



What is InterPARES

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InterPARES (1998 – 2026)

- With the preponderance of digital records we felt the need for **Original Archival Research** conducted **by archivists** and grounded on **archival diplomatics theory**.
- Thus, I created an archival research network where none existed before and called it **inter pares = among peers** to refer to the fact that all members of the network had equal input in the development of new knowledge.
- To express the purpose of the research, I made of *inter pares* an acronym: International research on Permanent Authentic Records in Electronic Systems: InterPARES.
- Since then, t general goal of all InterPARES projects has been to ensure that digital records be created reliable and accurate and preserved authentic for as long as needed by the creator and society at large across technological changes.

InterPARES has been funded by SSHRC grants and matching funds from UBC and all the partners (in cash and/or in kind) since 1998



The Goal of InterPARES 1 and 2 (1998-2006)

To develop the body of theory and methods necessary to ensure that digital records produced in databases and office systems, as well as in dynamic, experiential and interactive systems, in the course of artistic, scientific and e-government activities can be created in accurate and reliable form and maintained and preserved in authentic form, both in the long and the short term, for the use of those who created them and of society at large, regardless of technology obsolescence and media fragility.

Goal of InterPARES 3 (2007-2012)

- To enable public and private archival organizations and programs with limited resources to preserve over the long term authentic records that satisfy the requirements of their stakeholders and society's needs for an adequate record of its past.
- It did so by building on the products of the first two phases of InterPARES (1998-2006)



Key IP 1 & 2 Products

Policy Framework

A framework of principles guiding the development of policies for records creating and preserving organizations

Internation	erPARES 2 Project		le of Contents
Internation		humo	DUCTION
	nal Research on Permanent Authentic Records in Electronic Systems		
		STRU	CTURE OF THE PRINCIPLES
		PRINC	CIPLES FOR RECORDS CREATORS
		(01)	Digital objects must have a stable content and a fixed documentary form to be considered records and to be capable of being preserved over time. (P5)
		(C2)	Record creation procedures should ensure that digital components of records can be separately
Title:	A Framework of Principles for the		maintained and reassembled over time. (P4)
	Development of Policies, Strategies and	(C3)	Record creation and maintenance requirements should be formulated in terms of the purposes the records are to fulfit, rather than in terms of the available or chosen record-making or recordseeping
	Standards for the Long-term Preservation of		technologies. (P6)
	Digital Records	(C4)	record reliability, accuracy and authenticity expressiv and separately. (P2)
	Digital Records	(C5) (C6)	
		(00)	and authentic (P11, P12)
		(C7)	Preservation considerations should be embedded in all activities involved in record creation and maintenance if a creator wishes to maintain and preserve accurate and authentic records beyond its
			operational business needs. (P7)
		(C8) (C9)	A trusted custodian should be designated as the preserver of the creator's records. (P1)
Status:	Final (public)	10-01	explicitly documented. (P10) 10
Version:	1.2	(C10)	Third-party intellectual property rights attached to the creator's records should be explicitly identified and managed in the record-making and recordseeping systems. (P6)
Submission Date:	June 2005	(C11)	Privacy rights and obligations attached to the creator's records should be explicitly identified and
		(C12)	protected in the record-making and record keeping systems. (P9)
Release Date:		1-1-1	the legal requirements under which the records are created. (P13)
	The InterPARES 2 Project	(013)	Reproductions of a record made by the creator in its usual and ordinary course of business and for its purposes and use, as part of its recordsteeping addivides, have the same effects as the first manifestation, and each as to be considered at any other inme the record of the creation. (F3)
Writer(s):	Luciana Duranti, Jim Suderman and Malcolm Todd	0.000	ciples for Records Preservers
Project Unit:	Policy Cross-domain	(Princ	A designated records preserver fulfils the role of trusted custodian. (C8)
URL:	http://www.interpares.org/display_file.cfm?doc=	(P2)	Records preservation policies, strategies and standards should address the issues of record
	ip2(pub)policy_framework_document.pdf	(P3)	accuracy and authenticity expressly and separately. (C4)
		(63)	are to be considered authentic copies of the creator's records. (C13) 15
		(P4)	Records preservation procedures should ensure that the digital components of records can be separately preserved and reassembled over time. (C2)
		(P5)	Authentic copies should be made for preservation purposes only from the creator's records; that is,
		(86)	from digital objects that have a stable content and a fixed documentary form. (C1)
		(preservation, rather than in terms of the specific technologies available. (C3)
		(P7)	Preservation considerations should be embedded in all activities involved in each phase of the records iffecvcie if their continuing authentic existence over the long term is to be ensured. (C7)
		(P8)	Third-party intellectual property rights attached to the creator's records should be explicitly identified
		(P2)	and managed in the preservation system. (C10)
		100.	protected in the preservation system. (C11)
		(P10)	creation and/or use of the same records. (C9). 20
		(P11)	Archival appraisal should assess the authenticity of the records. (C6)
			Archival description should be used as a collective authentication of the records in an archival fonds. (C6) 20
		(P13)	Procedures for providing ascess to records created in one jurisdiction to users in other jurisdictions anould be established on the basis of the legal environment in which the records were created, (C13)





