



A data infrastructure for digital cultural heritage: characteristics, requirements and priority services

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Digital cultural content

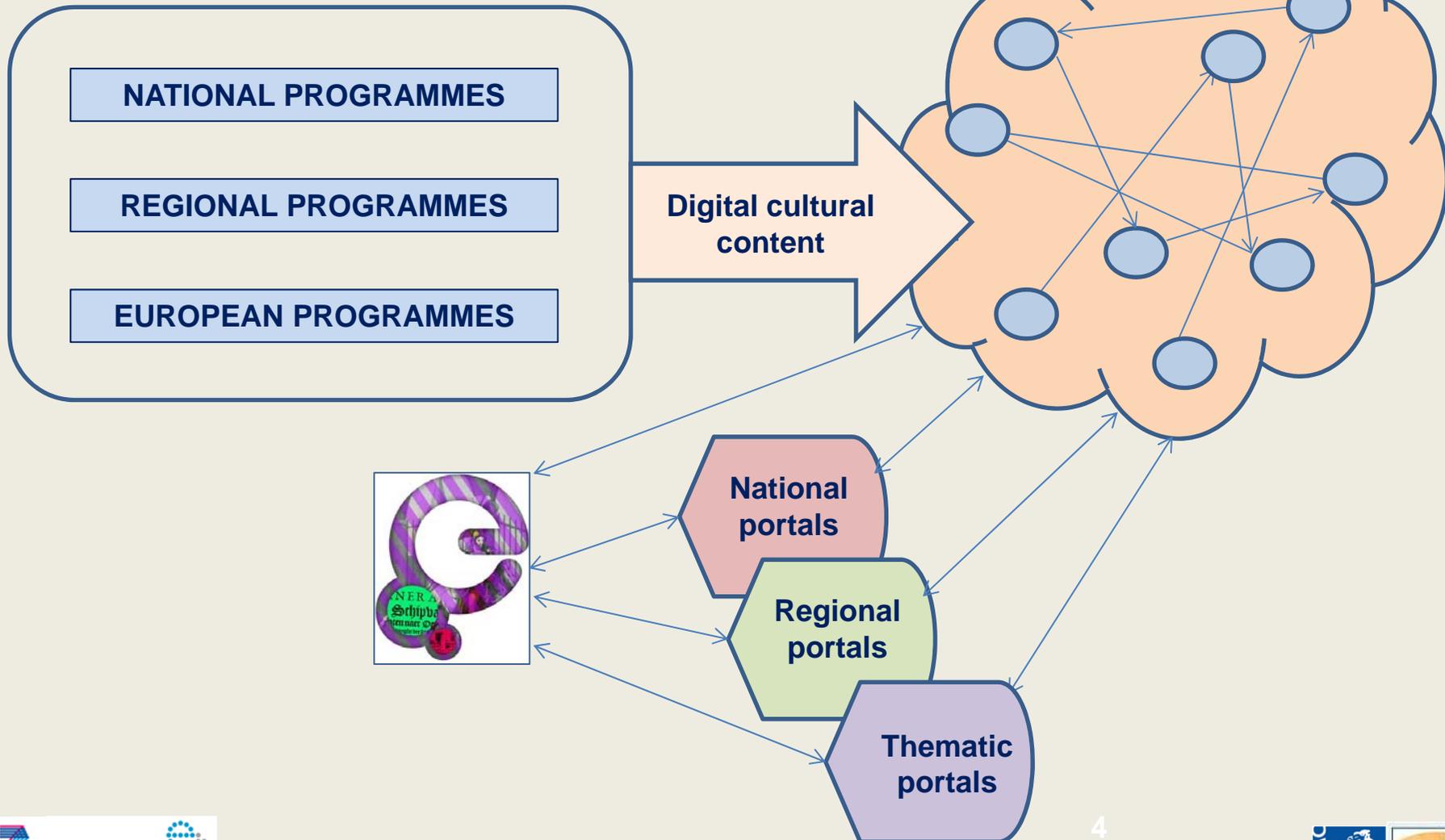
The **amount of digitised material** in the European Cultural sector is growing very rapidly

- **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



THE VISION

Data Continuum





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.

