

**PERIODIC REPORTING ON
THE APPLICATION OF
THE WORLD HERITAGE CONVENTION**

The Preservation of the World Heritage --- the Mogal Grottoes of Dunhuang

EXECUTIVE SUMMARY

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 or entity responsible for the preparation of the report
- f. Date of report
- g. Signature on behalf of State Party

2. Statement of significance

3. Statement of authenticity/integrity

4. Management

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1. Introduction

a.	Country: The People's Republic of China	001
b.	Name of World Heritage property: the Mogal Grottoes of Dunhuang	002
c.	<p>Dunhuang is situated in the western end of the Hexi Corridor at 40° N., 94.49° E. Mogal Grottoes, 25 km from Dunhuang city, lies in the brim of the Dunhuang valley and is sandwiched between Mount Sanwei and Mount Mingsha. The Caves, facing east, consist of a group of caves extending 1,600 meters from south to north. There are over 700 grottoes lining in 5 stories, of which 492 house color sculptures and murals. Altogether, there are over 2,000 color sculptures and over 45,000 square meters of murals and five wooden cave eaves.</p> <p>The Caves are divided into a key conservation area and a general conservation area.</p> <p>The key conservation area: starting from the eastern cliff of Daquan River and extending 200 meters further east. In the south, it begins from Cave 131 and extends 500 meters further south. In the west, it extends 200 meters further west from Shiku cliff. In the north, it extends 200 meters northward from Cave 465.</p> <p>The general conservation area: with the west foot of Mount Sanwei as the boundary in the east, in the south, it consists of the entire Daquan River valley --- Daquan, Tiaohu Lake, Dalapai, Xiaolapai, Kukou Spring and Chengcheng Curve. In the west, it extends 2 km westward from Mount Mingsha watershed. In the north, it ends at the 13 km point of the S217 (Wenhua Road).</p> <p>The central point: 40°02'14.2" N., 94°48'14.7" E.</p>	003
d.	Date of inscription on the World Heritage List or later added to the list (if applicable): 1987	004
e.	<p>Organization or entity responsible for preparation of the report:</p> <p>Organization/entity: Dunhuang Research Academy</p> <p>Person in charge: Fan Jinshi</p> <p>Address: The Mogal Grottoes of Dunhuang City</p> <p>City and postal code: Dunhuang City, 736200</p> <p>Tel: 0937-8869003</p> <p>Fax: 0937-8869028</p> <p>Email: FJS@mail.dha.ac.cn</p>	005
f.	Date of report: August, 2002	006
g.	Signature on behalf of State Party:	007

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Signature: Name: Fan Jinshi Title: Director, Dunhuang Research Academy	
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2. Statement of significance

<p>When a heritage is included in the world heritage list, the world heritage committee pointed out its outstanding universal value or the value of world heritage to determine that the heritage is worth being listed. Please draw a circle on the criterion of the heritage listed:</p> <p style="padding-left: 40px;">Cultural criterion: i — ii — iii — iv — v — vi</p>	008
<p>After initially being included in the list, has any new criterion been established through re-nomination or building up new items?</p> <p style="text-align: center;">Yes/No✓</p>	009 010
<p>The comments on the property by the advisory body in evaluating the nomination:</p> <p style="padding-left: 40px;">Evaluating the nomination, the ICCMOS pointed out: Dunhuang Mogal Grottoes meet the six criteria to be embodied in the world cultural heritages. It also noted that extending the conservation area surrounding Mogal Grottoes to outside the cliff, particularly the large area on the foot of the cliff, aims at protecting the site from the damages brought about by any other structures. Plan has be worked out for the study project proposed by UNESCO to enhance the ability of the Dunhuang Research Academy in protecting, repairing and managing the site. Undoubtedly, the plan will arouse the interest of the international community.</p>	011
<p>Cite the decision and assessment/recommendation of the World Heritage Committee upon inscription and extension:</p>	012
<p>Point out what follow-up actions have been taken after these assessments and/or decisions:</p> <p>1. Small shops in the cave area have been demolished, and shops selling tourism articles were built up in thickets and the square in front of the Nine-story Building, the landmark structure of the Mogal Grottoes, was rebuilt. The parking lot and reception division have been moved to the eastern bank of Daquan River, which is farther away from the caves; the towering water tank, canteen room and other buildings that are completely out of harmony with the cave surroundings are removed.</p> <p>2. Since 1987, various international cooperation projects have been carried out to implement a number of grotto protection, repair and management plans.</p>	013
<p>Statement of significance:</p> <p>The Mogal Grottoes meet any of the following six criteria:</p>	014

	<p>1. The Caves display unique artistic achievements. The space of the 492 caves were divided into five layers with over 2,000 sculptures applied with color mud on rock walls and 45,000 m² of murals. Many of them are elaborate works of Chinese art.</p> <p>2. During over 1,000 years from the Northern Wei Dynasty (386-534) to Yuan Dynasty (1276-1368), Mogal Grottoes played a decisive role in the artistic exchanges between central plains and Central Asia and India.</p> <p>3. The murals in the caves accidentally witness the brilliant ancient Chinese culture from the Sui Dynasty (the mural in Cave 302 depicting a camel drawing a cart is the earliest and most vivid picture about the Silk Road), the Tang Dynasty (the mural in Cave 23 shows people working in the field and the mural in Cave 156 draws a team of chariots) and the Song Dynasty (the famous landscape of Wutai Mountain in Cave 61 is the unparalleled example of picture composition. From a religious point of view, it depicts rivers, mountains, cities, temples, roads and even canary birds, all being parts of the boundless universe).</p> <p>4. The Thousand Buddha Cave is one of the outstanding representatives of Buddhist cave art.</p> <p>5. By the end of the 19th century, the Caves have been in the possession of monks and they have not been under the management of Dunhuang Cultural Relics Academy until the 1930s. Therefore, they keep the traces of monk inhabitation.</p> <p>6. Mogal Grottoes are closely linked with the come-and-go between the east and the west in history and the dissemination of Buddhism in Asia. For centuries, Dunhuang and its nearby areas has been at the crossroad of the Silk Road and serving as the place of alternation between the new and the old in both trade exchanges and in ideology. This has been proven by documents in the languages of Han, Tibet, Sute, Yutian, Huihu and even Hebrew discovered in the caves.</p>	
	<p>Will you consider re-nomination in respect of the property?</p> <p style="text-align: right;">Yes/No <input checked="" type="checkbox"/></p>	<p>015</p> <p>016</p>
	<p>Are the boundaries of the property and its buffer zone (still) protected and preserved with an aim to ensure the universal values of the property:</p> <p style="text-align: right;">Yes/No <input checked="" type="checkbox"/></p> <p>It the answer is no, please explain why, and point out what change should be made to the boundary or the buffer zone of the heritage (please also mark the change on the map attached to this report):</p> <p>As there is an earth pyramid at the Chengcheng Sinus in the Daquan River valley, which is an important component of Mogal Grottoes. The sphere extending 2,000 meters westward from the top of the Caves is the key sand control area of the Mogal Grottoes. Expanding the area for nearly 2 km northward is to better preserve the natural landscape on the northern side of the Caves.</p> <p>The key conservation area will be extended by 200 meters eastward from the east cliff of Daquan River. The south end will be moved southward by 500 meters from the Chengcheng</p>	<p>017</p> <p>018</p>

