

**Cultural institutions and the
e-infrastructures:
DC-Net, Indicate,
Digital Cultural Heritage Roadmap for
Preservation projects**

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- A data infrastructure for DCH
- Three inter-related projects:
 - DC-NET, (Digital Cultural Heritage Network)
 - INDICATE (International Network for a Digital Cultural Heritage e-Infrastructure)
 - DCH-RP (Digital Cultural Heritage Roadmap for preservation)

A New Phase is beginning

- From FP7 to Horizon2020 and the Digital Agenda
- From CIP ICT-PSP to CEF
- Europeana established with 23M items
- Enormous silos of data to be linked, used, re-used and in general exploited for the research, leisure, business
- Private sector entering in the scenario, with large and small enterprises
- The big cultural institutions experimenting new paradigms of access to cultural heritage...

Many Opportunities, different players

- Digitisation and aggregation of data
 - The leaders: cultural institutions and public authorities (national programmes and EU projects)
- Infrastructure deployment
 - The leaders: ICT and e-infrastructure providers together with user communities
- New services, new products
 - The leaders: creative industry + cultural institutions

DCH and the e-Infrastructures

- To focus on the use of existing e-infrastructures as a channel for **delivery, access and preservation** of digital cultural heritage data
- **Storage, computing, connectivity** together with **authentication, authorisation** and accounting mechanisms offered by the e-infrastructures can well serve the needs of the sector
- To establish factual **cooperation** among three sectors (the research, the cultural heritage and the e-infrastructures) that are not used to work together

The research infrastructures play an important role for the research applied to tangible, intangible, and digital cultural heritage.

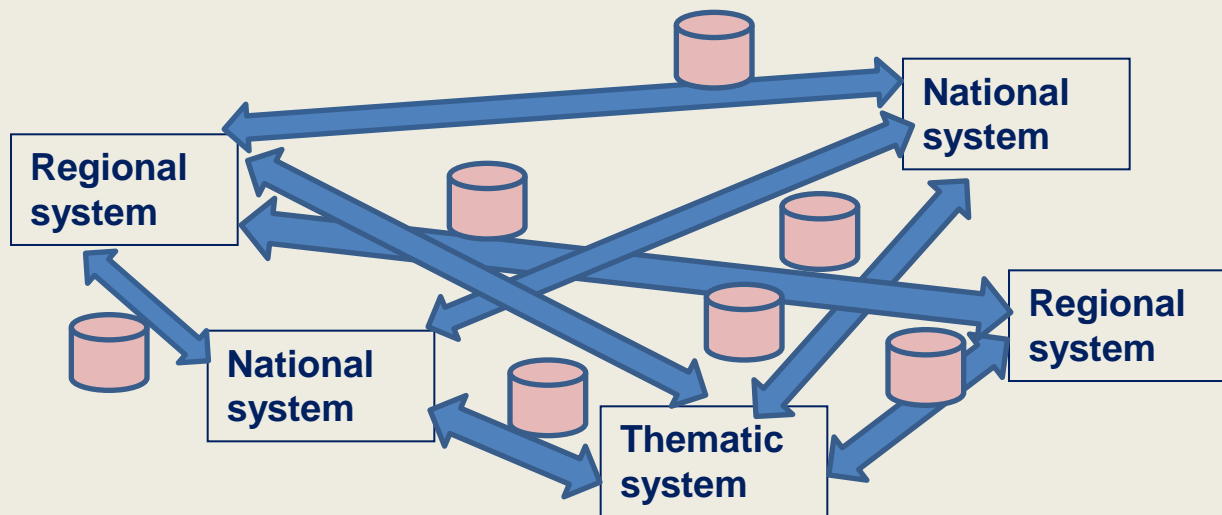
In particular, the eInfrastructure sector is fundamental for the development of the European research because all scientific sectors base their activities on the access to data through information systems.

