle these problems.	
	area where improvement would be desirable and / or towards ne State Party is working:	080
The follo	wing improvements would be desirable:	
(i)	A site information system in the building presently occupied by the MTDC can be developed for the benefit of the visitors specifically indicating do's and don'ts for the healthy maintenance of the World Heritage Monument.	
(ii) (iii)	Pre-recorded cultural texts and messages can be given to the tourists so that they can individually enjoy the caves / paintings. Publication of innumerable brochures, booklets and other guide books to enable the tourists and scholars alike to understand the paintings and caves well.	
	indication if the impact of the factors affecting the property is ng or decreasing:	081
	ural factors affecting the property due to unprecedented rainfall	

What actions have been effectively taken, or are planned for the future, to address the factors affecting the property?	082
Attempts are on for educating the masses (and tourists) in proper behavioural approach towards the World Heritage Property, do's and don'ts as envisaged at the site and closely monitoring the cultural phenomena by installation of modern gadgets (to record the Relative Humidity, temperature variations, rainfall, etc) for proper and effective management.	

II. 6 Monitoring

If applicable, give details (e.g. dates, results, indicators chosen) of any previous periodic or reactive monitoring exercises of the property:	083
The monument is regularly monitored.	
Is there a formal monitoring system established for the site?	084
YES / NO	
If YES, please give details of its organisation:	085
At the local level the monument is monitored on a daily basis at Ellora itself. It consists of :	
Structural Conservation	
Archaeological Survey of India through its administrative system.	
Chemical Preservation	
Science Branch, Archaeological Survey of India through its administrative system.	
At the Circle level periodic inspections and directives are given by the Superintending Archaeologist and other officers who regularly visit the monuments.	
If not already in place, is the establishment of a formal monitoring system planned?	086
YES / NO	

consideration the key indicators you will be asked to define below (see 089 / 090)	
Not applicable	
Are there any indicators established for monitoring the state of conservation of the property?	
YES / NO	
If YES, please provide up-to-date information with respect to each of the key indicators established and / or used. Care should be taken to ensure that this information is as accurate and reliable as possible, for example by carrying out observations in the same way, using similar equipment and methods at the same time of the year and day. Name and describe the key indicators for measuring the state of conservation of this property:	
Use of Tell-Tales: The ASI uses tell-tales for monitoring the cracks develops in the monuments. These are periodically monitored to see whether any cracks develop or not.	
Monitoring the loose portions of rock surface etc:	
As the Ellora group of Caves is excavated in volcanic trap rock, the geological setting had been disturbed in the past. This has caused in loosening of rock portions at some places and at places the facades, ceilings, pillars have fallen down. Hence these vulnerable points are periodically monitored and immediate measures are carried out. Moreover, the recent studies carried out by the Geological Survey of India has suggested various measures to be carried out for the safety of the monument.	
Monitoring the Relative Humidity inside and outside the caves	
Monitoring the Pollution Levels in the vicinity of the monument	
Monitoring the variation in temperature levels inside and outside the caves	
Monitoring the rainfall (during the season)	
The Geological Survey of India has installed certain scientific gadgets for monitoring and planning future management	
If NO indicators have been identified and / or used so far, please define key indicators for future use in monitoring:	1

Not applicable	
Indicate which partners, if any, are involved or will be involved in the regular monitoring exercise:	091
Apart from ASI no other partner is involved in the direct monitoring exercise of the monument.	
Identify the administrative provisions for organising the regular monitoring of the property:	092
As per the reply in 085 the set-up monitors the property.	
Describe what improvement the State Party foresees or would consider desirable in improving the monitoring system:	093
On the basis of necessity and new scientific innovative applications can be considered which are not in vogue. For example the GPS and GIS applications can be utilised for better and effective management of the site.	
In specific cases, the World Heritage Committee and / or its Bureau may have already examined the state of conservation of the property and made recommendations to the State Party, either at the time of inscription or afterwards. In such cases the State Party is requested to report on the actions that have been taken in response to the observations or decisions made by the Bureau or Committee. Give details, if applicable:	094
As per the committee's recommendations a protection zone safeguarding the surrounding landscape and the cliff has been maintained.	
Please summarise the main conclusions regarding the state of the World Heritage values of the property (see items II.2. and II.3. above):	095
Remains unchanged.	
Please summarise the main conclusion regarding the management and factors affecting the property (see items II.4. and II.5 above):	096
The management set-up of the Archaeological Survey of India effectively monitors and takes measures as and when necessity arises. The factors affecting the site is closely monitored and kept well under control.	
Give an overview over proposed future action / actions:	097
The adopted monitoring system recordings would be analysed for formulating future action in the interest of World Heritage Property.	

