



INDICATE
International Network
for Digital Cultural
Heritage e-Infrastructure



eIRG Workshop

e-Infrastructure needs for the Arts, Culture, Humanities

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 - DC-NET
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Initiatives of European Member States in the last 10 year

A wide range of activities:

- Building a shared platform of recommendations and guidelines
- Agreement on common data models
- Experimenting and launching online services (MICHAEL, Europeana, national and thematic portals)
- Initiating a dialogue with the e-infrastructures (NREN, NGI)
- International cooperation between Europe and the other regions in the world
- Digitisation within national and regional programmes



Digital cultural content characteristics

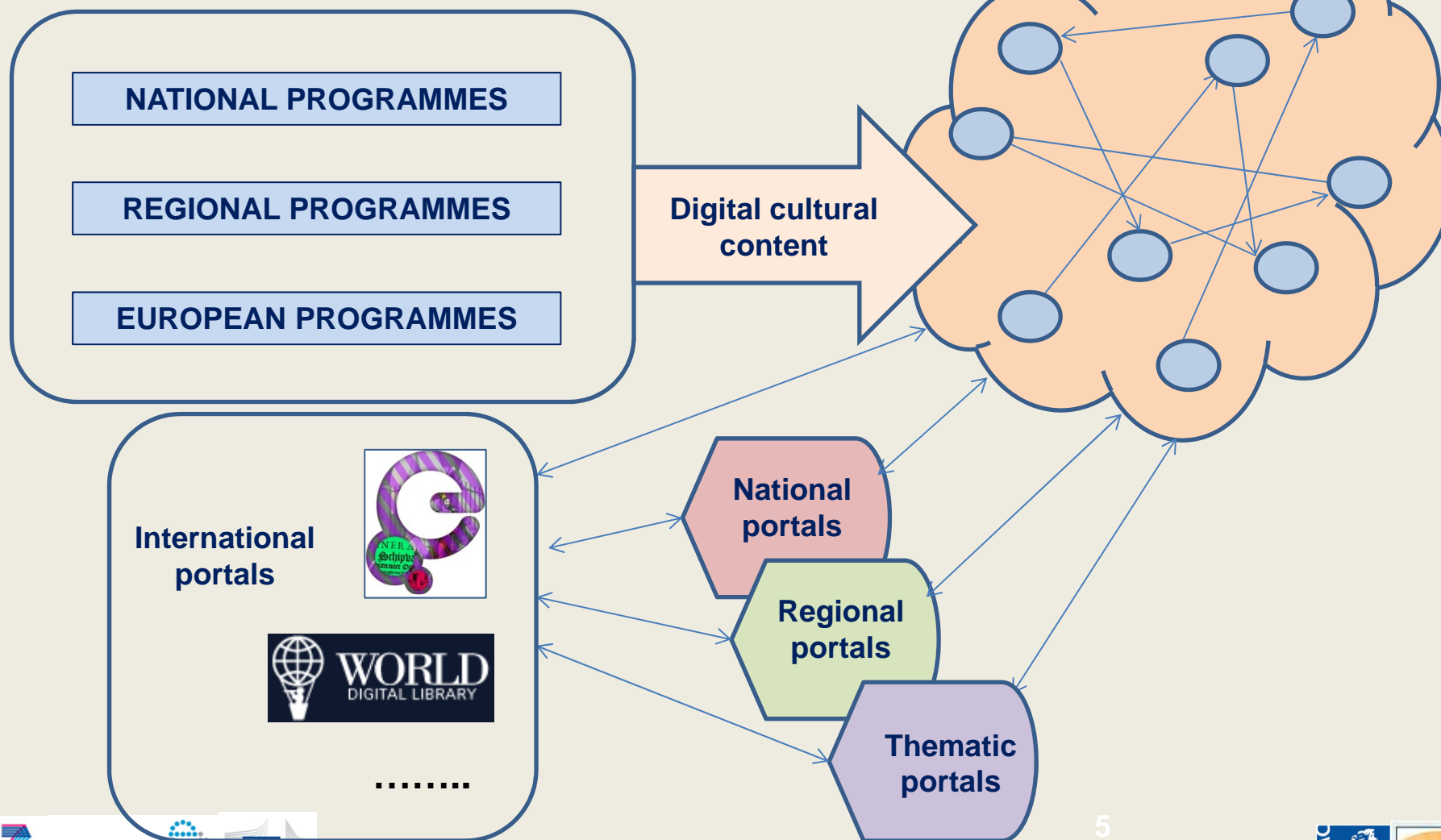
The **amount of digitised material** is growing very rapidly

