



Towards a Digital Cultural Heritage e-Infrastructure

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Antonella FRESA

DC-NET and INDICATE Technical Coordinator
Central Institute Union Catalogue Italian Libraries



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for the citizens

EUROPEANA



INDICAT

for the researchers

**DIGITAL CULTURAL
HERITAGE
e-INFRASTRUCTURE**

**RECOMMENDATIONS
& GUIDELINES**

**DATA MODEL &
SERVICES**

E-INFRASTRUCTURES

NATIONAL & REGIONAL INITIATIVES

2002

2005

2009

2012

2014



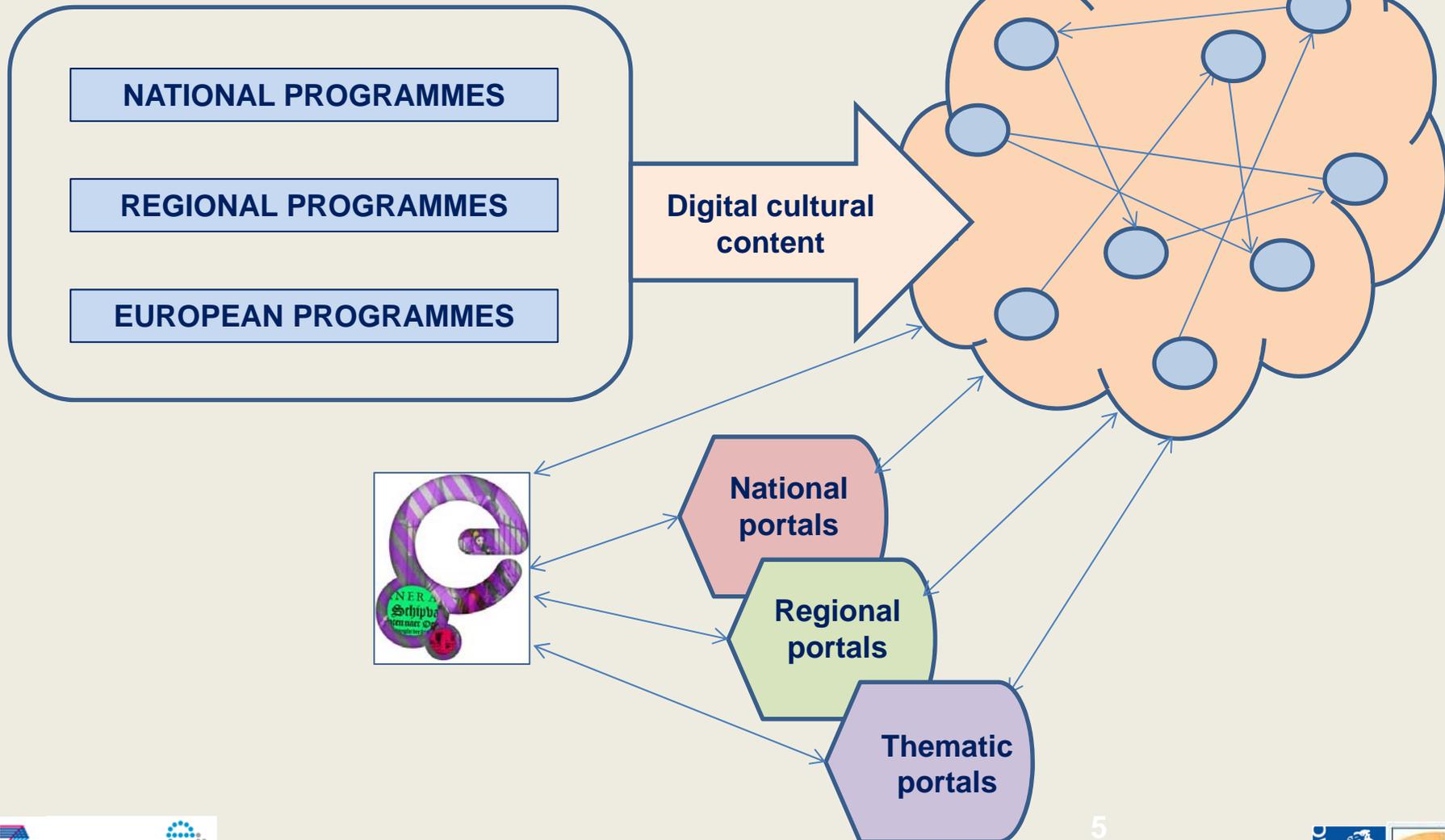
Digital cultural content

The **amount of digitised material** in the European Cultural sector is growing very rapidly

- **National, regional and European programmes** support the digitisation of the content of Museums, Libraries, Archives, Archaeological sites and Audiovisual repositories
- The generation of digital cultural heritage is accelerated also by the impulse of **Europeana** that is fostering the European cultural institutions to produce even more digital content
- Digital cultural heritage content are **complex and interlinked** through many relations



Data Continuum



Amman, 13/12/2011



The needs of the DCH sector

1. high quality **information technology** management, to ensure trust, availability, reliability, long term safety of content, security, preservation and sustainability;
2. **access facilities** to the final users (*the researchers*) who will search into the DCH e-Infrastructure for their research and to the cultural institutions that will deliver their data to the DCH e-Infrastructure;
3. **interoperation** among existing cultural heritage repositories and of cultural heritage data with research data.