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	Sinus and the west end of the area will be extended by 2,000 meters westward along the cliff of the Caves. In the north, it will end on the milestone at 11 km from S217 line.	
	<p>Is the State Party considering the modification of the boundaries or the buffer zone of the World Heritage property?</p> <p align="right">Yes/No <input checked="" type="checkbox"/></p> <p>If the answer is yes, note what should be done to achieve the goal:</p> <p>At present, the new sphere of the key conservation area has been reported to the Gansu Provincial Government, and has been included in the Regulation on Protecting Gansu Dunhuang Mogal Grottoes. The regulation has been submitted to the Standing Committee of the Gansu Provincial People's Congress.</p>	019

3. Statement of the authenticity/integrity

	<p>Since the property was included on the World Heritage List, have the values defined above been maintained:</p> <p align="right">Yes <input checked="" type="checkbox"/> / No</p>	021 022
	<p>At the time of inscription, what was the assessment of the authenticity/integrity of the property?</p> <p>ICOMOS: it meets the six criteria to be embodied in the list of world cultural heritages.</p>	023
	<p>Since inscription on the List, are there any changes in the authentic/integrity of the property?</p> <p align="right">Yes/No <input checked="" type="checkbox"/></p> <p>If the answer is yes, please note the changes and the reason for the changes.</p> <p>Since 1987, in accordance with the requirements of the World Heritage Convention, we have strengthened the scientific protection and management and intensified protection of the heritage so as to better manifest the authenticity and integrity of the heritage.</p>	024 025
	<p>In the near future, are there any predictable (further) changes in the authentic/integrity of the property?</p> <p align="right">Yes/No <input checked="" type="checkbox"/></p>	026 027

II. 4. Management

	<p>How to make the most appropriate arrangement for the protection and management of the property (more than one choice may be ticked)?</p> <p align="center">legislative (<input checked="" type="checkbox"/>) contractual (<input checked="" type="checkbox"/>) traditional (<input checked="" type="checkbox"/>)</p>	028
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	<p>Illustrate and evaluate the implementation of the arrangement and the effectiveness of preserving the values described under Item II.2 at the national, provincial and/or municipal level:</p> <p>Law can effectively prevent local governments and departments from adopting actions adverse to the protection of the heritage out of the desire to reap economic gains.</p> <p>Contractual arrangement can effectively restrain organizations using the heritage from altering the functions of the heritage.</p> <p>To a certain extent, traditional arrangement can draw support from people, so that their awareness will be raised to exercise active protection and management of the relics.</p>	029
	<p>Generally speaking, can the legislative, contractual and/or traditional protection be deemed as sufficient?</p> <p style="text-align: right;">Yes√ /No</p> <p>Please explain the reason:</p> <p>Same as for Item 029.</p>	030 031
	<p>A list and summary of the law and regulations governing the protection and management of cultural and natural heritage:</p> <p><i>The Constitution, The Criminal Law and The Law of the People's Republic of China on the Protection of Cultural Relics.</i></p> <p>Article 22 of Chapter 1, the General Principles of <i>The Constitution</i> provides that “the state protects places of scenic and historical interest, valuable cultural monuments and relics and other important items of China’s historical and cultural heritage.”</p> <p>Article 174 of <i>The Criminal Law</i> stipulates that “deliberate damage of precious cultural relics, scenic sports or historical sites under state protection shall result in a prison sentence of not more than seven years or criminal detention.”</p> <p>Article 31 of <i>The Law of the People's Republic of China on the Protection of Cultural Relics</i> stipulates that “deliberate damage of precious cultural relics, scenic sports or historical sites under state protection should result in investigation to establish criminal responsibility in accordance with law.”</p>	032
	<p>What administrative and management arrangement has been made for the property concerned:</p> <p>Dunhuang Research Academy, a special agency representing the state to exercise the protection and management of Mogal Grottoes, affiliates several functional bodies related to the protection of the relics, such as the Protection Institution, the Security Division and Cave Management Divisio, etc.</p>	033
	<p>Under which level of authority is the management of the property placed:</p> <p style="text-align: center;">Property () District (✓) State ()</p> <p>The full name, address and telephone/fax/email of the entity directly responsible for the</p>	034 035

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	<p>management (preservation, maintenance and tourist control) of the property:</p> <p>The full name: Dunhuang Research Academy Address: Dunhuang Mogal Grottoes Tel: 0937-8869003 Fax: 0937-8869028 Email: FJS@dha.ac.cn</p>	
	<p>Is it necessary to revise the administrative and management arrangement for the property? Yes √ /No</p> <p>If the answer is yes, please explain why.</p>	<p>036</p> <p>037</p>
	<p>Is there any management plan? Yes √ /No</p> <p>If there is, please provide a brief account to explain whether the plan is being implemented and from what time the implementation begins.</p> <p>There is an Overall Plan for Protecting and Managing Mogal Grottoes, which has been implemented since 2001.</p>	<p>038</p> <p>039</p>
	<p>What legal and administrative measure will be adopted in the future to protect the values described under Item II.2:</p> <p>A special regulation is on its way in Gansu Province, i.e., <i>the Administrative Regulation of Mogal Grottoes</i>.</p>	<p>040</p>
	<p>Providing detailed information about the following items, particularly the significant changes (if any) since the inscription of the property on the List:</p> <ul style="list-style-type: none"> ● <u>conservation</u> <p>Cite all major interventions on the site and explaining the current state of the preservation:</p> <ol style="list-style-type: none"> 1. From 1990 to 1994, an exhibition center of the achievements on the protection study of the Dunhuang Caves was built in the east bank of Daquan River in front of Mogal Grottoes. The center is a semi-underground structure whose exterior appearance and style do not significantly affect the landscape and environment of the Mogal Grottoes. 2. From 1990 to 1991, a triangle sand fence was erected on the top of the Mogal Grottoes to protect Mogao Kunan area. During 1993-1997, a stripe of sand breaks of 2,000 meters long and 30 meters wide was planted on the foot of Mount Mingsha. 3. From 1998-1999, the small shops in the cave area were demolished, and shops selling tourism articles were built in thickets and the square in front of the Nine-story Building, the landmark structure for Mogal Grottoes, were rebuilt. The parking lot and the reception division were moved further away from the Caves to the east bank of Daquan River. The towering water tanker in the grotto area and restaurants that were out of harmony with the cave environment were dismantled. 	<p>041</p> <p>042</p>

4 From 1998-2000, the lower temple of Mogal Grottoes was repaired and opened as Lection Storage Cave Exhibition Hall.

5. In 2002, work started to renovate the middle and upper temples, which will be used as the exhibition hall of the Dunhuang Research Academy.

