

# **Italian legislation on digital records preservation: standards and policies for certification**

Maria Guercio

Sapienza Università di Roma

Association of Italian Archivists (ANAI)

# basic principles of the legal framework

- Since the first national legislation approved in 1900 (regio decreto 35/1900) on records and archives management for public administrations, the specific Italian legal focuses on a general principle: **public records are protected since their creation.**
- **Early protection** is the main measure to ensure both the quality of their **evidential value** and their permanent preservation as **accessible and authentic resources.**
- This principle has been **renewed and reinforced** in the ICT environment:
  - current **records** in **any digital form** (databases, textual records, webpages) are today, more than in the past, a **strategic tool** for the improvement of public administrations services, their efficiency and accountability
  - **The digital records preservation is recognized a crucial function for interoperability over time both for active, semi-active and inactive digital archives**

# The legal framework for preservation - 1

- The legal framework is based on a series of **standardized rules and tools** with the aim of ensuring **sustainability** and **flexibility**. In particular, the framework includes:
  - **An interconnected group of acts and rules** which implies the adoption **of internal policies and manuals for each public agency** (in compliance with a general template approved in the regulations);
  - A **conceptual model for information packaging infrastructure** based on ISO 14721 OAIS;
  - A **series of guidelines included common glossary, recommendations of formats, a scheme for the archival information package**

## The legal framework for preservation - 2

- A **certification process** compliant with international standards approved in 2013 such as ISO 16363 and ISO 16919 on auditing of digital repositories and with national standard.
- A **detailed series of requirements for assessing the quality of the preservation process**, based on OAIS and ISO 16363;
- The **manual of preservation**: goal and national detailed template;
- **General guidelines** for the whole process (improvements are required to be more practical)
- the list **of professional profiles** to be present in the digital repositories and their **responsibilities**

# profiles recommended by the AGID guidelines

- General requirements
  - stable contracts (not less than 3 years for the main relevant profiles)
  - Definition of university degree and number of years (3 to 5) for experienced people (5 years are required without academic degree)
- Profiles:
  - **Responsible for the digital preservation with archival knowledge** (specific academic degree and 2-3 years of experience/5 years without academic degree)
  - **Responsible for the digital preservation** (generic academic degree and 5 years of experience/8 years without academic degree)
  - **Responsible for the repository information system and security** (academic degree in scientific topics and 3 years of experience/5 years without academic degree)

## Certified digital repositories: state of art

- At present **more than 70 public and private repositories** (<http://www.agid.gov.it/agenda-digitale/pubblica-amministrazione/conservazione/elenco-conservatori-attivi>) have been accredited on this basis and are able to provide a certified preservation system.
- The repositories **manuals are published and available**

**Lights and shadows characterize the foundation of the Italian model for electronic records management and for preservation systems, whose history is not yet concluded**

## principles of Italian ERMS (since 2000) relevant for preserving electronic records

- capture and acquisition of the records (both analogue and digital) with a **unique and persistent identifier** based on the registry system,
- obligation **of filing and aggregating** the records at the creation phase on the basis of classification plans articulated on functions and activities,
- **integration of classification plan and the retention schedule** to support the analysis for appraisal and disposition,
- definition of **well-defined procedures and directives able to govern the whole chain of creation and keeping** in compliance with the creator requirements

# the main rules for records creation and preservation

- Codice dell'amministrazione digitale - CAD (2005, last change: August 2016): **general act for public and private sector** (artt. 43, 44, 44 bis are dedicated to digital preservation)
- 4 main coordinated technical rules on the **electronic record, ERMS, digital preservation, digital identities**:
  - dpcm 3.12 2013, regole tecniche sul sistema di conservazione: **technical rules on preservation systems**
  - dpcm 3.12.2013, regole tecniche sul protocollo informatico: **technical rules on electronic records management**
  - dpcm 13.11.2014, regole tecniche sul documento informatico: **technical rules on electronic record (updated on the basis of the European regulation on digital identity)**

[www.agid.gov.it/agenda-digitale/pubblica-amministrazione/conservazione](http://www.agid.gov.it/agenda-digitale/pubblica-amministrazione/conservazione)

# Contradictions and limits in the legislation development

- The **procedures for digitizing the analogue records and for supporting preservation of digital resources** were delivered by a working group based on IT competencies and did not include any archival competencies.
- **On the contrary**, the **rules for the definition of ERM** (Electronic Records Management) requirements have been developed with **the support of representatives of the main government agencies and the relevant institutional stakeholders, included the National Archives**, the Ministry of Justice, the Ministry of Interiors and the experts from the research.
- The procedures on digital preservation **have changed five times** (1994, 1998, 2001, 2004 and 2013) and they are **still under discussion** and not successfully implemented by both the government agencies and the preservation repositories.
- The **lack of integration and continuity has determined duplication and fragmentation** of the results for many decades (1994-2014).

