

# PROJECT PERIODIC REPORT

**Grant Agreement number:** 261324

**Project acronym:** INDICATE

**Project title:** International Network for a Digital Cultural Heritage e-Infrastructure

**Funding Scheme:** Coordination and support action

**Date of latest version of Annex I against which the assessment will be made:** 2012-07-06

**Periodic report:**                    1<sup>st</sup>     2<sup>nd</sup>     3<sup>rd</sup>     4<sup>th</sup>

**Period covered:**                    from                    1/9/2011                    to 31/10/2012

**Name, title and organisation of the scientific representative of the project's coordinator:**

Antonella Fresa, INDICATE Technical Coordinator

Istituto Centrale per il Catalogo Unico (ICCU)

Tel: +39 338 1006059

Fax: +39 06 4959302

E-mail: antonella.fresa@beniculturali.it

**Project website address:** [www.indicate-project.eu](http://www.indicate-project.eu)

<b>Periodic Publishable Summary</b>
-------------------------------------

## TABLE OF CONTENT

1	Summary description of project context and objectives .....	3
2	Description of the work performed since the beginning of the project and the main results achieved .	5
2.1	Work performed during the whole project .....	5
2.2	Final results and their potential impact and use.....	7
2.3	Address of the project public website.....	8
3	Diagrams and photographs .....	10
	Contact details of the partners.....	19

## **1 Summary description of project context and objectives**

INDICATE is a project whose main objectives are from one side the coordination of cultural heritage research opportunities opened by e-Infrastructures in countries all around the Mediterranean and from the other side the development of consistent policies and best practices governing such research.

The use of e-Infrastructures by researchers in Arts, Humanities and Social Sciences (AHSS) is still a relatively new phenomenon. Traditional users of grid computing and national research and education networks have been scientists and information technologists. However, e-Infrastructures enable exciting and valuable new research in AHSS, and in cultural heritage in particular. The coordination of digital cultural heritage initiatives in Europe has a distinguished history, with long term commitment by national bodies and memory institutions over the last decade. However, to date there has been little coordination of new e-Infrastructures-enabled cultural heritage research.

New regional, national and EU initiatives continue to emerge, but there is no facility for such projects to easily take advantage of the experience of other e-Infrastructures-enabled projects. There is a lack of coordination structures for sharing best practice and experience, and there is as yet a shortage of usable guidelines and best practice documentation.

INDICATE project aims to establish and nurture a network of common interest made up of experts and researchers in all the relevant fields, whose sustainability will be planned on a long term beyond the project duration. The network shares experience, promotes standards and guidelines, seeks harmonisation of best practice and policy and acts as a conduit for knowledge transfer from countries with more experience of e-Infrastructures-enabled e-culture to those who are just beginning to investigate this area.

The project is rooted in the reality of research pilots and case studies which act as exemplars and demonstrators of the issues and the processes which are relevant to establishing cultural initiatives on the e-Infrastructures platform. The results inform a wide-reaching dissemination work-package, including two major public best practice deliverables, one international conference, three technical workshops and one policy workshop.

More in details the main objectives of the project are:

1. To establish a long-term network of common interest, involving experts in AHSS, cultural heritage and e-Infrastructures, from all the partner countries. Within this network to:
  - a. Establish working groups dedicated to specific aspects of e-Infrastructures-enabled cultural heritage which are relevant across national and organisational boundaries, such as common standards and guidelines;

- b. Hold conferences, workshops and seminars on the convergence of e-Infrastructures and AHSS, with a special focus on cultural heritage;
  - c. Establish online tools and resources for the working groups, which act both to facilitate the working groups and to enable wider access to the expertise within the groups.
2. To propose a model for the identity management that can provide solutions to the issue of the protection of IPR in the cultural heritage sector.
3. To design and develop two pilot applications to demonstrate in practical terms the potential that e-Infrastructures hold for cultural heritage research.
4. To analyse three case studies of new services and facilities which can be delivered with e-Infrastructures, without which they could not otherwise be envisaged: virtual exhibitions of cultural content, preservation of digital cultural content and processing and management of geo-coded digital content.
5. To share the ideas on how to set up a set of common e-Infrastructures international access policies, endorsed by all partners and aligned with the recommendations issued by the e-IRG.

## **2 Description of the work performed since the beginning of the project and the main results achieved**

### ***2.1 Work performed during the whole project***

The work progress and achievements are described here with respect to the general objectives listed in the previous section.

A network of common interest dedicated to policy and best practice in the complementary domains of e-Infrastructures and e-Culture has been established through the set up of a number of Working Group in each country dedicated to key aspects of the project. It was decided to organise the WGs around the research cases of WP5: virtual exhibitions of cultural content, preservation of digital cultural content and processing and management of geo-coded digital content. A National Referee was nominated for each WG, who is the person in charge of animating the group and of reporting its activity to the WP leader. The terms of reference for the working groups have been draw up and described in Deliverable D2.1. Furthermore, methods and procedures have been agreed to attract to the project new participants who expressed the interest and the desire to get involved and a number of workshops have been organised to stimulate discussion and collaboration. Reserved areas on the project website and dedicated mailing lists has been created to support the work of the working groups. The results of the work carried out by the national Working Groups and Groups of Interest have been collected and analysed in Deliverable D2.2.

