PERIODIC REPORTING EXERCISE
ON THE APPLICATION OF THE WORLD HERITAGE CONVENTION

SECTION II
State of Conservation of specific World Heritage properties

State Party: Republic of Indonesia
Property Name: Borobudur Temple
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
b. Name of World Heritage property
c. Geographical coordinates to the nearest second
d. Date of inscription on the World Heritage List
e. Organization(s) or entity(ies) responsible for the preparation of the report
f. Date of report
g. Signature on behalf of State Party

II.2. Statement of significance

II.3. Statement of authenticity/integrity

II.4. Management

II.5. Factors affecting the property

II.6. Monitoring

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)
b. Main conclusions regarding the management and factors affecting the property (see Items II.4 and II.5. above)
c. Proposed future action/actions
d. Responsible implementing agency/agencies
e. Timeframe for implementation
f. Needs for international assistance.

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

II.9. Documentation attached
## II.1. Introduction

| a. Country (and State Party if different): The Republic of Indonesia | 001 |
| b. Name of World Heritage property: Borobudur Temple | 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. 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 coordinates to the nearest second (in the case of large sites, towns, areas etc., give at least 3 sets of geographical coordinates): Centre point: 7°36'28'' Southern Latitude and 110°12'13'' Eastern Longitude North-west corner: 7°36'22'' Southern Latitude and 110°12'07'' Eastern Longitude South-east corner: 7°36'34'' Southern Latitude and 110°12'18'' Eastern Longitude | 003 |
| d. Give the date of inscription on the World Heritage List and subsequent extension (if applicable): | 004 |
| e. Organisation(s) or entity(ies) responsible for the preparation of this report. Organisation(s) / entity(ies): Development of Culture and Tourism Board. Deputy of Development and Preservation of Culture. Person(s) responsible: Dr. I Gusti Ngurah Anom Address: 4th floor, E Build, Komp.Depdiknas Jl. Jend. Sudirman City and post code: Jakarta 10270 Telephone: 062 21 5725035 Fax: 062 21 5725578 E-mail: anom@dephbudpar.go.id | 005 |
| f. Date of preparation of the report: Octobre 2002 | 006 |
| g. Signature on behalf of the State Party | 007 |

Signature: 

Name: Dr. I G. N. Anom NIP 130353848 Gusti Ngurah Anom

Function: Deputy for Development and Preservation of Culture

If the space on the Questionnaire is not sufficient, please continue on a separate page, clearly labelling the answer with the corresponding number of the question (e.g. 006).
### 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:  \( i, ii, iii, iv, v, vi \)
- Natural criteria:  \( i, ii, iii, iv \)

Were new criteria added by re-nominating and/or extending the property after the original inscription?  

Yes / No  

If YES, please explain:

Please quote observations concerning the property made by the Advisory Body(ies) during the evaluation of the nomination:

Quote the decisions and observations / recommendations, if appropriate, made by the World Heritage Committee at the time of inscription and extension (if applicable):

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

If the space on the Questionnaire is not sufficient, please continue on a separate page, clearly labelling the answer with the corresponding number of the question (e.g. 006).
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.:

i. Represent a unique artistic achievement, a masterpiece of the creature genius.
ii. Have exerted great influence, over a span of time or within a cultural area of the world, on developments in architecture monumental arts or town planning and landscaping.
vi. We directly and tangibly associated with events or with ideas or beliefs of outstanding universal significance (the committee considered that this criterion should justify inclusion in the list only in exceptional circumstances or in conjunction with other criteria.

For the extension of a property or the inclusion of additional criteria a re-submission of the property may be considered. This might be regarded as necessary in order to recognize cultural values of a natural World Heritage property, or vice-versa, become desirable following the substantive revision of the criteria by the World Heritage Committee or due to better identification or knowledge of specific outstanding universal values of the property. Should a re-nomination of the property be considered? YES / NO

If YES, please explain:
Concerning to regelius meaning among the temples of Pawon and Mendut, they are considered to be one compound so that it is expected the extension of the World Heritage properties to be Borobudur, Pawon, and Mendut.

