

# Conference Proceedings

Edited by:  
Luciana Duranti and  
Elizabeth Shaffer

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

An international conference  
on permanent access to  
digital documentary heritage

Hosted by:



**a place of mind**  
THE UNIVERSITY OF BRITISH COLUMBIA

In collaboration with



UNIVERSITY OF  
**TORONTO**



United Nations  
Educational, Scientific and  
Cultural Organization



Memory of the World  
20<sup>th</sup> Anniversary

**26 to 28 SEPTEMBER 2012**  
Vancouver, British Columbia, Canada  
Sheraton Vancouver Wall Centre



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Educational, Scientific and  
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Memory of the World  
20<sup>th</sup> Anniversary



Organisation  
des Nations Unies  
pour l'éducation,  
la science et la culture



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## UNESCO Memory of the World Programme, Knowledge Societies Division

This book of Proceedings includes most of the papers and posters presented at the International Conference “The Memory of the World in the Digital Age: Digitization and Preservation” held on 26–28 September 2012 in Vancouver, British Columbia, Canada, by the UNESCO Memory of the World Programme, Knowledge Societies Division, and The University of British Columbia in collaboration with the University of Toronto.

The proceedings have been compiled and formatted with minor editing; papers and posters appear as submitted. The authors are responsible for the choice and the presentation of the facts contained in this publication and for the opinions they express, which are not necessarily those of UNESCO and do not commit the Organization.

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sciences humaines du Canada

Canada



**InterPARES Project**

International Research on Permanent Authentic Records in Electronic Systems

## Preface

This publication presents the proceedings of the international conference 'Memory of the World in the Digital Age: Digitization and Preservation' which was held in Vancouver, Canada, from 26 to 28 September 2012.

More than 500 experts and other interested persons from all regions of the world participated in this knowledge-sharing and policy-driving event to discuss and exchange opinions on how to protect the world's documentary heritage. Although this heritage is the record of knowledge, its physical carriers are extremely vulnerable and can easily disappear without a trace. Whether recorded on a clay tablet or an electronic tablet, our methods of sharing content and knowledge need to be protected.

It is impossible to exaggerate the importance of documentary heritage in our lives. It governs our actions whether these relate to creating the basis of mutual respect between different civilizations and communities or building knowledge societies. Documentary heritage provides the foundation of peace, our identity and knowledge.

UNESCO's interest in this subject matter is as fundamental as its constitution with its mandate to contribute to building peace through the spread of knowledge from improved access to printed and published materials. These core materials, our documentary heritage, have been preserved in archives, libraries and museums for generations.

But while measures needed to maintain access to print materials are globally understood, the newer challenges related to preserving digital information are not keeping pace with technological development. The need for dedicated hardware and software, associated with their rapid obsolescence, hamper our ability to keep invaluable content accessible. Unless timely migration to newer technologies, operating systems and software platforms is assured, we face the risk developing digital Alzheimer's.

UNESCO's expectation from this Conference was to obtain a better definition of our expected role, and our contribution to setting a global digital agenda. The UNESCO/UBC Vancouver Declaration sets out specific recommendations which we will be implementing and incorporating into our digital strategy. Likewise, we expect that our Member States, professional organizations and private sector bodies will also implement the recommendations addressed to them.

Only through collaborative strategic alliances can we overcome the major challenges threatening the preservation of digital information. We believe that the presentations featured in this publication provide the basis for a global commitment to preserving the memory of our world in this digital age.

**Jānis Kārklīņš**  
**Assistant Director-General**  
**for Communication and Information**

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# Development of Policies and Requirements for Ingesting and Preserving Digital Records Into a Preservation System

*Where to start?*

**Alicia Barnard**

## **Abstract**

*In the light of the new Records/Archives Law in Mexico, it is mandatory to issue requirements and processes for agencies recordkeeping systems as well as for the development a digital repository for long-term preservation. For that there are already models, standards and basic requirements, widely accepted that may be reviewed and adapted for our environment. Moreover, good practices for digital records preservation require giving special attention to digital records appraisal activities. Thus, in order make recommendations for digital records appraisal policies for federal agencies, selected documents from national archives as well as research projects are being reviewed.*

