



# InterPARES 3 Project

International Research on Permanent Authentic Records in Electronic Systems

TEAM Italy

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**Author:** The InterPARES 3 Project, TEAM Italy

**Writer(s):** Maria Guercio  
Director  
TEAM Italy – InterPARES 3 Project

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## TEAM Italy Composition

The composition of TEAM Italy is as follows:

**Director:** Maria Guercio

**Co-investigators:**

- Alessandro Alfier - Regione Emilia Romagna
- Maristella Agosti - Università di Padova
- Alessandra Aversa - Università di Roma Tor Vergata
- Stefano Benedetto - Comune di Torino
- Gabriele Bezzi - Regione Emilia Romagna
- Giorgetta Bonfiglio-Dosio - Università di Padova
- Maria Letizia Bongiovanni - Provincia di Bologna
- Rossella Bonora - Regione Emilia Romagna
- Lilia Borghi - Regione Emilia Romagna
- Paolo Buonora - Archivio di Stato di Roma
- Eugenio Capra - Politecnico di Milano
- Maria Mata Caravaca - ICCROM
- Cristiano Casagni - Regione Emilia Romagna
- Sabrina Catani - Provincia di Forlì Cesena
- Daniela Conti - Rep. San Marino, Archivio di Stato
- Concetta Damiani - Anai
- Vincenzo De Meo, archivista
- Carlo Di Cave - Unione delle Comunità ebraiche italiane
- Fynnette Eaton, archivista
- Roberto Falco - Regione Piemonte
- Gigliola Fioravanti – Direzione generale degli archivi
- Nicoletta Fiorio Plà - Politecnico di Torino
- Lucilla Garofalo - Archivio centrale dello Stato
- Marina Giannetto – Istituto centrale per gli archivi
- Prisca Giordani - Archivi Storici dell'Unione Europea (HAEU)
- Linda Giuva - Università di Siena
- Massimiliano Grandi, archivista
- Monica Grossi - Università di Urbino
- Anna Guastalla - Provincia di Trento
- Bruna La Sorda - Anai
- Claudio Leombroni - Provincia di Ravenna
- Domenico Luca - CSI Piemonte
- Maria Emanuela Marinelli - Soprintendenza archivistica di Roma
- Guido Marinelli - Università di Roma Tor Vergata
- Monica Martignon - Università luav di Venezia
- Manuela Martinelli - Camera di commercio di Roma
- Enrica Massella - Cnipa
- Giovanni Michetti - Università di Roma La Sapienza
- Roberto Nahum - ICCROM
- Susanna Orefice, archivista
- Isabella Orefice - Anai
- Maria Grazia Pastura - Direzione generale degli archivi

- Maria Clara Peira - CSI Piemonte
- Gianni Penzo Doria - Università di Padova
- Lucia Persico - Regione Piemonte
- Vincenza Petrilli – Archivio di Stato di Milano
- Stefano Pigliapoco - Università di Macerata
- Barbara Pistorozzi - Università di Bologna
- Gianfranco Pontevolpe - Cnipa
- Lucio Rocchetti, ingegnere informatico
- Simone Sacchi - Università di Bologna
- Silvio Salza – Università degli studi di Roma Sapienza
- Sabrina Santangelo – Ministero per i beni e le attività culturali
- Daniela Simonini - Provincia di Ravenna
- Michele Toschi - Università di Bologna
- Silvia Trani – Istituto centrale degli archivi
- Caterina Valia - Consiglio del Notariato
- Laura Veneruso - CSI Piemonte
- Marialaura Vignocchi - Università di Bologna
- Stefano Vitali - Direzione Generale per gli Archivi

### **Testbed partners**

- Camera di commercio di Roma
- Consiglio del Notariato
- International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM)
- Provincia di Forlì - Cesena
- Provincia di Ravenna
- Regione Emilia Romagna
- Unione delle Comunità ebraiche italiane

### **Research Partners**

- Archivio centrale dello stato
- Archivio di Stato di Milano
- Associazione nazionale archivistica italiana – ANAI
- Direzione generale degli archivi
- Archivi storici dell’Unione Europea, Fiesole
- International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM)
- Istituto centrale per gli archivi
- IUAV
- Politecnico di Milano
- Repubblica di San Marino, Archivio di Stato
- Titulus
- Università degli studi di Bologna
- Università degli studi di Macerata

- Università degli studi di Padova
- Università degli studi di Roma Sapienza
- Università degli studi di Roma Tor Vergata
- Università degli studi di Siena
- Università degli studi di Urbino

