



EVA Florence

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DC-NET and LINKED HERITAGE Two approaches to e-culture



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The Background of the Digital Cultural Heritage

A long way that begun 10 years ago

Three complementary directions:

- Coordination of policies and programmes
- Recommendations and guidelines
- Implementation of innovative services

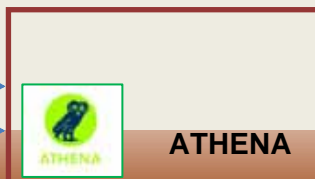


Lund Action Plan
Brussels Quality Framework
National Digitisation Programmes

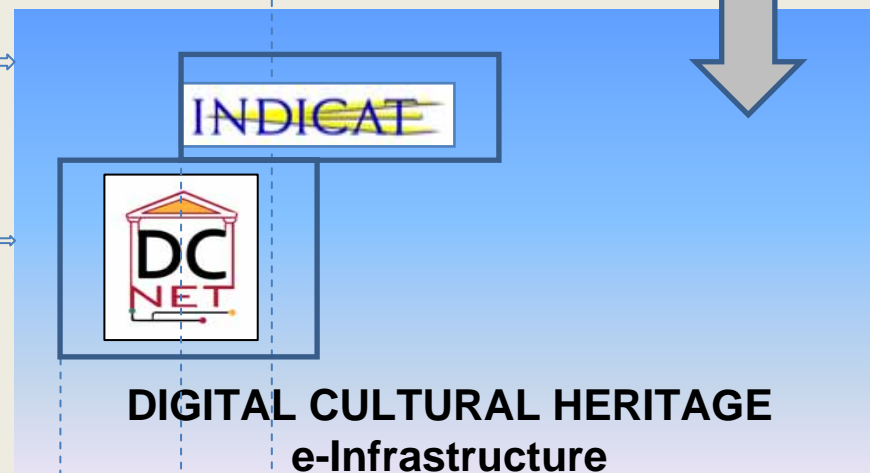


**RECOMMENDATIONS
& GUIDELINES**

**DATA MODEL,
ORGANISATION,
GOVERNANCE**



**EUROPEANA
The European Portal**



**DIGITAL CULTURAL HERITAGE
e-Infrastructure**

NATIONAL & REGIONAL INITIATIVES

2002

2005

2008

2009

2011

2014



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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 thorough many relations



What the resulting data need

1. high quality **information technology** management (to ensure trust, availability, reliability, long term safety of content, security, preservation and sustainability);
2. **access facilities** offered to the final users 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** of cultural heritage data with non-cultural heritage data and other research data.



The DC-NET ERA-NET

- DC-NET started in December 2009 as an ERA-NET among cultural EU Ministries
- A project funded by EC FP7 e-Infrastructures
- **Core objective** : to establish a common awareness of perspectives, priorities, constraints and capabilities across the digital cultural heritage (DCH) and e-Infrastructures communities in Europe



9 Ministries from 8 EU countries

- **Italy:** Ministero per i beni e le attività culturali - Istituto Centrale per il Catalogo Unico (coordinator)
- **Belgium:** Politique scientifique fédérale/Federaal Wetenschapsbeleid (BELSPO/STIS)
- **Estonia:** Eesti Vabariigi Kultuuriministeerium
- **France:** Ministère de la Culture et de la Communication – Département de la Recherche de l'enseignement supérieur et de la technologie
- **Greece:** Υπουργείο Πολιτισμού [Hellenic Ministry of Culture]
- **Hungary:** Oktatási Kulturális Minisztérium (Ministry of National Resources)
- **Slovenia:** Ministrstvo za Kulturo Slovenia
- **Sweden:** Riksarkivet (*)
- **Latvia:** Valsts Agentūra Kultūras Informācijas Sistēmās (new partner)

(*) Partner delegated by the Ministry of Culture



The Coordinator: Central Institute for the Union Catalogue of IT Libraries

2 services

1. Administrative Service
2. Service for the cultural promotion

Projects:

- Internet Culturale
- Culturalitalia
- Europeana (Italian partic.)
- World Digital Library (Italian partic.)
- European projects

6 departments

1. Standards rules for cataloguing and digitisation
2. National Library Service (SBN)
3. Bibliographic information and activities for the Registry of the Italian library
4. Digitisation and access to documents
5. Activities concerning bibliography, cataloguing and census of the ancient book
6. Census and management of the Italian bibliography of manuscripts



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DC-NET overall plan

- I. to establish a **dialogue** between the Cultural Heritage, the ICT and the e-Infrastructures (***working groups, international conferences & publications***)
- II. to explore how e-Infrastructures can **add value** to the research in the digital cultural heritage and to anticipate a range of advanced services (***focused seminars and workshops***)
- III. to develop and endorse a **Joint Activities Plan** (***commitment from the stakeholders***)

DC-NET vision

To implement a seamless data and services infrastructure for the research of the cultural heritage virtual community, which unobtrusively but reliably provides key services such as:

- preservation and backup,
- authentication and data integrity,
- collaborative research environments,
- advanced (cross-collection, multilingual and semantic) search and retrieval
- intellectual property management and authorised use of DCH content.