DCH and the e-Infrastructures

- To focus on the use of existing e-infrastructures as a channel for digital cultural heritage data
- Storage, computing, connectivity together with authentication , authorisation and accounting mechanisms offered by the e-infrastructures can serve the needs of the sector: the issue here is to establish factual cooperation among two sectors (the research and the cultural heritage) that are not used to work together
- DCH: Ministries of Culture and cultural institutions
- Cross-domain: museums, libraries and archives together

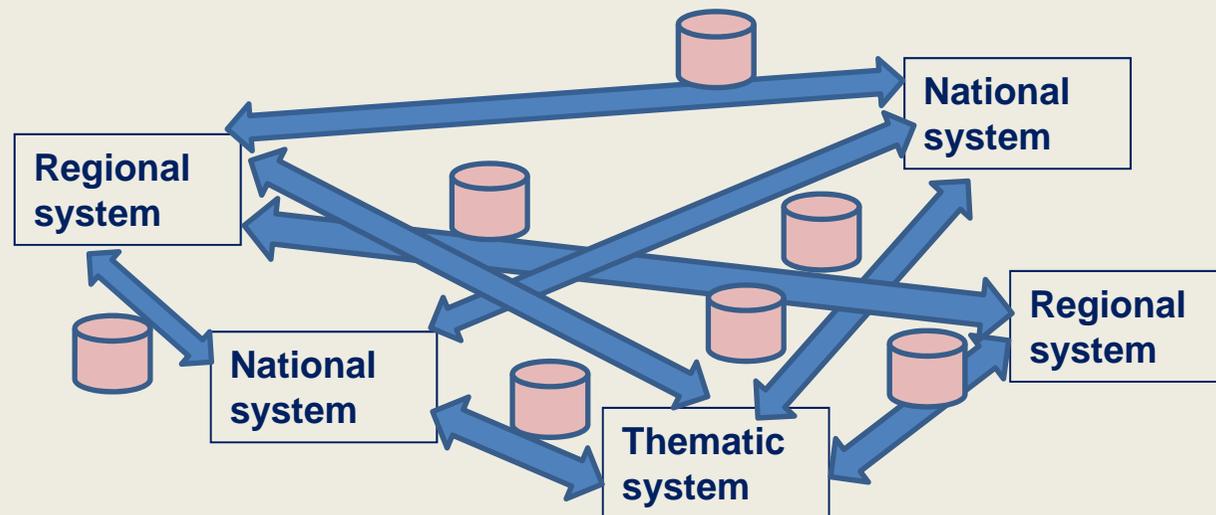


The e-infrastructure for DCH

Not a “new infrastructure”, but instead a “**new approach**”

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

The keyword is **INTEROPERABILITY**





Sustainability of the e-Infrastructure

National and regional programmes in the areas of

- Research
- Cultural heritage
- e-government

European programmes

- Infrastructures
- ICT research
- Innovation (CIP)

→ **Horizon 2020**



Expected impacts

- **e-Infrastructures**

The adoption of the e-Infrastructures by the digital cultural heritage community will open new scenarios of use and exploitation

- **Cultural Heritage**

Cultural managers will become more aware about the potential that the e-infrastructures can offer to their work: storage, preservation, access services for the cultural institutions, etc.

- **European research**

A better integration of the cultural sector with the e-Infrastructures will enable the research of new advanced services and applications

- **Other sectors**

Digital cultural content will become more usable and re-usable for education, cultural tourism, long-life learning, non-professional cultural interests, creative industry, etc.