### Ricercatori

- Cecilia Castellani (Università di Urbino)
- Stefano Palagiano (Università di Urbino)
- Laura Natoli (Università di Roma Sapienza – Scuola di specializzazione per archivisti e bibliotecari)

### Case studies

Case studies for all InterPARES TEAMS can be found online at:

[www.interpares.org/ip3/ip3\\_case\\_studies.cfm](http://www.interpares.org/ip3/ip3_case_studies.cfm)

TEAM Italy case studies are available online at:

[http://www.interpares.org/ip3/ip3\\_case\\_studies.cfm?team=3](http://www.interpares.org/ip3/ip3_case_studies.cfm?team=3) .

TEAM Italy contributed to InterPARES 3 with the following case studies:

- ICCROM Archives
  - CS01 – Design and Implementation of a Records Management System at ICCROM
- Regione Emilia-Romagna
  - CS02 – PARER - Service for Digital Preservation for Regione Emilia-Romagna
- Provincia di Ravenna
  - CS03 – Service for a Recordkeeping System for Provincia di Ravenna
- ATLANTIS Project
  - CS04 – Long-term Preservation of the Protocol Registry
- Provincia Forlì- Cesena
  - CS05 – The preservation of electronic records: "mandato elettronico, denunce prezzi delle strutture recettive, determinazioni dirigenziali"
- DoQui-Acta system
  - CS06 – Document management system

**Case Study:** 01

**Test Bed Name:** ICCROM Archives

**Topic/Title:** Design and Implementation of a Records Management System at ICCROM

**Case study type:** Records, Systems, Policy

**Start Date:** February 2008

**Abstract:** ICCROM (International Centre for the Study of the Preservation and Restoration of Cultural Property) is an intergovernmental (IGO), scientific and autonomous organization, with a worldwide mandate to promote the conservation of all types of cultural heritage, both movable and immovable. It was founded by UNESCO in 1956 and established in Rome in 1959. ICCROM Archives' function is to arrange, describe and preserve records produced and used by ICCROM's functions and activities, regardless of medium and form. The Archives also provides reference assistance to users. The Archivist at ICCROM was appointed in 2002.

The case study focuses on developing a system for managing ICCROM's active and semi-active records. The following project phases are foreseen to accomplish this aim:

- Creation of a records classification scheme for the whole institution.
- Creation of a records retention and disposal schedule for all the records generated by the institution. This schedule needs to be integrated to the records classification scheme.
- Identification and adoption of a records management software that allows registering mail and e-mail, classification and filing, records flow management, and records retention and disposal timetable management.
- Elaboration of a records management procedures manual, which contains:
  - Procedures for the creation, maintenance and long-term preservation of records.
  - Procedures and functional components of the electronic records management system.
  - As attachments: Records classification scheme, records retention and disposal schedule, and technical documentation of the electronic records management system.

The procedures for the creation, maintenance and preservation of records should take into consideration international policies and standards, in particular the methodologies and recommendations on the long-term preservation of authentic records in electronic systems produced by InterPARES 2.

**Link:** [http://www.interpares.org/ip3/ip3\\_case\\_studies.cfm?team=3#cs01](http://www.interpares.org/ip3/ip3_case_studies.cfm?team=3#cs01)

**Case Study:** 02

**Test Bed Name:** Polo Archivistico Regionale dell'Emilia Romagna - ParER

**Test Bed Type:** Public archives

**Topic/Title:** A service for digital preservation for regione Emilia-Romagna

**Case study type:** Systems, Policy

**Start Date:** July 2009

**Abstract:** ParER (Polo archivistico regionale dell'Emilia-Romagna), instituted in July 2009 as the central archive of Regione Emilia-Romagna, is responsible for the permanent preservation of born-digital records transferred from regional public administrations.

The case study focuses on analysing functional requirements for the purpose of developing an OAIS-compliant Digital Archives system. This system ingests digital records created by Regione, as well as other administrations, into a trusted digital repository, according to Italian law. The development of such a system is highly relevant to the Archives' functioning, as it will facilitate the preservation of authentic digital records created by the public administration system.

The main objectives of the case study are to identify relevant InterPARES findings and to incorporate them into the project's requirements analysis activity. The expected outcomes are translated InterPARES findings from case studies and/or requirements/specifications supporting the development of the system. The end-goal is to develop an OAIS-compliant functioning prototype digital preservation environment with an accompanying policy and procedural framework that will enable the ParER to preserve authentic and reliable electronic records created by the Regione Emilia-Romagna, its boards and agencies, as well as records acquired from other public administrations (University, healthcare systems, etc.).