6. As to the gardens outside the caves, the way of watering has been changed from flooding irrigation to drop irrigation.

7. Some of the withered trees and trees threatened by pests and diseases have been replaced with those adaptable to local climate and soil.

8. A security system was gradually put into use during 1988-2000, adopting the way of voice control, infrared control, magnetic control and television to guarantee the security of the Mogal Grottoes.

9. The ruins of the Nine-story Hall were cleared and excavated during 1999-2000, and the ground and building vestige of the periods of Tang, Song, Western Xia, Yuan and Qing Dynasties as well as Sun Yat-sen's Republic of China, were discovered and put under protection.

10. The middle section of the southern area was reinforced during 1999-2000, including reinforcing the efflorescent cliff, grouting into the cracks, and dismantling and rebuilding of the reinforcing construction work of the 1950s. However, the style of that time has been basically kept.

11. During 1999-2000, the work to reinforce the cliff against efflorescence and seal off the cracks by grouting in Cave 3 was completed.

12. In 2001 and 2002, air purifiers were installed in Cave 320, Cave 323 and Cave 328.

13. During April-July 2002, the three-story building of Mogal Grottoes was repaired and reinforced.

14. Dunhuang Research Academy cooperated with the US Getty Conservation Institute to protect and repair Cave 85 during 1998-2002, with the emphasis laid on repairing and reinforcing plumped up and loosened murals.

15. In 1999, a full automatic weather monitor station was built in cooperation with Osaka University of Japan.

Through the above-mentioned interventions, the natural environment of Mogal Grottoes has become more harmonious their value as the world heritage. At the same time, the most important threat to the Caves, wind and sand, have been brought under certain control, thus the authenticity and integrality of the heritage has been effectively protected.

● Ownership

The ownership rights of the heritage belong to the state, and will remain so in the future.

<p>Detailed explanation of the staffing:</p> <p>An academic unit at the prefecture level, Dunhuang Research Academy has a dozen of departments, including a protection Research Academy, an art research academy, a document Research Academy, an archeology Research Academy, an editorial department, a data center, a photography department, an exhibition center on the achievements of the protection and study of the Dunhuang Grottoes, a reception division, an academic committee, an office, a personnel division and a security division.</p> <p>The Academy now employs 245 staff members and 239 temporary workers. Of the 245 formal employees, 30 are aged over 50, accounting for 12.2%, 76 between 40 and 49, accounting for 31%, 108 between 30 and 39, accounting for 44.1% and 31 under 30 years old, accounting for 12.7%. Its has 182 intellectual staff, accounting for 74.3% of the staff, with 10.4% or 19 having master's or doctor's degrees. University graduates number 44, accounting for 24.2% of the intellectuals, 107 graduated from junior colleges, accounting for 58.8%, and 12 graduated from technical secondary schools, accounting for 6.6%. There are now 159 professionals, including 8 research staff, accounting for 5% of the professionals, and 18 assistant research fellows, accounting for 11.3%. There are altogether 60 librarians, accounting for 37.7%, 64 assistant librarians, accounting for 40.3%, and 3 administrators, accounting for 1.9%. Another 6 professionals are waiting to be awarded professional titles, accounting for 3.8%.</p>	043
<p>Is the staff in place sufficient for the proper management of the property:</p>	044
<p style="text-align: right;">Yes/No <input checked="" type="checkbox"/></p>	045
<p>If the answer is no, what step should be taken to improve the situation?</p>	046
<p>Continue to attract and fund the training of high quality inter-disciplinary talent.</p>	
<p>Do the staff members need additional training?</p>	047
<p style="text-align: right;">Yes <input checked="" type="checkbox"/>/No</p>	
<p>If the answer is yes, what kind of training do your staff require?</p>	
<p>Train a backbone team who are knowledgeable of both culture and museum science and management; train a team of new type professionals who master both professional knowledge and modern science and technology; train a team of management, research and information propagation cadres who master the knowledge of culture and museum science as well as foreign languages.</p>	
<p>The current situation of funding and finance:</p> <p>The fund mainly comes from the state financial appropriation, ticket selling and donations from domestic and overseas organizations and individuals. From 1993 to 2001, the state financial appropriations and subsidies amounted to 30 million yuan, special allocations for capital construction and relic maintenance 22.17 million, subsidies from higher authorities 1.7 million, income from undertakings 104.69 million, revenue from other sources 2.09 million and</p>	048

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<p>donations 5.35 million.</p> <p>Is the existing amount of funds sufficient for the proper management of the property: Yes/No ✓</p> <p>If the answer is no, explain what financial sources are needed to exercise the management.</p> <p>The size of Mogal Grottoes is massive and the natural environment there is awful. The preservation of the heritage is frequently threatened by wind and sand erosion, water penetration from concentrated rainstorms and earthquakes. The steep rise in the number of tourists has made the protection of the Grottoes a more arduous task. Large amounts of fund need to be put in the protection of the heritage.</p>	<p>049</p> <p>050</p>
<p>From what international assistance has the property benefited:</p> <ul style="list-style-type: none"> ● The World Heritage Fund: 051 ● The UNESCO International Promotion Program: None 052 ● Country/regional projects of the UNDP, the World Bank and other institutions: None 053 ● Bilateral cooperation: None 054 ● Other assistance: 055 <p>Dunhuang Research Academy has received donations from the Japanese government, Japanese Syndicate of the Protection and Revival of Cultural Heritages, US Getty Fund , Getty Conservation Institute, US Meron Fund, Hong Kong Run Run Shaw Fund, Japanese painter Hirayama, Hong Kong Beneficiary Association of the Protection of Buddhist Relics and individual donation of Run Run Shaw and Li Ka-shing.</p>	<p>051</p> <p>052</p> <p>053</p> <p>054</p> <p>055</p>
<p>IT (computer) facilities:</p> <p>Dunhuang Research Academy has built a 100M optical fiber network linking its administrative offices, data center, art institute, photography department, protection institute, exhibition center, reception division and security division. Statistics show that apart from its Lanzhou branch, the institute now has 5 servers, 62 PCs of various types, 11 portable PCs, 40 printers (Its Lanzhou branch has one server, 17 PCs, 2 portable PCs and 12 printers). Most of the computers now in use were PIII and PIV PCs bought in the recent two and three years, with only a few being in old Pentium series. Most of the printers are desk laser ones for office use, with a few being matrix printers.</p> <p>The computers are used mostly for word processing in offices, word processing and information management. To facilitate digital study of Dunhuang murals, Apple series PCs, high performance image processing PCs, color laser printers and high precision scanners have been equipped to conduct extensive domestic and international cooperation with such institutions such as the Computation Technology Institute of the Chinese Academy of Sciences, Changchun Precision Optical Instruments Institute of the Chinese Academy of Sciences, Zhejiang University, and Northwest University of the United States. As the result, Dunhuang Research Academy is a leader in the research on relic information protection and storage in the whole nation.</p>	<p>056</p>

of application of the Shuguang Tianyan Power workstation in relic protection, a state 863 project, and the topic of multimedia and intelligent technology integration and artistic restoration, a high-tech project of the State Natural Science Fund Committee. The study projects now under way include “the study on murals and color sculptures in ancient cave temples and their protection”, “the environmental evolution in Dunhuang Mogal Grottoes and grotto protection”, “the education of the popular science on the environment evolution in Dunhuang Mogal Grottoes and their surrounding areas”, and “the study on the application of full digital photographic survey in the protection of Dunhuang Mogal Grottoes relics” delivered by the State Bureau of Cultural Relics.