The e-infrastructure for DCH

It is not a “new infrastructure”, it is instead a “new approach”

- based on **national and regional systems**
- valorising **existing resources**

The keyword is **INTEROPERABILITY**



Three integrated projects

1. **DC-NET**: joint activities plan for DCH e-infrastructure implementation
2. **INDICATE**: international cooperation, use case studies, pilots, policy harmonisation
3. **DCH-RP**: developing and validating a Roadmap for digital preservation



DC-NET in short

- DC-NET - an ERA NET on digital cultural heritage coordinated by MiBAC (Ministry of Cultural Heritage and Activities, Italy).
- Aim: supporting cooperation for research infrastructure in the digital cultural heritage field.
- Main results:
 - Network of common interest made up of cultural and technological stakeholders
 - MoUs between cultural institutions and e-infrastructure providers
 - Definition of 7 research priorities on digital cultural heritage (booklet)
 - Joint activities plan (joint study on preservation of digital cultural heritage)

A Network for the European Research Area:

- Composed by Programme Owners and Programme Managers in the cultural sector
- To agree common perspectives & priorities across EU Member States
- To establish an operative dialogue between cultural heritage and e-Infrastructures communities in Europe,
- To identify constraints and capabilities in order to establish a plan of joint activities

Completed in March 2012

A project funded by EC FP7 e-Infrastructures

DC-NET: services priority ordering for Content Providers

1. Long-term preservation
2. Persistent identifiers
3. Interoperability and Aggregation
4. Advanced search
5. Data resource set-up
6. User authentication and access control
7. IPR and digital rights management

Study on preservation

Digital preservation services: state of the art analysis

- Edited by Raivo Ruusalepp and Milena Dobрева
- overview of the state of the art in service provision for digital preservation and curation
- Focus: on the areas where bridging the gaps is needed between e-Infrastructures and efficient and forward-looking digital preservation services
- Available at www.dc-net.org

INDICATE

- To foster the **international cooperation** of eInfrastructures providers and cultural heritage users
- Target **regions**:
 - Mediterranean region, (Egypt, Turkey and Jordan)
 - Cooperation with China in liaison with the EPIKH Grid School

Started in September 2010, ended in October 2012

A project funded by EC FP7 e-Infrastructures

INDICATE– a concrete approach

- **Pilots and case studies** as demonstrators of the processes relevant to establishing cultural initiatives on the e-Infrastructure platforms
- **Coordination** of policy regarding the use of e-Infrastructures for digital cultural heritage in countries all around the Mediterranean
- **Dissemination** and contribution to the establishment of the DCH Community

www.indicate-project.org

Pilots and case studies

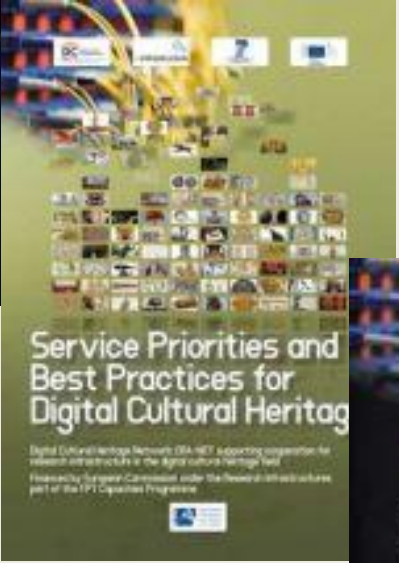
Pilots

- Semantic Search pilot
- e-Collaborative Digital Archives

Case studies

- Long Term Preservation (Ankara workshop)
- Virtual exhibitions (Amman workshop)
- Geo-coded Digital Cultural Content (Ljubljana workshop)

Publications



Best practice for applying research pilots and use case studies to digital cultural heritage





Digital Cultural
Heritage Roadmap
for Preservation -
DCH-RP

Digital Cultural Heritage Roadmap for Preservation

- to create a validated Roadmap for the long-term preservation in DCH
- The use of existing research e-infrastructure is an efficient channel for the delivery of advanced services to the digital cultural heritage
- To achieve this goal, NREN and NGI facilities needs to be complemented with targeted specific services
- DC-NET and INDICATE started the work
- DCH-RP will continue adding more concrete results in the specific area of the **digital preservation**



Digital Cultural Heritage Roadmap: characteristics

- A Coordination Action with cultural institutions, e-infrastructure providers and a wide network of international organisations willing to contribute to the project
- DCH-RP refers to the digital preservation of digital representation of cultural objects (not to the preservation of physical cultural objects).
- Focus on the **storage phase**, which includes both ‘*long-term preservation*’ (including dark archives) and ‘*short-term preservation*’ (storage for a relatively short period of access).