Are the borders of the World Heritage property and its buffer zone (still) adequate to ensure the protection and conservation of the property’s World Heritage values: YES / NO

If NO, please explain why not, and indicate what changes should be made to the boundaries of the property and / or its buffer zone (please indicate these changes also on a map to be attached to this report):
### II.2. continued

<table>
<thead>
<tr>
<th>Is the State Party actively considering a revision of the property boundaries or the buffer zone?</th>
<th>YES / NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>If YES, indicate what is being done to that end:</td>
<td></td>
</tr>
</tbody>
</table>

### II.3. Statement of authenticity / integrity

<table>
<thead>
<tr>
<th>Have the World Heritage values identified above been maintained since the property’s inscription?</th>
<th>YES / NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>If NO, please describe the changes and name the causes:</td>
<td></td>
</tr>
</tbody>
</table>

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

If the space on the Questionnaire is not sufficient, please continue on a separate page, clearly labelling the answer with the corresponding number of the question (e.g. 006).
<table>
<thead>
<tr>
<th>II.3. continued</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have there been changes in the authenticity / integrity since inscription? YES / NO 024</td>
</tr>
<tr>
<td>If YES, please describe the changes to the authenticity / integrity and name the main causes? 025</td>
</tr>
<tr>
<td>Are there (further) changes foreseeable to the authenticity / integrity of the property in the near future? YES / NO 026</td>
</tr>
<tr>
<td>If YES, please explain and indicate how these changes might affect the World Heritage values of the property: 027</td>
</tr>
</tbody>
</table>

**II.4. Management**

How could the arrangements for the protection and the management of the property best be defined (more than one indication possible)?

- Legal (X)
- Contractual ( )
- Traditional ( )

If the space on the Questionnaire is not sufficient, please continue on a separate page, clearly labelling the answer with the corresponding number of the question (e.g. 006).
II.4. continued

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:

Distribution of the zoning, the regulations, the laws are clearly provided so that legal approach must be done:

- zone 1 managed by Central government,
- zone 2 managed by Archaeological Park of Candi Borobudur, Prambanan, and Ratu Boko, and
- zone 3-5 managed by local government.

In general terms, can this legislative, contractual and/or traditional protection be considered sufficient?  

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
</table>

Please explain:

Recently laws or government arrangement really need some correction according to field condition of the world heritage preservation i.e the users who take the profitable up to now this gave any contributions to whom who take charge in preservation on the world heritage properties because it is regulated by the laws.

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:

- Law No. 5, 1992 about The Preserved Cultural Object
- Law No. 4, 1982 about The Environment
- President Decree No.1, 1992 about The Management of Archaeological Park of Candi Borobudur, Prambanan, and Ratu Boko and the controlling its region
- Law No. 9, 1990 about The Tourism
- Law No. 24, 1992 about The Landscaping

If the space on the Questionnaire is not sufficient, please continue on a separate page, clearly labelling the answer with the corresponding number of the question (e.g. 006).
II.4. continued

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:

The management are:

Central Government:
1. State Minister of Culture and Tourism.
2. Finance Department who rules Archaeological Park of Candi Borobudur, Prambanan, and Ratu Boko.
3. Deputy of Preservation and Development Culture.

Province:
1. Local Government of Central Java Province
2. Tourism Office of Central Java Province

Regional:
1. Local Government of Magelang Regency
2. Tourism Office of Magelang Regency

Please indicate under which level of authority the property is managed:

- Property ( )
- Regional ( )
- National (X)
- 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:

Conservation and preservation management held by Borobudur Studies and Conservation Institute. The tourist/visitors are managed by Archaeological Park of Candi Borobudur, Prambanan, and Ratu Boko.

