

DRAFT RESOLUTION 1.0

Committee: United Nations Educational, Scientific and Cultural Organization

Topic: Improving the Conservation of Cultural Heritage with Innovative Technology

Sponsors: *Afghanistan, Brazil, China, Ethiopia, France, Italy, Japan, Mexico, the United Kingdom, Saudi Arabia*

Signatories: *Türkiye, Pakistan, Germany, Greece, Iraq, Iran, India, Egypt, the Republic of Korea*

The United Nations Educational, Scientific and Cultural Organization(UNESCO),

Recognizing that cultural heritage faces increasing threats to its preservation, not only from traditional causes such as pollution but also from changing economic and political conditions that exacerbate the situation with even more formidable phenomena of damage or destruction,

Acknowledging that the deterioration or disappearance of any element of the cultural heritage constitutes a harmful impoverishment of the heritage of all nations of the world,

Considering that national level protection of cultural heritage often remains incomplete due to the scale of the resources it requires and the insufficient economic, scientific, and technological resources of the country where the property to be protected is located,

Recalling that the Organization's Constitution provides for the maintenance, increase, and dissemination of knowledge through the conservation and protection of the world's heritage and recommends the necessary international conventions to the concerned nations, which was already mentioned in the 2003 Convention for the

Safeguarding of the Intangible Cultural Heritage,

Acknowledging that existing international conventions, recommendations, and resolutions concerning cultural property highlight the importance of safeguarding this unique and irreplaceable treasure for all peoples of the world, regardless of its ownership,

Recognizing that all cultural heritage, local and global, possess outstanding value for all mankind and, therefore, should acquire equal protection and enjoy equal attention,

Acknowledging that the magnitude and severity of the new dangers threatening cultural heritage require the international community take joint step into protecting the cultural heritage of outstanding universal value by providing collective assistance that, while not replacing action by the concerned State itself, will serve as an efficient supplement thereto,

Recognizing the significance of legislation and law enforcement in the conservation of the cultural heritage, to better cooperate and align with innovative technology, according to the Convention on World Cultural and Natural Heritage,

Emphasizing that the conservation of cultural heritage is a long-term strategy which requires consistent efforts from generations to generations,

Having decided, during its third session, that this question should be the subject of an international convention,

Adopts this convention on the third day of April 2023,

PART I:

The Application of Innovative Technology

1. Encourages all member states and organizations and other entities to:

(1) Intensifies the usage of digital collection and storage:

- a. Requiring high-standard and high-definition digital acquisition of cultural heritage to form a basic digital resource of cultural heritage. These digital resources include picture collection resources, video collection resources and 3D data resources, etc. Basically, realize the goal of "comprehensive information collection and rich resource types" and to lay a good foundation for the next digital display works. To carry out "cultural heritage digital resources integration and hierarchical creation" of heritage conservation technology display project. Through script creation and "storytelling", the digital resources obtained from the digital collection of cultural heritage are integrated and processed to create digital works with independent themes, forming an integrated display of cultural heritage digitization;

(2) Draws attention to digital restoration:

- a. Using digital technology to stitch together, replicate, and restore destroyed cultural heritage through virtual means. The use of digital technology to stitch together, replicate, and restore destroyed cultural heritage through virtual means. By capturing a range image by measuring 3D surface geometry with a laser rangefinder, the surface geometry of cultural heritage is preserved intact in the range data,

(3) Emphasizes the significance of digital presentation and dissemination:

- a. Combining VR technology and cultural heritage conservation can achieve digital preservation, virtual restoration, propaganda display, virtual browsing, digital museums and other high-precision, large-scale, interactive and wide-audience displays of cultural heritage, thus solving the traditional problems in cultural heritage conservation.

(4) Advocates the usage of innovative technology:

- a. Adopting the block chain technology to verify the authenticity of cultural heritage artifacts, documents, and other historical items. It can also be used to facilitate the funding of cultural heritage projects;
- b. Using the Internet of Things (IOT) to monitor and preserve its cultural heritage;
- c. Implementing machine learning algorithms to analyze historical data and real-time data from sensors and weather reports, to predict the likelihood and severity of natural disasters;

2. Suggests that necessary restrictions be imposed, and all member states and stakeholders take concrete steps:

- a. Urging government to monitor the video on the social media platform like Tick-tock, Facebook, Twitter, YouTube and so on;
- a. Forming a supervisory and transparent mechanism that allows other countries to monitor the work and process of conservation of cultural heritage;
- b. Avoiding the misunderstanding and deviation on cultural heritage caused by discourse hegemony;
- c. Preventing hackers from stealing sensitive information or vandalize websites, leading to the destruction of cultural heritage sites;
- d. Establishing comprehensive cultural property databases on social media to ensure the stable and efficient dissemination of cultural heritage;

3. Promotes the improvements of technology:

- a. Enhancing the accuracy of data collection;
- b. Developing the prediction of disasters, such as the earthquake early warning system;

4. Encourages the member states to reconstruct the damaged cultural heritage, noticeable points including but not limited to:

- a. Recording the surviving and lost attributes of Outstanding Universal Value(OUV), both tangible and intangible;
- b. Assessing the impacts of events on the attributes of OUV;