Creator Guidelines

Recommendations for making and maintaining digital materials for individuals and small communities of practice





Preserver Guidelines

Recommendations for digital preservation for archival institutions





Benchmark and Baseline Requirements Authenticity requirements for assessing and maintaining the authenticity of digital records

«REQUIREMENT SET B »

The preserver should be able to demonstrate that:

«REQUIREMENT SET A >>

To support a presumption of authenticity the preserver must obtain evidence that:

REQUIREMENT A.1: Expression of Record Attributes and Linkage to Record The value of the following attributes are explicitly expressed and inextricably link record. These attributes can be distinguished into categories, the first concerning th records, and the second concerning the integrity of records.

A.1.a Identity of the record:

A.1.a.i Names of the persons concurring in the formation of the record, the - name of author^a

- name of writer^b (if different from the author)
- name of originator^c (if different from name of author or writer)
 name of addressee^d
- A.1.a.ii Name of action or matter
- A.1.a.iii Date(s) of creation and transmission, that is:
 - chronological date^e
 - received date^f
 - archival date^g
 - transmission date(s)^h

A.1.a.iv Expression of archival bond¹ (e.g., classification code, file identifier)

- A.1.a.v Indication of attachments
- A.1.b Integrity of the record:
 - A.1.b.i Name of handling office
 - A.1.b.ii Name of office of primary responsibility^k (if different from handling c
 - A.1.b.iii Indication of types of annotations added to the record
 - A. I.D.III Indication of types of annotations added
 - A.1.b.iv Indication of technical modifications^m

REQUIREMENT A.2: Access Privileges

The creator has defined and effectively implemented access privileges concerning the creation, modification, annotation, relocation, and destruction of records.

<< REQUIREMENT SET A (cont) >>

REQUIREMENT A.3: Protective Procedures: Loss and Corruption of Records The creator has established and effectively implemented procedures to prevent, discov correct loss or corruption of records.

REQUIREMENT A.4: Protective Procedures: Media and Technology The creator has established and effectively implemented procedures to guarantee the coridentity and intentiv of records against media deterioration and across technological chu

REQUIREMENT A.5: Establishment of Documentary Forms The creator has established the documentary forms of records associated with each pro either according to the requirements of the juridical system or those of the creator.

REQUIREMENT A.6: Authentication of Records

If authentication is required by the juridical system or the needs of the organization, the has established specific rules regarding which records must be authenticated, by who the means of authentication.

REQUREMENT A.7: Identification of Authoritative Record If multiple copies of the same record exist, the creator has established procedures that which record is authoritative.

REQUREMENT A8: Removal and Transfer of Relevant Documentation If there is a transition of records from active status to semi-active and inactive status involves the removal of records from the electronic system, the creator has establish effectively implemented procedures determining what documentation has to be remov transferred to the preserver along with the records.

REQUIREMENT B.1: Controls over Records Transfer, Maintenance, and Reproduction The procedures and system(s) used to transfer records to the archival institution or program

The procedures and system(s) used to transfer records to the archival institution or program; maintain them, and reproduce them embody adequate and effective controls to guarantee the records' identity and integrity, and specifically that:

- B.1.a Unbroken custody of the records is maintained;
- B.1.b Security and control procedures are implemented and monitored; and
- B.1.c The content of the record and any required annotations and elements of documentary form remain unchanged after reproduction.

REQUIREMENT B.2: Documentation of Reproduction Process and its Effects The activity of reproduction has been documented, and this documentation includes:

- B.2.a The date of the records' reproduction and the name of the responsible person;
- B.2.b The relationship between the records acquired from the creator and the copies produced by the preserver;
- B.2.c The impact of the reproduction process on their form, content, accessibility and use; and
- B.2.d In those cases where a copy of a record is known not to fully and faithfully reproduce the elements expressing its identity and integrity, such information has been documented by the preserver, and this documentation is readily accessible to the user.

REQUIREMENT B.3: Archival Description

The archival description of the fonds containing the electronic records includes—in addition to information about the records juridical-administrative, provenancial, procedural, and documentary contexts—information about changes the electronic records of the creator have undergone since they were first created.



