





### e-infrastructures for the Digital Cultural Heritage

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#### **Antonella FRESA**

Technical Coordinator
Central Institute Union Catalogue Italian Libraries











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- The Digital Cultural Heritage sector: characteristics and needs
- The vision towards a DCH data infrastructure
- Two inter-related projects: DC-NET and INDICATE
- Service priorities









# Initiatives of the European Member States in the last 10 year

#### A wide range of activities:

- Building a shared platform of tecommendations and guidelines
- Agreement on common data models
- Experimenting and launching innovative online services
- E-infrastructures for the citizens
- E-infrastructures for the research
- International cooperation: in Europe and abroad
- Digitisation within national and regional programmes





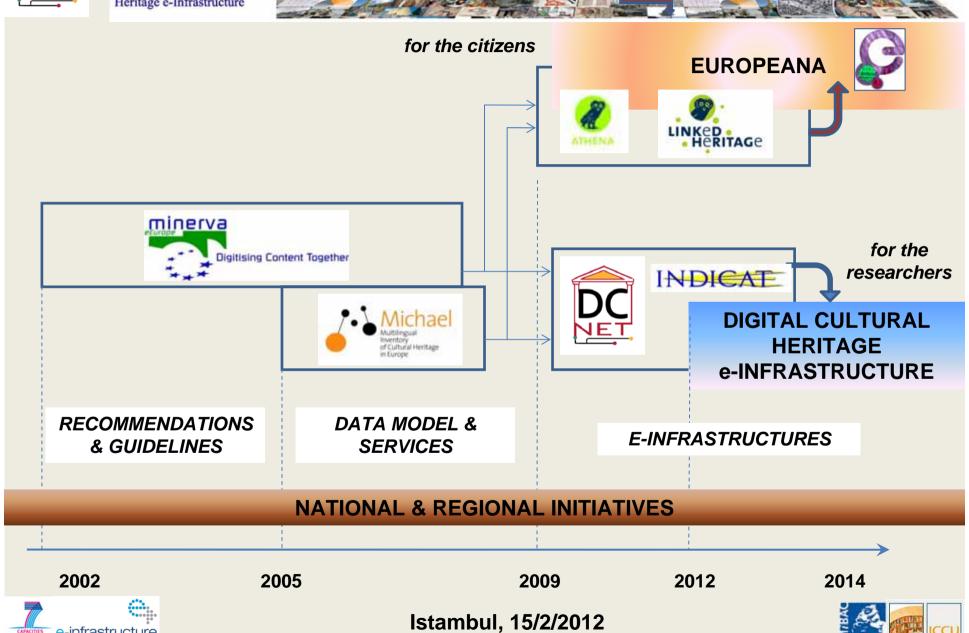






















# Digital cultural content characteristics

The amount of digitised material 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** 



**NATIONAL PROGRAMMES** 

**REGIONAL PROGRAMMES** 

**EUROPEAN PROGRAMMES** 

**International** portals



Istambul, 15/2/2012

**Digital cultural** content

> **National** portals

> > Regional portals

> > > **Thematic** portals













### 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 <u>final users (the researchers)</u> who will search into the DCH e-Infrastructure for their research and to the <u>cultural institutions</u> 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.









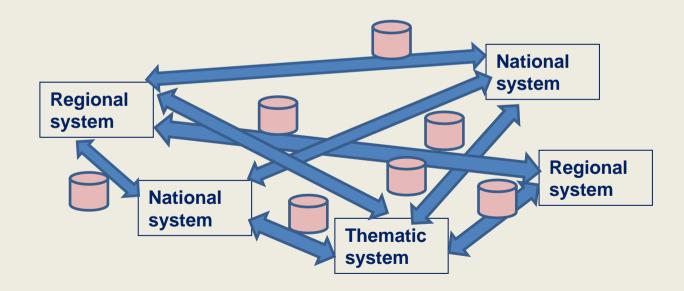


### The e-infrastructure for DCH

It is not a "new infrastructure", but it is instead a "new approach"

- based on national and regional systems
- Valorising existing resources

The keyword is **INTEROPERABILITY** 













### **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 einfrastructures can offer to their work: storage, preservation, access services for the cultural institutions, etc.