- c. Specifying the approach to be taken to re-establishing attributes. In the case of material assets and attributes it will indicate techniques and technologies and implementation provisions. In the case of immaterial attributes it will specify what provisions are in place to monitor developments to foster community cohesion and sustainability and to ensure the viability of future uses;
 - d. Using space technologies to monitor the environment around cultural heritage to detect the potential for disaster;
 - e. Using data collection and analysis technology during the disaster to predict the future disaster of cultural heritage;
 - f. Using laser scanning, photogrammetry, 3D printing and robotic restoration to efficiently reconstruct damaged cultural heritage sites;
5. Calls for joint effort of post-trauma recovery and reconstruction of cultural heritage damaged by fire , earthquake and flood, noticeable points including but not limited to:
- a. Using the stable air pressure system to reduce the impact of coke, toxic gas and other harmful substances generated by the combustion of culturally heritage by adjusting the internal temperature and oxygen level, thus reducing the damage of cultural heritage;
 - b. Using thermal imaging technology to capture the high temperature at the fire scene to help fire emergency workers find the fire site in time and take effective carbonization measures;
 - c. Formulating specific measures to maximize the protection of cultural heritage through simulation scenario of fire, earthquake and flood;
 - d. Further resolving the problem of fireproof materials to make it easier to obtain and apply to building where cultural heritage is located;
 - e. Further resolving the problem of building structures that can withstand the power of earthquakes;
 - f. Further resolving the problem of waterproof materials to make it easier to obtain and apply to building where cultural heritage is located;

Part II:

Monitoring the Application of Innovative Technology

6. Calls for joint effort of multi-angle cooperation to ensure the use of technologies in a responsible and ethical manner:

- a. Developing International Standards to cover areas such as data privacy, cultural sensitivity, and the protection of intellectual property.
- b. Encouraging international collaboration on the use of innovative technologies for the preservation of intangible cultural heritage to help with ensuring that best practices are shared and that knowledge is shared widely, including initiatives such as international conferences, workshops, and training programs;

7. Urges governments to reinforce the regulations on the applications of digital means of cultural heritage conservation:

- a. Developing regulatory frameworks by governments that supervise the implementation of innovative technologies for the preservation in areas such as data privacy, intellectual property, and cultural sensitivity;
- b. Promoting ethical and responsible usage of innovative technology led by authorities in initiatives such as codes of conduct and ethical guidelines for developers and users of these technologies;
- c. Supporting research and development to improve the effective use of innovative technologies for the preservation of ICH, including investments in research projects, the development of new technologies, and the training of professionals and engagement of public in this field;

8. Encourages technology companies to promote a safer use of technology in monitoring:

- a. Clarifying the capabilities and limitations of technologies and providing clear information about how technologies work and how they can be used;

- b. Prioritizing privacy and security when developing and implementing the technologies. Companies and agencies are suggested to take steps to protect user data and ensure that the technologies are not used for malicious purposes;

PART III:

International Cooperation

9. Encourages all member states to cooperate based on their own advantages and disadvantages, for instance:

- a. Emphasizing the importance of establishing a relationship of complementary advantages between experienced countries and countries with strong need
- b. Recognizing the value of technical expertise and advanced technologies from countries with expertise in cultural heritage conservation;

10. Urges countries providing assistance to engage in consultations with recipient countries on resource sharing:

- a. Suggesting that for tangible cultural heritage, assisting countries can explore opportunities for joint tourism development with recipient countries, which can contribute to the increased visibility and economic benefits of the cultural heritage of the recipient countries;
- b. Highlighting the potential of such exchanges to promote the preservation and inheritance of diverse world cultures, generate employment opportunities, and foster mutual economic development;
- c. Stressing the importance of preserving the local characteristics of cultural heritage in the development of cultural and creative products, including through collaborative efforts on copyright and intellectual property rights;

11. Calls for the establishment of dedicated international funds by multiple countries to support the conservation of cultural relics and the preservation and development of intangible cultural heritage,

12.Calls also for the establishment of monitor system of illegal trafficking of antiquities, using technologies such as Big Data Analysis, Block-Chain, etc, corresponding the need of cross-border judicial collaboration,

13.Recommends countries with similar cultural heritage, such as Saudi Arabia and Egypt, both of which share the Islamic faith, to establish close partnerships and cooperation in safeguarding and promoting their common cultural heritage,

14.Promotes the development of the Games Hunter application PLUGGY3D between Germany and Italy, in order to boost the active public involvement in their own cultural heritage,

15.Recognizes the importance of establishing global and regional cooperation mechanisms, respect the religious beliefs of all countries and actively promote the establishment of model platforms and mechanisms under the framework of interest, such as the Belt and Road,

16.Calls on all member states agree to provide necessary facilities and guarantees for international academic collaboration and technical exchanges on this subject;

Part IV:

Other Related Institutions and Mechanism

17.Calls for educational cooperation to cultivate professional talents:

a. Encouraging countries with a rich technical, economic, educational experience and cultural heritage to support school education for cultural heritage protection and preservation in countries where cultural heritage needs conservation;

18.Provides assistance and consults with recipient countries on the sharing of educational resources:

a. Exploring the potential of educational and cultural exchanges such as student exchange to contribute to the preservation and dissemination of the world's cultures, the creation of employment opportunities and the promotion of joint economic development;

- b. Emphasizing the importance of preserving the local distinctiveness of cultural heritage in the development of cultural and creative products, including through cooperative efforts in the field of copyright and intellectual property rights to promote international standardization of education in intangible heritage;

19. *Calls on* several countries to establish dedicated international funds to support the cause of museum education for heritage conservation and intangible cultural heritage;

20. *Calls on* several countries to build up institutions and facilities concerning inheritors training.

- a. Encouraging that member states should take action to lower the requirement for the access to the usage of technologies;
- b. Noting that the involvement and engagement of professionals and publics should be improved;
- c. Encouraging that all stakeholders should take the responsibility in both profit and non-profit ways to preserve the cultural heritages. Modern approaches should rely on various third-party cloud-based subscription solutions connected via Application Programming Interface (API) ;