## **Author**

Alicia Barnard is currently an independent records manager consultant. From 1990 to 2008, she was director of the Documentation Centre in the Mexican Federal Ministry of Health. In 1992, she received an “Archival Merit Diploma” and in 2000 “Acknowledgment to the Records and archival Tasks Diploma” from the General Archive of the Nation. From September 2005 to March 2006 she was a member of the CLAUD Team funded by UNESCO to receive training on electronic records preservation within the InterPARES 2 Project. She was director of TEAM Mexico of the InterPARES 3 Project until spring 2008 and co-researcher until May 2012. She has published and presented widely on digital records management and preservation.

## **1. Introduction**

Before the recent Federal Law of Records/Archives in Mexico last issued last January,<sup>1</sup> digital records were still not an issue to be taken into account. Although there were some unclear general guidelines for the Federal Government, record managers and archivists were and are indeed worried about this kind of records. One may say that until now information technology areas (IT) are ruling how the information is managed within Federal Agencies without any records/archival practices, although all information systems create, maintain and preserve information that comply or function as records since they are created as an instrument or by-product of an activity or as a reference, are unique, and have archival bond that relates with others of the same aggregation. Right now when we are about to have a new Administration nobody knows for sure how digital records from the current Administration are being delivered to the next one, or how are they kept or disposed of, or if there is enough information to assure that the systems where the information resides are trustworthy. Although computer safety regulations help the maintenance of information systems, we are aware that they complement records/archival practices, but it is not enough since nobody knows how data maintained in information systems is being disposed, or if said data is kept without any reason to do so, or if it is already compromised because of migration or other changes (technological, administrative or juridical) that might impact on its authenticity and accessibility.

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<sup>1</sup> <http://www.diputados.gob.mx/LeyesBiblio/pdf/LFA.pdf> (Accessed August 28, 2012).

Well of the evils, the lesser. The above mentioned Federal of Records/Archives Law sets for the first time regulations for digital records, it stipulates that processes and technical tools are equivalent for both paper and electronic records, among them there are: capture (creation/integration), monitoring (tracking), use, creation of functional classification schemas, file integration, description (section, series, files), transference (disposal rules), maintenance, information access and personal data controls, appraisal and audit. Besides the Law disposes that guidelines for recordkeeping systems must be issued which should consider: a) To keep and preserve metadata created for the development of such recordkeeping systems; b) To include rules and measures to guarantee authenticity, security, integrity and availability of electronic records as well as those devoted to their management and control; c) to develop procedures to document updating, backing, migration, or other processes that affect the authenticity of electronic records as well as those juridical-administrative and technological changes in systems, software or devices and hardware that may also impact on the electronic records content.

Fortunately the Law dispositions have not forgotten digital records preservation, either for the creator's usability or for the historical and social values, the Law disposes that institutions must have a preservation system according to the specifications to be issued.

On these order of ideas, in addition to basic functionalities for a recordkeeping systems for agencies, in relation with records, National General Archives (NGA) must develop a digital repository together with policies, rules, guidelines or procedures related to appraisal and transference of records with values to be considered as heritage of our Nation.

As for a recordkeeping system there are already models, functionalities, requirements that are being analysed in order to adapt which is best for agencies. Those rules as well as the guidelines are being elaborated. Firstly, for next January the rules derived from the Law will be published as well as the basic policies and requirements for a recordkeeping system. In this task it was decided to select minimum requisites and review the further on them according to the experiences obtained in their instrumentation.

With respect to the transference/ingesting and preserving records to a digital repository, the OAIS model<sup>2</sup> already offers the main elements for transference/ingesting digital data. The model, provides with elements to consider for this process such as: agreements between the creator and the preserver in relation with the type of information to be transferred, formats, means of transmission and periodicity as well as the requirements to be established by the repository regarding the type of information that will keep and maintain, the kind of metadata needed, intellectual rights to be acquired, and so on. There are also criteria for digital records repositories certification.<sup>3</sup> It is not the same with the appraisal process, there is not a single model or methodology to do so, but is also a fact that appraisal<sup>4</sup> cannot be anymore carried without

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<sup>2</sup> Consultative Committee for Space Data Systems (2012): Reference Model for an Open Archival Information System (OAIS), <http://public.ccsds.org/publications/archive/650x0m2.pdf> (Accessed August 28, 2012).