- **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
- The availability of data is creating **more demand** of data by the researchers
- Digital cultural heritage content are **complex and interlinked** through many relations



Towards a DCH e-Infrastructure

Data Continuum



Copenhagen, 12/6/2012

5



The needs of the DCH sector

1. **Storage and preservation**
2. **Access facilities**

Two types of users:

Researchers who search into the DCH e-Infrastructure for their research and

Cultural institutions that deliver their data to the DCH e-Infrastructure;

3. **Interoperation** among existing cultural heritage repositories and of cultural heritage data with research data
4. **Visualisation**, as the next step

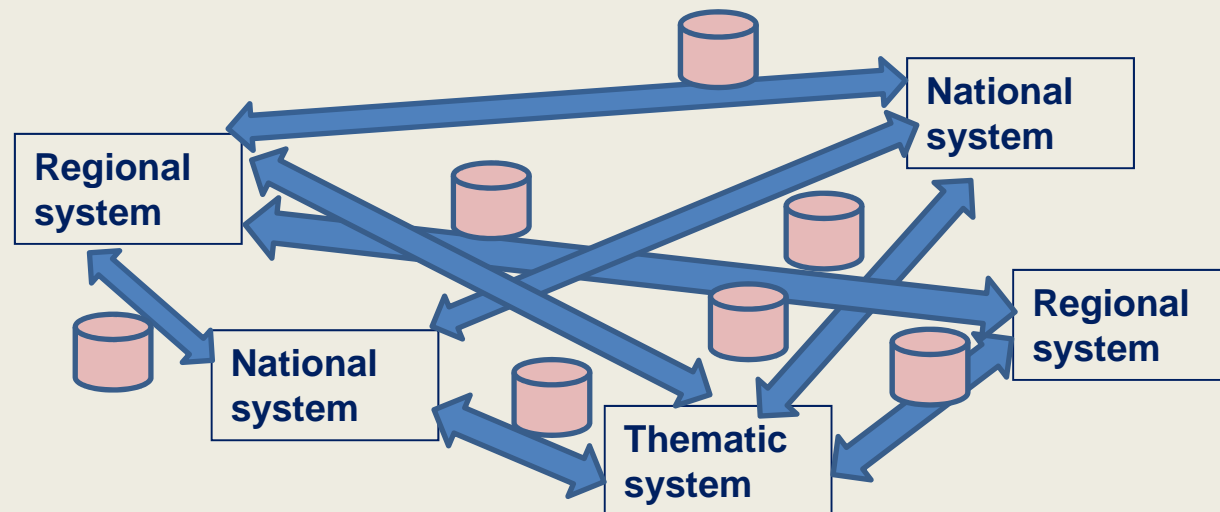


The e-infrastructure for DCH

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

- based on **national, regional, local 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 e-infrastructures 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.