Digital Cultural
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DC MAP Roadmap: expected outcomes

The main outcome will be a Roadmap for the implementation of a preservation infrastructure for DCH

- supplemented by **practical tools** for decision makers
- validated through a range of **proof of concepts**, where cultural institutions and e-infrastructure providers will work together on concrete experiments

DCH-RP Roadmap is intended as the first instance of the Open Science Infrastructure for DCH in 2020



Digital Cultural
Heritage Roadmap
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DCH-RP partners

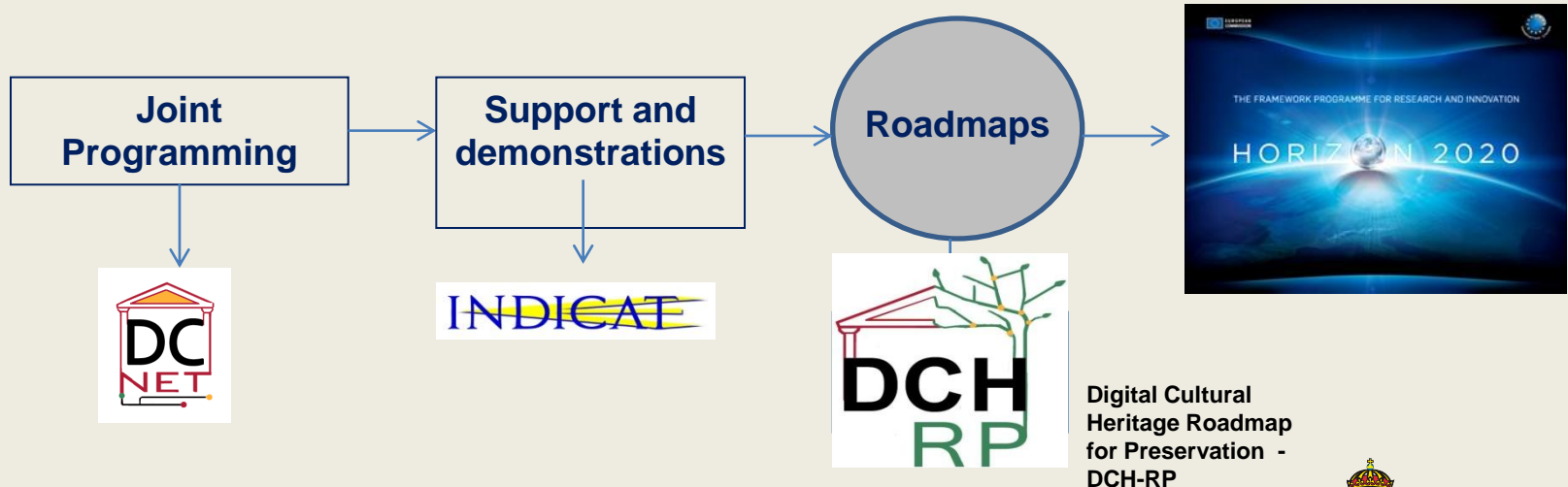
- | | | |
|----|---|------------------------|
| 1 | ICCU (Istituto Centrale per il Catalogo Unico delle biblioteche italiane e per le informazioni bibliografiche) | Italy |
| 2 | RIKSARKIVET (The National Archives of Sweden) | Sweden |
| 3 | BELSP0 (Service Public Federal de Programmation Politique Scientifique) | Belgium |
| 4 | EVK (Eesti Vabariigi Kultuuriministerium) | Estonia |
| 5 | COLLECTIONS TRUST | United Kingdom |
| 6 | Promoter | Italy |
| 7 | EGI.eu (Stichting European Grid Initiative) | the Netherlands |
| 8 | INFN (Istituto Nazionale di Fisica Nucleare) | Italy |
| 9 | PSNC (Instytut Chemii Bioorganicznej Pan) | Poland |
| 10 | NIIFI (Nemzeti Informacios Infrastruktura Fejlesztési Iroda) | Hungary |
| 11 | EDItEUR | United Kingdom |
| 12 | TERENA (Trans-European Research and Education Networking Association) | the Netherlands |
| 13 | Michael Culture | Belgium |



Limassol, 1/11/2012

The vision

- DC-NET, INDICATE and DCH-RP are part of a wider process, which started 10 years ago among cultural institutions
- This process entered in a new phase joining the research e-infrastructures
- Time is ready to start working towards an Open Science Infrastructure for Digital Cultural Heritage in 2020



Digital Cultural
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Thank you for your attention!

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