Is it necessary to revise the administrative and management arrangements for the property? YES / ☑

If YES, explain why this is the case:
- It is necessary needed participation of Archaeological Park of Candi Borobudur, Prambanan, and Ratu Boko in the case of preservation of the world heritage object.
- It is necessary needed participation of professional in the activities of case Archaeological Park of Candi Borobudur, Prambanan, and Ratu Boko included management of the environment.
- Really needed the plan of Landscaping which is created by Regency Government

If the space on the Questionnaire is not sufficient, please continue on a separate page, clearly labelling the answer with the corresponding number of the question (e.g. 006).
**II.4. continued**

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes / No</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is there a management plan for the property?</td>
<td>038</td>
<td></td>
</tr>
<tr>
<td>If YES, please summarise, indicating if the plan is being implemented and since when:</td>
<td>039</td>
<td></td>
</tr>
<tr>
<td>Since inauguration of Borobudur Temple in 1983, it is still being done continuously same activities such as monitoring, conserving, researches and security.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>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.):</td>
<td>040</td>
<td></td>
</tr>
<tr>
<td>Legal aspect due to correction of President Decree No. 1, 1992.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The administration aspect needs clearly order about participation of Province Government, Regency Government, and of Archaeological Park of Candi Borobudur, Prambanan, and Ratu Boko in the case of world heritage preservation.</td>
<td>041</td>
<td></td>
</tr>
<tr>
<td>Please provide detailed information, particularly in cases where changes have occurred since the inscription of the property, on the following matters:</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Conservation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Make reference to all major interventions at the property and describe its present state of conservation:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Generally significant of conservation aspect with influence the building condition there are: vandalism by visitor, extension of southeastern yard against soil erosion, the completion of the loosing parts which substituted by the new one either by the original stone ny using anastilose method.</td>
<td>041</td>
<td></td>
</tr>
</tbody>
</table>

If the space on the Questionnaire is not sufficient, please continue on a separate page, clearly labelling the answer with the corresponding number of the question (e.g. 006).
II.4. continued

• Ownership

Make reference to all major changes in ownership of the property and describe the present state of ownership:

It is still to be government property, there is no changing.

Please, give a detailed description of the staffing of the site:

Details staff of Borobudur Studies and Conservation Institute:

- Conservator: 29 persons
- Technician: 9 persons
- Archaeologist: 4 persons
- Photographer: 3 persons
- Laboratory Analyst: 12 persons
- Security: 52 persons

Details staff of Archaeological Park of Candi Borobudur:

- Operational Section: 89 persons
- Conservation Section: 43 persons
- Nursery Section: 28 persons
- Security Section: 59 persons

Is the staffing level sufficient for adequate management of the property? **NO**

If NO, what should be done to improve the situation?

1. How to substitute the employees who will be retired soon by professional staff.

2. Providing conservation and restoration training.

3. Additional of the equipments.

4. Rising of the budget.

If the space on the Questionnaire is not sufficient, please continue on a separate page, clearly labelling the answer with the corresponding number of the question (e.g. 006).
II.4. continued

Does the staff need additional training? YES / NO

If YES, what are the training needs for your staff?
1. Management.
2. Laboratory Analysis.

Describe the funding and financial situation of the property, indication sources, level and regularity of financing:
The conservation budget still given by Indonesian Government (namely APBN and Pembangunan) while other funds are not realized yet (private, society, and foreign, etc.)

Is the available funding sufficient for adequate management of the property? YES / NO

If NOT, describe the financial resources that would be required for the management of the property:
It is needed adequate funding from Archaeological Park of Candi Borobudur, Prambanan, and Ratu Boko regularly.

Indicate International Assistance from which the property has benefited:
• World Heritage Fund:

If the space on the Questionnaire is not sufficient, please continue on a separate page, clearly labelling the answer with the corresponding number of the question (e.g. 006).
## II.4. continued

- **UNESCO International Campaign:**

- **National and/or regional projects of UNDP, the World Bank or other agencies:**

- **Bilateral co-operation:**

- **Other assistance:**

Describe the IT (computer) equipment of the site and/or management office and assess its effectiveness:

Computers are belong to Borobudur Conservation and Studies Institute:

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>CPU Comline PC/AT, 1992</td>
<td>1 unit</td>
</tr>
<tr>
<td>2.</td>
<td>CPU ICM tahun 1992</td>
<td>1 unit</td>
</tr>
<tr>
<td>3.</td>
<td>Computer, 1994</td>
<td>1 unit</td>
</tr>
<tr>
<td>4.</td>
<td>Computer, 1995</td>
<td>1 unit</td>
</tr>
<tr>
<td>5.</td>
<td>Acer Mate 486x2/66, 1996</td>
<td>1 unit (damaged)</td>
</tr>
<tr>
<td>6.</td>
<td>CPU MBA SAKHR, 1997</td>
<td>1 unit</td>
</tr>
<tr>
<td>7.</td>
<td>CPU MBA SAKHR, 1998</td>
<td>1 unit</td>
</tr>
<tr>
<td>8.</td>
<td>Pentium Processor 133, 1999</td>
<td>1 unit</td>
</tr>
<tr>
<td>9.</td>
<td>Pentium III/650 Mhz, 2001</td>
<td>1 unit</td>
</tr>
<tr>
<td>10.</td>
<td>Pentium III/800 Mhz, 2002</td>
<td>1 unit</td>
</tr>
</tbody>
</table>

Are you using (multiple indications are possible):

- PC (X)
- Apple ( )
- Mainframe ( )

Please, give the number of available computers:

Does an operational access to the Internet exist? **YES ★★★**

If the space on the Questionnaire is not sufficient, please continue on a separate page, clearly labelling the answer with the corresponding number of the question (e.g. 006).
II.4. continued

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is e-mail used for daily correspondence?</td>
<td>YES/NO</td>
</tr>
<tr>
<td>Is there a Geographical Information System (GIS) for the site?</td>
<td>YES/NO</td>
</tr>
<tr>
<td>If YES, what software do you have and how is the GIS used?</td>
<td></td>
</tr>
<tr>
<td>List scientific studies and research programmes that have been conducted concerning the site:</td>
<td>063</td>
</tr>
<tr>
<td>• Archaeology Studies</td>
<td></td>
</tr>
<tr>
<td>• Conservation Studies</td>
<td></td>
</tr>
<tr>
<td>• Environmental Studies</td>
<td></td>
</tr>
<tr>
<td>• Anthropology Studies</td>
<td></td>
</tr>
<tr>
<td>• Geotechnical Studies</td>
<td></td>
</tr>
<tr>
<td>• Geodetics Studies</td>
<td></td>
</tr>
<tr>
<td>• Architectural Studies</td>
<td></td>
</tr>
<tr>
<td>• Geohydrology Studies</td>
<td></td>
</tr>
<tr>
<td>Describe financial and human resource inputs for the research programmes and or facilities:</td>
<td>064</td>
</tr>
<tr>
<td>2. Human resources from Borobudur Studies and Conservation Institute and experts from Gadjah Mada University of Yogyakarta.</td>
<td></td>
</tr>
<tr>
<td>3. Fasilies:</td>
<td></td>
</tr>
<tr>
<td>a. Equipment from Borobudur Studies and Conservation Institute, some of them belong to Gadjah Mada University of Yogyakarta</td>
<td></td>
</tr>
<tr>
<td>b. Analisys: Laboratory of Borobudur Studies and Conservation Institute and Gadjah Mada University of Yogyakarta.</td>
<td></td>
</tr>
<tr>
<td>Describe how the information / results are disseminated?</td>
<td>065</td>
</tr>
<tr>
<td>All the result of the studies are written in Indonesian language and its spread over institutions within Directorate Archaeological and Museum and also to related universities or institutions.</td>
<td></td>
</tr>
</tbody>
</table>

If the space on the Questionnaire is not sufficient, please continue on a separate page, clearly labelling the answer with the corresponding number of the question (e.g. 006).
II.4. continued

Are there any visitor statistics for the site? YES / NO 066

If YES, please summarise the statistics and attach to this report:

<table>
<thead>
<tr>
<th>Year</th>
<th>Domestic Tourist</th>
<th>Foreign Tourist</th>
<th>Total Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>1,279,460</td>
<td>115,309</td>
<td>1,394,769</td>
</tr>
<tr>
<td>1999</td>
<td>1,764,934</td>
<td>86,258</td>
<td>1,851,192</td>
</tr>
<tr>
<td>2000</td>
<td>2,559,527</td>
<td>114,440</td>
<td>2,673,967</td>
</tr>
<tr>
<td>2001</td>
<td>2,470,647</td>
<td>111,136</td>
<td>2,581,783</td>
</tr>
<tr>
<td>2002 (until September)</td>
<td>1,551,272</td>
<td>93,568</td>
<td>1,644,840</td>
</tr>
</tbody>
</table>

Dominant of Foreign Tourist are Japanese, Dutch, Germany, British, France, Taipei Chinese, and Korean.