Name the agency responsible for implementation of these actions (if different from 005):
Archaeological Survey of India
Give a timeframe for the implementation of the actions described above:
As per the necessity of the implementation programme with specific conservation needs the actions would be carried out.
Indicate for which of the planned activities International Assistance from the World Heritage Fund may be needed (if any):
To be decided at the Directorate level.
Are there any contacts with management units of other properties within or outside your country? VES / NO
If YES, please explain:
With the site managers of other World Heritage Property; the Directorate Office and other units of Archaeological Survey of India like the Science Branch, Horticulture Branch, etc.
Please indicate which experience made during the periodic reporting exercise and / or during the on-going conservation / protection efforts of the property could be shared with other States Parties dealing with similar problems or issues:
Nil
Provide the name(s) and address(es) of organisation(s) or specialist(s) who could be contacted for this purpose:
Nil
Agency / Organisation:
Person responsible:
Address:
City and post code:

Fax:	
E-mail:	

II. 8. Assessment of the Periodic Reporting exercise for Section II

Was sufficient and adequate information made available to the responsible authorities and individuals during the preparation phase of the Periodic Reporting exercise (information given, meetings etc.)? Yes	105
Was the questionnaire clear and did it help to comply with the reporting requirements of the State Party?	106
Yes	
What are the perceived benefits and lessons learnt of the exercise?	107
To understand the follow-up action and measures required in the best interest of the World Heritage Property.	
Please describe the expected outcome of the Periodic Reporting exercise and the desired follow-up by the World Heritage Committee:	108
Would help in proper monitoring and taking steps for proper management, conservation and follow-up action for the general upkeep, maintenance and longevity of the World Heritage Property.	

II. 9. Documentation attached

The State Party is invited to supply the materials listed above. Please check those items that were attached.

- 1. $(\sqrt{\ })$ Maps and plans showing the general location of the property, its boundary and buffer zone as well as the necessary detail of the property itself (see question 003 for specifications)
- 2. $(\sqrt{\ })$ Photo of general view (aerial view) of the property (in CD)
- 3. $(\sqrt{\ })$ Illustrations of the state of conservation of the site (photographs, slides and, if available, film / video) (in CD)
- 4. $(\sqrt{})$ Details of important aspects of the property (landscape, animal and vegetable species, monuments etc.)

- 5. $(\sqrt{})$ Photos illustrating the main threats to the site and its surroundings.
- 6. $(\sqrt{})$ Extracts of relevant laws and regulations concerning the protection of cultural and natural heritage at national, provincial and municipal levels.
- 7. $(\sqrt{\ })$ Copies of the management plan of the site as well as extracts and / or copies of other plans relating to the site (e.g. emergency plan, use plan, etc.
- 8. $(\sqrt{\ })$ Indicative bibliography.

11.9.4

Details of important aspects of the property (landscape, animal and vegetable species, monuments etc.)

Ellora group of caves are excavated on the crescentic vertical cliff facing west from right to left in order of their time frame. This is the only site where the three religious art and architecture almost co-existed thus establishing an example of perfect tolerance and harmony. The Sahyadri range of hills in which the Ajanta Caves are located is a resultant of volcanic lava flow which approximately took place between Cretaceous and Eocene periods of the Secondary and Tertiary Epochs respectively of Geological Time Scale.

The chief of the forest species found is teak, which covers a considerable portion of the Sahyadri range. The main types of trees that occur in this region in order of frequency are as follows, Tectona grandis (Teak), Anogeissus Latifolia (dhavra), Hardwickia Binata (Anjan), Boswellia serrata (Salai), Santalum album (Chandan), Cassia fistula 9Bahawa), Bauhinia recemosa (apta), Phyllanthus emblica (amla), Pterocarpus marsupium (Bija) and other miscellaneous species like Khair, Babul, Ber, Bel, Bhilawa, Charoli, Lendi, Dhaman, Dudhi, Kalam, etc. Apart from these common shrubs and climber growth is also found.

A very few specimens of Wagh (Panthera tigris), Panthers, Bibatya Wagh (Panthera pardus) occur in this region. The small game consists of deer, chital (Axis axis), some solitary Indian gazelle, chikara (Gazella bennetti). Wild boar (Sus cristatus) and Jackals, Kolha (Canis aureus) are also found. Among monkeys, the langur, Wanar (Presbytis entellus is very common).

The bird species are very rarely found. Even the most common birds like pea fowl, Mor (Pavo cristatus) and grey jungle fowl, Jungli Murghi (Gallus sonneratti) are rarely encountered.

The commonly found animals are hardy squirrel Khadi Khar (Funambulus Palmarum) and the prolific hare Sasa (Lepus ruficaudatus).

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ARCHAEOLOGICAL SURVEY OF INDIA, AURANGABAD CIRCLE, AURANGABAD VISITORS DATA OF ELLORA CAVES

MONTH	1998-99	1999-2000	2000-2001		2001-2002		2002	
							(Upto Nov,2002)	
			INDIAN	FOREIGN	INDIAN	FOREIGN	INDIAN	FOREIGN
APRIL	30619	23139	31986		29926	549	22194	446
MAY	39994	46064	56148		38872	187	37466	225
JUNE	33349	44061	46889		38973	138	27189	158
JULY	36092	35628	44577		32396	535	27325	339
AUGUST	43714	39804	43473		38006	1060	36896	637
SEPTEMBER	28956	36037	31277		34568	537	28895	504
OCTOBER	60633	42213	55474	166	34205	698	29929	639
NOVEMBER	41966	66674	54346	1902	46643	1067	36820	1131
DECEMBER	70397	56441	87844	1792	58012	1400		
JANUARY	57937	54464	54101	2556	41811	1913		
FEBRUARY	44145	45200	37421	2743	28074	1363		
MARCH	28804	36778	31509	1538	20843	1013		
TOTAL	516606	526503	575045	10697	442329	10460	246714	4079
AVERAGE/MONTH	43051	43875	47920	2140	36861	872	30839	510