

# **Digital Preservation: A Perspective on European Action and Research**

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# Overview

- Digital preservation: What are the challenges for Europe?
- EU policy initiatives and actions
- EU-funded research in digital preservation



# Aspects of a complex problem

- **Technical**
  - obsolete media and formats
  - conversion, migration, emulation...
- **Organisational**
  - authentication, certification
- **Financial**
  - costs of preservation
  - financial risks of losing data
- **Legal**
  - copyright protection
  - legal obligation to preserve
- **No definitive solution possible**
  - preservation requires ongoing efforts

# Requirements for finding solutions

## ➤ Knowledge and skills

- Research (technologies, methods...)
- Education and training
- Common European curriculum for "digital curators"

## ➤ Joint efforts

- synergies of ideas, technology developments and practices
- across disciplines, organisations and national borders



# Actions at EU level (1)

- **"i2010 Digital Libraries" initiative (2005)**
  - strategy for digitisation, online accessibility and digital preservation of Europe's collective memory
  
- **Commission Recommendation on Digitisation and Online Accessibility of Cultural Material and Digital Preservation (2006)**
  - national strategies and quantitative and qualitative targets, including financial planning
  - improved conditions for digital preservation

# Actions at EU level (2)

- **Member States' Expert Group on Digitisation and Digital Preservation (2007)**
  - exchange of good practices, monitoring progress in EU Member States
- **Communication from the Commission: 'Scientific Information in the Digital Age: Access, Dissemination and Preservation' (2007)**
  - digital repositories for science and research

# ICT Research

## ➤ ICT Programme

- 9 projects, € 44 mio co-funding
- **Actors:** research centres, universities, ICT companies, archives, cultural institutions...
- first project: **ERPANET** (2001-2004): raise awareness, sharing experience, knowledge-base on state-of-the-art developments



# FP6 projects: DPE, CASPAR, Planets



digitalpreservationEurope



- R&D into preservation of digital **content of various domains**, including high volume objects and multimedia content
- **Awareness raising and outreach activities**, targeted at content owners in various sectors





## FP7 projects: LiWA, PROTAGE, SHAMAN

### ➤ **LiWA**

**Web archiving tools** able to capture content from a variety of sources, to improve archive fidelity and authenticity and to ensure long term interpretability of web content (e.g. through handling evolving semantics)

### ➤ **PROTAGE**

**Agent-based technology and methodology** for preservation-friendly content production, transfer and ingest, facilitating archival monitoring and access to information

### ➤ **SHAMAN**

Next generation **digital preservation framework** including tools for analysing, ingesting, managing, accessing and reusing information objects and data across libraries and archives



# FP7 projects: Results of last ICT Call

- **Emulation access platform** to enable accurate rendering of static and dynamic digital objects stored on outdated computer media
- Long-term preservation of **digital audio-visual content**
- **Competence Centres** to support cultural institutions and stakeholders in digitisation, in managing digital resources and in preserving them over time

***Projects start in January 2009***



# Future Research Challenges (1)

## ➤ Needs identified

- Intelligent planning (preservation workflows)
- Overcoming hardware and software dependencies
- Guaranteeing the integrity and authenticity of the information as originally recorded

## ➤ Time schedule

- November 2008: ICT Work Programme 2009-10
- 2009: Public call for proposals



# Future Research Challenges (2)

- **Research topics** anticipated for WP2009-10
  - **scalable** systems and services that can handle **end-to-end workflows** for different types of digital resources
  - **large scale testbeds**, where organisations can demonstrate the feasibility of systems and services and assess their use
  - **advanced preservation**, focusing on challenging problems which cannot be adequately handled by current models



# Links and Contacts

- **DigiCult website: ICT Research** on digital culture, digital libraries and digital preservation

[http://cordis.europa.eu/fp7/ict/telearn-digicult/digicult\\_en.html](http://cordis.europa.eu/fp7/ict/telearn-digicult/digicult_en.html)

- **"i2010 Digital Libraries" initiative**

[http://ec.europa.eu/information\\_society/activities/digital\\_libraries/index\\_en.htm](http://ec.europa.eu/information_society/activities/digital_libraries/index_en.htm)

- **Contacts**

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