# Interdisciplinary and professional coordination as the basis for the success

- In the course of these long twenty years **records managers and archivists** have played together to identify (sometimes on voluntary basis) a **qualified list of requirements at a national level based on the international standards and the achievements of the best research projects** (InterPARES, PLANET, CASPAR, DELOS, APARSEN).
- This effort was **fruitful in the e-government sector, where archivists and record managers role is today well recognized and undeniable**, but – as mentioned – not immediately and sufficiently well established for digital preservation

# The uncertainty of the legal framework for digital preservation

- The creation and **legal validation of born digital** records, whose requirements have been mainly determined by *IT specialists and jurists*, were (and partially still are) based on an **unstable legal framework, continuously updated, unbalanced and now again under revision** for compliance with EU directives dedicated to digital identity.
- The definition of rules on “**legal digital archiving and preservation**” and digitization of analogue records have been defined in their first phase (1993-1994) only by *IT specialists* and – despite their definition – were **mainly/only related to support the legal validation of the records** and not to provide operational principles for long term digital preservation.
- The design was uncertain and the framework **so complicated to apply that nobody (even the Digital Agency) used them**.
- **More recently (2011-2014) this legislation has been revised by a multidisciplinary team and finally transformed** into a consistent and well interrelated series of rules and technical annexes able to provide the legal and technical basis for a qualified digital recordkeeping system and an adequate group of certified digital repositories.

## The quality of present regulations (2014-2016)

- The new rules (developed with the support of archivists and records managers' representatives of many central and regional agencies, of National Archives and Italian ISO Committee for archives and record management) **make possible the implementation of flexible and sustainable solutions for creation, keeping and long-term preservation of electronic records.**
- They **renovated the juridical framework**, even if still today it is not yet completely consistent with the archival principles.
- **The guiding principle** is, again, that creation, management and preservation of electronic records **require a *systematic and interrelated approach*** and that the success of the **preservation system implies an early integration with the ERMS**

# Requirements in the Italian regulation for digital preservation

- **the information on provenance** have to be maintained not only in the profile of the records to be submitted for preservation (on the basis of an explicit obligation of the Code for digital administration, approved in 2005), but also **because of its relevance for verifying the records authenticity** (identity, integrity, security);
- the validation over time of the record implies the **documentation of its integrity**;
- **the role of processes and workflows documentation is crucial**;
- **policies and manuals must be formally approved** (according to a common template adopted at national level) in each public agency and each private and public digital repositories as part of **formal documentation of a well developed and implemented** preservation environment

## The positive consequences of new regulations

- The approval of rules and standards as part of formal legislation has implied many consequences on the Italian records management function. In particular:
  - the obligation of formal definition of procedures for RM in each public agency has increased the **quality of ERMS tools in place and of related software procurement**.
  - **the standardization of the documentation relevant for records creation and for preservation processes** (manuals of records management, manuals of preservation, submission reporting, formal delegation of responsibilities) has provided the **simultaneous qualification of controls, of professionals and of training and educational profiles and a better definition and distinction of responsibilities** for each phase of digital records cycle.

# Policies for evidence in the preservation processes

- The **manual for records management procedures** (*manuale di gestione*) is an obligatory requirement for the public administrations since October 2000
- The obligation of the manual for ERMS has been recently confirmed by the regulation of the electronic registry system (2013, *Technical rules on electronic registry system*) and includes rules on the records creation, capture, classification, filing, appraisal, archiving, digitization processes and preservation (both in paper and in digital form).
- The **manual for digital preservation** (*manuale di conservazione*) is a new requirement for any digital repository which is responsible for the preservation of public and/or private records, even if internal to the creator itself (2013, *Technical rules on digital preservation system*);
- The manual for preservation describes in details the organizational obligations, the overall architecture, the infrastructure, the processes, the security measures and all the information required for the long-term digital preservation system management and its auditing (when appropriate or required).
- **Submission reports** (*rapporti di versamento*) and standard models for creating Archival Information Packages (according to OAIS model) are required for transferring digital records to the repository responsible for preservation and for their archiving (2013, *Technical rules on digital preservation system*).

# The compliance of the documentation with the standards and its role

- The documentation (specifically the reports and the manual for digital preservation) has to be compliant with the international standards:
  - ISO 15489 on Record Management,
  - ISO 14721-OAIS,
  - ISO 16363 on the auditing for repository certification) even if this compliance is not part of the regulation but only suggested in the annex
- The increasing role of the documentation implies the **recognition that the authenticity problems cannot be delegated only to technological solutions**, like digital signatures and seals, has increased the institutions' awareness for the risks connected to the long-term protection of digital resources and for the need of adequate investments in this area both from the **conceptual and organizational points of view**

# Cooperation and national community of practices

- The Agency for Italia digitale Agid has created last year a forum for preservers (Forum dei conservatori, <http://www.agid.gov.it/agenda-digitale/pubblica-amministrazione/conservazione/forum-conservazione>), which includes repositories, software providers, institutions, professional associations. Its actions include working groups and guidelines
- University of Rome La Sapienza (research center Digilab) has recently (2016) promoted in cooperation with the National Association of Italian Archivists (ANAI) and thanks to funds provided by Regione Lazio the creation of an informal network (Rete per la conservazione e l'accesso ai patrimoni digitali, RECAP, <http://digilab.uniroma1.it/attivita/recap> (under development)). Its actions include:
  - Developing initiatives able to sustain the digital preservation by **making available guidelines and good practices**
  - **Increasing the awareness for the need of quality in this environment and promoting cooperation** (both in the investigation and in the dissemination of achievements) and **training** at regional and national levels

# Lesson learned

- *A habit cannot be tossed out the window; it must be coaxed down the stairs a step at a time.*

Mark Twain