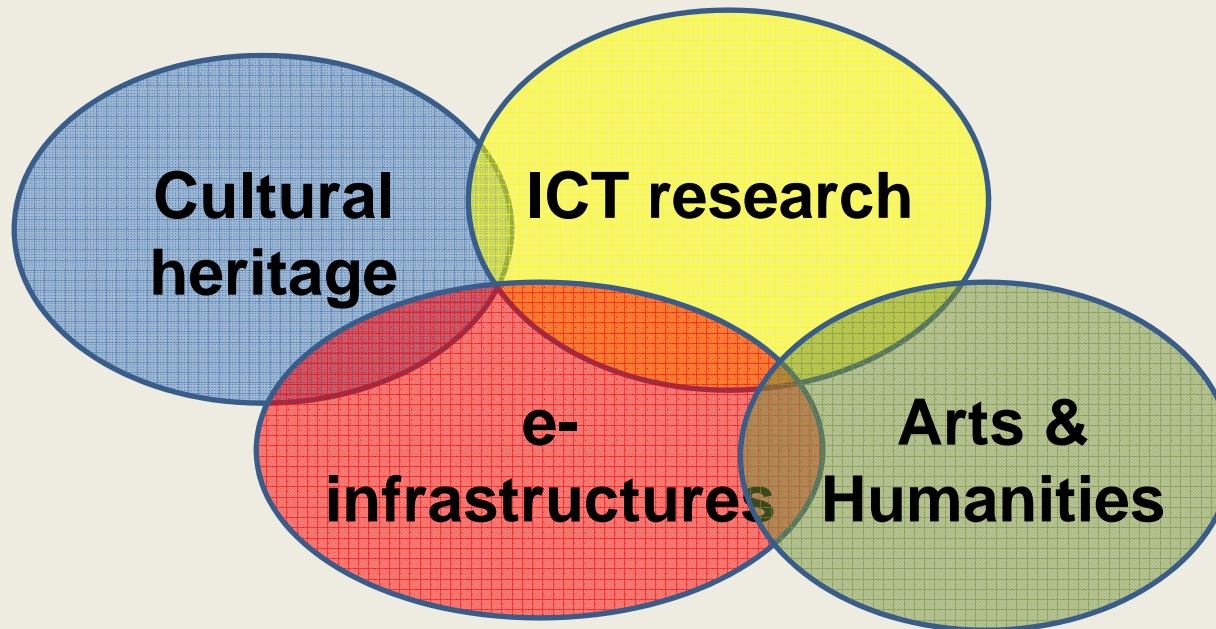
DCH and the e-Infrastructures

- To focus is 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 sectors that are not used to work together



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**



Cooperation and coordination among these sectors is at the core of an e-infrastructure for the Digital Cultural Heritage

Communication is another important element



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**



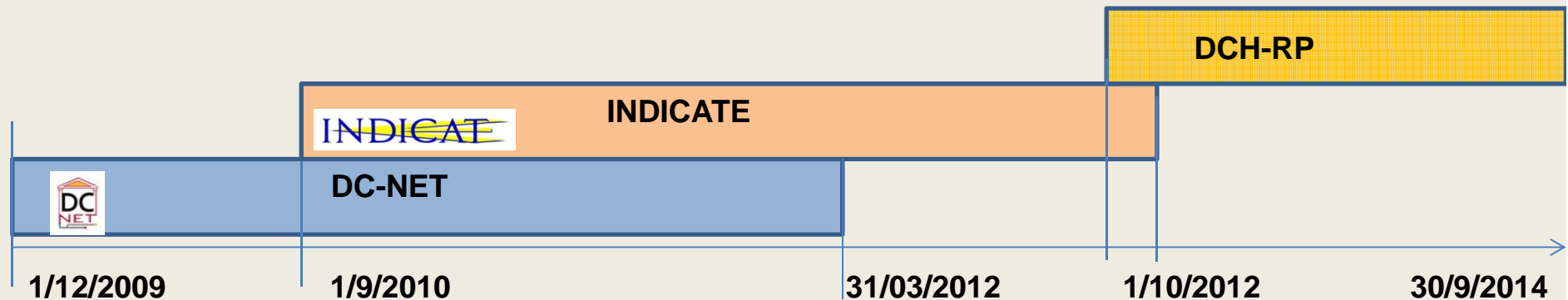
Three integrated projects

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





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- The projects target the same **DCH community**
- The e-infrastructure programmes identified in DC-NET are expected to be at the basis of the **sustainability** of the results of INDICATE and DCH-RP.