What visitor facilities do you have at the property?
- Parking area (with its capacity 100 buses, 300 cars, 200 motorcycles)
- Karmawibangga Museum (indoor & outdoor)
- Souvenir Shop (120)
- Information Centre and Audio Visual Room
- Shelter, Security Guard Box, Locker, Emergency Office
- Public Toilet (7) and Mosque (4)
- Monohara Hotel and Restaurant
- Kinder Garten
- Sculpture Market (Relocation 600 hawker)
- Nursery
- Ticket Booth and Entrance Gate
- Concourse, Park Road, Pedestrian
- Internal and External yard

What visitor facilities are you in need of?
Visitor facilities which still need are toilet, outdoor furniture, shelter, security sentry boxes, facilities map and information board.

Is a public use plan (tourism/visitor management plan) in existence for the property? YES / NO 070

If the space on the Questionnaire is not sufficient, please continue on a separate page, clearly labelling the answer with the corresponding number of the question (e.g. 006). - 17 -
### II.4. continued

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>If YES, please summarise, if NO explain if one is needed:</td>
<td></td>
</tr>
<tr>
<td>Entrance vehicles (gate No. 5 for buses, gate No. 1 for car, gate No. 3 for motorcycles).</td>
<td></td>
</tr>
<tr>
<td>Visitor promenade in external yard with which content souvenir shop toward ticket booth.</td>
<td></td>
</tr>
<tr>
<td>Inspection of visitors goods.</td>
<td></td>
</tr>
<tr>
<td>Visitors enter the gate toward information centre and audio visual through internal yard.</td>
<td></td>
</tr>
<tr>
<td>Visitors promenade toward the main eastern port of the temple yard.</td>
<td></td>
</tr>
<tr>
<td>Sightseeing on the temple with paradaksina direction (clockwise).</td>
<td></td>
</tr>
<tr>
<td>Left the temple through northern exit toward Karmawibangga Archaeological Museum.</td>
<td></td>
</tr>
<tr>
<td>Left the museum toward the park exit through sculpture market then toward parking area.</td>
<td></td>
</tr>
<tr>
<td>Vehicles left the parking area (buses via gate No. 5, car via gate No. 1, motorcycles via gate No. 3).</td>
<td></td>
</tr>
<tr>
<td>Special for state visitors and customer of Manohara Hotel the entrance and exit through the gate No. 7.</td>
<td></td>
</tr>
<tr>
<td>Indicate how the property’s World Heritage values are communicated to residents, visitors and the public (please attach examples of leaflets, videos, posters etc. and print-outs and/or the address of a web-page):</td>
<td></td>
</tr>
<tr>
<td>Publication using leaflet, VCD, posters, advertisement, journalistic and electronic media, web site, exhibition, special event 10 K run, and Borobudur festival.</td>
<td></td>
</tr>
<tr>
<td>Are there educational programmes concerning the property aimed at schools?</td>
<td>YES / NO</td>
</tr>
<tr>
<td>If yes, please describe:</td>
<td>Marketing safari to schools in Jawa, Bali, and Sumatera Selatan as cultural study tour.</td>
</tr>
<tr>
<td>What role does World Heritage inscription play for the site concerning the visitor number, the research programmes and/or the awareness building activities?</td>
<td>There is no evaluation yet.</td>
</tr>
</tbody>
</table>

If the space on the Questionnaire is not sufficient, please continue on a separate page, clearly labelling the answer with the corresponding number of the question (e.g. 006).
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.

Some of the risk factors can be explain as the following:

1. Up to nowdays there is no pressure about the temple as a building. Arrangement control continuously done by Regency government, but the contract permission is not executed as good as well, it appeared as the existence of highrise building.