File Format Selection Guidelines

Principles and criteria for adoption of file formats, wrappers and encoding schemes

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Internation	nal Research on Permanent Authentic Records in Electronic Systems	Introduction	1
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		1.1 What is a file format?	
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Titler	General Study 11 Final Report:	1.3 "Standard" file formats	
Title:		1.4 "Stable" file formats	
	Selecting Digital File Formats for	1.5 Standardizing terms	
	Long-Term Preservation	2. Selection criteria 2.1 Widespread use	9
		2.1 Wdespread use 2.2 Non-proprietary origin	
		2.3 Availability of specifications	
		2.4 Platform independence (interoperability)	
		2.5 Compression	
		2.6 Discussion of criteria	
	Final (public)	Policy implications A Recommendations for developing and implementing policies	
Version:		Recommendations for developing and implementing policies	
Release:	March 2007	Appendix A: list of repositories reviewed	15
Author:	The InterPARES 2 Project	Appendix B: URLs of documents reviewed	
Writer(s):	Evelyn Peters McLellan	Bibliography	
Project Unit:	Domain 3 (Methods of Appraisal & Preservation)	Bibliography	
URL:	http://www.harspars.org/doguy_file.dtm/doc= (glile_formstopede.pdf Elgeland) http://www.harspars.org/dogby_file.dtm/doc= (g2_file_formsto_fichers_municrigues.pdf (French)		





Terminology Database

Including a glossary, a dictionary and ontologies

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Elle Edit View History Bookmarks Tools Help (8 http://www.interpares.org/ip2/ip2_terminology_db.cfm 0)	InterPARES 2 Project							
Image: State of the state o	Concept of a Record							
InterPARES Project: Termi Image: Vew Yab New Vindow	Records							
Home About Us About the Research Research to Date Dissemination Researchers' Area	Intellectual Companyits Attributes Diata Components							
InterPARES 2 Project 💁	There are 7 required components:							
International Research on Permanent Authentic Records in Electronic Systems	Acts Persons Archival Bond Context Content Medium Form							
terminology database	Every record exists in hierardry of contextual (intelectual Form) (Physical Form)							
BA B	Every record requires 3 persons frameworks that move from the general to the specific intrinsic Extrinsic							
BC D The Terminology Database has been designed to support multidisciplinary communication in InterPARES	Addressee Writer Author Autor May Include in any order Will always have							
2 research project. By extension this Database now stands as a contribution to our understanding of	TaterDADEC 2 Droject							
B G records in dynamic, interactive, and experiential systems in arts, sciences, and e-government.								
It contains three terminological instruments: a Glossary, Dictionary, and Ontologies. The first of these, the Glossary, is an authoritative list of terms and definitions that are core to our understanding of the evolving	ONTOLOGY C:							
K records creation, keeping, and preservation environments. The Dictionary is a tool used to facilitate	Trustworthiness of a Record							
BM interdisciplinary communication. It contains multiple definitions for terms, from multiple disciplines. By using this tool, researchers can see how Archival Science deploys terminology compared to Computer	TRUSTWORTHINESS							
Bo Science, Library and Information Science, or Arts, etc. The third terminological instrument, the Ontologies, identify explicit relationships between concepts of records. This is useful for communicating the nuances	TRUE WAR HIRESO							
BR of Diplomatics in the dynamic, experiential, and interactive environment.	is conferred to a record by its degree of							
U U U U U U V The following complete documents are available for downloading the PDF format								
	is established by examining a record's is the degree to which records are							
InterPARES 2 Project Glossary	COMPLETENESS CREATION PROCEDURE PRECISE CORRECT TRUTHFUL PERTINENT							
InterPARES 2 Project Dictionary								
	Has two components							
	INTEGRITY IDENTITY							
How to cite: InterPARES 2 Terminology Database. http://www.interpares.org/ip2/ip2/terminology.db.cfm								
Done //								



Two Records Preservation Models

Chain of Preservation (COP) Model (lifecycle) Business-driven Recordkeeping (BDR) Model (continuum)



IP 1 & 2 Final Products

Two books:

Luciana Duranti, ed. *The Long-term Preservation of Authentic Electronic Records: Findings of the InterPARES Project* (San Miniato: Archilab, 2005). Available on line at <u>http://www.interpares.org/book/index.cfm</u>

Luciana Duranti and Randy Preston, eds. *InterPARES 2: Interactive, Dynamic and Experiential Records* (Roma: ANAI, 2008). Available on line at <u>http://www.interpares.org/ip2/book.cfm</u>.



InterPARES 3 General Studies

- National Standards Relevant to IP3
- Community Archives e-Records Assessment
- Public Sector Audit Report for Digital Recordkeeping
- Records Management Policies and Procedures Template
- Cost-benefit Models
- Ethical Models
- File Viewers
- Education Modules (ICA Education Modules)
- Open Source Records Management Software
- Metadata Applications Profiles
- Organizational Culture & Risk Assessment

InterPARES 3 General Studies

- Web 2.0/Social Media
- Terminology Database (ICA Multilingual Archival Database – now it includes 26 languages)
- Analysis of Other Digital Preservation Projects
- International Standards Relevant to IP3
- Annotated Bibliography Database
- E-mail Preservation
- Preservation of Registries

InterPARES Trust (2013-2020)

The goal of InterPARES Trust was to generate the theoretical and methodological frameworks that should support the development of integrated and consistent local, national and international networks of policies, procedures, regulations, standards and legislation concerning digital records online, to ensure public trust.



