

ICT Workprogramme 2009-2010

Objective 4.1: Digital Libraries and Digital Preservation

Call 6

Cultural Heritage and Technology Enhanced
Learning Unit
DG INFSO / E3



Challenge 4

- Research on the **creation, distribution and exploitation of knowledge and digital content**
- Three objectives make this challenge:
 - **Digital libraries and digital preservation** (unit E3 call 6)
 - Enhancing the meaning and experiences we get from cultural and scientific content;
 - Preserving digital objects created today for the future;
 - Technology-enhanced learning (unit E3 **call 5**)
 - Improving learning and teaching through ICTs;
 - Intelligent Information Management (unit E2 call 6)
 - Assisting humans in the creation of intelligent digital objects (modular and self-describing)

Objective 4.1 Call 6



Work programme 2009-2010: Digital Libraries and Digital Preservation

Digital preservation research topics

- a) Scalable systems and services for preserving digital content (IP)
- b) Advanced scenarios / challenging problems
 - 1) preserving complex objects (new) (STREP)
 - 2) intelligent digital curation and preservation (IP)

Digital libraries research topics

- c) Innovative solutions for assembling multimedia digital libraries (IP)
- d) Adaptive cultural experiences (new) (STREP)
Objective 4.1 Call 6

Work programme 2009-2010: Digital Libraries and Digital Preservation

- e) **Research capacity** building:
 - Interdisciplinary research networks
- f) **Uptake** of research results:
 - Promoting uptake to encourage deployment; roadmapping; showcase, validation and demonstration centres (**new**)



a) Scalable systems and services for preserving digital content

- a) Scalable systems and services for preserving digital content handling the whole workflow for different types of digital resources, guaranteeing their long-term integrity and authenticity. Research should demonstrate the feasibility of systems and services proposed and assess their use by organisations in large scale testbeds (e.g. science, business and financial records, public records, multimedia/audiovisual and performing arts).

Objective 4.1 Call 6 Funding scheme: **IP**



b1) Advanced preservation scenarios ... preserving complex objects

Advanced preservation scenarios: methods, models and tools for **managing digital memory**, focusing on **challenging preservation problems** which cannot be adequately handled by **current models**. These should result in:

b1) Methods and tools for **preserving complex objects**, addressing the **life-cycle of composite digital information instances** (e.g. multiple embedded structures, actionable objects, distributed and interlinked resources and ontologies, transient information and ephemeral data).

Funding scheme: STREP

b2) Advanced preservation scenarios ... intelligent digital curation and preservation

Advanced preservation scenarios, contd.:

- b2)** Intelligent digital curation and preservation systems able to learn, reason and act autonomously, integrating tools and methods to support the complex decision making processes for appraisal, selection and management of diverse collections of digital resources. The system should ensure the representation of the objects and their embedded semantic knowledge in order to support their future re-use. Appropriate verification scenarios should be integral component of the work.

Funding scheme: IP

Objective 4.1 Call 6



Digital Preservation: Impact

- **reinforced capacity** for organisations **to preserve digital content**
- in a **more effective and cost-efficient** manner,
- safeguarding the **authenticity and integrity** of these records
- Significant **reduction in the loss of irreplaceable information** and
- **new opportunities for its re-use**, including new knowledge production



c) Assembly of multimedia digital libraries

- c) **Innovative solutions for assembling multimedia digital libraries** for collaborative use in specific contexts and communities, enhancing scholarly understanding and experiences of digital cultural heritage. This includes work on the dynamic aggregation of cross-media resources across existing institutional digital libraries and repositories. Research should address scalability, interoperability and distributed architectures, aggregation and semantic search tools. Validation should address researchers and cultural heritage professionals but be open to wider audiences.

Instrument: IP

d) Adaptive cultural experiences

- d) **Adaptive cultural experiences** exploring the potential of ICT for creating personalised views of various forms of cultural expression, reflecting individual narrative tendencies (i.e. adapt to the background and cognitive context of the user) and offering meaningful guidance about the interpretation of cultural works.

Funding scheme: STREP

Objective 4.1 Call 6



Digital libraries / adaptive cultural experiences: Impact

- Significant advances in the ability to offer easily customisable access services to
 - scientific and
 - cultural digital resources,
- improving their
 - use,
 - experiencing and
 - understandings.



e) Interdisciplinary research networks

- e) Interdisciplinary research networks bridging technological domains (e.g. computing models, knowledge representation, visualisation and graphics), information and archival sciences, and social and cognitive sciences to advance the state-of-the-art in well identified and focused application areas (eg digital preservation).
- ✓ **digital preservation** is one of the areas where such an approach appears to be specially promising

Funding scheme: NoE

e) Interdisciplinary research networks: Impact

- **Restructure and strengthen European research landscape** in digital libraries and digital preservation
 - Engagement of new research stakeholders
- **Wide** - beyond the limits of the consortium
- **Durable** – beyond the time horizon of the funded project



f) Promoting the uptake of EC-funded research

- f) **Promoting the uptake** of EC-funded research enabling the **deployment of new ICT-based cultural and memory preservation services**, leveraging the impact of associated national initiatives; **roadmapping** and identification of **future 'Grand Challenges'**; establishment of a **pan-European network of living 'memory centres'** for validations, demonstrations and showcases.

Funding scheme: CSA

Digital Libraries and Digital Preservation: Budget & call

IPs: min 28 MEUR - max 39 MEUR

- a) **Scalable systems and services** for preserving digital content
- b) **Advanced scenarios / challenging problems**
 - 2) **Intelligent digital curation and preservation**
- c) Innovative solutions for **assembling multimedia digital libraries** ... enhancing scholarly understanding and experiences of cultural heritage

STREPs: min 17 MEUR - max 28 MEUR

- b) **Advanced scenarios / challenging problems**
 - 1) **preserving complex objects** and,
- d) **Adaptive cultural experiences**

IPs/STREPs: 56 MEUR

(min 50% for IPs, 30% STREPs)

Objective 4.1 Call 6



Digital Libraries and Digital Preservation: Budget & call

NoE and CSA: max 13 MEUR

- e) **Interdisciplinary research networks**
- f) **Promoting uptake of research**

Overall budget 69 MEUR!





Further information:

- **DigiCult web site**

Work programme, on-going and previous research

http://cordis.europa.eu/fp7/ict/telearn-digicult/digicult-projects_en.html

- **Background document** will be published shortly!

- **Contact**

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