Sustainability of DCH e-Infrastructure

National programmes in the areas of

- Research
- Cultural heritage
- Innovation & e-government

European programmes

- Infrastructures
- ICT
- CIP

Regional programmes for digitisation and access



Programmes coordination

The pre-requisite for the sustainability of the DCH e-Infrastructure is the coordination of public programmes: national, regional and European

The programmes addressed by DC-NET belong to two families:

- **Research for the cultural heritage**
- **Creation and access to digital content**



Research for the cultural heritage: the Joint Programming Initiative for Cultural Heritage (JPICH)

"Cultural Heritage and Global Change: a new challenge for Europe"
- EC Recommendation 26/4/2010

- 17 Member States participate + 4 observers
- Chaired by Italy
- To define, develop and implement strategic research agendas

**DC-NET is endorsed by JPICH and is involved
into the new JHEP (Join Heritage European
Programme) action for the implementation of**



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IBIRU



Joint Programming Initiative Cultural Heritage

NET-HERITAGE



Tangible
Cultural Heritage

DC-NET



Digital
Cultural Heritage



Creation & access to digital content: from NRG to MSEG

NRG - National Representatives Group

MSEG - Member States Experts Group

Coordination of national Representatives from EU to define priorities and initiate action plans

–from 2002 until 2007: the National Representatives Group

–from 2007: the Member States Expert Group



Positioning of DC-NET Community

- All the partners of DC-NET participate in **MSEG**
- MCC is President of MICHAEL AISBL, sits in the **Executive Board of Europeana Foundation** and in the **Governing Board of JPICH**
- ICCU sits in the **Advisory Board of DARIAH**
- BELSPO sits in the **Board of ESFRI**
- Director of ICCU, project manager of DC-NET, sits in the **Scientific Board of JPICH**
- The Director of ICCU and Technical Coordinator of DC-NET participate to **JHEP**, the coordination action for the implementation of JPICH.

Liaisons with European strategic bodies

DC-NET has established factual cooperation:

- regular participation to the **e-IRG** workshops (Madrid, Brussels, Budapest)
- presentation at the **ESFRI SSH** thematic working group meeting (Brussels, 18/1/2011)
- Participation to this **EGI** User Forum in Vilnius
- e-Culture workshop at the **TERENA** Conference in Prague
- Participation to the **ASPIRE** event in Berlin



Impacts

- Impact on the **e-Infrastructures**
 - The adoption of the e-Infrastructures by the digital cultural heritage community will open new scenarios of use and exploitation
- Impact on the **cultural heritage**
 - Cultural managers will become more aware about the potential that the e-infrastructures can offer to their work: storage, preservation, services for the cultural institutions, etc.
- Impact on **European research**
 - A better integration of the cultural sector with the e-Infrastructures will enable the research of new advanced services and applications
- Impact on the **general public**
 - Digital cultural content will become more usable and re-usable for education, cultural tourism, long-life learning, non-professional cultural interests, etc.



Result at the time

DCH managed to achieve the following results:

- it is well positioned in the **political scenario**
- it has established **liaisons and cooperation** with the e-Infrastructure providers
- it has progressed from the **technical point of view**
- It has developed its **vision** and obtained **audience** among stakeholders

Services

Services for content providers and data resource creation	Services for Managing and Adding value to the content
Networking	Geo-referencing
Training	Annotation
Technical	Linked data generation