**Link:** [http://www.interpares.org/ip3/ip3\\_case\\_studies.cfm?team=3#cs02](http://www.interpares.org/ip3/ip3_case_studies.cfm?team=3#cs02)



**Case Study:** 03

**Test Bed Name:** Service for the recordkeeping of computerized protocol, of document flows and archives management of the Province of Ravenna

**Test Bed Type:** Public Authority – Public Archives

**Topic/Title:** Creation of the Electronic Protocol Register for Preservation in a Digital Trusted Repository

**Case study type:** Systems, Policy

**Start Date:** May 2009

**Abstract:** The Province of Ravenna was established as local administration in 1831 by the Papal State. The Province tasks are defined by Legislative Decree n 267/2000. Complying with the Subsidiary principle, the Region Emilia-Romagna has devolved several administrative functions to Provinces in many fields, such as agriculture, environment, culture, tourism, territorial administration, and vocational training.

In 1858 the Province of Ravenna established an Archive Service for document management. The Protocol Registers have been produced since 1832 and edited on paper until 2006. In 1988 the Protocol Register was converted into a computerized register, which was then printed out on to paper.

In 2006 a new Protocol Register was implemented with a computerized management system that includes document workflow (such as the sorting of documents and files), digital document management and interoperability. A management manual and a new classification/ filing system were adopted; documents for the editing of the protocol and the files by subject were prepared. The responsibilities for document management have been identified. The ongoing training of the staff is considered an essential prerequisite.

The new document management model adopted is based on an operative distributed model which actively involves several subjects such as offices serving end users or archive management decentralized offices. Each subject is authorized to perform tasks according to their own competence under the coordination of the Archive Service: consultation, taking in charge, assignment, protocol registration, creation and management of files containing the documents recorded and classified (both digital and on paper) as well as incoming and outgoing mail.

Since 2006, the responsibilities of the Archive Service have been: the management, the recordkeeping and the preservation of documents received and produced by the Province of Ravenna. The Archive Service also acts as coordinator and has the responsibility for the data storage process of the management of the Archive Repository and of the Historical Archive Depository.

The case-study analyzes in detail both the operating specifications of the computerized document management system and the main features of the electronic protocol in order to preserve it in a digital trusted repository.

The main objectives of the case study are to identify relevant InterPARES findings and to incorporate them into the project's requirements analysis activity.

**Link:** [http://www.interpares.org/ip3/ip3\\_case\\_studies.cfm?team=3#cs03](http://www.interpares.org/ip3/ip3_case_studies.cfm?team=3#cs03)

**Case Study:** 04

**Test Bed Name:** ATLANTIS Project

**Test Bed Type:** University archives

**Topic/Title:** Long-term preservation of the protocol registry

**Case study type:** Records

**Start Date:** October 2007

**Abstract:** According to Italian law, all public administrations must provide a digital recordkeeping system. Within the digital recordkeeping system, the Protocol Register is the primarily trusted public act and an archival unit, which is at the root of documentary system in every public organization. Most Italian universities have chosen the recordkeeping system named *Titulus97* that indicates the basic rules for university recordkeeping systems.

This case study examines the "Protocol Register" as a digital entity; it identifies its proper features, it establishes suitable functional requirements for digital environment and for supporting the long-term preservation. It also aims to set the proper treatment for a long time preservation of this trustworthy digital object.

The working team aims to establish for this object:

- its juridical characters
- its diplomatic characters
- the roles, procedures and controls needed for ensuring authenticity and reliability in long-term preservation.
- Its format standards and metadata requirements

The main objectives of the case study are to devise policies, procedures and guidelines for the creation, maintenance and long-term preservation of authentic and reliable Protocol register selected for permanent preservation

**Link:** [http://www.interpares.org/ip3/ip3\\_case\\_studies.cfm?team=3#cs04](http://www.interpares.org/ip3/ip3_case_studies.cfm?team=3#cs04)

**Case Study:** 05

**Test Bed Name:** Provincia di Forlì-Cesena

**Test Bed Type:** Public local authority – public archives

**Topic/Title:** The preservation of electronic records: “electronic evidence for payment, registration of tourist accommodation prices, records signed by the head of department”

**Case study type:** Records

**Start Date:** March 2009

**Abstract:** Provincia di Forlì-Cesena has been starting in the last years a record digitalization path aiming at producing digital records that can be preserved permanently in digital archives.

