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REPORT ON THE INTERNATIONAL CONFERENCE
"MEMORY OF THE WORLD IN THE DIGITAL AGE: DIGITIZATION AND PRESERVATION"

OUTLINE

Source: 32 C/Resolution 42, 36 C/Resolution 59.

Background: The growing impact of digital documentary heritage led to the adoption by the General Conference in 2003 of the UNESCO *Charter on the Preservation of the Digital Heritage*. The Charter recommended the development of strategies and policies to preserve digital heritage. However, a survey in 2009 revealed that few governments in developing countries had undertaken steps to implement the provisions of the Charter. Its recommendations were largely unknown and there was a lack of understanding of its basic underlying principles. Consequently, digital records were, and remain, endangered.

To redress the situation, UNESCO organized an international debate on the issue in order to obtain concrete proposals that would enable the preservation of digital documentary heritage, culminating in an international conference on the subject in Vancouver, (BC), Canada, in September 2012.

Purpose: To report the outcomes of the Conference to the 37th session of the General Conference.

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1. The opportunities presented by digital technology greatly facilitate the creation and sharing of knowledge, and thereby support access to education, science, culture and other areas as part of

the framework of national and sustainable development. However, the vulnerability of digital records to technological obsolescence and progress means that a large percentage of records – and the knowledge they contain – has become inaccessible. The situation will further deteriorate with the increasing production of information in digital format unless policies for long-term authentic preservation are implemented at the global level.

2.   The challenge of ensuring digital continuity has to be addressed, and digital preservation made a development priority, with investments in infrastructure that ensure long-term accessibility and usability. Training programmes must be developed to provide information professionals with the skills permitting them to implement both digitization and preservation practices relevant to the needs of governments and their citizens.

3.   These were the main conclusions of the international conference the "Memory of the World in the Digital Age: Digitization and Preservation" which was held in Vancouver (Canada) in September 2012. Emphasis needs to be given to ensuring long-term access and trustworthy preservation, and in particular, addressing issues relating to open government and open access while respecting fundamental rights.

4.   Conference participants adopted the *UNESCO/UBC Vancouver Declaration* (Annex) which addressed specific recommendations to UNESCO, its Member States, professional stewardship associations and the private sector. In particular, it was felt that priority needed to be given to developing a cohesive, conceptual and practical digital strategy to address the management and preservation of recorded information in the digital environment, without overlooking the fact that print and audiovisual documents will remain important sources of information.

5.   While UNESCO has started to implement the recommendations, it recognizes that further action is essential and that its Member States must be made aware of the more pressing issues relating to the establishment of digital preservation frameworks and practices for management and preservation; closer collaboration among international professional associations and other international bodies; the formulation of strategies for open government and open data that address the need to create and maintain trust and reliance in digital government records; cooperation with the private sector for the development of products that facilitate the long-term retention and preservation of information recorded in a digital format.

ANNEX

UNESCO/UBC VANCOUVER DECLARATION

**The Memory of the World in the Digital Age:
Digitization and Preservation**

26 to 28 September 2012
Vancouver, British Columbia, Canada

Digital technology offers unprecedented means to transmit and store information. Documents and data in digital form are important for science, education, culture and economic and social development, but assuring their continuity over time is a far from resolved problem. While countries differ greatly as to the possibilities they have to implement policies to address sustainability access to digital resources, the fundamental challenges are universal. Closer collaboration in managing these resources will be beneficial for all.

At present, digital information is being lost because its value is underestimated, because of the absence of legal and institutional frameworks or because custodians lack knowledge, skills and funding. In order to explore these issues in depth and obtain solutions, UNESCO's Director-General convened an international conference: *The Memory of the World in the Digital Age: Digitization and Preservation* from 26 to 28 September 2012 in Vancouver, British Columbia, Canada.

More than 500 participants from 110 countries discussed the key factors affecting the two major aspects of records, documents and data in the digital environment:

- issues pertaining to the digitization of analogue material, and

- issues pertaining to continuity, access, and preservation of authentic, reliable, and accurate digital materials.

As a result of these discussions, the participants agreed that:

1. as enshrined in Article 19 of the Universal Declaration on Human Rights, each individual has the right to seek, receive and impart information through any media and regardless of frontiers (Article 19). Citizens exercise this right when they access information in digital form. Trustworthiness and integrity of documentary heritage and documentary systems are therefore a prerequisite for the continued exercise of this right;

2. for analogue documents, digitization can protect valuable documents from deterioration by reducing handling. In the case of audiovisual documents, digitization is the only means of ensuring their survival;

3. many objects are born digital, but without due consideration of the means of ensuring their continuing accessibility, and authentic, reliable, and accurate preservation through time and technological change. These issues of access and preservation apply also to digitized materials;

4. a better understanding of the digital environment is essential for the establishment of digital preservation models that respect fundamental legal principles enshrined in institutional regulatory frameworks, and balance access with privacy, right to knowledge with economic rights, and respect ownership and control of indigenous cultural heritage and traditional knowledge in digital format;

5.   digital preservation should be a development priority, and investments in infrastructure are essential to ensure trustworthiness of preserved digital records as well as their long-term accessibility and usability;

6.   education and training programmes for information professionals must be developed and provided to prepare or reposition them to implement both digitization and preservation practices relevant to the needs of governments and their citizens;

7.   there is a pressing need to establish a roadmap proposing solutions, agreements and policies, that ensure long term access and trustworthy preservation. This roadmap should address issues like open government, open data, open access and electronic government. It should dovetail with national and international priorities and be in full agreement with human rights.

