

#### The InterPARES Project

International Research on Permanent Authentic Records in Electronic Systems

ociety preserves its memory in its art and architecture, in its books and other printed material, and in the traces of its endeavours captured in the form of records. Records are unique documents that participate in or result from the activities of individuals and organizations, and constitute the primary source of knowledge about those activities. Records are increasingly generated in digital form and their preservation is complicated by the rapid obsolescence of hardware and software, the fragility of digital storage media, and the ease with which digital information can be manipulated. A portion of our society's documentary memory created and preserved digitally has already been compromised, and, although the extent to which valuable digital information has been lost or has become retrievable only at great expense has yet to be adequately quantified, it is already apparent that the threat is real and widespread. Moreover, as we address this threat, we must remember that preserved records are of little value unless we can be sure they are authentic, that is, that they can be trusted as sources. For centuries, the authenticity of records has been based on elements such as seals and signatures, on mechanisms of control on the procedures by which records are generated. transmitted, used and maintained, and on an uninterrupted chain of custody. The use of digital technology to create records has reconfigured the traditional formal elements by which records were recognized as authentic, has allowed for the bypassing of procedural controls, and has made elusive the concept of physical custody.

The International Research on Permanent Authentic Records in Electronic Systems (InterPARES) Project was launched in 1999 to address these issues. Thus far, this multi-disciplinary project has involved more than 100 researchers from over 20 countries on five continents

**InterPARES 1** (1999-2001) was undertaken from the viewpoint of the preserver and researched issues surrounding the preservation of authentic administrative records created and maintained in databases and document management systems that were no longer needed by their creator to fulfill their purposes.

InterPARES 2 (2002-2007) took the record creator's perspective with an aim to develop theory and methods capable of ensuring the reliability, accuracy, and authenticity of digital records from their creation and throughout their preservation. The project's focus was on complex records, typically created in interactive, experiential and dynamic digital systems in the course of artistic, scientific and e-government activities.

InterPARES 3, a five-year multi-national project scheduled to begin in September 2007, will translate the theory and method of digital preservation drawn from the InterPARES and other preservation research to date into concrete action plans for existing bodies of records that are to be kept over the long term by archives—and archival/records units within organizations—endowed with limited resources.

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### **Contact Information**

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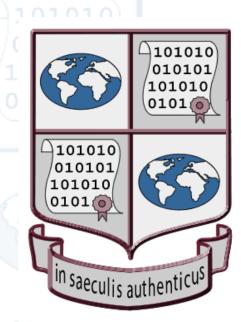


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# **InterPARES Project Preservation Resources**

The InterPARES Project has developed a number of resources that support the understanding of the nature of digital records and the development of methods for their reliable creation and accurate and authentic maintenance and preservation. These scalable resources may be used by individuals, organizations and government bodies as guidelines and instruments for addressing preservation issues presented by their own digital materials. They are also useful for informing the activities of national and international standards bodies. Some of the key resources are briefly outlined here, while a more comprehensive listing can be found on the InterPARES Web site at www.interpares.org.







AUTHENTICITY REQUIREMENTS. This InterPARES 1 resource consists of two sets of requirements for assessing and maintaining the authenticity of digital records, with one set for records creators and one set for records preservers. The former set, known as the Benchmark Requirements, constitutes the requirements that support the presumption of the authenticity of a creator's digital records before those records are transferred to the custody of the preserver. The latter set, known as the Baseline Requirements, consists of the requirements that support the production of authentic copies of digital records transferred to the custody of the preserver and maintained within the preserver's preservation system.

TEMPLATE FOR ANALYSIS. This InterPARES 1 resource provides a decomposition of a digital record into its four necessary constituent parts: documentary form (i.e., extrinsic and intrinsic elements), annotations, contexts (i.e., the framework of action in which the record participates, including its administrative, provenancial, procedural, documentary, and technological contexts), and medium. The Template defines each part and each element of form, explains its purpose, and indicates whether, and to what extent that part or element is instrumental in assessing the record's authenticity. On a more basic level, the Template serves as a checklist with definitions that help users determine whether they actually are even dealing with a record.

Policy Framework. This InterPARES 2 resource is comprised of two complementary sets of principles for the creation and preservation of authentic digital records, which together help structure the relationship between records creators and preservers by providing guidance for establishing a comprehensive intellectual framework within which creators and preservers can develop consistent and integrated policy environments conducive to effective and coordinated digital records preservation.

**CREATOR GUIDELINES.** This InterPARES 2 resource is intended for individuals and small organizations or communities of practice (e.g., medical offices, consulting groups, or teams of research scientists) who create and maintain digital materials in the course of their professional and personal activities. It provides practical recommendations to help these individuals and organizations make informed decisions about making and maintaining these materials in ways that will help ensure their preservation (in an authentic state) for as long as they are needed by the creator, as well as help ensure that materials that merit long-term preservation in an archival repository will be accessible when they are turned over to the care of a trusted custodian. Individuals and organizations with records creation and maintenance responsibilities should also consult the Policy Framework, which provides complementary policy principles designed to help support these guidelines.

PRESERVER GUIDELINES. This InterPARES 2 resource provides concrete advice to any organization responsible for the long-term preservation of digital records. Many of the recommendations of these guidelines may also be applicable to the preservation of digital entities other than records, such as documents, publications or data. These guidelines are tailored to address the needs of organizations or programs whose records must be retained and consulted for long periods, and those of archival institutions that take on the responsibility for the long-term preservation of the records of others and for their continuing accessibility to the public they serve. Institutions, organizations and programs with preservation responsibilities should also consult the Policy Framework, which provides complementary policy principles designed to help support these guidelines.

RECORDS MANAGEMENT MODELS. These InterPARES 2 models depict, in both graphical and narrative form, all the activities and important, specific actions that must be undertaken, together with their inputs, outputs, constraints or controls and enabling mechanisms, to create, manage and preserve reliable and authentic digital records. As well, both models characterize the data and information that must be gathered, stored, and utilized to support the various management processes throughout the life of a record.

Chain of Preservation (COP) Model. The COP Model, which is based on the traditional 'records lifecycle' approach, accommodates the situation-specific perspectives of the records creator, manager and preserver (i.e., archivist or trusted custodian).

**Business-Driven Recordkeeping (BDR) Model.** The BDR Model, which is based on the 'records continuum' approach, adopts the perspective of the records creator.

TERMINOLOGY DATABASE. This InterPARES 2 resource contains three terminological instruments: a Glossary, a Dictionary, and Ontologies. The Glossary is an authoritative list of terms and definitions that are core to InterPARES' understanding of the evolving records creation, keeping and preservation environments. The Dictionary is used to facilitate interdisciplinary communication. It contains multiple definitions for terms from multiple disciplines. By using this tool, users can see how Archival Science deploys terminology compared to Computer Science, Library and Information Science, Arts, etc. The Ontologies identify explicit relationships between concepts of records. This is useful for communicating the nuances of Diplomatics in interactive, experiential and dynamic digital environments.

METADATA AND ARCHIVAL DESCRIPTION REGISTRY AND ANALYSIS SYSTEM (MADRAS). This InterPARES 2 interactive, online tool is a centralized repository of schemas intended to aid in the identification of metadata sets, or the combinations of elements from different sets, that are appropriate to serve various recordkeeping and long-term preservation needs. In response to user input, MADRAS provides recommendations for how each schema might be extended or otherwise revised to address the reliability, authenticity and preservation needs of digital records created within the user's domain, community or sector.