Since the end of the 1980s when international cooperation was started to protect Mogal Grottoes, we have cooperated with the National Cultural Heritage Research Institute, Tokyo, Japan, Getty Conservation Institute (GCI), Tokyo National University of Fine Arts and Music, Japanese Osaka University, US Meron Fund and Northwest University in the study on the protection and preservation of Dunhuang Caves relics, thus have introduced up-to-date foreign technology and equipment to make up for our own technical deficiency. The first phase of the cooperative project with the GCI won a high opinion of international experts after their evaluation in 1994. They saw the project as the most successful example the GCI had conducted in its international cooperation and a model of the State Bureau of Cultural Relics in its international cooperative projects. The second phase of the project known as “the study on the protection of Mogal Grottoes murals” started in 1997 and the implementation is now been stepped up. With more and more areas of study of Magao Caves open to the world, exchanges between Dunhuang Research Academy and domestic and overseas organizations have been promoted and international cooperation sped up.

In the study on monitoring the grotto site and its natural environment, the chemical composition of cliff rocks and surface water has been analyzed and the structural feature of the shaping of cliff stratum and the diseases brought about by it investigated. The materials, structure and property for making the color sculptures and murals have been analyzed and evaluated, a full automatic weather station has been built up to monitor the climate factors in the grotto area like temperature, humidity, wind direction and illumination. Different types of caves have been selected as the sites to monitor the sub-environment in the caves. In the exploration and control of the causes of diseases, it has been found out that with their back against Mount Mingsha, Mogal Grottoes are subject to the threat of wind and sand which have worn down color sculptures and murals. Therefore, wind and sand flow have been monitored. The mechanism and cause of the common but most dangerous diseases to the murals like encrustation, color change of paste and loosened changes have been explored. Materials and techniques to repair murals and color sculptures have been studied and picked out and the actual effects of the repair materials evaluated. Experiments have been made to bring the diseases under control on the basis of scientific monitoring and investigating into their causes,

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	like employing engineering, chemical and vegetal measures to put wind and sand hazard under control in an all-round way.	
	<p>The financial and human resource input for the research plan and/or facilities:</p> <p>The Protection Institute of Dunhuang Research Academy has intensified its protection of the Caves, a world-class cultural heritage. It has now become an entity of scientific study comprising grotto relic protection study, mural and sculpture repair and project reinforcement. It has developed into a team of nearly 50 members with high, intermediate and junior professional titles engaged in protection science & technology and repair work. The work of its doctors, masters and bachelors covers the fields of chemistry, physics, engineering geology, computer science, forestry, construction, survey, photography and meteorology. The team is equipped with advanced instruments of analyzing and environment monitoring, such as X diffract, X fluorescence, infrared ray, polarized microscope and full automatic environment monitor. To ensure the smooth implementation of various study projects, the related departments, international organizations and Dunhuang Research Academy have put in a large amount of human and material resources. Initial estimate puts the financial input at over 100 million yuan and human input at over 200 persons.</p> <p>How to disseminate information/research results?</p> <p>The information is disseminated through <i>Dunhuang Study</i>, the academic periodical sponsored by Dunhuang Research Academy, the Internet and various kinds of traditional and electronic publications.</p>	<p>064</p> <p>065</p>
	<p>Are there any statistics about tourists to the site: Yes ✓ /No</p> <p>If there are, please provide a brief account of the material and attach it in the report: (see attachment) Figures 6, 7, 8 and 9.</p>	<p>066</p> <p>067</p>
	<p>What facilities are available to tourists?</p> <p>Post office 1</p> <p>Telecommunication, mobile communication and China Telecom station 1</p> <p>Public telephones 19</p> <p>Microwave TV network</p> <p>Bank 1</p> <p>Shops 19</p> <p>Reception center 1</p> <p>Canteen Hall 2</p> <p>Toilets 4</p> <p>Clinic, first aid center 1</p> <p>Public Security Police station</p> <p>Exhibition center, lection storage cave exhibition hall</p>	<p>068</p>

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	<p>Reception hall, 5 academic conference halls and a number of lobby areas</p> <p>VIP parking lot, sedan parking lot and parking lot for other vehicles 3</p> <p>There are over 70 guides of various languages and rational tour routes</p> <p>Road signs and signposts</p> <p>Passage for disabled</p> <p>Inquiry and complaint desk</p>	
	<p>What facilities are needed for tourists' convenience?</p> <p>We need a large number of toilets of environment protection type, multipurpose digital exhibition halls, electronic guides, and electronic searching devices, etc.</p>	069
	<p>Is there any public plan for the heritage?</p> <p style="text-align: right;">Yes <input checked="" type="checkbox"/> /No</p> <p>If there is, please provide a brief account. If there is no, please explain whether such a plan is needed.</p> <p> There is a whole chapter in the <i>Overall Plan on the Protection and Management of Mogal Grottoes</i> dealing with tourist management.</p> <p> Dunhuang Research Academy has a sound professional reception body and a professionally trained reception team. The receptionists can speak six different languages and are able to receive guests with different requirements.</p> <p> There is a regularized management body and staff.</p> <p> A number of elaborately selected and rationally arranged caves are open to tourists.</p> <p> There is space for displaying exhibits, such as the exhibition center and lection storage cave exhibition hall.</p> <p> There are caves reproduced to their original sizes to ease the pressure on the caves of the same numbers so that the open time of the original ones will be minimized.</p> <p> There is now a plan to develop new exhibits and tour items to further increase the educational function and effect.</p>	070 071
	<p>How to communicate the world heritage value of the property to residents, tourists and the public:</p> <p>We have disseminated information about Mogal Grottoes to tourists and the public through popular reading materials about Dunhuang study, picture albums about Dunhuang art and electronic publications. Related information can also be obtained from the website of Dunhuang Research Academy.</p>	072
	<p>Are there any educational programs for schools?</p> <p style="text-align: right;">Yes <input checked="" type="checkbox"/> /No</p> <p>If there is, please explain.</p> <p> Preferential treatment is offered to pupils and middle school students when they visit Mogal Grottoes. Student ticket rate is applied to individual pupils and middle school students so long</p>	073 074

	as they show their student ID cards. Visiting the site in groups organized by schools during holidays is free of charge. Commendatory for pupils and students is available to give them practical education.	
	<p>What role does the World Heritage designation play in promoting tourist arrivals at the site, its research plans and/or awareness building activities?</p> <p>The inclusion has increased the number of visitors by a big margin and attracted the attention of a large number of domestic and foreign scholars engaged in Dunshuang study. It has also helped more people realize and understand the charm of Dunshang art.</p>	075