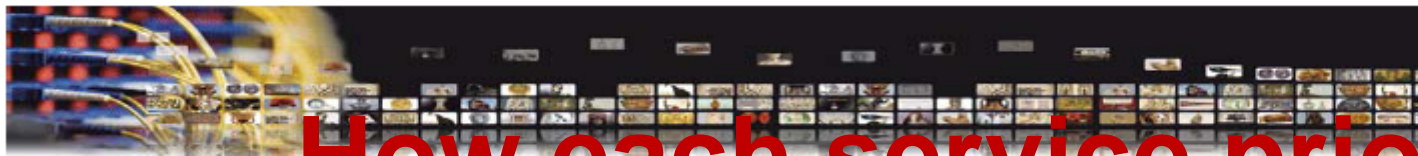
Services for content consumers

User Authentication and access control

Collaborative environments

Advances search

Visualisation



How each service priority is addressed by the e-infrastructures facilities

Priority	Fast networks	Processor Power	Data Storage	Authentication & Security
Interoperability	x	X	X	
Aggregation	x	X	X	
Storage & Preservation	X		X	X
Advanced Search supports	x	x	x	
Persistent identifiers	X		X	X
Data resource setup services	X		X	
Stable platforms		X	X	
Scalability			X	
Geo-referencing	X		X	
3D visualisation & manipulation	X	X	X	
User Authentication & Access Control	X	X		X
Cooperative Environments	X		X	X
Conferencing	X			X
Annotation & Discussion			X	X
IPR & Digital Rights Management				X



Future actions

The Digital Cultural Heritage is a growing Community committed toward the implementation of a stable infrastructure

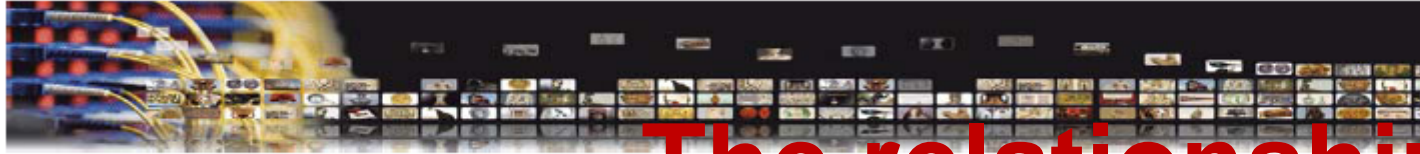
- Technical validation
- Training and information seminars
- The Joint Activities Plan
- Piloting and use cases (the INDICATE project www.indicate-project.eu)
- The DC-NET Conferences



The relationship with Europeana

Structural difference and Cooperation

The targets:	Europeana is a portal for final users	DC-NET works towards an infrastructure for the research
The initiators:	Europeana is an initiative of the EC supported by Member States	DC-NET is an initiative of the Member States supported by EC
The access to data:	Europeana offers flat access to the object level only	The concept of the collection level is very relevant for DC-NET; it is scientifically central for the cultural heritage research, since it provides contextualisation and thematic aggregation of the objects



The relationship with Europeana

Structural difference and Cooperation

DC-NET will offer tools and functionalities to Europeana, such as, for example the preservation (indicated as a priority in the New Renaissance Report, Comité des Sages)

Common work between Europeana and DC-DI on metadata

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



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Linked Heritage

Best Practice Network

Started on 1/4/2011

- To contribute large quantities of new content to Europeana – **cross domain**
- To prepare for the enhancement of the quality of both new and existing Europeana content
- To demonstrate improved search, retrieval and use of Europeana content
- In Linked Heritage, for the first time, the **public sector** participate together with the **private sector** to provide content to Europeana