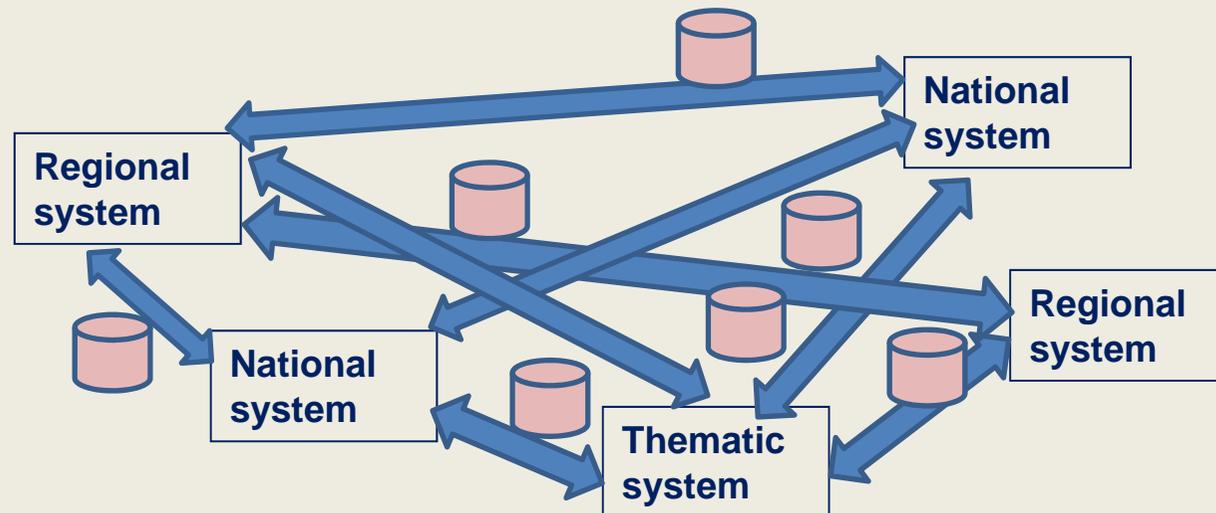


The e-infrastructure for DCH

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**





DCH V/S 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 well 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