Preparatory actions

- To define **priorities** among the services to be deployed
- To consult with **stakeholders** and to engage programme owners at national and regional level
- To improve **awareness**: needs&offers, standards, who-is-who
- To promote **trust building**, covering different aspects and including organisational, operational and legal issues
- To run **experiments**: pilots and use case studies
- To open **international cooperation**
- To establish an **e-culture community**



Two integrated projects

1. **DC-NET**: joint activities plan for DCH e-infrastructure implementation
2. **INDICATE**: international cooperation, use case studies, pilots, policy harmonisation



Priorities and
progamming



INDICAT

Support and
demonstration



DC-NET ERA-NET

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



Started in December 2009, it will last until February 2012

A project funded by EC FP7 e-Infrastructures



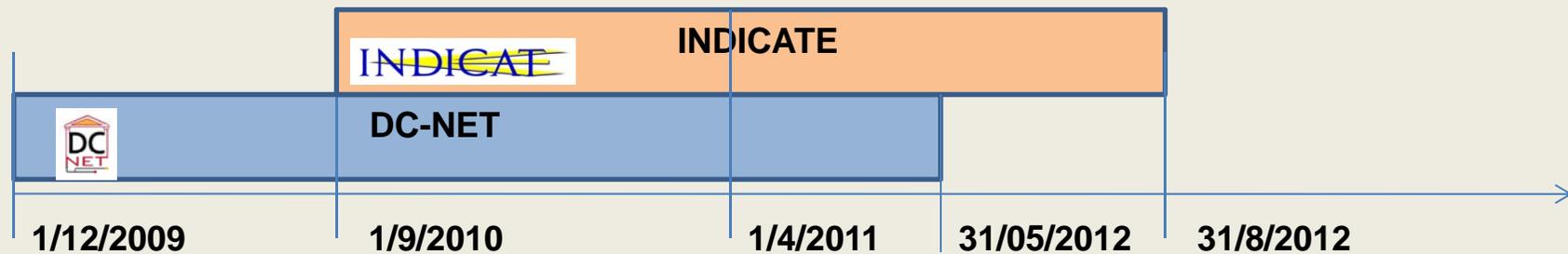
INDICATE

A concrete approach within an international dimension

- Stimulating the **international cooperation** of eInfrastructures providers and cultural heritage users
- Target areas:
 - Mediterranean region, (Egypt, Turkey and Jordan)
 - Cooperation with China in liaison with the EPIKH Grid School
 - Exchanges with South America, for example, in the frame of experiments for live distributed performances
- **Case studies:** preservation, virtual exhibitions, GIS

Started in September 2010, it will last until August 2012

A project funded by EC FP7 e-Infrastructures



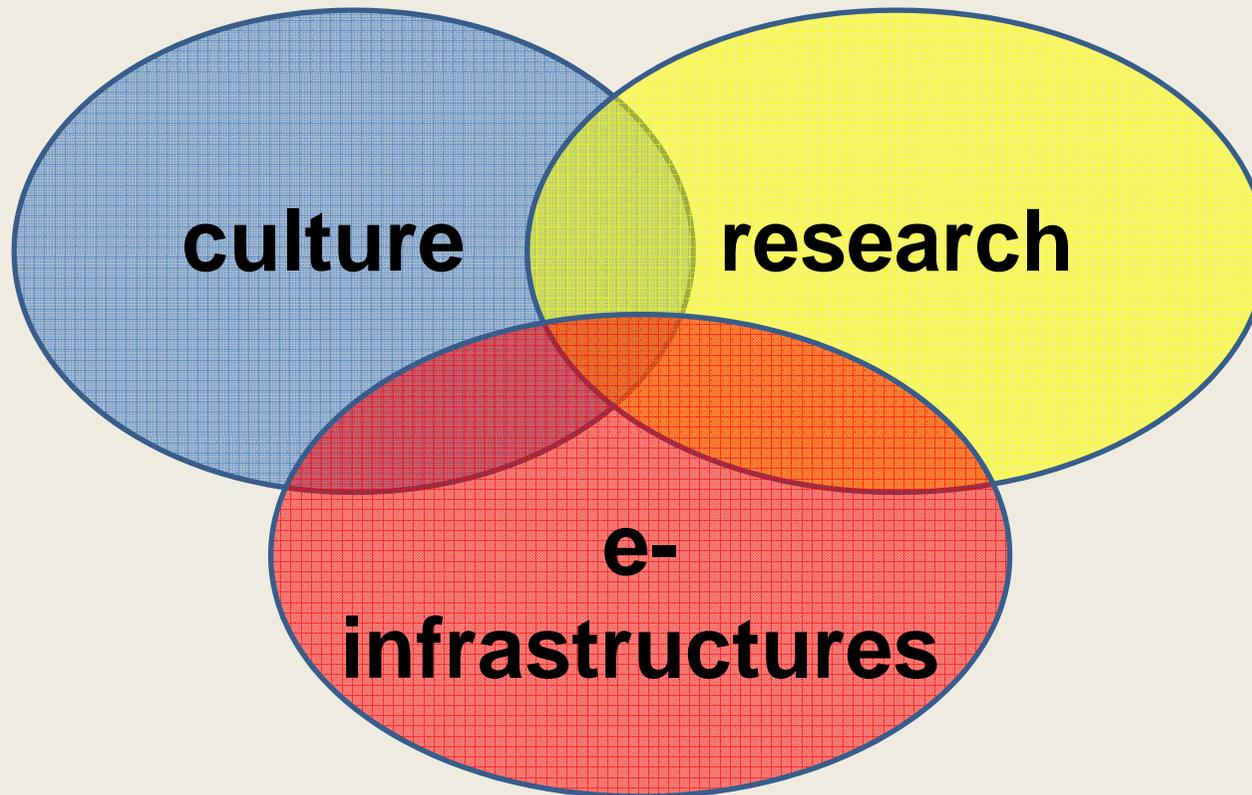
- The two projects share the same coordinator and have many partners in common.
- The e-infrastructure programmes identified in DC-NET will be at the basis of the sustainability of the results of INDICATE.
- The two projects represent the same **DCH community**.