II. 5. Factors affecting the heritage

	<p>To what degree is the property threatened by particular problems and risks?</p> <p>Instability of rock structure (earthquake, natural collapse, cracks, etc.);</p> <p>Wind and sand hazard (wind erosion on rocks, friction to murals from sand dust);</p> <p>Water problem (water for irrigating gardens in front of the caves, precipitation from atmosphere, water penetration in rocks);</p> <p>The rise in the number of tourists year after year and the mounting pressure on caves when open to the public.</p>	076
	<p>Is there any emergency plan for the property?</p> <p style="text-align: right;">Yes √ /No</p> <p>If there is one, please give us a brief account and provide a copy.</p>	077 078
	<p>Areas for anticipated improvement and/or the orientation that the State Party strives for:</p> <p>We hope the state may exercise unified management of the world heritage.</p>	080
	<p>Has the impact of the factors affecting the property increased or decreased?</p> <p>The natural factors of wind and sand, precipitation and earthquake and the increasing number of tourists will continue to affect the grotto protection. How to restrain or ease the impact of these factors is a problem that must be faced and solved.</p>	081
	<p>In order to address those factors affecting the property, what effective measures have been adopted or planned for the future?</p> <p>Environment monitoring, sand control, investigation and study of the geological and water environment in Mogao Grottoes, reinforcement of effloresced and cracked rocks.</p>	082

II.6 Monitoring and control

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	<p>Detailed information about the previous monitoring of the heritage on a regular or responsive basis:</p> <p>In May 1994, the World Heritage Committee exercised monitor in response to the incident of felling trees in the Mogao Grottoes. After their inspection of the area the experts believed that the wide media coverage on the felling of a large area of windbreak forest in front of the grottoes by Dunhuang Research Academy did not tally with the fact. The Academy only replaced some trees died from dry rot or diseases. The experts gave a full affirmation of the efforts of heritage protection and management.</p>	083
	<p>Has a formal monitoring system been established for the heritage? Yes /No ✓</p> <p>If no, is there a plan to establish a formal monitoring system? Yes ✓ /No</p> <p>If there is one, please provide a brief account about its operation.</p> <p>A security system for Mogao Grottoes was set during 1988-2000, including the employment of sound control, infrared, magnetic control and TV control devices.</p>	084 085 086 087
	<p>Has any guideline been set up for monitoring the conservation of the heritage? Yes ✓ /No</p> <p>If yes, please provide the latest update on the major indices already established and/or put in use. Be advised that the information should be kept as accurate as possible. For an example, illustrating similar equipment or methods employed at the time on the same day and in the same year if observation is conducted in the same manner. Listing and explaining the major indices of measuring the conservation of the heritage:</p> <p>Figures of tourist number, the impact produced by tourists to the sub-environment in the caves like dynamic monitoring of CO₂, humidity, changes in temperature, position change of cracks, vibration, mural and color sculpture diseases.</p>	088 089 090
	<p>Which cooperation partner has participated or will participate in regular monitoring:</p> <p>US Getty Conservation Institute, the National Cultural Heritage Research Institute of Tokyo, Japan and Japanese Osaka University.</p> <p>To define the administrative stipulations on organizing regular monitoring of the heritage:</p> <p><i>The Law on the Protection of Cultural Relics of the People's Republic of China</i></p> <p><i>The Law on Environmental Protection</i></p> <p><i>The Regulations on the Protection and Management of Mogao Grottoes</i></p>	091 092
	<p>What is expected to be improved or what improvement measures may be adopted in terms of bettering the monitoring system:</p> <p>The signatory country should work out various monitoring system and content in the light of the type of the heritage to enhance effective protection of the site by exercising periodical monitoring and inspection in the form of administrative regulations.</p>	093

<p>Under specific circumstances, the World Heritage Committee and/or the Presidium of the World Heritage may have examined the preservation of the heritage and made recommendations to the State Party when or after the heritage was inscribed on the List. In this case, the State Party is required to report any actions adopted as a reply to the assessment or decision by the Presidium or the Committee.</p> <p>Demolish the buildings put up in violation of relevant regulations and damaging the landscape.</p>	094
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II. 7. Conclusion and actions proposed to be taken

<p>Major conclusion on the heritage as a universal heritage value: The heritage meets the six criteria for the value of world heritage and the current state of protection embodies the authenticity and integrity of its value.</p>	095
<p>Major conclusion on the heritage's management and factors affecting it: Protection first and rational utilization.</p>	096
<p>A summarization of actions recommended for future:</p> <p style="text-align: center;">Objectives for the near future</p> <p>(1) Protection study</p> <p style="padding-left: 20px;">A. Continue to deepen the study in the technology for digital restoration and reproduction of the information about endangered precious relics and fulfill digital restoration of the information in about 10 caves;</p> <p style="padding-left: 40px;">B. Develop cave virtual roaming technology and open two virtual caves to tourists;</p> <p style="padding-left: 40px;">C. Strive to start building a Dunhuang picture center;</p> <p style="padding-left: 20px;">D. Commence the establishment of a databank of paints used in Dunhuang murals and color sculptures. Conclude the analyzing work on the paints in 10 key caves and put them in the databank;</p> <p style="padding-left: 20px;">E. Go on with the geological study in the grotto environment, gain a clear understanding of the natural factors affecting the grotto protection, such as the rule for the activity of water, wind and sand and earthquake and put up corresponding measures for prevention projects;</p> <p style="padding-left: 20px;">F. Continue to study the mechanism of mural diseases like plumping up, becoming loosened and encrustation. Based on the study, we will deepen our experiment on selecting repair and reinforcing materials against mural diseases;</p> <p style="padding-left: 20px;">G. Experiment will be conducted in a limited sphere to test the technique for cleaning fumigated murals;</p> <p style="padding-left: 20px;">H. A feasibility study on building a lighting system in open caves will be started by selecting lighting equipment that will not damage relics and meet the requirement of tourists visiting the site;</p> <p style="padding-left: 20px;">I. A study on the maximum capacity of receiving visitors in the grottoes will be carried</p>	097

out;

J. Multimedia technology will be employed to study the restoration of Dunhuang artistic articles;

K. GPS technology will be applied in the study in the long-term observation of sand, wind erosion of rock face and the position of cracks in sand dunes in the grotto area.

(2). Protection projects and restoration

A. Carry out projects to reinforce north Mogao Grottoes area and build up open facilities;

B. Repair the upper and middle temples and construct an exhibition hall on the history of the Research Academy;

C. Undertake flood prevention projects in Mogao Grottoes, Yulin Grottoes, and West Thousand Buddha Cave;

D. Expand hilltop sand control project by adopting multiple ways to effectively prevent the harm to the grottoes by wind and sand;

E. Start ecological environment protection project in Daquan River Valley;

F. Start ecological environment construction project along Yulin River (the Yulin Grottoes conservation area);

G. Start to conclude the work to restore the murals in entire caves numbered 85, 98 and 454;

H. Complete the restoration of the sculptures in Cave 6 and murals in five caves of Yulin Grottoes, including Cave 25;

I. Complete the reinforcement project left over for the earth pyramids including the dome of Tianwang Hall;

J. Start to carry out the planting of wind and sand breaker forests in grotto areas;

K. Implement an experimental project of building a seepage prevention wall in front of the grottoes.

(3) Archive building

A. Complete the entire checking work on grotto archives and complement the survey maps unavailable for caves; this work for 40 caves will come to an end in the near future.

