



InterPARES 2 Project
International Research on Permanent Authentic Records in Electronic Systems

The InterPARES 2 Case Studies: an Overview

**By Martine Cardin,
University Laval (Québec)**

**“Finding Pathways for preserving authentic digital
objects” The InterPARES project**

The Hague, Netherlands

June 22, 2005

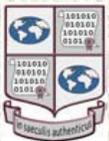
Topics

- Objectives
- Methodology and Reporting Framework
- Case studies at a Glance
- Preliminary Findings



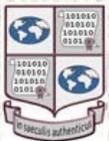
Objectives

- Exploring issues related to the records generated by interactive, dynamic, and experiential systems in the artistic, scientific and government sectors.
- Providing material for focus, domains and cross domains



Methodology

- Intellectual framework
- Approved proposal
- Investigation by a team of researchers
- Case study reporting framework
- Final Report Analysis



Investigation (1/3)

1. The creating body and its activities
2. Nature of digital entities studied
3. Functions of digital entities
4. Creation of digital entities
5. Retrieval and access



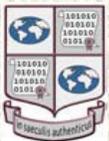
Investigation (2/3)

6. Use of digital entities and their effects
7. Competence and responsibility
8. Measures of control: reliability, authenticity, and quality
9. Archival selection and value



Investigation (3/3)

10. Record keeping system (preservation of digital entities)
11. Descriptive standards (metadata)
12. Technological change
13. Standards, policy, and legal, moral or ethical obligations



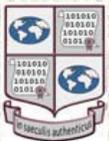
Case Study Reporting Framework

1. Overview
2. Statement of Methodology
3. Description of context
4. Answers to the core research questions
5. Answers to domain and cross domain research questions
6. Bibliography of relevant material
7. Glossary of Terms
8. Preliminary Model



Analysis

- Characterization
- Diplomatic Analysis
- Walkthrough and specific studies by focus, domains and cross-domains teams.



Case studies at a Glance



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Approved Case Studies

Focus/Nbr	Total	Underway	Completed
 Artistic	9	3	6*
 Scientific	5	4	1
 E-Govnt	10	6	4
TOTAL	24	13	11

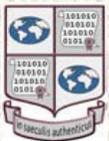
**Excluding one completed section from Case Study 09*



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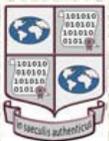
Focus 1 : Artistic activities

1. Arbo Cyber Théâtre (?)
2. Performance Artist Stelarc
3. HorizonZero/ZeroHorizon Online Magazine
4. Digital Moving images
5. The Danube Exodus
6. Obsessed Again?...
7. Waking Dream
8. Variable Media Network's
9. Electronic Café International



Focus 2: Scientific activities

1. CyberCartographic Atlas of Antarctica
2. NASA Spacecraft Mission Operation
3. Archaeological Records in a Geographical Information System
4. Preservation and Authentication of Electronic Engineering and Manufacturing Records
5. MOST satellite mission: Preservation of space telescope data



Focus 3: E-Government activities

1. Archives of Ontario Website Exhibits
2. Nova Scotia Business Registry
3. Antarctic Treaty Searchable Database
4. New York State Dept of Motor Vehicles
5. Alsace-Moselle's Land Registry
6. Revenue Online (ROS)
7. Supreme Court in Singapore
8. UK Knowledge Network
9. VanMap
10. Legacoop Bologna Website





Type of Creator	Total	Arts	Sces	Govnt
Individual	4	4		
Individual - Network	2	2		
Small private corp.	4	2	1	1
Large private corp.	1	1		
Large public corp.	2	2		
University centres	2	1	1	
Govnt -Central	3			3
Govnt - Prov, State, etc.	6		1	5
Govnt - Municipal	1			1
Govnt -others	2		2	
Total	27*	12*	5	10

** Including 4 sections from case study 09*

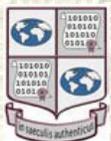


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Digital entities	Total	Arts	Sces	Govt
Web Site	8	4		4
Network	2	2		1
Digital motion image products	4	4*		
Digital music score	1	1		
Data and Records	3		3	
Database	6	1	2	3
Filing system	2			2

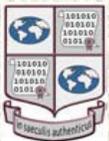
**4 sections from CS09*



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Preliminary findings

- The creator's concerns;
- The *matriochka* context
- The digital entities: a work in progress?
- The creation : publication or archives?



The 24 Case studies



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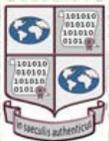
Arbo Cyber Théâtre (?)

- **Creating body:**
Theatre company
- **Context :**
Private corporation run by 2 individuals in Québec City, Québec, Canada
- **Digital entity studied:**
Website “*Ludosynthèse*” for maintaining memory of the troupe, while allowing audience interaction to continue.