<sup>3</sup> For digital repositories criteria check: The Center for Research Libraries and Online Computer Library Center, Inc. (2007): Trustworthy Repositories Audit & Certification: Criteria and Checklist. (2007). Version 1.0, [http://www.crl.edu/sites/default/files/attachments/pages/trac\\_0.pdf](http://www.crl.edu/sites/default/files/attachments/pages/trac_0.pdf) (Accessed August 28, 2012); And also: International Standards Organization: ISO 16363:2012: Space data and information transfer systems -- Audit and certification of trustworthy digital repositories, [http://www.iso.org/iso/iso\\_catalogue/catalogue\\_tc/catalogue\\_detail.htm?csnumber=56510](http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=56510) (Accessed August 28, 2012).

<sup>4</sup> The definition of appraisal for this paper is the one of the InterPARES Glossary: "The process of assessing the value of records for the purpose of determining the length and conditions of their preservation," [http://www.interpares.org/ip2/display\\_file.cfm?doc=ip2\\_glossary.pdf&CFID=2004855&CFTOKEN=47951380](http://www.interpares.org/ip2/display_file.cfm?doc=ip2_glossary.pdf&CFID=2004855&CFTOKEN=47951380) (Accessed August 28, 2012).

specific policies methodologies or guidelines they are essential if we really want to maintain for future generations our heritage materials available.

Currently, for paper records Federal agencies, most of the states and local agencies already use functional classification schemas linked to disposition schedules, although it is perceived that these instruments are not always good or applied correctly, so first they must be a reviewed for its application within a digital environment. As for an appraisal methodology GAN, as the agency responsible of authorizing records destruction or transference issued a reference guide for identifying paper records series with secondary value,<sup>5</sup> it recommends agencies to carry out record series appraisal during the first and second phase of the life cycle, first for a quality study of the records series and a second appraisal for comparing other similar series created by other institutions, besides the guide offers certain general topics as well of a checklist that will lead to an approximate of certain documents with secondary values. GAN has also issued basic requirements for the transference of paper records to be preserved for the long-term. Notwithstanding there is still lack of a policies, guidelines or practices for appraising digital records.

The purpose of this study is to offer an approach of certain factors and recommendations to be taken into account for the development of appraisal policies in Mexico. It is based on the review of the main digital records appraisal policies or rules issued of the National Archives of Canada, United States, United Kingdom and New Zealand published in their official websites. Besides the InterPARES project materials related to appraisal will be taken into account, as well as the results of the recent conclusions obtained by the Digital Records Appraisal Group of the Latin American (including Spain) Records Appraisal Project (FIED).<sup>6</sup> First, a synthesis of the documents reviewed is presented followed by an approach of what appraisal policies or guidelines in Mexico should consider.

## 2.1 National Library and Archives of Canada (LAC)

*Document:* Appraisal Methodology: Macro-Appraisal and Functional Analysis. Part B: Guidelines for Performing an Archival Appraisal of Government Records. 2000 reviewed on 2005<sup>7</sup>

### *Purpose:*

The guidelines proposed are based on the Macro-Appraisal approach by means of functional analysis to get information about the environment where information is recorded such as its nature, structure, creation process and especially interrelationships with other information/records creators and users. The guidelines also considers at the end micro-appraisal to identify factors such as completeness and comprehensiveness, authenticity, uniqueness, relationship to other records, date and time span, extent,

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<sup>5</sup> Archivo General de la Nación (2009): Guía para la identificación de series documentales con valor secundario, <http://www.agn.gob.mx/menuprincipal/archivistica/pdf/GuiaIdentificacion21052012.pdf> (Accessed August 28, 2012).

