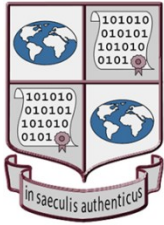# Guidelines for long-term preservation of protocol register

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InterPARES 3 International Symposium
Barcelona
5 October 2011

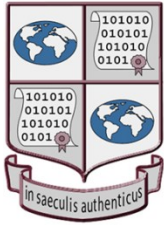# General Study: Guidelines for long-term preservation of e-protocol registers

- The document is written in relation to the proposal of an international general study about the long-term preservation of electronic protocol registers (Catalonia, Italy, Brazil), proposed by TEAM Catalonia at the International Summit in Rio de Janeiro in Sept/Oct 2009, and defined at the International Summit in Vancouver in May 2010.

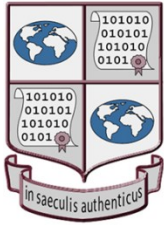- Participants: TEAMs Italy, Catalonia and Brazil

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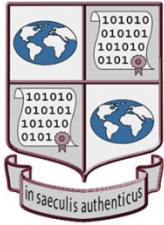- The value of protocol register for long-term preservation of records

Purpose

Its aim is to analyze the constitutive aspects and the functions of the protocol register in a ERDMS according to laws, regulations and practice in several countries, in particularly Italy, Brazil, Spain (Catalonia). It also aims to analyze the possible modalities of preservation of the protocol register, which is considered as a specific record constituted by the collection of registrations made in a certain period of time (daily registry, annual registry).
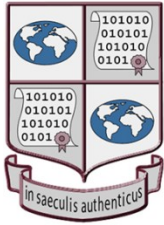
In particular, we will proceed comparing the practices and the rules of the different countries to identify a minimum core of necessary and sufficient information for the constitution of a preserving protocol register, then a methodology and metadata for the preservation of the protocol register itself, 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.
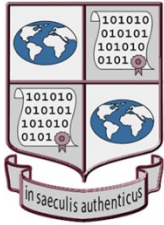
We will also provide some indications about the best practices of management of the protocol register within a system of records management and its organizational impact, dealing in particular with the management of digital records, analyzing work flows, responsibilities and possible levels of normalization and standardization.
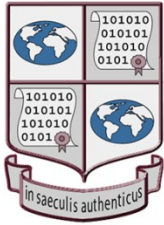
Sources and reference models

- Case Studies conducted in different countries

- International standards on records management: MoReq 2, ISO 15489, DoD 5015-2 and to the requirements specified by the Authenticity Task Force of InterPARES and OAIS for long-term preservation

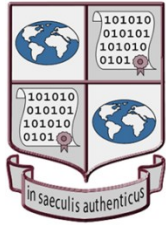- The specific legislation in Italy, Brazil and Catalonia

Case studies underway in Italy

Case Study 01 – Design and Implementation for a recordkeeping system for ICCROM:

Phase 1: design analysis (completed in May 2009)

Phase 2: implementation (to be completed in 2012)

Case studies underway in Italy
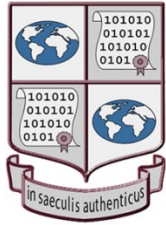
Case Study 02 – PARER - A service for digital preservation for Regione Emilia-Romagna:

The case study is dedicated to defining the legal and juridical structure for creating an archival repository for digital preservation compliant with the national legislation and international standards and able to be certified in the future. A second phase will concern the evaluation of the compliance with InterPARES and OAIS requirements with reference to the ingestion/acquisition phase
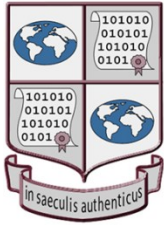
Case studies underway in Italy

Case Study 02 – PARER - A service for digital preservation for Regione Emilia-Romagna:

Parer (Polo Archivistico regionale dell'Emilia – Romagna) repository started in January 2010.