B. Archives on videotapes will be transferred onto CDs for preservation.

C. Dunhuang Grottoes digital archives will start to be set up and the existing archive databank management system will be improved.

D. Support study and restoration work by doing a good job in writing down, collecting and sorting out the archives.

(4) Others

A. Organize education and exhibition on the environmental evolution in Mogao Grottoes and their nearby areas.

B. Set up a mural protection school together with Lanzhou University and Getty Conservation Institute to train senior mural protection staff members.

Long-term plans

(1) Protection study

A. With the development of new and high-tech technologies, we will further update and improve the study in the digital picture project for Dunhuang relics, develop in a massive way the virtual roaming technology for caves of different shapes and sizes, build up a Dunhuang picture project center.

B. A databank of Dunhuang mural and sculpture paints will be set up and the analyzing work of paints used in 100 caves will be completed and the relevant information will be put in the databank.

C. The latest theories and technologies will be adopted to deepen the study in the environmental geology in the caves so as to tackle a number of problems posed by natural environment to grotto protection.

D. Use new materials and technologies in the experiment and study in selecting mural restoration materials and techniques to clean up fumigated murals.

E. Employ the up-to-date technologies to improve cave lighting facilities.

F. Based on the study in the maximum tourist reception capacity, new measures on cave opening will be put forth.

G. Use the achievements attained in restoring Dunhuang art to develop popular science products.

(2) Protection projects and relic restoration

A. Adopt new techniques and materials to replace all the reinforcement structures and plank roads built along the cliffs in the 1960s in south Mogao Grottoes area to make them more harmonious with the original appearance of the grottoes, and make the plank roads wide enough for tourists to pass through;

B. Reinforce rock face against efflorescence in the south Mogao Grottoes area step by step;

C. Install air purifiers in all caves open to the public to bring down the humidity, CO₂ density and floating dust amount produced by tourist visiting and keep them at due levels.

D. Use the latest scientific and technological achievements to select and improve materials for mural and sculpture protection and restoration and apply them in practice.

E. Employ the latest scientific and technological achievements to study ways of preventing mural and sculpture diseases.

F. Try to restore endangered murals and color sculptures facing serious damage.

G. Implement in an all-around way the ecological environment construction in Daquan River Valley and Yulin River Valley (Yulin Grottoes conservation area).

H. Plant wind and sand breaker forests in all the Mogao Grottoes area.

I. Based on the experiment of the early period, seepage prevention walls will be put up in front of Dunhuang Grottoes.

J. Beef up the management of the windbreaker forests and sand control installations of the

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	<p>cave domes so that their benefits will be brought into full play in fighting wind and stabilizing sand.</p> <p>(3) Establish cave archives</p> <p>A. Establish basic data for all caves, including survey maps, photographs and videotaped data, etc;</p> <p>B. Set up Meron-Dunhuang international archives in cooperation with US Meron Fund;</p> <p>C. Set up digital archives for key caves of Dunhuang Grottoes, and establish a corresponding archive data management system.</p> <p>D. Standardize the compilation of scientific and technological archives to better serve the protection study and relic restoration.</p>	
	The name of the body responsible for action implementation (if different from 005):	098
	<p>The timetable for implementing the above action:</p> <p>The objectives for the near future will be fulfilled from 2001-2005 and the long-term objectives will be fulfilled during 2001-2010.</p>	099
	Among the planned activities, which may need international assistance from the World Heritage Fund:	100
	<p>Are there any links with other management bodies of overseas heritage?</p> <p style="text-align: right;">Yes ✓/No</p>	101
	<p>If there is, please explain:</p> <p>At the annual world heritage meeting held in China, we carry out academic exchange with other heritage management units to discuss problems in world heritage protection and management. We learned from each other and drew advanced experience in protection and management. We also occasionally send delegates to visit other heritage sites.</p>	102
	<p>What experience obtained from periodical report activities and/or the preservation/protection of the heritage can be shared with other State Parties with similar problems/or matters:</p> <p>In the process of periodical reporting, we organize related departments to participate in the joint compilation of periodical reports to allow them to find out their shortcomings in work. In this way, we also disseminate information about the latest developments in world heritage protection and related international activities.</p> <p>From years of protection efforts, we profoundly realize that as world heritage protection involves many different disciplines, they should cooperate with each other to tackle key problems to fulfill the colossal task of heritage protection. In the effort, talented people play the key role. The most significant commitment for Dunhuang Research Academy is always to train a team of management staff members who are both devoted to the heritage protection career and dedicated to the career. In addition, it is indispensable to increase cooperation in this field.</p>	103

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	<p>Attention should be paid not on fund assistance only, it is more important to introduce advanced technologies and management concepts from foreign countries and to combine them with the actualities of the heritage to find a new way of thinking applicable to the protection and management of the heritage. In our cooperation with US Getty Conservation Institute, the National Cultural Heritage Research Institute of Tokyo, Japan and Japanese Osaka University, US Meron Fund and Northwest University in the past dozen of years, we have introduced not only advanced technologies, but more importantly, have trained a protection management team through the co-operation, which will serve as a solid foundation for our future cause.</p>	
	<p>To this end, the name and address of bodies or experts available for contact:</p> <p>Institute/organization: Dunhuang Research Academy Responsible person: Fang Jinshi Address: Mogao Grottoes, Dunhuang City City and zip code: Dunhuang City, 736200 Tel: 0937-8869003 Fax: 0937-8869028 E-mail: FJS@mail.dha.ac.cn</p>	104
	<p>At the preparatory stage of periodical report activities, have you provided enough and sufficient information to responsible bodies and individuals?</p> <p>Dunhuang Research Academy set up a special leading group for periodically monitoring activities. It also called a special meeting attended by leaders of the related departments and asked them to provide materials and information related to periodical monitoring activities.</p>	105
	<p>Is the survey sheet clear and is it helpful for the State Party to meet the criterion?</p> <p>It is clear on the whole and helpful.</p>	106
	<p>What are the explicit benefits and lessons drawn from periodical report activities?</p> <p>The periodical reporting activities allow the heritage management body to re-examine all the changes taking place after the heritage was included in the list so that it will find out the gap between its own work and the criterion set out in the <i>World Heritage Convention</i>. They also prompt the body to protect and manage the heritage in a scientific and standardized way.</p>	107
	<p>What results do you expect from periodical report activities and what follow-up actions do you expect from the World Heritage Committee:</p> <p>We hope the periodical report activities will not only evaluate our protection and management work, but also help the World Heritage Committee to be more informed of our work in the heritage conservation and management so that it may help us do a better job in the future.</p>	108

II. 9. Attached documents

The State Party is required to provide the following materials. Please check if all materials are enclosed.