<sup>6</sup> The Digital Records Appraisal Group of the Latin American and Spanish Records Appraisal Project was partially funded from 2009 to 2012 by the International Council of Archives. The professors and practitioners that participated were from Argentina, Brazil, Colombia, Spain, Costa Rica, Mexico, Peru and Uruguay. There were different groups for specific topics related to appraisal, such as terminology, educational programs, sampling, methodologies and specific issues on digital records. Particularly, this last group was coordinated by Lluís-Esteve Casellas (in 2011) and Alicia Barnard (in 2010-2012) and integrated by Ma. Teresa Bermudez, Aida Cristina Oliveiro, Andrés Pak Linares and Aída Luz Mendoza Navarro, <http://blogs.ffyh.unc.edu.ar/evaluaciondedocumentos/category/mariela-alejandra-contreras-argentina/> (Accessed August 28, 2012).

<sup>7</sup> <http://www.collectionscanada.gc.ca/government/disposition/007007-1041-e.html>.

usability, physical condition. The guidelines were designed for both paper and digital records. Particularly, in relation with electronic data of program delivery or analysis systems, the guidelines recommend archivists to carry out:

Investigation of micro-data as well as longitudinal data-files built from said micro-data in order to (recognize or) confirm the role of regional and field data systems and their relationship with data sharing with superior systems.

## 2.2 National Archives and Records Management Administration (NARA) of the United States

*Document:* Appraisal Policy. September 2007<sup>8</sup>

### *Purpose:*

The policy sets out the strategic framework, objectives, and guidelines that the National Archives and Records Administration (NARA) use to determine whether Federal records both, traditional and digital, have archival value. It establishes which are permanent records categories as well as specific guidelines for appraising certain categories of records.

The policy states that the authority for retention and disposition of the Federal Records is the National Archivist, although it also establishes that the process is carried out with interested parties and considers the point of view of the records creators. Besides the policy includes appendixes for special considerations such as the usability of electronic records that might require specific measures due to their technological capabilities in contrast with other records that are easy to maintain. There are also special considerations for certain types of records as observational data, environmental health and safety records or research and development records; said considerations are mainly directed to digital records.

## 2.3 The National Archives (TNA), United Kingdom.

*Document:* The National Archives Appraisal Policy (last updated August, 2004)<sup>9</sup>

### *Purposes:*

- To develop a system of appraisal applicable to new environments created by digital records
- To ensure the continued transfer of paper records to TNA for at least the next 20 years.
- To ensure that appraisal for archival purposes selects records of highest archival value avoiding duplication.
- To provide appraisal methods for both digital and paper records as well as records created in any other medium.
- The policy states that an effective appraisal, mainly in the digital environment depends on good systems of records creation and business scheduling records.

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<sup>8</sup> <http://www.archives.gov/records-mgmt/initiatives/appraisal.html> (Accessed August 28, 2012).

<sup>9</sup> [http://www.nationalarchives.gov.uk/documents/information-management/appraisal\\_policy.pdf](http://www.nationalarchives.gov.uk/documents/information-management/appraisal_policy.pdf) (Accessed August 28, 2012).

The policy was developed to deal with digital records, it admits that the traditional Grigg System issued in 1958 proved its effectiveness for paper records although specific changes should be made for appraising digital records. It states that an effective appraisal, mainly in the digital environment, depends on good systems of records creation and business scheduling records. Moreover, the policy considers macro-appraisal appropriate for digital records as an initial guide to identify public records of value for business and archival purposes, in order to understand the functions that create them. Also, it considers macro-appraisal as an aid to identify those records with potential archival value in file plans, as well as datasets and case files that overlap between departments. It also includes the need for developing generic archival appraisal guide for categories of records such as those produced by similar types of departments.

In relation with appraisal TNA has developed a various documents that help agencies with the process such as the Appraisal Report Template, General Guidelines for the Selection of Records, How to compile an appraisal report, Series level appraisal questionnaire.<sup>10</sup>

## 2.4 New Zealand Archives

*Document:* Appraisal Policy, September 2008<sup>11</sup>

### *Purpose:*

To support the Chief Archivist's decision making around appraisal of government records for the purposes of disposal.