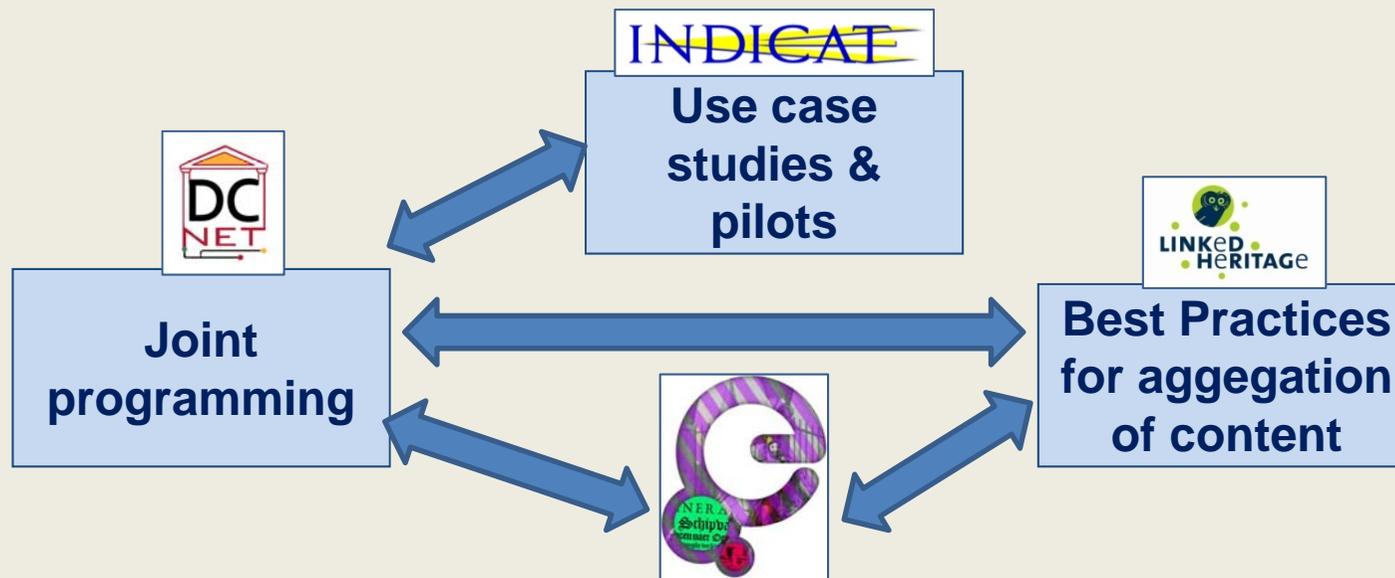
Actions

- To improve **awareness** (needs v/s offers, standards, who-is-who, ...)
- To promote **trust building** (experiments, pilots, use case studies, ...) covering different aspects and including organisational, operational and legal issues
- To establish **priorities** among the services to be deployed
- To consult with **stakeholders** and to engage of programme owners at national and regional level
- To open to the **international cooperation**, both to enlarge the market and to reuse best practice and successful solutions



3 integrated projects

1. **DC-NET**: joint programming for DCH e-infrastructure implementation
2. **INDICATE**: international cooperation, use case studies, pilots
3. **LINKED HERITAGE**: a best practice network on metadata and standards, linked data and persistent identifiers, multilingual vocabularies, aggregation of content to Europeana





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

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 in the frame of experiments for live distributed performances

Started in September 2010, it will last until August 2012

A project funded by EC FP7 e-Infrastructures



LINKED HERITAGE

A network of Best Practices about aggregation of cultural heritage content:

- Establishing best practices in the fields of linked data, persistent identifiers, multilingual vocabularies, metadata standards
- 38 partners from 24 countries
- Aggregating 3 million new items to Europeana