1. () The map and plane sketch indicating the heritage's overall location, its boundaries and the buffer zone, as well as necessary details about the heritage itself. (refer in detail to issue 003)
2. () A panorama picture of the heritage (a bird's view picture)
3. () Illustrations about the preservation of the heritage (photos, slides and if any, films/videos)
4. () Detailed information about the main aspects of the heritage (landscape, fauna and flora species, and souvenirs)
5. () Pictures illustrating the major threat endangering the property and its surrounding area
6. () Excerpts of national, provincial and city laws and regulations on the protection of cultural and natural heritage
7. () Copies of the heritage's management plan and excerpts and/or copies of other plans related to the heritage (such as emergency plans and utilization plans)
8. () Illustrative bibliography

(1) The location, protection zone and other graphs of Mogao Grottoes

Figure 1 Geographical location of Mogao Grottoes in China

Figure 2 Geographical location of Mogao Grottoes in Gansu Province

Figure 3 Geographical location of Mogao Grottoes in Dunhuang City

Figure 4 Protection Zone of Mogao Grottoes

Figure 5 Satellite image of Mogao Grottoes and nearby areas

Figure 6 Changes in the number of tourists since Mogao Grottoes opened to the public in 1979

total number of tourists
foreign tourists
domestic tourists
total number of visitors

Figure 7 Revenues from ticket sales in Mogao Grottoes since 1984

Revenues (10, 000 yuan) year

Figure 8 Trend of changes in revenues from ticket sales in Mogao Grottoes since 1984

Revenues (10, 000 yuan) year

Figure 9 Monthly statistics of tourists in Mogao Grottoes in 2001

Number of tourists (person) foreign tourists
domestic tourists
total number

Month: January February March April May June July August September October November
December

(2) The panorama of Mogao Grottoes

The Panorama Map of Digital Orthographic Image of Dunhuang Mogao Grottoes

(3) Photos on the conservation of Mogao Grottoes

Plate 1 The head of the Sleeping Buddha in Cave 158

Plate 2 The panorama of the chamber of Cave 428

Plate 3 The Still Buddha in the east side of the north wall in Cave 259

Plate 4 The mural “Feeding Tiger” in Cave 254

Plate 5 The Mural “Expounding Buddhist Doctrine” in Cave 320

Plate 6 The Coffering in Cave 329

Plate 7 “Portrait of A-Nan” in Cave 45

Plate 8 “Providers” in Cave 61

Plate 9 “Bodhisattva” in Cave 45

Plate 10 Buildings depicted in the mural in Cave 61

Plate 11 Large area of fallen off mural in Cave 3

Plate 12 Herpes disease of the mural in Cave 3

Plate 13 Loosened mural in Cave 16

Plate 14 Encrusted mural on the south wall in Cave 465

Plate 15 Loosened mural in Cave 465

Plate 16 Fallen off encrusted mural in Cave 465

Plate 17 The mildew phenomenon in Cave 53

Plate 18 Fumigated mural in Cave 56

Plate 19 the wall in Cave 85 appears loosened and encrusted

Plate 20 Plumped up and cracked mural

Plate 21 Plumped up mural leaves the rock wall by 3cm

(4) Photos related to the heritage

Plate 1 The headstream of Daquan River

Plate 2 Exterior view of Mogao Grottoes

Plate 3 Daquan River

Plate 4 Mount Mingsha

Plate 5 Mount Sanwei

(5) Photos showing the threat to the heritage and its surrounding environs

Plate 1 Sand breaker blocks wind and sand from Mount Mingsha

Plate 2 Sand Plants in the sand-fixation forest to prevent the moving of sand dune

Plate 3 Rock collapse

Plate 4 Wind erosion of Mogao Grottoes cliffs

Plate 5 Cracks in rock

Plate 6 Rocks endangered by cracks

Plate 7 The north zone of Mogao Grottoes threatened by serious desertification

(6) Excerpts from national, provincial and municipal laws and regulations related to the protection of cultural and natural heritage

The Constitution of the People's Republic of China

(Excerpts)

(Adopted at the 5th meeting of the 5th National People's Congress of the

People's Republic of China on December 4, 1982)

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Article 22 The state protects places of scenic and historical interest, valuable cultural monuments and relics and other important items of China's historical and cultural heritage.

The Law of the People's Republic of China on the Protection of Cultural Relics

(Experts)

(Published on October 28, 2002)

Chapter I General Principles

Article 2 The following cultural relics are under state protection within the border of the People's Republic of China:

(1) Ancient monuments, ancient tombs, ancient buildings, grotto temples, stone inscriptions and murals of historical, artistic and scientific value.

Article 3 Unmovable cultural relics such as ancient cultural sites, ancient tombs, ancient buildings, grotto caves, stone carvings, murals, and important historical sites and typical buildings of modern times may be classified, according to their historical, artistic and scientific value, into units of cultural relics under key protection at the national level, units of cultural relics under protection at the provincial level, and units of cultural relics under protection at the city/county level.

Movable cultural relics such as important substances, art works, literature, manuscripts, books, reference materials, and typical objects of various historical periods shall be classified into cultural relics of rare value and cultural relics of ordinary importance. Cultural relics of rare value shall be divided into first-class cultural relics, second-class cultural relics, and third-class cultural relics.

Article 4 The principle of key efforts in conservation, rescue first, rational utilization, and strengthening of management shall be adhered to in all work relating to cultural relics.

Article 5 All cultural relics lying underground, in inland rivers, and under territorial waters within the territory of the People's Republic of China shall be owned by the State.

Unmovable cultural relics including ancient cultural sites, ancient tombs and grotto caves shall belong to the State. The memorial buildings, ancient buildings, stone carvings, murals, and typical buildings of modern times listed by the State for conservation shall be owned by the State, unless otherwise stipulated by the State.

The ownership of unmovable cultural relics owned by the State shall not change with any change in the ownership or use right of the land they are attached to.

The following cultural relics shall be owned by the State:

- (1). Cultural relics unearthed within the territory of China, excluding those otherwise stipulated by the State.
- (2). Cultural relics collected and kept by cultural relics collection units or by other government departments, military units, State-owned enterprises, or institutional organizations.
- (3). Cultural relics collected or purchased by the State.
- (4). Cultural relics donated by citizens, legal persons or other organizations to the State.
- (5). Other cultural relics to be owned by the State according to stipulations in law.

The ownership of the movable cultural relics owned by the State shall not change with termination of or change in the units collecting or keeping them.

The ownership of State-owned cultural relics shall be protected by law and shall not be encroached upon.

Measures of Gansu Province on the Implementation of the
Law on the Protection of Cultural Relics
(adopted at the 6th meeting of the standing committee of the
7th People's Congress of Gansu Province on January 20, 1989)

Chapter I General Principles

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Article 2 In accordance with article 2 of the Law on the Protection of Cultural Relics, all the cultural relics in the province are under state protection.