Research Domains





Research Cross-Domains





Final I Trust Final Products

- Luciana Duranti and Corinne Rogers eds. *Trusting Records in the Cloud*. Facet Publishers and the Society of American Archivists. London, UK and Chicago, Ill. 2019
- Jens Boel and Eng Sengsavang eds., *Recordkeeping in International Organizations Archives in Transition in Digital, Networked Environments*. London, UK: Routledge, Taylor and Francis, 2021
- Hrvoje Stancic ed., *Trust and Records in an Open Digital Environment.* London, UK: Routledge, Taylor and Francis, 2021
- Alicia Barnard ed., *InterPARES en Latinoamérica y el Caribe 2005-2019*. Alcaldía Coyoacán CD MX: Instituto Nacional de Transparencia, Acceso a la Información y Protección de Datos Personales, 2020.
- Mpho Ngoepe ed., *Managing Digital Records in Africa.* London, UK: Routledge, Taylor and Francis, 2022.
- InterPARES and Canadian Institute for Information and Privacy Studies *Duty to Document*, a documentary accessible on www.interparestrust.org

InterPARES Trust AI (2021-2026)

The goal of the fifth phase of InterPARES, I Trust AI, is to design, develop, and leverage Artificial Intelligence to support the ongoing availability and accessibility of trustworthy public records. We aim to

- •Identify specific AI technologies that can address critical records challenges;
- •Determine the benefits and risks of using AI technologies on records; and
- •Ensure that records concepts and principles inform the development of responsible AI

Approach

- Our short-term approach focuses on identifying high impact problems and limitations in records and archives functions, and applying AI to improve the situation.
- Our long-term approach focuses on identifying the tools that records and archives specialists will need in the future to flexibly address their ever-changing needs. This includes decision support and, once decisions are made, rapid implementation of AI-based solutions to those needs.



Approach (cont.)

- The fact that the *I Trust AI* project is a **multinational interdisciplinary** endeavour means that our first effort had to be to understand each other, starting with the language we use. For example, archival professionals talk about records, while computer scientists and AI professionals talk about data. To archivists, <u>data are the smallest meaningful unit of</u> <u>information in a record</u>. To an AI specialist, <u>data is</u> (note: singular) <u>organized information</u> (possibly in a database), be it facts or not, regardless of size, nature and form.
- Thus, key to our work have been AI tutorials and workshops for non-AI researchers, and archival and diplomatics theory tutorials for non archival researchers. These educational endeavours are supported by the Terminology Database which is developed in collaboration by a multidisciplinary team.



Studies

Studies are all international and interdisciplinary

Focus on all aspects of archival functions

- 1. Creation and use of trustworthy records
- 2. Appraisal and acquisition of archival material
- 3. Arrangement and description
- 4. Retention and preservation
- 5. Management and administration of records and archives
- 6. Reference and access



Expected Outcomes

The project will <u>improve upon existing tools and create new</u> <u>Machine Learning tools</u> that will address archival needs, such as

- •machine translation,
- •image recognition and description,
- •optical character recognition (OCR) and handwritten text recognition,
- •text summarization and classification, and
- •text style transfer for language civilization (e.g., removal of bias, hate, and sexism)



Indirect Outcomes

- New Professionals: by the end of the project, there will be well over 100 professionals who will have worked as <u>student research assistants</u> on case studies with test-bed organizations and who will spread the acquired knowledge, without counting all the future professionals taught such knowledge during their course of study
- Students from other disciplines: computer scientists, lawyers, etc. will <u>understand and value the archival perspective</u> in their work and the impact of records and recordkeeping on the broader society
- Knowledge co-creation: the project will <u>enrich research in archival science</u>, <u>records management</u>, AI, cybersecurity, information science, law, and ethics, through knowledge exchange and uptake between scholars and practitioners within and among those disciplines.
- Sensitizing AI developers, scholars, and other members of that community to the role of AI in record keeping and archival preservation and to the role of archival concepts and principles in AI design and development.

Participants

- 100 partner organizations in 36 countries (in 5 continents)
- 129 co-applicants (academics)
- 133 collaborators (professionals)
- 2 postdocs
- 60 Graduate Academic Assistants in any given year



Today you will hear several I Trust AI researchers talking about the studies they have been working on.

If you wish to learn more, you can find us here:

<u>www.interpares.org</u> <u>www.interparestrustai.org</u> @itrustai <u>www.facebook.com/interparestrust</u>