Recommendations

Taking current and emerging challenges into consideration, the participants:

Urge the UNESCO secretariat to:

(a)   play an active advocacy role to make digital preservation frameworks and practices a reality, by promoting digital objects management and preservation in all appropriate forms, including working with other United Nations agencies, funds and programmes;

(b)   support the work of the international archival, library and museum community to secure an international legal framework of copyright exceptions and limitations to ensure preservation of and access to cultural heritage in digital format, and acquisition of and access to that heritage in a culturally appropriate manner;

(c)   collaborate with international professional associations and other international bodies to develop academic curricula for digitization and digital preservation, and implement training programmes and global educational approaches that enhance the capabilities of archives, library, and museum personnel to manage and preserve digital information;

(d)   establish a multi-stakeholder forum for the discussion of standardization in digitization and digital preservation practices, including the establishment of digital format registries;

(e)   in cooperation with international professional associations and research projects teams, design and publish guidelines, policies and procedures as well as best-practice models in digitization and digital preservation;

(f)   support the belief that good management of trustworthy digital information is fundamental to sustainable development by developing and implementing a global digital roadmap under the auspices of the Memory of the World Programme to encourage all relevant stakeholders, in particular governments and the industry, to invest in trustworthy digital infrastructure and digital preservation;

(g)   create an emergency programme aiming at preservation of documentary materials endangered by natural disasters or armed conflicts, as well as a programme for the recovery of analogue and digital heritage that is under threat of becoming, or is already, inaccessible because of obsolete hardware and software;

(h)   encourage engagement of cultural heritage professionals knowledgeable about digital forensics concepts, methods and tools in order to ensure capture and reliable preservation of authentic, contextualized and meaningful information, and appropriate mediation of access to the information;

(i)   update the implementation guidelines of the 2003 UNESCO Charter on preservation of digital heritage and give consideration to the inclusion of preservation of and access to digitized cultural heritage in the proposed recommendation on documentary heritage being examined by the 190th session of UNESCO's Executive Board;

(j)   work with national and international research and heritage bodies to develop criteria for assessing whether repositories are, or can be improved to be, trustworthy in terms of their ability to preserve digital holdings;

(k)   promote cooperation with international standards bodies in order to increase consistency among different reference sources on digital preservation, and support the development of standards compliant with the principles endorsed by UNESCO.

Urge UNESCO's Member States to:

(a)   develop and enforce laws that ensure rights of all citizens to relevant knowledge;

(b)   develop public policies enabling and supporting preservation of digital heritage in a rapidly changing technological environment;

(c)   promote cooperation between their legislative bodies and archives, libraries and museums and other relevant organizations, in order to develop legal frameworks that support preservation of, and access to, digital cultural heritage;

(d)   develop strategies for open government and open data that address the need to create and maintain trust and reliance in digital government records;

(e)   provide legal guarantees that information to which citizens are legally entitled be available in an open format;

(f)   encourage private sector organizations to invest in trustworthy digital infrastructure and digital preservation;

(g)   develop a Recommendation for the promotion of legal deposit laws for digital formats;

(h)   establish appropriate oversight body(ies), e.g., Information Ombudsman, to monitor and protect the necessary degree of independence required by archives, libraries, museums and other heritage organizations to preserve and provide access to digital information in such a way that sustains public trust in what information is selected for preservation and how it is preserved;

(i)   identify and propose registration of digital documentary heritage on a Memory of the World Register;

(j)   ensure that analogue contents will be made available in digital form, to avoid their future neglect in a world of predominant digital information retrieval;

(k)   raise public awareness of relevance of digital preservation for the endurance of our cultural heritage;

(l)   promote the use of standards and widely recognized guidelines and best practices on digitization and digital preservation among the relevant national organizations and communities.

Urge professional organizations in the cultural heritage sector to:

(a) cooperate with other professional associations, international and regional organizations and commercial enterprises to ensure that significant born-digital materials are preserved by promoting and advocating for digital legal deposit laws;

(b) assist in the development of a cohesive, conceptual and practical vision for a digital strategy capable of addressing the management and preservation of recorded information in all its forms in the digital environment;

(c) encourage their members to take into consideration the reliability, authenticity, copyright ownership and future use of digital information, and to develop policies for all aspects of management and preservation of digital materials;

(d) cooperate with the private sector for the development of products that facilitate the long-term retention and preservation of information recorded in a digital format;

(e) encourage members to identify and evaluate the specific threats to which their digital information is vulnerable, and implement appropriate processes and policies to mitigate these threats.

Urge private sector organizations to:

(a) cooperate with archives, library, museum and other relevant organizations to ensure long-term accessibility to digital information;

(b) adhere to recognized metadata standards designed in cooperation with information professionals for description and/or management of digital resources, in order to enable interoperability of sources that can be presumed authentic and guaranteed reliable and accurate;

(c) take digital preservation issues into consideration when participating in national and international standards initiatives and in their work on multi-jurisdictional and other partnership initiatives where information generated in a digital format is to be retained through the long term.