Services priority ordering

A prioritised list of the most immediately important services has been agreed:

- 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**



Cooperation and coordination among these three sectors is at the core of the DCH e-infrastructure



The network of common interest

It combines:

- regional, national and international levels,
- bottom-up (working groups) and top-down (Joint Programming) approaches

Working groups: experts seconded by their cultural, research and infrastructure organisations

Cooperation with other networks and projects: EPIKH, CHAIN, EUMEDGRID-Support, EUMEDCONNECT2, LINKED HERITAGE,



Liaisons with EU strategic bodies

Factual cooperation is established with:

- **e-IRG** e-Infrastructure Reflection Group
- **ESFRI** European Strategy Forum on Research Infrastructures (SSH thematic working group)
- **EGI** European Grid Initiative
- **TERENA** Trans-European Research and Networking Association
- **MSEG** Member States Expert Group on digitisation
- **ASREN** – Arab States Research and Education Network



Next steps DC-NET & INDICATE

January 2012: release and endorsement of the DC-NET **Joint Activities Plan**

Until March 2012: DC-NET **informative seminars**

8/3/2012, Rome – **final DC-NET Conference**

January-September 2012:

- validation of the INDICATE **e-culture science gateway** (ref. last issue of ISGTW)
- **use case studies** on long-term preservation, virtual exhibitions and geo-coded cultural content

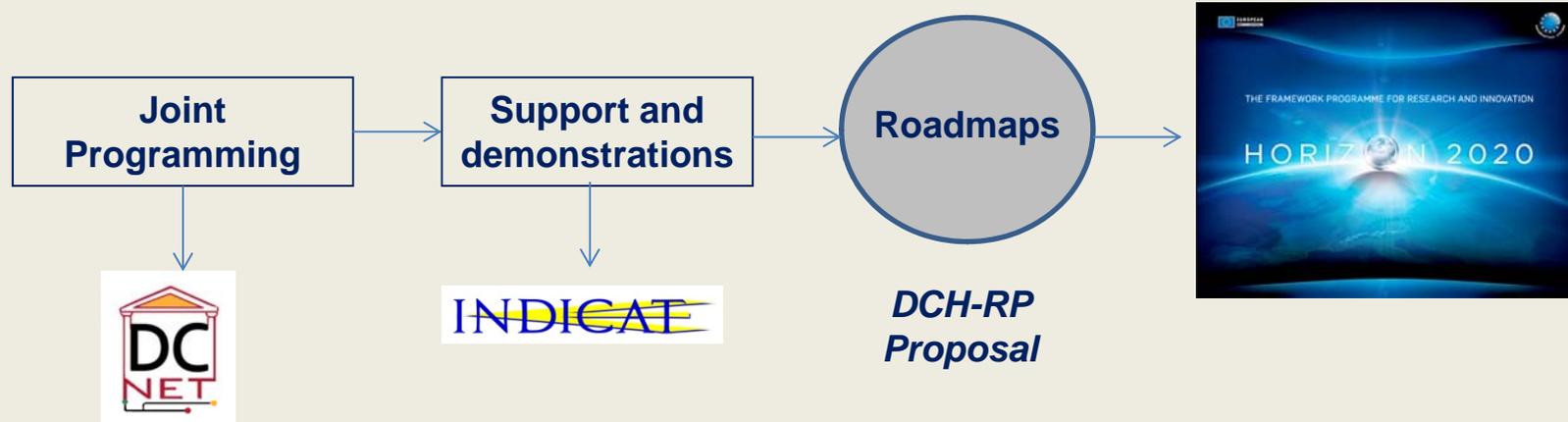
20/4/2012, Catania – **INDICATE Technical Conference**

July 2012, Cairo – **INDICATE Final Conference**



The vision

- INDICATE and DC-NET 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





Thank you

Antonella Fresa
DC-NET, INDICATE Technical Coordinator
fresa@promoter.it

www.dc-net.eu
www.indicate-project.eu