The case study will analyze three different kinds of records that are created in different ways:

- electronic evidence of payment – whose management is based on a proprietary application, developed and managed by an external company that controls the short-term chain of preservation
- registration of tourist accommodation prices – the records are managed within a web software realized by Provincia di Forlì-Cesena, accessible through a user id and a password. This system allows data to be transformed into PDF format. These digital records are directly registered in a Protocol Register as a result of a web-service link
- records signed by the head of department are attached with a digital signature using the electronic recordkeeping system that also manages every step of record creation

The main objectives of the case study are:

- to test ways and methods for record creation
- to check the record links to the Protocol Register and to the electronic recordkeeping system
- to assess the record reliability for long-term preservation

**Link:** [http://www.interpares.org/ip3/ip3\\_case\\_studies.cfm?team=3#cs05](http://www.interpares.org/ip3/ip3_case_studies.cfm?team=3#cs05)

**Case Study:** 06

**Test Bed Name:** DoQui-Acta system

**Test Bed Type:** Archives of public administrations

**Topic/Title:** Document management system

**Case study type:** Records, systems, policy

**Start Date:** 2009

**Abstract:** The DoQui-Acta system is a Moreq2 standard compatible document management system, aimed at organising, archiving and sharing documents in digital format.

The functional requirements, analysis and coding activities have been carried out by a multi-disciplinary workgroup (archive managers, IT and organization experts) from public institutions and the academic world (Regione Piemonte, Comune di Torino, Provincia di Torino, Politecnico e Università di Torino).

The system is based on open-source technologies; it is suitable for large and small Institutions as it is easily customisable and its components are re-usable. The designed system is compliant with SOA paradigms, and is broken down into self-contained modules and based on ECM standards.

*Acta* organises all the documents of the institution (both digital and paper format, whether in a protocol or not) via the titles management list, into a single logical archive. It sets up, together with the 'protocol' module (PRT), the core of the document management system, which relies on the Content Management platform, the *DoQui Index*.

The production/ acceptance system components, as well as the Authentication, Authorization, Digital Signature, distribution and preserving selection function systems are all integrated with the archive management.

In particular, the PRT module, unlike other systems, is not the core of the ECM solution, but rather only one of the modules that feeds the whole system. It produces the protocol registry, managed and archived within the system, so as to guarantee the integrity and identity of all its contents.

**Link:** [http://www.interpares.org/ip3/ip3\\_case\\_studies.cfm?team=3#cs06](http://www.interpares.org/ip3/ip3_case_studies.cfm?team=3#cs06)

## General Case Studies:

**General Study:** 05

**Topic/Title:** Keeping and Preserving E-mail

**Team Lead:** Italy

**Authors:** Gianfranco Pontevolpe (CNIPA)  
Silvio Salza (Università di Roma Sapienza)

**Documents:** Final Report

[http://www.interpares.org/ip3/display\\_file.cfm?doc=ip3\\_gs05\\_e-mail\\_final\\_report\\_v4-1p.pdf](http://www.interpares.org/ip3/display_file.cfm?doc=ip3_gs05_e-mail_final_report_v4-1p.pdf)

**Abstract:**

The aim of this study is to investigate the technical aspects relevant to the e-mail creation, capture and maintenance (i.e., records management) and permanent preservation (i.e., archival) processes. This is important since e-mail messages have a rather complex structure, and because of the need to take into account the peculiar infrastructure through which they are delivered (i.e. the Internet).

To achieve this goal we have considered both the functionalities of the commercial products for e-mail management, including the so-called “e-mail archiving” systems, and the requirements expressed in several important reference documents. Devising precise and systematic procedures for e-mail records management and/or permanent preservation is not a goal of this document, and indeed cannot be done in a sufficiently general case, since these procedures may heavily depend on the characteristics of the organization where the process is taking place.

For this reason the definition of a more detailed e-mail records management and permanent preservation model should be carried out as a separate task, within the InterPARES 3 Project, and deserves a more thorough discussion, involving records management, archival and IT competences.