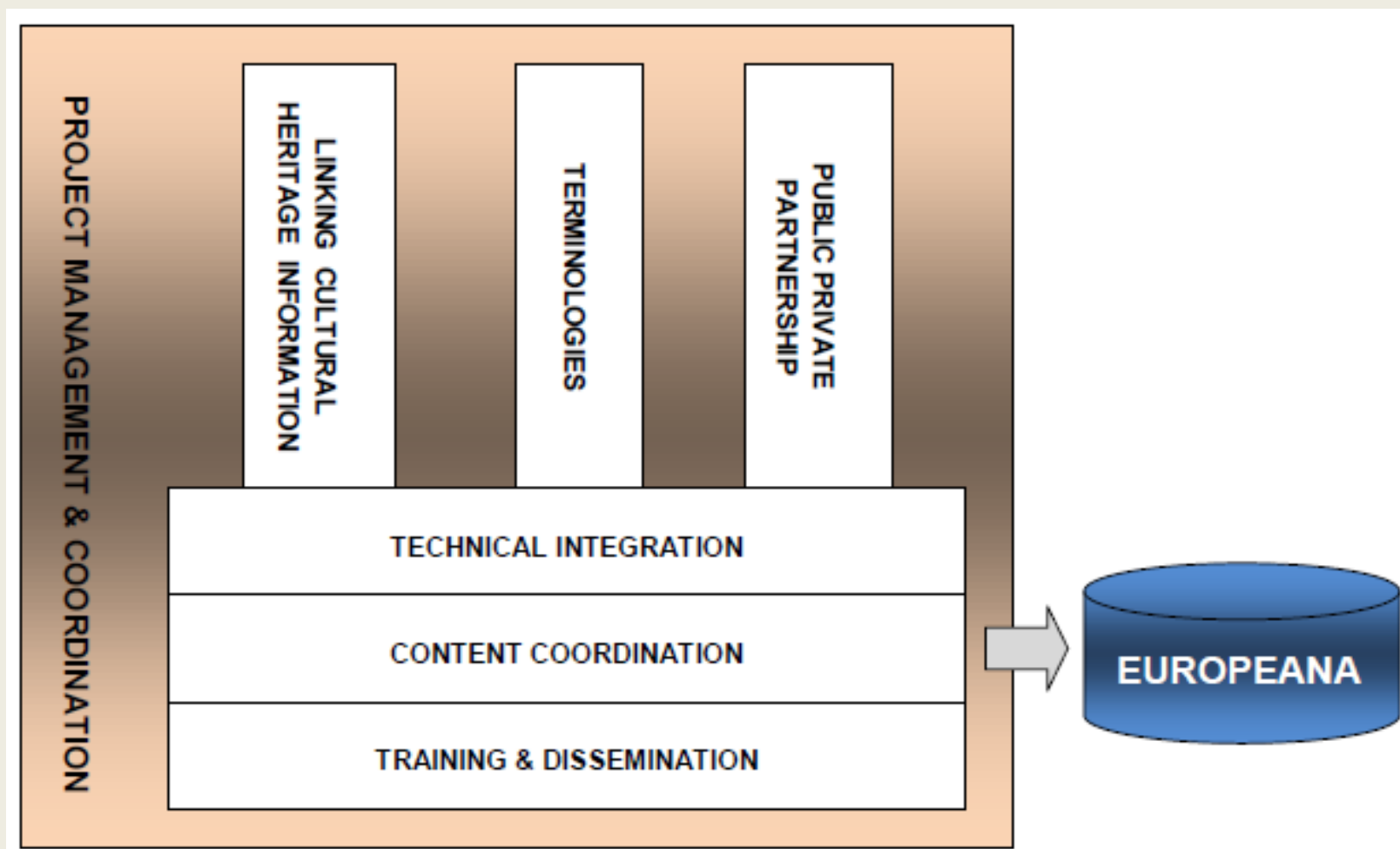


Main objectives

1. First and most important focus: to provide 3 million new content to Europeana
2. Five key areas of development and innovation:
 - a) The use of linked data
 - b) Persistent identifiers
 - c) Metadata and standards (particularly for non-library sources)
 - d) Multilingual and cross-domain combination of terminologies
 - e) Engagement with the private sector (ONIX mapping)



Project structure





IPR

The new content to be contributed to Europeana by Linked Heritage has one of the following classes of IPR status:

- the **public sector** material, contributed by libraries, museums, archives, etc. is either
 - in the public domain or
 - covered by a license (e.g. creative commons) which allows its re-use (with or without attribution, derivate works, etc.)
- the **private sector** material, contributed by publishers and their representatives, is protected by copyright.



IPR: the private sector

- Part of the work of the Public Private Partnership work-package will focus on identifying and agreeing the most appropriate IPR model for this content.
- It is anticipated that the outcome of this work will be a model which possibly allows the private-sector metadata to be displayed by Europeana.



Contribution of Linked Heritage to future challenges of Europeana

Priorities of Europeana for the near future:

- to aggregate a critical mass of content
- to engage with a critical mass of users
- to improve quality and accessibility of content
(multilingualism first of all)

Linked Heritage will contribute to these priorities



The Europeana strategic plan 2011-2015

The Europeana Strategic Plan 2011 – 2015 sets out a clear vision for the further development of Europeana.

It focuses on four **strategic tracks**:

- Aggregate
- Facilitate
- Distribute
- Engage

These tracks correspond to the approach of Linked Heritage

A comprehensive and integrated approach

Linked Heritage →
to contribute to Europeana

DC-NET →
to study the new e-Infrastructure

INDICATE →
use cases and pilots

JPI-CH →
to coordinate programmes

+ national, regional and European digitisation initiatives



See you in Budapest

Under the aegis of the Hungarian Presidency of the European Union

22 June 2011 – Linked Heritage conference

23-24 June 2011 – Second DC-NET Conference

Further information online at:

www.linkedheritage.eu

www.dc-net.org



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Thank you

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