The Policy briefly explains why appraisal is needed in context of government and local agencies and the purposes for determining which records are public. Also includes principles for good records practices to support appraisal decision making such as lawfulness, accountability and transparency, consistency and resources that should be taken into consideration together with the point of view of creators. Also, the policy establishes certain objectives that help to identify the archival significance of records and the responsibilities of the process for producers and preservers. The policy applies for any public record (electronic, paper or other) as stated in the Public Records Act.<sup>12</sup>

## 3. Main conclusions encountered in the documents reviewed

- Most Archival Institutions do have an appraisal policy.
- The policy main purpose is to support the National Archivist for disposition decision making actions.
- Policies also guide creators to identify records that should be preserved because of their values.
- Policies are focused on both traditional (paper, film, etc) and digital records.
- There are checklists to help the creator to identify those records with permanent values, as well as special considerations for scientific data, environmental data, etc.

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<sup>10</sup> <http://www.nationalarchives.gov.uk/information-management/guidance/a.htm> (Accessed August 28, 2012).

<sup>11</sup> [http://archives.govt.nz/sites/default/files/appraisal\\_policy\\_0.pdf](http://archives.govt.nz/sites/default/files/appraisal_policy_0.pdf) (Accessed August 28, 2012).

<sup>12</sup> <http://www.legislation.govt.nz/act/public/2005/0040/latest/DLM345537.html> (Accessed August 28, 2012).

- There are recommendations for macro-appraisal or functional appraisal although down to top appraisal is not left out.
- The main reason of an appraisal policy was for better appraisal practices regarding digital records and considers that an effective appraisal is supported by good systems of records creation and scheduling records.
- Recognition of the role of regional and field data systems and their relationship with data sharing with superior systems .
- The issuing guides for categories of records such as those produced by similar types of departments.

By reviewing the InterPARES Project proposals for appraisal there are four main issues to take into consideration for digital records appraisal.<sup>13</sup>

1. To carry out appraisal at the beginning of the life cycle or when designing the recordkeeping systems.
2. Assess and document authenticity. Digital records intangibility as well as technological obsolescence or its transmission in time and space are undoubtedly factors that compromise their authenticity. Therefore, assessment to identify elements related to its integrity (persons, dates, archival bond) and integrity (completeness and uniqueness) of records or the recordkeeping system where they reside must be carried out. Although one must accept that digital records of the creator are authentic unless the contrary is proved, we must trust on our digital heritage to be authentic and reliable for its preservation.
3. Determining feasibility of preservation. By identifying technical requirements for preservation, formats, as well as digital components such as metadata, content and context information will help the institution that is going to preserve the records for the long-term to understand costs of acquisition, taking into account that most of them are constant. There may be records that are developed in complex systems that might require either to postpone its transference in order to look for more resources or alliance with other institutions.
4. Monitoring appraised records. Those records already appraised for is long-term preservation require to be monitored and reappraised before they are transferred to an archive for preservation, in order to assess if the initial appraisal decision has not changed or if there is no damage in records and its components when there are changes or redesign of the recordkeeping system, or in functions within the organization, or in the status of the records information.

The InterPARES 3 Project with support of the International Council of Archives recently issued the series *Digital Records Pathways: Topics in Digital Preservation*.<sup>14</sup> The series includes a module devoted to

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<sup>13</sup> Hackett, Yvette, Domain 3 Task Force, "Appendix 21: Preserver Guidelines – Preserving Digital Records: Guidelines for Organizations," [electronic version] in *International Research on Permanent Authentic Records in Electronic Systems (InterPARES) 2: Experiential, Interactive and Dynamic Records*, ed. Luciana Duranti and Randy Preston (Padova, Italy: Associazione Nazionale Archivistica Italiana, 2008).  
[http://www.interpares.org/display\\_file.cfm?doc=ip2\\_book\\_appendix\\_21.pdf](http://www.interpares.org/display_file.cfm?doc=ip2_book_appendix_21.pdf) (Accessed August 28, 2012).

appraisal which reasserts that “principles for appraisal and preservation decisions should be embedded in all record-creating and recordkeeping activities.” The module proposes the following steps for conducting appraisal which is based on the above mentioned issues.