2. The problems due to the number of hawkers both in zone I and zone II which made uncondusif environmental condition. The coordination between Archaeological Park of Candi Borobudur, Prambanan, and Ratu Boko and Borobudur Studies and Conservation Institute to relocated the hawkers.

3. Earthquake monitoring achieved by installation of 2 seismograph which placed on the temple and on southerneast near the climatological equipment. During five years (1997 – 2002) there is twice earthquake had happen (3 and 6 Richter scale) but no significant effect on the structure and the material of the temple.

4. Increasing of visitors always follow by increasing vandalism and littering.

5. Biological component are still condusive, it gave no deterioration effect to the temple.
II.5. continued

Is there an emergency plan and / or risk preparedness plan for the property in existence?  YES / NO

If YES, please summarise the plan and provide a copy:

Some activities done to avoid dangerous factors face to Borobudur Temple due to visitors:
1. Inspection of visitors good which probably cause vandalism and littering.
2. Visitors are always inform about the regulation of visiting to the temple.
3. To arrange the visitors current in order provide no accumulation on one place.
4. Increasing the security on the temple.

Against side effect of the environment:
1. Collecting data of flora, fauna, stone damage and deterioration yearly.
2. Monitoring on soil erosion and do the measurement.
3. Routine conservation to anticipate the growd of flora which may exist on the joining stone.

If NO, describe what is being done – and by whom – to counteract the dangers that threaten or may threaten the property:

Indicate areas where improvement would be desirable and/or towards which the State Party is working.

If the space on the Questionnaire is not sufficient, please continue on a separate page, clearly labelling the answer with the corresponding number of the question (e.g. 006).
II.5. continued

Give an indication if the impact of the factors affecting the property is increasing or decreasing:

Number of littering and graffiti indicate increasing visitors side effect.

What actions have been effectively taken, or are planned for the future, to address the factors affecting the property?

Some of future activities that will be done to anticipate factors which influence to Borobudur existence:
1. Improving security on the temple.
2. Improving cleaning service against the littering.
4. Observing and analyzing on the damage and deterioration temple stone periodically.
5. Visitors behavior monitoring from the entrance up to the exit.
6. Improving monitoring equipment.

II.6. Monitoring

If applicable, give details (e.g. dates, results, indicators chosen) of any previous periodic or reactive monitoring exercises of the property:
1. To increasing security it is needed installment of detector for inspecting visitors goods.
2. Improving cleaning service against littering on the temple and on the yard. Regulation of the workers. 1st shift 06.00 – 12.00 done 3 labours, 2nd shift 12.00 – 17.30 done 3 labours. Additional labours on certain days for example waisaka, school holidays, etc.
3. Monitoring on building structure and its slope gives assumption that it is still steady. Eventhough the settlement in the investigation found 0,0172 m but it is considered to be normal case (Expert prediction is 0,042 m during 20 years post restoration). Just a point control of the hill indicate deviation 0,034 m (direction on toward outside) but the others no more than standard deviation (0,02 m).
4. Investigation on microorganism growth found not more than 30%, algae population 8.25%, moss found 8.3%, and fungi found 1.0%. So that the conservation is conducted well, but deterioration on stone could not be stop, it is found 1,774,281 cm² of superficial scaling it is mean 4.0% of the wall surface.
5. Environment.
   During 3 decades since 1972 the climate condition
   • Average air temperature : 25.4°C
   • Average humidity : 79%
   • Evaporation : 867.3 kgs/ m²/year
   • Wind speed : 2.9 kms/ hour
   • Rainfall : 2080 mm/year

Environmentally influence (geo-physics and biology component) did not give any effect to the building material.