PARER started in September 2010 an operative test with a specialyzed software house to realize long-term preservation protocol registers using XML format, by analyzing and recovering the different protocol systems used by IBC, the Cultural Heritage Institute of Regione Emilia-Romagna, from 1997 to 2008.
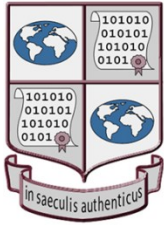
Case studies underway in Italy

Case Study 03 – Service for a recordkeeping system for Provincia di Ravenna: Creation of the Electronic Protocol Register for Preservation in a Digital Trusted Repository

Phase 1: contextual analysis (completed in May 2009)

Phase 2: implementation (to be completed in 2011, in relation with Case Study 02)

Case studies underway in Italy
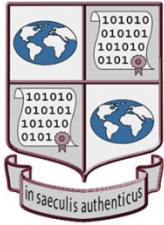
Case Study 04 – University archives - Atlantis Project: Long-term preservation of the protocol register

Atlantis Project conducted by Gidi (Gruppo Interuniversitario sul Documento Informatico) produced the document **"Linee guida sulla conservazione a lungo termine del documento informatico (Draft 5 May 2009)"**, with a definition of a XML schema for long-term preservation protocol register starting point of the operative test of case study 02

Case studies underway in Italy
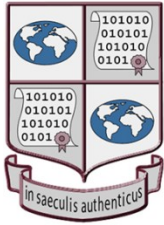
Case Study 04 – University archives - Atlantis Project: Long-term preservation of the protocol register

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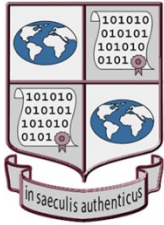
Case studies underway in Italy

Case Study 04 – University archives - Atlantis Project: Long-term preservation of the protocol register

The working team aims to establish for digital protocol register:

- its juridical characteristics

- its diplomatic characteristics

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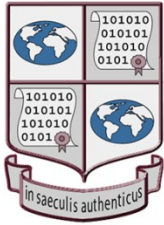
- its format standards and metadata requirements

Case studies underway in Italy

Case Study 06 - Archives of Public Administrations of Piemonte - *DoQui-Acta* : Document Management system

Acta organises in a single logical archive all the documents of the institution (digital and on paper, either protocolled or not) through the titles management list.

Together with the Protocol module (*PRT*), that feeds the whole system, *Acta* constitutes the core of the Document Management system that relies on the Content Management platform *DoQui Index*.

DoQui is a Moreq2 standard compatible DM system, based on open source technologies.

Definitions

(essential: from InterPARES 2 Glossary or international standards)

Identity

Registration

Protocol register

Identity:
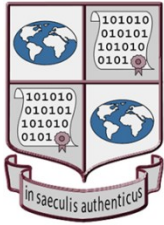
The whole of the characteristics of a document or a record that uniquely identify it and distinguish it from any other document or record. With integrity, a component of authenticity.
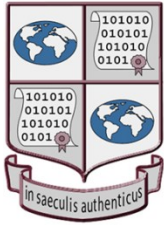
Registration:

The act of giving a record a unique identifier on its entry into a system.

Source: ISO 15489

Protocol register:

A type of register that records the identifying attributes of incoming, outgoing, and/or internal records, specifying the action taken.

The protocol register [...] records the document's protocol number (i.e., a unique identifier), the name and official title of the sender, the protocol number in the office of the sender (if applicable), the nature of the action, and indication of any enclosures and their types, the assigned classification number, and the office handling the matter.

A register containing unique, consecutive numbers assigned to records and including additional information about the identity of persons involved and the documentary context of the record.
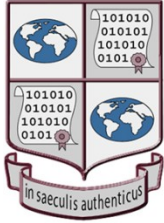
Function and value of protocol registration

This part will analyze the history and tradition of the protocol register over time and how it has been developed in some countries as a central element of the records management system in public agencies and a crucial component in the preservation process.

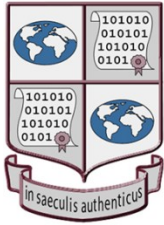# Function and value of protocol registration

The protocol register in the tradition and in the e-government systems in Italy:

- According to the Italian set of rules, all public administrations must provide for a digital record-keeping system. Within the digital recordkeeping system the Protocol Register is both a preferential trustworthy public act and an archival unit, which is at the root of documentary system in every public organization.