#### 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.















# **Key players**

- Key players from the DCH:
  - Ministries of Culture
  - Cultural institutions
- → Cross-domain: museums, libraries and archives together
- Key player from the research:
  - Ministries of Research
  - Researchers in the Humanities
  - Researchers in ICT applied to CH
- E-Infrastructure providers











# **Preparatory actions**

- To define priorities among the services to be deployed
- To consult and to advocated with stakeholders
- To engage with programme owners
- To improve awareness: 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





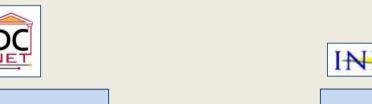






# Two integrated projects

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



Priorities and progamming





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 March 2012 A project funded by EC FP7 e-Infrastructures











### **INDICATE**

#### A concrete approach within an international dimension

- Stimulating the international cooperation of elnfrastructures 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 in the frame of experiments for live distributed performances
- Case studies: preservation, virtual exhibitions, GIS

Started in September 2010, it will last until September 2012 A project funded by EC FP7 e-Infrastructures











	INDICAT	INDICATE		
DC NET	DC-NET			
1/12/2009	1/9/2010	1/4/2011	31/05/2012	31/8/2012

- 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

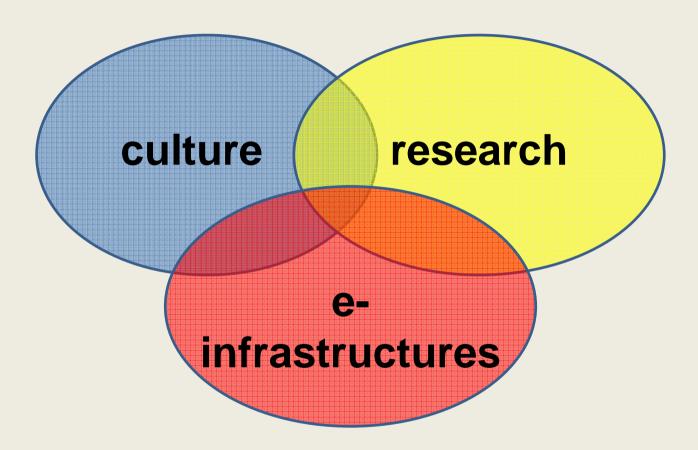












Cooperation and coordination among these three sectors is at the core of the DCH e-infrastructure









### 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 strategic bodies

Factual cooperation is established with:

- -e-IRG e-Infrastructure Reflection Group
- **–ESFRI** European Strategy Forum on Research Infrastruftures (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 appointment

8 March 2012, Rome – DC-NET Final Conference

**20 April 2012, Catania** – INDICATE Technical Conference to demonstrate the e-Culture Science Gateway and to present the result of the use case studies on long-term preservation, virtual exhibitions and geo-coded cultural content

9-10 July 2012, Cairo – INDICATE Final Conference





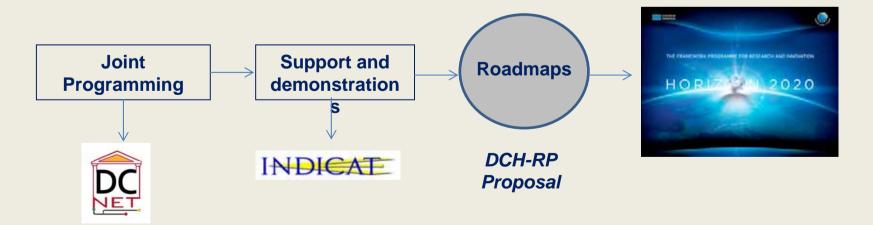






### The vision

- 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 einfrastructures
- Time is ready to start working towards an Open Science Infrastructure for Digital Cultural Heritage in 2020













### Thank you

Antonella Fresa

DC-NET and INDICATE Technical Coordinator

<a href="mailto:fresa@promoter.it">fresa@promoter.it</a>

antonella.fresa@beniculturali.it

www.indicate-project.org