Is there a formal monitoring system established for the site? YES / NO

If YES, please give details of its organisation:

If the space on the Questionnaire is not sufficient, please continue on a separate page, clearly labelling the answer with the corresponding number of the question (e.g. 006).
### II.6. continued

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<tr>
<td>If not already in place, is the establishment of a formal monitoring system planned?</td>
<td>086</td>
</tr>
<tr>
<td>If YES, please outline the functioning of that system, taking into consideration the key indicators you will be asked to define below (see 089 / 090):</td>
<td>087</td>
</tr>
<tr>
<td>Are there any indicators established for monitoring the state of conservation of the property?</td>
<td>088</td>
</tr>
<tr>
<td>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: Monitoring on the site done by Borobudur Studies and Conservation Institute in cooperate with Gadjah Mada University of Yogyakarta. The methods used as the following:</td>
<td>089</td>
</tr>
<tr>
<td>1. Monument stability and its slope are threatened by geotechnics and geodetics investigation. Examination over sample soil boring is done to know potential of swelling and settlement/deformation of vertical. While geodetics is done by traversing using theodolits to know horizontally deformation. Vertical deformation investigated by leveling. Further geodetics survey is done by GPS method.</td>
<td>090</td>
</tr>
<tr>
<td>2. To keep the conservation on the temple stone, the microorganism which grows on the stone surface threatened mechanical by using palm brush (sikat ipek), steam cleaner, and vacuum cleaner. Then to be conserve using chemical compound to slowly the growth, another way is applying water repellent.</td>
<td>090</td>
</tr>
<tr>
<td>3. The stone damage are observed directly.</td>
<td>090</td>
</tr>
<tr>
<td>If NO indicators have been identified and/or used so far, please define key indicators for future use in monitoring:</td>
<td>090</td>
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### II.6. continued

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<tbody>
<tr>
<td>Indicate which partners, if any, are involved or will be involved in the regular monitoring exercise: Monitoring regularly done collaboration with expert and student from Gadjah Mada University and student of others university.</td>
<td>091</td>
</tr>
<tr>
<td>Identify the administrative provisions for organizing the regular monitoring of the property: Central Government (Development of Culture and Tourism Board)</td>
<td>092</td>
</tr>
</tbody>
</table>

If the space on the Questionnaire is not sufficient, please continue on a separate page, clearly labelling the answer with the corresponding number of the question (e.g. 006).
Describe what improvement the State Party foresees or would consider desirable in improving the monitoring system:

Regarding to monitoring system progress it should be paid attention in some cases:
1. Adequate human resources.
2. Sophisticated equipment.
3. Easy to be carried out, effective, and efficient.

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:

Up to nowadays it never been done yet.
## II.7. Conclusions and recommended actions

Please summarise the main conclusions regarding the state of the World Heritage values of the property (see items II.2. and II.3. above):

Borobudur Temple investigated of its position indicate no deformation. The environment is still support its authentics and further existence. Temples material is still authentics its made of andesite and the temple size does not change it form and its architecture as well. Completing the architectural aspects is still continue of stone matching of original stone which unknown its location by using anastiloge method. The conservation is conducted well and the structural condition of the temple and its supporting hill is still steady, even though it necessary equipment for monitoring which more sophisticated ones.

Please summarise the main conclusions regarding the management and factors affecting the property (see items II.4. and II.5. above):

Up to nowdays manpower who manage Borobudur Temple is conducted adequate enough, but they will retired soon. So that need substitution. Improving human resources need training abroad on conservation and restoration. To solve the conservation problems needs collaboration with national and international expert in certain knowledge. Some of the equipment have already broken so it need international fund and increasing the national budget (APBN). Participation of Archaeological Park of Candi Borobudur, Prambanan, and Ratu Boko and local government need improving specially to increasing fund for preservation and environment control as well. The internal factors of stone damage had been achieve already by routine conservation but the external factors is still difficult to be avoided, so that it needs solution step by step continuously.

