

# Preserving Public Records in an Age of e-Government: an Introduction to the Work of InterPARES

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## The e-Government Challenge

If governments make decisions based on information in electronic records, can citizens use these records to reliably reconstruct the basis of the decision-making process? Will citizens be able to trust their governments to create and maintain digital records of transactions reliably and authentically?

In recent decades, advances in computing technology have revolutionized the way large organizations, including governments, conduct their business. Much of any given government's activity is now conducted electronically, and transactions between citizens and their governing institutions are often captured in an entirely digital environment. This revolution has allowed governments to work more efficiently and offer a broader range of services than ever before. However, the resulting records often exist only in digital form, and such records are more easily lost or corrupted than their analogue counterparts. Thus, the advent of e-government has begun to have the unintended effect of rendering unacceptably short-lived the documentary memory of government institutions. This threat to society's public records, if not dealt with, will have major consequences: governments will have increasing difficulty conducting their business, and the ability of citizens to hold their governments accountable for their actions, an ability that lies at the heart of any democracy, will be seriously impaired.

## InterPARES

International Research on Permanent Authentic Records in Electronic Systems (InterPARES) aims at developing the theoretical and methodological knowledge essential to the long-term preservation of authentic records created and/or maintained in digital form. InterPARES has developed in two phases:

### InterPARES 1, 1999-2001

InterPARES 1 focused on the preservation of records created and/or maintained in databases and document management systems in the course of administrative activities. Outcomes of InterPARES 1 were presented in a book entitled "The Long-Term Preservation of Electronic Records: Findings of the InterPARES Project," available at <http://www.interpares.org/book/index.cfm>.

### InterPARES 2, 2002-2006

InterPARES 2 is investigating the preservation of electronic records in the context of artistic, scientific and government activities that are conducted using experiential, interactive and dynamic computer technology.

## DEFINITIONS

### Authentic Record

A record that is what it purports to be and that is free from tampering or corruption. Authenticity is established by assessing the identity and the integrity of the record. It must be possible to ascertain at all times what a record is, when it was created, by whom, what action or matter it participated in, and what its juridical/administrative, cultural, and documentary contexts were. It must also be possible to ascertain the wholeness and soundness of the record: whether it is intact or, if not, what is missing.

### Interactive Record

A record the content and/or form of which depends on the input of the user(s), which in turn depends on earlier output from the same run.

### Dynamic Record

A record the content of which is dependent upon data that might have variable instantiations and be held in databases and spreadsheets internal or external to the system in which the record is generated.

### Experiential Record

A record produced, used and maintained in an experiential system. An experiential system is one which immerses the user in a sensory experience.

## InterPARES 2 - Case Study Examples

### Revenue On-Line Services, Ireland, case study 20



Captured Feb. 8, 2005, at 3:46 pm.

The Revenue On-line system currently in operation by the Revenue Commissioners of Ireland enables generation of and access to electronic based tax and related records in a secure environment. The system allows citizens to file a series of tax returns on-line, view details of revenue account information and transfer funds electronically to settle tax liabilities. The key areas of this study are digital signatures and public-key infrastructure (PKI) encryption and the associated challenges of preserving encrypted data.

### VanMap, City of Vancouver, Canada, case study 24

VanMap is the corporate GIS database of the City of Vancouver in British Columbia, Canada, made available to the public via the web. The system features interactive maps incorporating geographic features, physical infrastructure, property information and a comprehensive set of aerial photographs of the city. The system is dynamic and constantly changing as new data are added and old data are changed or overwritten. How to track the changes and preserve the ability to render the data as interactive maps are the subjects of this case study.



Captured Feb. 11, 2005, 12:47 pm.

### Computerization of the Alsace-Moselle Land Registry, France, case study 18



Photograph courtesy Genevieve Shepherd.

The Alsace-Moselle Land Registry, which will ultimately comprise the transcription of 40,000 paper volumes (10 linear km), is designed to allow the juridical status of properties within the region to be publicly available to citizens in accordance with French civil law. Each new database entry will be signed by a judge using a public-key infrastructure (PKI) combining biometric access and digital signatures. The case study focuses on the long-term preservation of digital signatures within an electronic information system.

For further information, visit the InterPARES website at <http://www.interpares.org>. The author can be contacted at [evelyn.mclellan@vancouver.ca](mailto:evelyn.mclellan@vancouver.ca).

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