<b>General Study:</b>	05
<b>Topic/Title:</b>	Guidelines and Recommendations for E-Mail Records Management and Long-Term Preservation
<b>Team Lead:</b>	Italy
<b>Authors:</b>	Massimiliano Grandi
<b>Documents:</b>	Final Report <a href="http://www.interpares.org/rws/display_file.cfm?doc=ip3_italy_gs05_final_report.pdf">www.interpares.org/rws/display_file.cfm?doc=ip3_italy_gs05_final_report.pdf</a>
<b>Abstract:</b>	<p>This general study has divided proposed recommendations for e-mail records management according to the two main phases of the records life cycle. Most relate to the period of time in which e-mail records are current or semi-current, namely when the records creator uses them to carry out its ordinary business activities.</p> <p>A smaller set of recommendations refers to e-mail records selected for long-term preservation, when they become historical records transferred to the custody of a trusted preserver and are not used on a regular basis, and are preserved mostly for cultural reasons and/or sporadic use for reference and action.</p> <p>Several recommendations are intended to establish good practices to create e-mail records intended to be integrated in a record-keeping system. Recommendations for long-term preservation of e-mail records focus on aspects of management that need to be modified when records become historical or on actions that are exclusively intrinsic to long-term preservation (e.g. use of given formats, organization of procedures for migration).</p> <p>Recommendations of the case study include:</p> <ul style="list-style-type: none"><li>• integration of email with recordkeeping systems</li><li>• The operation of capture and filing must be performed solely through email accounts which have been programmed to directly communicate with the RKS</li><li>• Maintenance of an audit trail for an email record</li><li>• Inclusion of a long term preservation plan that addresses best practice as well as preserving the email record and all of its components</li><li>• Inclusion of a description of email elements, (such as attachments, digital signatures and links) associated with the email record</li></ul>

**General Study:** 14

**Topic/Title:** Preserving the registry system

**Team Lead:** Italy

**Authors:** Gabriele Bezzi (Regione Emilia Romagna – PARER)

**Documents:**

**Abstract:** This general study was created to address the preservation of the protocol register and is carried out by TEAM Catalonia, Italy and Brazil. The general study was proposed by TEAM Catalonia in Rio de Janeiro in 2009 (International Summit, Sept. 30 - Oct. 2).

Its aim is to analyze the constitutive aspects and the functions of the protocol register in an ERDMS according laws, regulations and practice in several countries, in particularly Italy, Brazil and Spain (Catalonia). It also aims to analyze the possible modalities of preservation of the protocol register, which is considered to be a specific record constituted by the collection of registrations made in a certain period of time (daily registry, annual registry).

In particular, we will proceed by comparing the practices and the rules of the three different countries, as specified above, in order to identify a minimum core of necessary and sufficient information for the constitution of a preserving protocol register. Then the TEAMS will prepare methodology and metadata for the preservation of the protocol register itself, and the eventual functions of metadata and information contained and stored in protocol register in order to preserve and verify the authenticity of the records identified through the protocol registration.

We will also provide some indications about the best practices of management of the protocol register within a system of records management and its organizational impact, dealing, in particular, with the management of electronic records, analyzing work flows, responsibilities and possible levels of normalization and standardization.

**Link:**

[http://www.interpares.org/rws/rws\\_research\\_studies\\_documents.cfm?cs=80](http://www.interpares.org/rws/rws_research_studies_documents.cfm?cs=80)

## Translation Activity

TEAM Italy has participated in the translation activity of the InterPARES terminology database. To date, 228 terms have been translated by taking into account the Italian juridical system.

TEAM Italy has contributed to the translation of terminology for the ICA Dictionary as well. This translation has been developed by taking into account the Italian tradition and legislation. The final result has been discussed among the TEAM members.

TEAM Italy is also translating e-learning materials, and to this end, a group has been created and a first discussion of the material has been developed in the course of the workshop organized with the Project PRIN 2008-EPISTULAE and the partnership of Digilab - University of Rome (June 2011).

It is important to stress that the work done by the TEAM for the translation as part of the InterPARES Project has influenced the decision among research institutions present in TEAM Italy (mainly University of Urbino, University of Rome, University of Padova and the Central Institute for Archives - ICAR) to invest more research into this area: a working group has been created to continue this effort in the future.

## Other Activities

TEAM Italy sent comments to the DLM Forum on MoReq 2010. This statement was on the new legislation, which was approved in 2008 in relation to the public faith and evidential value of electronic records and informed a case study on the Unione delle Comunità ebraiche, which is currently under development. The case study is dedicated to the analysis of the record keeping system and its requirements for ensuring the future preservation of the records. TEAM Italy also created a position paper which outlined the risks involved in the new recommendations due to the lack of robustness and consistency of the conceptual model and of the basic requirements (i.e. for the capture and for the classification).