DC-NET: an ERA-NET for the digital cultural heritage

- Composed by Programme Owners and Programme Managers in the cultural sector
- To establish an operative dialogue between cultural heritage and e-Infrastructures communities in Europe,
- Two main outcomes:
 - **SERVICE PRIORITIES** and **PLAN OF JOINT ACTIVITIES**

Completed in March 2012

A project funded by EC FP7 e-Infrastructures



Services for DCH

On the basis of the typical workflow of the DCH research, services are divided into 3 categories:

1. Services for content providers, i.e. those related to the **creation of online data resources** for DCH
2. Services for **managing and adding value** to the content itself
3. Services which enable, support and enhance **virtual research** communities and the activities of content consumers



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



INDICATE: Experimenting new services for Data resource creation and Adding value to content

- Long-term preservation
- Virtual Exhibitions
- Geocoding cultural content
- Using the Grid for the DCH sector: the eCulture Science Gateway
- Deploying semantic technologies on the clouds



INDICATE: Fostering international cooperation of e-Infrastructures and cultural heritage

Target regions:

- 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

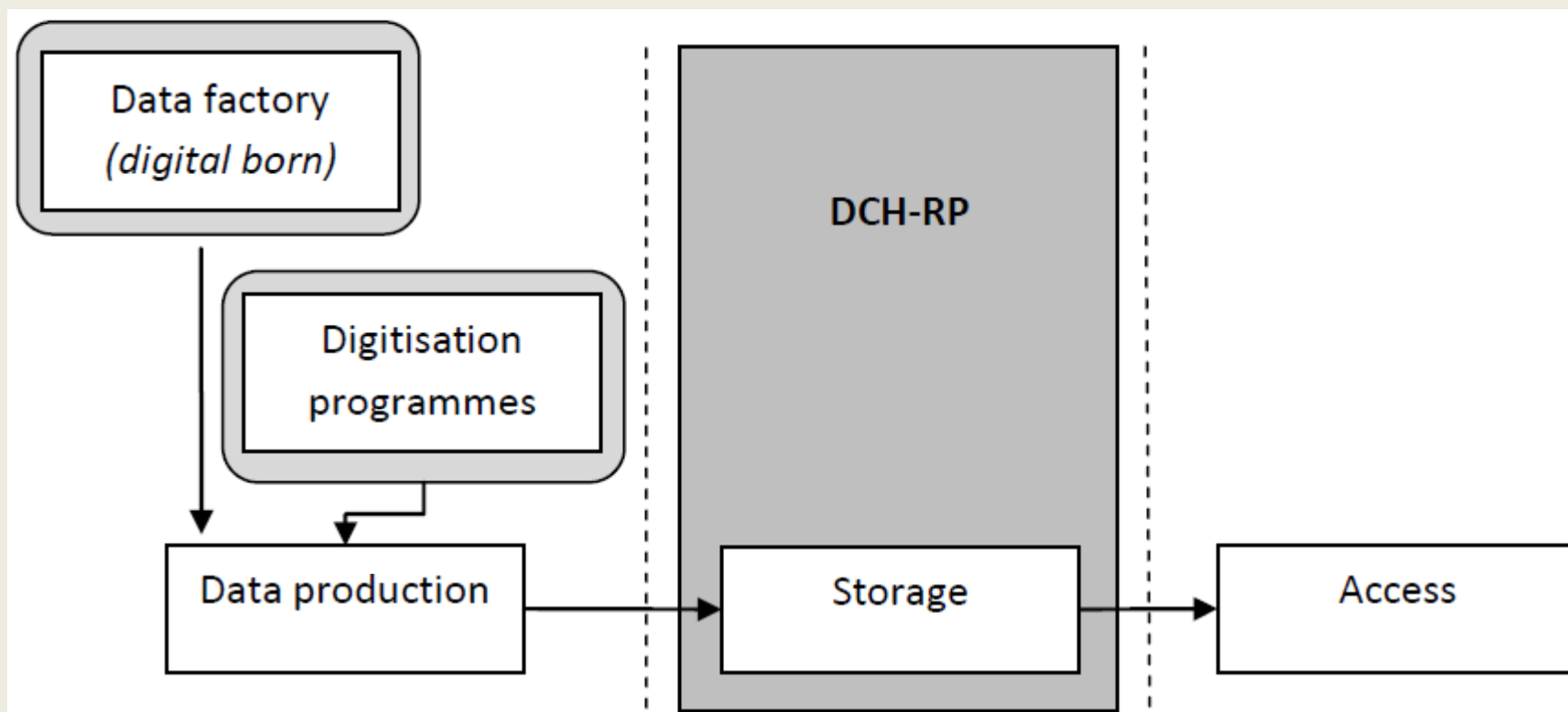
Started in September 2010, it will last until October 2012