Give an overview over proposed future action / actions:

It is needs some proposal about:
- Additional manpower with suitable of the necessity
- Improving human resources
- Providing the new equipment
- Improving collaboration with international institution
- Budget increasing for the preservation
- Providing the regulation concerning the world heritage management

Name the agency responsible for implementation of these actions (if different from 005):
Borobudur Studies and Conservation Institute

Give a timeframe for the implementation of the actions described above:
In 2003

If the space on the Questionnaire is not sufficient, please continue on a separate page, clearly labelling the answer with the corresponding number of the question (e.g. 006).
**II.7. continued**

<table>
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<tbody>
<tr>
<td>Indicate for which of the planned activities International Assistance from the World Heritage Fund may be needed (if any):</td>
<td>100</td>
</tr>
</tbody>
</table>
| Are there any contacts with management units of other properties within or outside your country? | 101
| YES / NO |
| If YES, please explain: | 102 |
| Just to do the communication within inside the country (domestic communication on management) |
| 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: | 103 |
| Collaborating with Cambodian government in the term of technical contributions for the restoration of Angkor Thomp Site |
| Provide the name(s) and address(es) of organization(s) or specialist(s) who could be contacted for this purpose: | 104 |
| Agency / Organisation: Borobudur Studies and Conservation Institute |
| Person responsible: Drs. Dukut Santoso |
| Address: Jl. Badrawati |
| City and post code: Magelang 56553 |
| Telephone: 062 293 788225 |
| Fax: 062 293 788367 |
| E-mail: balai-brb@magelang.wasantara.net.id |

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

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<tr>
<td>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.)?</td>
<td>105</td>
</tr>
<tr>
<td>It is enough</td>
<td></td>
</tr>
<tr>
<td>Was the questionnaire clear and did it help to comply with the reporting requirements of the State Party?</td>
<td>106</td>
</tr>
<tr>
<td>Yes it was</td>
<td></td>
</tr>
<tr>
<td>What are the perceived benefits and lessons learnt of the exercise?</td>
<td>107</td>
</tr>
<tr>
<td>world heritage monitoring system</td>
<td></td>
</tr>
</tbody>
</table>

If the space on the Questionnaire is not sufficient, please continue on a separate page, clearly labelling the answer with the corresponding number of the question (e.g. 006).
Please describe the expected outcome of the Periodic Reporting exercise and the desired follow-up by the World Heritage Committee:
The World Heritage Committee are requested directly come to Borobudur Temple to do the monitoring. Request on assistant of expert and additional fund for the conservation.

II.9. Documentation attached

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

1. (X) 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. (X) Photo of general view (aerial view) of the property
3. (X) Illustrations of the state of conservation of the site (photographs, slides and, if available, film/videos)
4. (X) Details of the important aspects of the property (landscapes, animal and vegetable species, monuments etc.)
5. (X) Photos illustrating the main threats to the site and its surroundings
6. ( ) Extracts of relevant laws and regulations concerning the protection of cultural and natural heritage at national, provincial and municipal levels
7. ( ) 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. ( ) Indicative bibliography

If the space on the Questionnaire is not sufficient, please continue on a separate page, clearly labelling the answer with the corresponding number of the question (e.g. 006).
APPENDIX 1. Zoning Plan Borobudur
BOROBUDUR TEMPLE

ZONING PLAN BC

Scale 1:25000
APPENDIX 3. Borobudur Temple and its Environt Condition

APPENDIX 4. Environt Condition of West Side of Borobudur Temple
APPENDIX 5. Environt Condition of East Side of Borobudur Temple

APPENDIX 6. Environt Condition of North Side of Borobudur Temple
APPENDIX 7. Envirot Condition of South Side of Borobudur Temple

APPENDIX 8. Stone Cleaning Mechanically by Using Palm Brushes and Water.
APPENDIX 9. Stone Cleaning by Using Steam Cleaner

APPENDIX 10. Stone Treatment Chemically with Hyvar X-L 1%.
APPENDIX 11. Water Measurement Applying for Cleaning Stone of Borobudur Temple

APPENDIX 12. Leakness of Lead Layer
APPENDIX 13. Repairing of Lead Layer Leak

APPENDIX 14. Applying Water Repellent Araldite Tar After Repairing of Lead Layer Leak
APPENDIX 15. Replacing Wall Stone of Borobudur Temple

APPENDIX 16. Scalling of Wall Stone of East Side Level 1 Section a
APPENDIX 17. Borobudur Temple Visitors

APPENDIX 18. Visitors Vandalism by Graffiti on the Stone Surface
APPENDIX 19. Hawker at the Zone 1 of Borobudur Temple