- **Compiling information.** This activity includes gathering contextual information of the record’s corpus to be appraised (juridical-administrative, provenancial, procedural and technological).
- **Assessing value.** The continuing value either for the creator due to legal, evidentiary or business reasons, or for cultural, historical and research purposes could be assessed either by top-down in terms of the records contexts or a bottom up approach by assessing their values.
- **Assess and document authenticity.** The InterPARES *Requirements for Assessing and Maintaining the Authenticity*<sup>15</sup> was designed for this purpose in order to either establish if records may be ingested for preservation or if it is needed to carry out risk assessment when authenticity is compromised.
- **Determining the feasibility of preservation.** This activity implies to identify records elements to be preserved according to the system design and configuration, records elements that may be manifested in digital components in various ways (content, metadata and creation contexts). This will help to know about the system, the essential records manifestations, its metadata and context creation that will help to reconcile preservation requirements with preservation capabilities by assessing the institutions current and future preservation capabilities such as professional knowledge, expertise as well as IT infrastructure and financial resources.
- **Monitoring appraised digital records.** Once the appraisal decision has been taken, records that are going to be preserved for the long-term require to be monitored while they reside in the recordkeeping system of the creator in order to verify if the initial appraisal decision is still valid and terms and conditions of transfer or require a new appraisal process.

The Digital Records Appraisal group of the Latin-American (including Spain) Evaluation Project (FIED) focused its research on appraisal documents issued by different national archives as well as on international research projects or institutions, some of which were also reviewed for this study case.<sup>16</sup> The main conclusions were:

- Appraisal as an intellectual activity is the same for any media.
- Appraisal must be carried out at the beginning of the lifecycle when records are controlled by a recordkeeping system

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<sup>14</sup> The InterPARES 3 Project, *Education Modules - Digital Records Pathways: Topics in Digital Preservation*, [http://www.interpares.org/ip3/display\\_file.cfm?doc=Education-Modules\\_Digital-Records-Pathways.zip](http://www.interpares.org/ip3/display_file.cfm?doc=Education-Modules_Digital-Records-Pathways.zip) (Accessed August 28, 2012).

<sup>15</sup> InterPARES: Authenticity Task Force (2002), “Appendix 2: Requirements for Assessing and Maintaining the Authenticity of Electronic Records” in *The Long-term Preservation of Authentic Electronic Records: Findings of the InterPARES Project*, ed. Luciana Duranti (San Miniato, Italy: Archilab, 2005), 204–219. Online reprint available at [http://www.interpares.org/book/interpares\\_book\\_k\\_app02.pdf](http://www.interpares.org/book/interpares_book_k_app02.pdf).

<sup>16</sup> The digital records appraisal group besides reviewed information from the website of the National Archives of Australia, the InterPARES Project also reviewed official websites of the Digital Curation Centre, Digital Preservation Europe, Inter-University Consortium for Political and Social Research, the UK Data Archive as well as the National Archives of Australia.

- Digital records appraisal cannot be dependent on technological factors, considerations on processes and contexts that impact the creation of digital records must be taken into account.
- Professional education, knowledge of the records environment and research are basic elements for good appraisal policy.

I would also like to mention the InterPARES Project Director Dr. Luciana Duranti's conclusions for digital records appraisal:<sup>17</sup>

- *Appraisal, different from selection, is entirely conditioned by the specific context.*
- *It requires a clear relationship between the creator and the designated preserver.*
- *Selection and appraisal must be based on trust.*
- *Appraisal must be clearly motivated on the basis of arguments that are not only being archival/diplomatic and technological, but also legal, ethical, and financial.*
- *The archivist must be all to all records, including the potential records that s/he should contribute to design.*
- *Appraisal must be carried out as soon as possible after creation.*
- *Appraisal must consider functions, records, systems.*
- *Appraisal must be carried out by a team of records professionals, legal, and financial experts, and IT professionals.*
- *Appraisal would serve the creator, researchers and society at large.*
- *Appraisal should be carried out in the environment in which they reside at any given time.*
- *Appraisal should be carried out every time the system's creator is upgraded or changed. Once the records are acquired the selection process and the appraisal is definitive.*