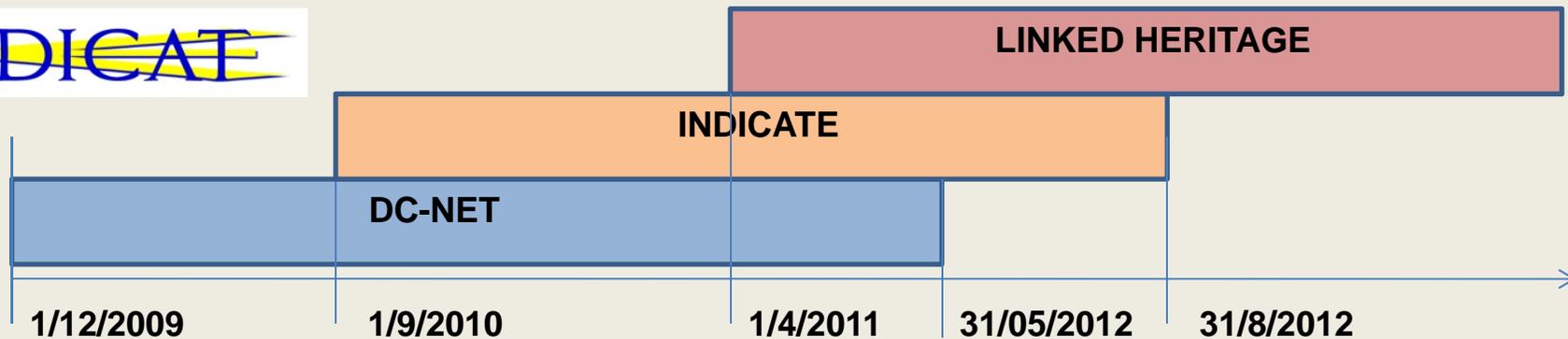


Started in April 2011, it will last until October 2013

A project funded by EC CIP ICT-PSP Digital Libraries



INDICATE



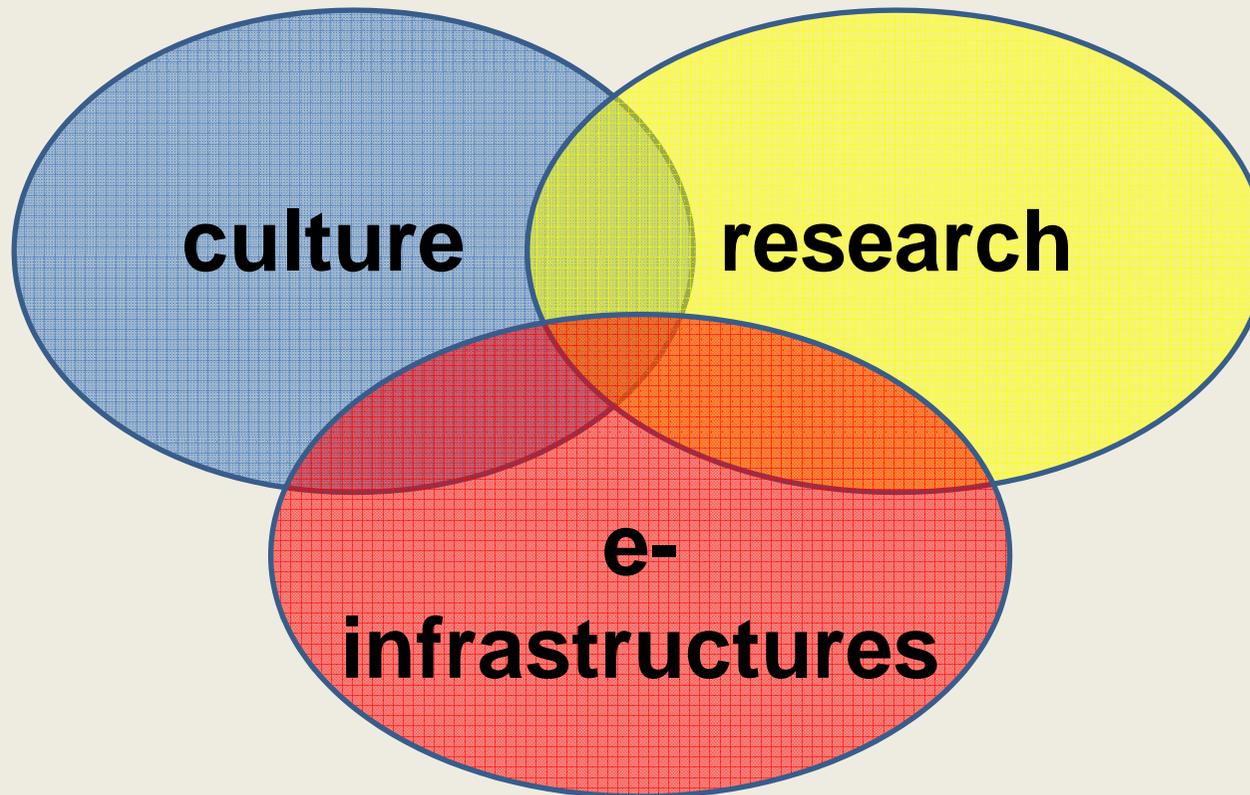
- The three projects share the same coordinator and have many partners in common.
- The e-infrastructure programmes identified in DC-NET will be at the basis of the sustainability of the results of INDICATE.
- The e-infrastructure studied in DC-NET and INDICATE will be populated with content from LINKED HERITAGE.
- The three 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:

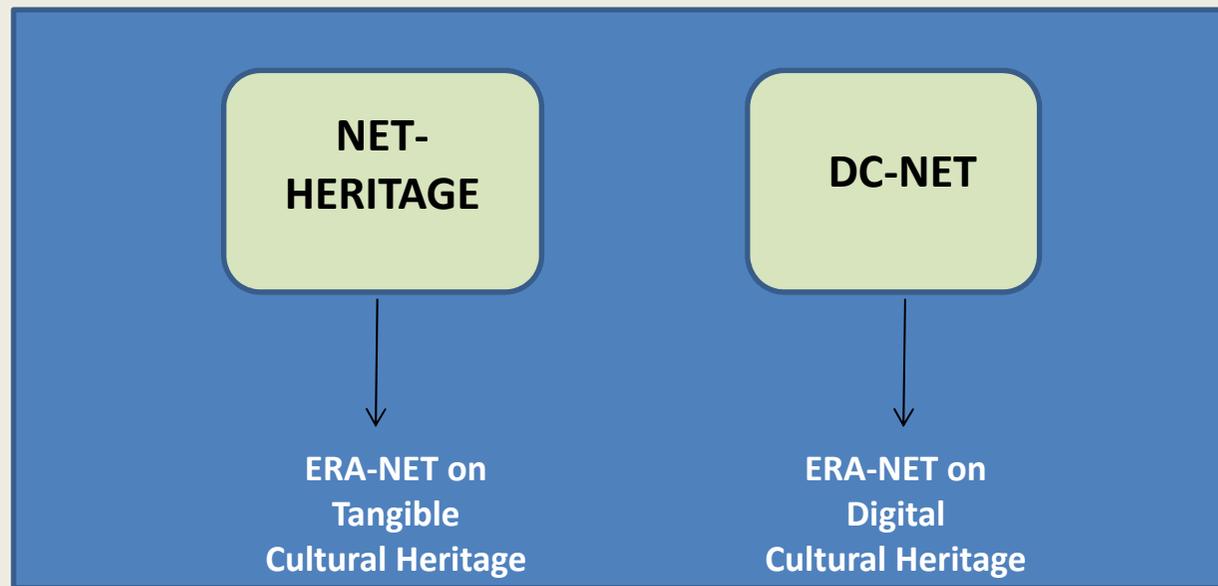
- regional, national and international levels,
- bottom-up (working groups) and top-down (Joint Programming) approaches

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

Joint programming: the JPI on Cultural Heritage



Joint Programming Initiative on Cultural 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



DC-NET and Europeana

Positioning



	Europeana	The vision for a digital cultural heritage (DCH) e-infrastructure
The targets:	Europeana is for final users	an infrastructure for the research in the digital cultural heritage
The initiators:	Europeana is an initiative of the EC supported by Member States	The Joint Activities Plan for a DCH infrastructure is intended to be an initiative of the Member States
Focus	Europeana is focused on access and re-use	DC-NET addresses the whole value-chain: Digitisation – Access - Preservation



DC-NET and Europeana

Cooperation and complementarities



The envisaged DCH e-infrastructure aims to offer tools and services to Europeana, such as, for example the long term digital **preservation** which is the first priority in the study from DC-NET

Common work with Europeana is expected to be carried out on **metadata** and **standards**

There is a natural link between DC-NET research community and Europeana through **projects** and political/strategic and technical **groups**



Position Paper

Open consultation Green Paper on Common Strategic Framework

1. **European Coordination:** the role of Member States and European Commission
2. **Europeana:** towards its full deployment
3. **Preservation:** a task for the Member States
4. **Digital Cultural Heritage:** the need for a research e-Infrastructure
5. **Research and innovation** in the digital cultural heritage: an international matter
6. **Users involvement:** the success factor
7. **Coordination and demonstration:** a requirement for the DCH sector



Next steps

January 2012: to release the DC-NET **Joint Activities Plan**

2011-2012: to complete the first run of DC-NET **informative seminars**

2012: to validate the INDICATE pilot on **e-culture science gateway** (ref. last issue of ISGTW) and to complete the INDICATE **use case studies** on long-term preservation, virtual exhibitions and geo-coded cultural content

2011-2014: to ingest 3 million content into **Europeana** and to develop best practice on multilingualism, persistent identifiers, linked data, PPP

2012 – 2014: to participate to JHEP support action to contribute to the **JPI** and in this context to launch the DC-NET **joint calls**



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Thank you

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