

## CULTURAL HERITAGE MANAGEMENT BASED ON INFORMATION SCIENCE IN CHINA

ABSTRACT

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The State Administration of Cultural Heritage(SACH) is one of the department of the State Council, aimed to protect, utilize and manage the cultural heritage of China. Digital and network technologies had been used in cultural heritage management since 1991. We are carrying out cultural heritage information construction, gradually realize the digitization of cultural heritage resources and the networking of industrial management and make use of internet to collect and propagate accurate, authoritative and abundance information about cultural heritage is an important guarantee for us to enhance the overall strength of cultural heritage. The SACH has established a governmental website (<http://www.sach.gov.cn>) for releasing information about cultural heritage in 1998, and has started the construction of some databases about cultural heritage protection and management projects. Our major task is to formulate, improve, promulgate and implement the standard of cultural heritage information, thereby laying a foundation for realizing interconnection and information share in China.

As the world famous country with an ancient civilization, China has a long history and very rich cultural heritage. There are 28 sites of the World Heritage List by UNESCO in China, 1271 most important old buildings and monuments and archaeological sites, more than 12 million movable relics. The policy about Chinese cultural heritage protection is "protection utmost, rescue first, reasonable use and efficient management". Chinese government lay particular stress on the protection of scientific, historical, cultural heritage. The State Administration of Cultural Heritage (SACH) is responsible for protecting, managing and utilizing these cultural heritage, has an irreplaceable role in the information construction of cultural heritage. To carry out cultural heritage management based on information science, gradually realize the digitization of cultural heritage resources and the networking of industrial management and make use of internet to collect and propagate accurate, authoritative and rich information about cultural heritage is an important guarantee for China to enhance the overall strength of cultural heritage undertakings as well as the only way for the future development of the said undertakings.

Cultural heritage management based on information science takes a special position in Chinese information construction and is an important measure for publicizing the ancient Chinese civilization and the characteristics of the traditional Chinese culture in the space of digitized development.

### WHAT WE DID

According to the progress of the development of network technology throughout the world, to put the information about domestic traditional cultures, museums, natural landscapes and colleges and universities on Internet has become a strategic choice of all developed countries. In order to achieve survival and development in the network world, some developing countries have also established cultural heritage-focused websites of traditional cultures.

Since 1996, a series of achievements has been made in cultural heritage information construction in China:

a. Achievements of the current stage have been made in the front-end work of national cultural heritage information construction. The building of the Database of Treasured Chinese Cultural Relics, a basic research job approved by the Ministry of Science and Technology, is under smooth progress. The formulation of Provisional Regulations of China on the Management of Information about Museum-held Objects and the Provisional Regulations of China on the Management of Information about Cultural Heritage Preservation Units has been basically completed.

b. Various websites concerning cultural heritage and museums have been established. The SACH has established a governmental website "<http://www.sach.gov.cn>" for releasing information about cultural heritage and museums, briefing on the relevant knowledge and publicizing the relevant rules and regulations. Nearly one hundred units such as Shanghai Museum, the Chinese National Museum, Henan Museum have successively established public professional websites or web pages for providing information about cultural heritage, treasured museum-held objects, academic researches, news about cultural heritage and the relevant exhibitions to be held.

c. Certain achievements have been made in the development and application of museum-held cultural relic management system. A group of museums represented by the Palace Museum, Shanghai Museum and Tianjin Historical Museum have completed the building of LANs and put them into operation with self-raised funds. The management system and digital image data of cultural relics developed by the Palace Museum take a leading position in the cultural relic management systems across China.

d. China has cooperated with some foreign countries in the development of virtual reality technology for the manage-

ment of museum-held relics and historical heritage preservation units. Research on digitized mural preservation technology jointly carried out by Dunhuang Institute and the US Northwest University is under smooth progress.

e. The SACH has started the construction of a database of cultural relic protection projects and the development and application of information technology for general investigation of cultural relics in the whole cultural relic and museum system of China.