Focus:

Artistic
(Theatre)

Final Report:
Completed

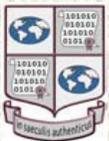


Performance Artist Stelarc

- **Creating body :**
Individual.
- **Context:**
Private individual; may work anywhere but is from Australia.
- **Digital entity studied :**
Website for advertising, and implementing and documenting the stages of the performance process.

Focus:
Artistic
(Performance Art)

Final Report:
Completed



HorizonZero/ZeroHorizon Online Magazine

➤ **Creating body :**

Media and Visual Arts
Department

➤ **Context :**

Institute, part of larger Centre;
in Banff, Alberta, (Canada)
Within organizational
hierarchy, made possible by
grants.

➤ **Digital entity studied :**

Bilingual multimedia Web
magazine

Focus:

Artistic
(Media)

Final Report:

Completed



Digital Moving images - Inputs, Processes and Outputs

➤ **Creating bodies :**

1. Commercial filmmaker,
2. Public filmmaker,
3. Independent producer
4. Public broadcaster

➤ **Contexts :**

1. Large private corporation (USA)
2. National Film Board (Canada)
3. Small private corporation (Italy)
4. Large public corporation (USA)

➤ **Digital Entities studied:**

Digital motion image products

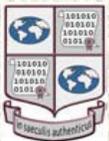
Focus:

Artistic

(Moving Images)

Final Report:

1. Still underway
2. Still underway
3. Still underway
4. Completed

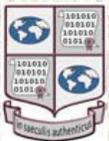


The Danube Exodus: Interactive Multimedia Piece

- **Creating body :**
Private individual working with an art collective and a Research Institute.
- **Context :**
Individual based in Budapest
(Installation in Los Angeles, CA)
Temporary, based on contract or partnership.
- **Digital Entity studied:**
Complex media installation

Focus:
Artistic
(Multimedia Exhibit)

Final Report:
Still underway

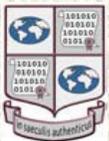


Obsessed Again

- **Creating body :**
Individual composer and artist
- **Context :**
Partnership between a composer and an artist based on contract in Vancouver, BC (Canada)
- **Digital Entity studied:**
Digital music score

Focus:
Artistic
(Musical Performance)

Final Report:
Completed



Waking Dream

➤ **Creating body :**

HCT Laboratory (UBC); 3-individual partnership (digital entity)

➤ **Context :**

Based on partnership, Within university hierarchy (UBC, Vancouver, Canada)

➤ **Digital Entity studied:**

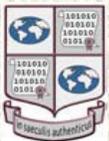
Website and multimedia performance art piece

Focus:

Artistic (Multimedia performance art)

Final Report:

Completed

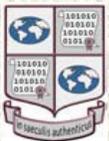


Model for description and preservation of documents created using unstable and variable artistic techniques

- **Creating body :**
Variable Media Network (VMN)
- **Context :**
International network of organizations. Partnership, growing into network of members.
- **Digital Entity studied:**
VMN tools, methodology, standards, practise, vocabulary

Focus:
Artistic
(Variable media)

Final Report:
Still underway



Electronic Café International: Aging Records from Technology-based Artistic Activities

➤ **Creating body:**

Electronic Café International;
individual artists (digital entities)

➤ **Context :**

Multimedia international network.
2 principals, network of artists in
Los Angeles, CA, USA.

➤ **Digital entity studied:**

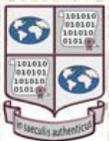
Accumulation of multimedia
related to telecollaborative work

Focus:

Artistic (Multimedia
(Collaboration and co-
creation)

Final Report:

Still underway



CyberCartographic Atlas of Antarctica

➤ **Creating body :**

Geomatics and Cartographic
Research Centre (GCRC),
Carleton University

➤ **Context :**

Granted research group at the
University Carleton, Ontario,
(Canada)

➤ **Digital entity studied:**

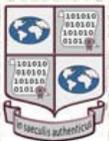
CDROM and Internet
multimedia product

Focus:

Scientific
(Cybercartography)

Final Report:

Still underway



Validation of the IP Preservation Model Using Records and Data from a NASA Spacecraft Mission Operation

➤ **Creating body :**

NASA National Space Science
Data Center (NSSDC)

➤ **Context :** Center, part of larger Center, in Maryland, USA. Within governmental hierarchy

➤ **Digital entity studied:**

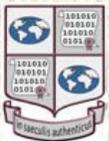
Records and data of a specific
NASA Spacecraft Mission
Operation

Focus:

Scientific
(Space Flight)

Final Report:

Still underway



Archaeological Records in a Geographical Information System: Research in the American Southwest

➤ **Creating body :**

Center for Desert Archaeology (CDA)

➤ **Context :**

Small private not-for-profit center located in Tucson, Arizona (USA)

➤ **Digital entity studied:**

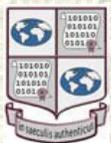
GIS Database. Provide answers to research questions relating to the aggregation and migration of prehistoric peoples in the American Southwest.