A project funded by EC FP7 e-Infrastructures



DCH-RP: to create a validated Roadmap for the long-term preservation in DCH

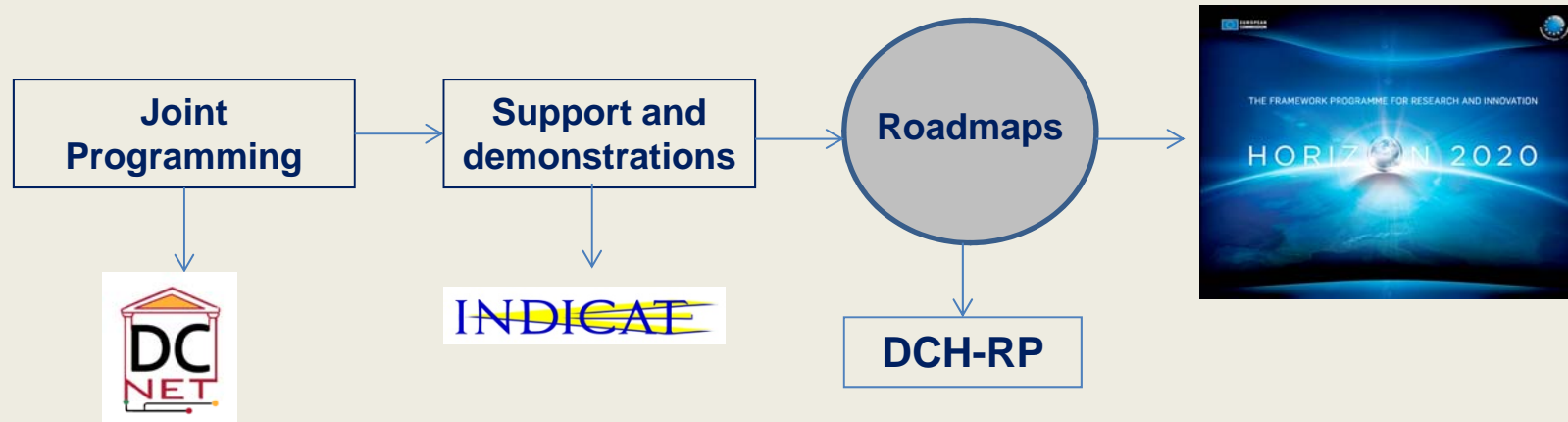
- DCH-RP refers to the digital preservation of digital representation of cultural objects (not to the preservation of physical cultural objects).
- Focus on the **storage phase**, which includes both '*long-term preservation*' (including dark archives) and '*short-term preservation*' (storage for a relatively short period of access).





The vision

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





Many Opportunities, different players

- **Digitisation and aggregation of data**

Core partners: cultural institutions

- **Infrastructure deployment**

Core partners : ICT and e-infrastructure providers together with user communities

- **New services, new products**

Core partners: the creative industry



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Thank you

www.dc-net.org

www.indicate-project.org

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