#### WHAT WE ARE DOING AND GOING TO DO

We will strengthen the research on the standardization of cultural relic and museum information and, while enhancing the basic work of cultural relic and museum management, preliminarily realize the digitization of cultural relic resources and the networking of cultural relic management and information propagation, expand foreign exchange in respect of cultural relic information and try hard to increase our country's cultural relic and museum information construction to an advanced level.

a. To formulate, improve, promulgate and implement the standard of cultural heritage information, with particular stress laid on the standard of the information about museum-held objects and the standard of information about cultural heritage preservation units, thereby laying a foundation for realizing interconnection and information share in China.

b. To construct the Database of Cultural Heritage Information Construction in China, with the contents mainly covering the policies, laws, rules and regulations on cultural relics and museums, the places in World Heritage List, national key cultural heritage preservation units, famous historical and cultural cities?towns?districts, large archaeological sites, sites of archaeological excavation, museums and warehouses of cultural relics, treasured museum-held cultural relics and important objects unearthed, propaganda on cultural relic protection, exhibitions, public collection and cultural relic circulation, cultural relic-related cases, scientific cultural relic protection, safety control projects, foreign exchanges, the relevant institutions, experts and talents, academic studies, education and training, etc.

c. To build a Cultural Relic Investigation and Cultural Relic Protection Projects Management System, including various special-topic databases concerning the construction and maintenance of national key cultural relic preservation units, the management of archaeological excavations, the maintenance of key museums and cultural relic warehouses, the safety control projects of cultural relic preservation units under grade A risks, the collection of public-held cultural relics, the scientific projection of treasured museum-held cultural relics and important objects unearthed.

d. To build a network system that is composed of three websites including Network of National Cultural Relic and Museum System, Network of Institutions under the SACH and Chinese Cultural Heritage and Museum Network in horizontal direction and four levels of nodes covering "state-provinces-prefectures (cities)-cultural heritage management

units" in vertical direction. To build a Database of Cultural Heritage Infrastructure Construction Projects and Environmental Management Projects, including the national key cultural heritage preservation units and national key museums, large archaeological site protection zones and etc. Last August, Mr. Zujin Wang and I advanced a new idea: According to the database, the SACH can utilize the 3S technology(RS,GPS,GIS) and management information system to supervise the old buildings & monuments and archaeological sites (the national key cultural heritage preservation units) in China. We already finished the project proposal.

e. To establish a national cultural heritage and museum administration and service management system with the institutions under the SACH as the centre for realizing automated administration in such aspects as the circulation of official documents between the SACH and the units under it and provincial cultural heritage administration departments as well as the approval and management of projects.

f. In accordance with the requirements of the relevant international conventions that China has joined, to construct such special-topic databases as National Cultural Relic-related Cases and Lost Cultural Relics Registration System for comprehensively, timely and accurately master the relevant situations and provide information service for severely cracking down and effectively preventing cultural relic-related crimes and recovering lost cultural relics.

g. To carry out the relevant front-end work for starting the construction of China Digital Museum and make it a representative of the image of Chinese cultural heritage in the digitized virtual world.

#### MAJOR POLICIES

The SACH established a cultural heritage information construction leading group with its head acting as the group leader. The executive office of cultural heritage information construction is responsible for the cultural heritage information construction and carry out centralized coordination. Every province's cultural heritage administration designates the relevant departments and special persons to be responsible for this work. The Chinese Cultural Heritage Information Consultation Centre will undertake the relevant work of cultural heritage information construction under the authorization of the SACH.

a. To speed up the training and introduction of talents and promote the popularization and application of achievements in IT-related scientific researches. To complete the program of training on computer and network for cultural heritage staffs, to take effective measures to introduce talents of information and network and make use of the existing achievements in IT-related scientific research in the cultural relic system.

b. To strengthen the building of the legal system and perfect the relevant laws, rules and regulations. To strengthen the research on intellectual property and information security for realizing the effective protection, reasonable use and efficient

management of information about cultural heritage. To encourage persons from all circles to contribute their efforts for cultural heritage information construction.

c. To strengthen foreign exchange and cooperation in respect of cultural relic and museum information construction. To make full use of the foreign successful experience, adopt world advanced technology, participate in the formulation of international standards and regulations on cultural relic information construction, send professional and managerial personnel abroad to study advanced cultural heritage information network construction technologies.