Focus:

Scientific
(Archaeology)

Final Report:

Completed



Preservation and Authentication of Electronic Engineering and Manufacturing Records

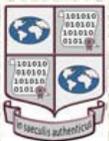
- **Creating body :**
Various US government departments
- **Context :**
Within the hierarchy of US Government departments (Federal)
- **Digital entity studied:**
Digital engineering and manufacturing records

Focus:

Scientific
(Engineering and manufacturing)

Final Report:

Still underway

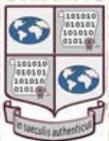


MOST satellite mission: Preservation of space telescope data

- **Creating body :**
Microvariability and Oscillations of STars satellite mission
- **Context :**
Partnership between Canada Space Agency, industry, universities
- **Digital entity studied:**
Space telescope data and engineering telemetry

Focus:
Scientific
(Astronomy)

Final Report:
Completed



Archives of Ontario Website Exhibits

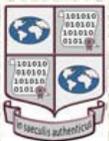
- **Creating body :**
Provincial Archives,
Government body (Province of
Ontario)
- **Context :**
Within governmental
hierarchy, under Mgmt. Board
Secretariat
- **Digital entity studied :**
Three web exhibits

Focus:

E-Government
(Archival)

Final Report:

Completed



Nova Scotia Business Registry

➤ **Creating body :**

Service Nova Scotia and
Municipal Relations (SNSMR)

➤ **Context :**

Government department
(Provincial). Within
governmental hierarchy

➤ **Digital entity studied :**

Online registration system

Focus:

E-Government
(Corporation law)

Final Report:

Still underway



Antarctic Treaty Searchable Database

➤ **Creating body :**

Private corporation

➤ **Context :**

Small private corporation. Partnership
2 individuals, in Ohio, (USA)

➤ **Digital entity studied :**

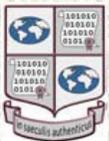
Database. Support teaching of
Antarctic Treaty documents, enable
those searching for Antarctic Treaty
materials.

Focus:

E-Government
(Treaty documentation)

Final Report:

Completed



New York State Dept of Motor Vehicles

➤ **Creating body :**

New York State Department of Motor Vehicles

➤ **Context :**

Within hierarchy of Government department (State)

➤ **Digital entity studied :**

Website. To provide online access to critical State services

Focus:

E-Government
(Motor vehicle licensing and driver registration)

Final Report:

Still underway



Computerization of Alsace-Moselle's Land Registry

➤ **Creating body :**

Le Livre Foncier d'Alsace-Moselle; GILFAM (digital entity)

➤ **Context :**

Within hierarchy of justice system.
Distributed between offices,
judges, clerks

➤ **Digital entity studied :**

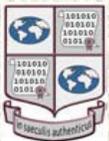
Database. To allow the activities currently underway in the paper-based environment.

Focus:

E-Government
(Real estate law)

Final Report:

Completed



Revenue Online (ROS)

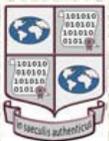
- **Creating body :**
Revenue Commissioners of
Ireland (Revenue)
- **Context :**
Government body (Central).
Within governmental hierarchy
- **Digital entity studied :**
Internet based filing system
(Website)

Focus:

E-Government
(Tax law)

Final Report:

Still underway



Electronic Filing System (EFS) From The Supreme Court in Singapore

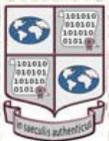
- **Creating body :**
Supreme Court of Singapore
- **Context :**
Legal body. Within hierarchy
of justice system
- **Digital entity studied :**
Electronic civil and criminal
law records filing system

Focus:

E-Government
(Law)

Final Report:

Still underway



UK Knowledge Network

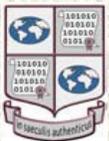
- **Creating body :**
UK Government
- **Context :**
Central government.
Encompasses central
government hierarchy
- **Digital entity studied :**
Virtual community of briefing
systems and information
resources

Focus:

E-Government
(Information)

Final Report:

Still underway



Preservation of City of Vancouver GIS database (VanMap)

- **Creating body :**
City of Vancouver, BC, Canada
- **Context :**
Municipal government. Team, within government hierarchy (IT Department)
- **Digital entity studied :**
GIS database. To allow the City of Vancouver to, “meet the needs of internal users in providing services to Vancouver’s citizens and businesses”.

Focus:

E-Government
(Services)

Final Report:

Still underway



Legacoop Bologna Website

- **Creating body :**
Cooperative network
- **Context :**
Provincial body of cooperative network in Bologna, Italy. Divided into departments, within network hierarchy
- **Digital entity studied :**
Website. To increase communication with and maintain the cooperative network of Legacoop Bologna's members

Focus:

E-Government
(Cooperative)

Final Report:

Completed

