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Defining the problem
A different archival tradition: the importance of preserving collective and institutional
definitions.

CITIZENS

INSTITUTIONS

Digital collections, documents and compound objects...

Government activity
Cultural / patrimonial
Institutional activity
Science

15th century
Today
The obligation of cultural institutions and memory keepers such as archives, libraries and museums to preserve our heritage carries with it the idea of perpetuity.
Guaranteed system based on documents & evidence

15th century

Today

Blockchain

eSignature

Compound record
or collection

Integrity guarantee

Document 1 + evidence

Metadata of document 1

Document 2 + evidence

Metadata of document 2

Defining the problem
Defining the problem

Guaranteed system based on documents & evidence
Perpetuity? Infinite?
Original conditions?
Storage: standardized and self-understanding model
OAIS ISO 14721 as the base of our model – WHY?

**DATABASE**
Preserves metadata of records (and other file system items) and links between these items and digital objects

**APPLICATIONS**
Applications are the only system capable of correctly interpreting its own database and the different relationships that exist internally between data and the relationships with digital objects

**REPOSITORY OF DIGITAL OBJECTS**
Electronic documents are part of the system, so they are stored in a repository of digital objects

Storage: standardized and self-understanding model
The need to build independent technology, self-understanding packages (AIPs)

Storage: standardized and self-understanding model

Compound record or collection
- Integrity guarantee
- Document 1 + evidence
- Metadata of document 1
- Document 2 + evidence
- Metadata of document 2

Additional metadata
Includes information about the transfer process and validations, hash function and preservation metadata

Additional metadata of document 1
Includes preservation-specific metadata associated with the document

Additional metadata of document 2
Includes preservation-specific metadata associated with the document
Towards an international standard: eArchiving

Storage: standardized and self-understanding model

- Preservation metadata folder
  - Metadata document METS
  - Metadata document PREMIS
- Metadata document folder
  - Descriptive metadata folder
  - Preservation metadata folder
  - Metadata document METS
- Representation folder
  - Metadata document PREMIS
- Data folder
  - Metadata document MARC
  - Metadata document PREMIS
- Schemas folder

PREMIS
MARC
METS
A standardized and self-understanding model

**Self-contained hierarchy relationships**

**Relationships between collections of self-contained packages**

**Knowledge bases, specific communities, means of depiction... self-contained**
**Quick Access Storage**

- Local storage or
  - region 1

**Preservation Storage**

- Local storage (2nd redundant instance) or
  - region 1

**Backup System**

- Local storage (2nd redundant instance) or
  - region 2

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File Information Packages (AIP/PIA). Latest versions generated by the preservation system.
Preservation as a continuum
Key Point 1. Automatic processes are not enough: Life Preservation as a Continuous (Technological) + Intellectual Process

- **CONSULTANCY SERVICES AND DEFINITION OF THE PRESERVATION PLAN AT THE BEGINNING OF THE PROJECT**
- **ARCHIVING AND PRESERVATION MANAGEMENT PLATFORM**
- **GEO-REDUNDATED STORAGE SELF-UNDERSTANDING OAIS**
- **CONTINUOUS PRESERVATION SERVICE – RISK CONTROL**
Key point 2. Towards the construction of a continuous and global system of archiving and preservation OAIS.
Key point 3. Complex processes managed with friendly solutions: OAIS should not be complex for end users
Key point 4. Accreditation with OAIS. Archiving and preservation services as a whole

The requirement of standards that accredit services must be a key element to ensure the continuity of documentation and digital collections.

**ISO 17068**
Trusted repositories for digital records (third party)

**ISO 27018**
Protection of personally identifiable information in public cloud environments

**ISO 27001**
Information security and privacy protection

**ISO 14721**
Preservation OAIS

**ISO 27701**
Security techniques. Privacy information management. GDPR compliance

**ISO 27017**
Information technology. Security techniques.

**ISO 22301**
Business continuity management systems