Article 3 No organization and individual is allowed to take possession of all the cultural relics left on the ground, under the ground and in the waters in the province, unless the state stipulates otherwise.

Article 4 As for the collectively or individually owned monumental buildings, ancient buildings and cultural relics handed down from ancient times, the ownership is under state protection. The owners must observe the stipulations on the protection and management of the relics.

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Chapter II Relic Management Bodies and their Outlay

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Article 8 Cultural relics undertaking expenditures and investment in the construction of cultural relics shall be included in the administrative budget and infrastructure investment plan of the people's governments at various levels, and shall be under the unified management of cultural administrations at the same levels.

Article 9 Proceeds of cultural relics undertaking units from paid service and regular activities will not be used to offset budgetary appropriations and should be used to make shortfalls in the cultural relics undertaking fund. And misappropriation is not permitted.

Chapter III Cultural Relics Protection Units and Famous Historical Cities

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Article 12 No construction project is allowed within the protection zone of cultural relics without the consent of the people's government that declared the site to be a cultural relic and the cultural administration at a higher level, or in the protection zone of a national key cultural relic. The related departments are not allowed to approve the fund appropriation, the acquisition of land, project design and construction.

When putting up buildings in the construction control area of the relic, the design plan must gain the approval of the cultural administration at the same level with the relic protection unit, and should be submitted to the local urban construction department for approval. The style, height, dimensions and color of the building or the structure proposed to be built should come in harmony with the surrounding environment and ambience of the relic and should not compromise the environment and style of the cultural relic.

Article 13 The cultural relic under protection must maintain its original entirety with no discretionary building, rebuilding and addition to its dependency permitted. The repair, maintenance and removal of the relic are only allowed to start after going through strict procedures of submission and approval. The repair work shall not change the structure and original shape of the relic.

(7) Copies of the heritage's management plan and excerpts and/or copies of other plans related to the heritage (such as emergency plans and utilization plans)

The Overall Plan for the Protection and Management of Mogao Grottoes during 2001-2010 has been worked out (its implementation started in 2001). The plan includes preface, the objectives of the protection and management of Mogao Grottoes, Mogao Grottoes, the presentation on the value of Mogao Grottoes (historical value, artistic value, research value and social value), evaluation (the current state, landscape/environment, research, tourist management, exhibition, management of heritage operation, daily maintenance and supervision, professional education and facility building), the overall objective for Mogao Grottoes, the principles for fulfilling the overall objective, 2001—2010 goals for each item (protection, landscape/environment, tourist management and exhibition, operation management, daily maintenance and supervision, professional education and facility building).

(8) Indicative reference book list

1. *Outlined Record of Mogao Grottoes*, compiled and printed by the National Dunhuang Art Research Academy, August 1948
2. *Dunhuang Art Treasures* (Chinese Edition), compiled by Dunhuang Cultural Relic Research Institute, jointly published by Cultural Relics Publishing House and SUP Bookstore Hong Kong, October, 1980
3. *Chinese Grottoes · Dunhuang Mogao Grottoes* (5 vol.)(volumes 1-5) (Chinese Edition), compiled by Dunhuang Cultural Relic Research Academy, published by Cultural Relics Publishing House (China) and Heibon Publishing Inc. (Japan), December 1981-September 1987
4. *Collected works on Dunhuang Study*, compiled by Dunhuang Cultural Relic Research Academy, published by Gansu People's Publishing House, 1st edition, March 1982
5. *Complete Catalogue of Dunhuang Mogao Grottoes Works*, compiled by Dunhuang Cultural Relic Research Academy, published by Cultural Relics Publishing House, 1st edition, November 1982
6. *Temple Palace in front of Mogao Grottoes*, ed., Pan Yushan and Ma Shichang of Dunhuang Cultural Relic Research Academy, published by Cultural Relics Publishing House, 1st edition, December 1985
7. *Analects of Dunhuang Grottoes Art*, by Duan Wenjie, published by Gansu People's Publishing House, 1st edition, April 1988
8. *Strolling in the Science and Technology Gallery of Dunhuang Art*, by Wang Jinyu, published by Popular Science Press (Beijing), 1st edition, November 1989
9. *Dunhuang*, compiled by Dunhuang Research Academy, published by Gansu People's Publishing House and Jiangsu Fine Arts Publishing House, July 1990
10. *Dunhuang Mogao Grottoes*, compiled by Dunhuang Research Academy, Published by Yingfeng Inc., Hong Kong, 1992
11. *Dunhuang Grotto Art*, compiled by Dunhuang Research Academy and Jiangsu Fine Arts Publishing House, published by Jiangsu Fine Arts Publishing House
12. *The Bests of Dunhuang Art*, compiled by Xie Shengbao and Ling Yuan, published by Gansu

- People's Fine Arts Publishing House, 1st edition, June 1993
13. *Collected Works of Dunhuang Study • Grotto Protection* (2 parts), compiled by Dunhuang Research Academy, published by Gansu Nationalities Publishing House, 1st edition, June 1993
 14. *Collection of Li Zuixiong's Articles on Grotto Protection*, chief ed., Liang Weiyong, published by Gansu Nationalities Publishing House, 1st edition, August 1994
 15. *Mogao Grottoes World Heritage Series (China)*, by Zhao Shengliang and Zhang Yanmei, published by Knowledge Publishing House (Beijing), 1st edition, October 1995
 16. *Dunhuang Treasures*, by Wang Huimin, published by Shanghai Classics Publishing House, 1st edition, September 1996
 17. *Study of the History of Dunhuang Mogao Grottoes*, by Ma De, published by Gansu Education Press, 1st edition, December 1996
 18. *Dictionary of Dunhuang Studies*, chief ed., Ji Xianlin, published by Shanghai Lexicographic Publishing House, 1st edition, December 1998
 19. *Library of Chinese Dunhuang Studies 100 Years • Archaeology* (1 – 4), chief eds., Fan Jinshi and Liu Yuquan, published by Gansu Cultural Publishing House, 1st edition, 1999
 20. *Library of Chinese Dunhuang Studies 100 Years • Grotto Protection*, chief ed., Li Zuixiong, Gansu Cultural Publishing House, 1st edition, 1999
 21. *Library of Chinese Dunhuang Studies 100 Years • Nationality* (1 – 4), chief eds., Yang Fuxue and Yang Ming, Published by Gansu Cultural Publishing House, 1st edition, 1999
 22. *Library of Chinese Dunhuang Studies 100 Years • Summary* (1 – 3), chief eds., Feng Zhiwen and Yang Jiping, published by Gansu Cultural Publishing House, 1st edition, 1999
 23. *Grottoes in Dunhuang Mogao Grottoes North Zone*, by Peng Jinzhang and Wang Jianjun, published by Cultural Relics Publishing House, 1st edition, July 2000
 24. *History of Dunhuang Diagrams*, Compiled by Dunhuang Research Academy, published by Shanghai Classics Publishing House, 1st edition, July 2000
 25. *Dunhuang Study*, 1st Issue 2000 (special issue on cultural relic protection)