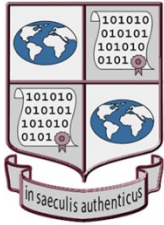# The protocol register in the IT environment

The study will analyze the changes determined by the information technology in records management, with specific reference to the evolution of the typical function of the Protocol Register and to its increasing role and relevance for electronic records management (ref. Standard ISO 15489 -2: paragraph 4.3, in particular 4.3.2. and 4.3.3)

We will analyze the main requirements of registration: the **essential metadata** and the interoperability with others information systems.

The protocol register in the IT environment

Metadata:

Identity metadata (IP2 Creators Guidelines Recommendation 3: "Ensure that digital materials are properly identified")

"Now, as records, metadata are analogous to more traditional types of records; their closest analogs are the registers that have been used in European country with registry systems since the time of Napoleon I (in Italy, they are known as "protocol registers")."

Source: MacNeil, Heather "Metadata Strategies and Archival Description: Comparing Apples to Oranges," *Archivaria* 39 (Spring 1995), p. 22–32, p. 26.
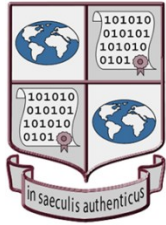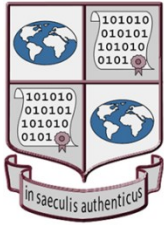
The protocol register in an ERMS

The study will value the implementation of the electronic protocol register, in particular for the functions of

- capture of data / records

- workflow and its own linked processes

In this part, besides giving indications about the best practices of managing the Protocol Register in an ERMS, the study will focus on the evolution of the Protocol Register into a database and a system of global management of the records. We will underline the need to individuate and define the "Protocol Register" archive unit
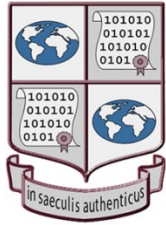
The electronic protocol register archive unit

The study has to consider the basic requirements for the creation and identification of the record named "protocol register", also in the perspective to guarantee authenticity and long-term preservation of the protocol itself and of the whole related records system. The need for maintaining functionality of the registry system will be also considered in this perspective.

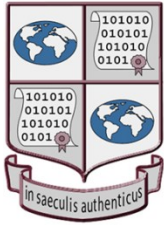# The protocol register long-term preservation

The study will evaluate existing solutions for preservation and possible suggestions for improvement:

- components and characteristics of the protocol register archive unit

- protocol register format: PDF, XML

- procedures and responsibility: legal digital repository

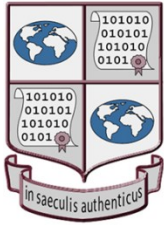# The protocol register long-term preservation

"Like protocol registers, metadata constitute evidence of the creation and receipt of records in a record-keeping system, their interrelationships, and the actions taken on them. […] And, like protocol registers, whose permanent retention is legislated, metadata need to be preserved in perpetuity because they are concrete evidence of what documents were made and received, who handled them, with what results, and the transactions to which they relate."

Source: MacNeil, Heather "Metadata Strategies and Archival Description: Comparing Apples to Oranges," *Archivaria* 39 (Spring 1995), p. 22–32, p. 27.

The value of protocol register for long-term preservation of records

In this last part the report will evaluate the possible uses of metadata and information contained in the protocol register for long-term preservation and for verifying authenticity of the records identified by the protocol register (e.g., the use of fingerprints in the protocol register for future verifications about preserved records' integrity, the capacity of the register protocol to provide accurate chronological terms for dating the registered records, the presence of digital signatures and the action for their verification, other information related to the original form of the records to be maintained over time and in the course of migration processes, etc.).
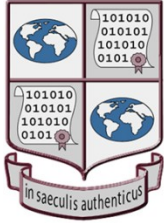
InterPARES 3 Project
International Research on Permanent Authentic Records in Electronic Systems
TEAM Italy

Thanks for your attention