Thus, the Digital Appraisal Group of FIED developed the following recommendations when designing appraisal policies:

- To develop and implement classification schemas, records schedule plans, migration, refreshment and updating procedures before transferring records to a digital repository for its preservation. This in order to assure integrity, reliability and usability of digital records.
- To take into consideration problems associated with records hosted outside the servers and to establish the development of recommendations in this respect.
- To elaborate guidelines for metadata retention regarding the appraisal decision and its link to the record during the retention period, as well as for protection against unauthorized disposition.
- To establish monitoring strategies to identify juridical-administrative, provenancial, procedural and technological changes of those records already appraised for its preservation.
- To consider that information creator systems must comply with recordkeeping procedures and processes in order to identify and establish retention periods, to provide periodical information related with the systems updates or changes, transfer or destruction activities according to schedule plans, and documentation related to the system functionalities

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<sup>17</sup> Duranti, Luciana, keynote address, "The Appraisal of Digital Records: The Return of Diplomatics as a Forensic Discipline," International Conference on "The E-Discovery Challenge: Digital Wasteland or Digital Oasis. An Interdisciplinary Approach to Managing Records – Archives, Law and Evidence," 3-4 November 2010. Singapore, Singapore, [http://www.interpares.org/display\\_file.cfm?doc=ip3\\_canada\\_dissemination\\_cs\\_duranti\\_singapore\\_2010a.pdf](http://www.interpares.org/display_file.cfm?doc=ip3_canada_dissemination_cs_duranti_singapore_2010a.pdf).

- To consider the elaboration of guidelines for the control and elimination of records produced or included in websites, and when necessary, to adapt schedules plan in order to include series created for the website when these are not already considered.
- To consider appraisal of information as by product of scientific data analysis models.

Besides, the Digital Appraisal Group established certain requisites and issues to consider when appraising digital records.

The information gathered lead to conclude that there is enough information for designing a general appraisal policy with special attention to digital records which deserve utmost attention due to the constant risk they face because of the technological environment that compromises their authenticity, thus severely questioning if they are trustworthy for the their preservation. Thus the following topics are of relevance to be considered.

- The role and responsibilities of creator and preserver for the appraisal process.
- The statement of the main governmental, cultural, historical and societal reasons for continued preservation.
- Check lists that may help the creator in the decision making process.
- The appraisal process must be carried out at the beginning of the life cycle or when designing the recordkeeping system for both digital and paper records.
- The development of specific policies, guidelines or procedures:
  - For carrying out the appraisal process. These will make distinction of traditional records (paper or other) and digital ones.
  - For specific disposition criteria in relation with generic series that are created and maintained in different agencies mainly for those created and maintained in digital environments.

Particularly, the appraisal policy must consider the following topics for digital records.

- Functional appraisal methodology as an initial approach although down-top appraisal should not be ignored.
- The main activities to carry out digital appraisal, such as:
  - Assessment and documentation of authenticity.
  - Identification of digital components of records (content, metadata and contextual information).
  - Determining feasibility of preservation.
  - Monitoring records already appraised.
  - Developing transfer-ingest plans.
- Development of risk analysis strategies or diplomatic analysis when it is presumed that records have high secondary values but authenticity is compromised because of the lack of structural or formal components or because they are not captured in a recordkeeping system.
- Appraisal carried out by multidisciplinary groups, based on local and national regulations.

Notwithstanding, the availability of policies, methodologies, procedures or requirements to be adapted or adopted for a good appraisal, as the main step to continued preservation of high value records, our digital heritage in Mexico will remain in danger if authorities of the highest level forget that archival/diplomatic practices are urgently needed to create, maintain and preserve digital records. Also it is important for the authorities to recognize that the challenge for preserving digital records is not anymore an isolated task carried out by records managers or archivists they should be accompanied by other professionals since the best solutions are multidisciplinary shared by creators, records managers and preservers and other stockholders. In these tasks IT also plays an important role, but not the only one as it is still perceived by authorities in Mexico.

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