INDICATE has established factual cooperation frameworks with many European projects around the topics of interest for the project. Cooperation Agreements and Memorandum of Understandings have been signed with: Museo Nacional Centro De Arte Reina Sofia (Madrid, Spain), CHAIN Project, DC-NET project, EPICK project, Linked Heritage Project and EUMEDGRID Project.

The e-Cultural Science Gateway (eCSG) which gives access to the pilots have been developed and linked to the project website. It provides users with an easy-to-use web interface and a single sign-on authentication mechanism, supporting Identity Federations. The INDICATE eCSG has been interfaced also with the CARSI (CERNET Authentication and Resource Sharing Infrastructure, <http://carsi.edu.cn>) Identity Federation established in China. A new section on Identity federation has been added to the eCSG to explain what they are and to demonstrate how it can work in the context of the eCulture Science Gateway.

Two pilot applications on E-Infrastructure-enabled semantic search for cultural repositories and on E-Infrastructure-enabled e-Collaborative Digital Archive protected by access control and rights management have been designed and set up. The De Roberto Digital Repository (De Roberto DR) and the Digital Repository of the Architectural and Archaeological Heritage in the Mediterranean Area (MED Repo) e-

---

culture applications have been ported and integrated. Thanks to the collaboration with the EPIKH project, regulated by a Memorandum of Understanding, a third e-collaborative repository has been integrated: the Digital Repository of China Relics (China Relics DR).

The analysis of three detailed case studies has been performed to examine how the facilities and resources offered by e-Infrastructures can be used to address long-standing R&D issues in the cultural heritage domain: one on virtual exhibitions of cultural content, one on preservation of digital cultural content and one on processing and management of geo-coded digital content. ICT requirements have been collected and e-Infrastructure capabilities have been identified. A set of guidelines for the realisation of virtual exhibitions have been produced by the Italian Working Group. A survey on Virtual Exhibitions has been prepared and circulated. The results of the work on virtual exhibition have been reported in Deliverable D5.2. A survey on digital preservation have been developed too - in collaboration with the DC-NET project - and the results of this questionnaire have been integrated in the D5.1 deliverable, which summarises the outcomes of the work carried out in this case study. The questionnaire includes also some “quick questions about preservation”, i.e. a set of simple questions, targeted to the small institutions and rapid to be replied, to understand what they are doing in terms of digitization and preservation (and if they are planning any preservation activity). Finally Deliverable D5.3 contains the results of the work carried out by the GIS case study. A technical Workshop on long term Digital Preservation has been organised in Ankara (Turkey) on 7<sup>th</sup> of July 2011, a second one on Virtual Exhibitions has been held in Amman (Jordan) 11<sup>th</sup> of December 2011 and a third one on GIS in Ljubljana on 7<sup>th</sup> of February 2012. The proceedings of these workshops have been prepared and published on the INDICATE website.

A working group focusing specifically on policy development has been established, in which experts from countries with different experiences work together to share the thinking behind their policies and to adapt them for re-use in different national contexts. The aim of such working groups was to develop “portable policies” which make sense and add value in different countries. A questionnaire on the state-of-the-art of national strategies and policies concerning the DCH with regards on the access of cultural heritage sector to the e-infrastructures has been prepared and circulated. A dedicated workshop on strategy and future plans has been held in Paris on 7<sup>th</sup> of June 2012. One of the main results of this work is the preparation and signature by all partners of the Paris Declaration, a document which details the future priorities and commitments of the network beyond the lifetime of INDICATE in the field of Digital Cultural Heritage.

The project website has been published and kept constantly updated; it is documented in deliverable D3.1 and accessible online at [www.indicate-project.org](http://www.indicate-project.org) and [www.indicate-project.eu](http://www.indicate-project.eu). A wide range of dissemination activities were carried out by the partners to maximise the impact of the project’s work through a programme of public events, publications and engagement with the key target audiences. Two international conferences have been organized in Catania (on 20<sup>th</sup> of April 2012) and in Ankara (on 15<sup>th</sup>-16<sup>th</sup> of October 2012) to present the achievements of the project and to pose the basis for future possible cooperations. Two publications have been produced: a handbook on virtual exhibitions and virtual

---

performances and a best practice handbook for applying research pilots and use case studies to digital cultural heritage. The Technical Coordinator participated regularly to the concertation meeting organised by the EC, to the Research Infrastructure conferences and to the e-IRG workshops. A set of dissemination materials have been produced and are available in the project website. INDICATE has been presented by the partners in the occasion of many national and international events.

## ***2.2 Final results and their potential impact and use***

INDICATE is focused on the development of new research communities, new policies and new relationships that add value to existing e-Infrastructures by:

- Promoting common approaches to the support of AHSS projects by e-Infrastructures;
- Stimulating the international cooperation of networks of e-Infrastructures providers and application-level users in the arts, humanities, social sciences and culture domains.

The major impact of INDICATE is on international cooperation, harmonised policies, facilitated research collaboration at both application-to-application and application-to- infrastructure levels, improved effectiveness and efficiency of e-Infrastructures-enabled eculture projects and thus better services to the end user.

INDICATE has an impact across three policy axes:

- Among digital cultural heritage organisations, to raise awareness of the potential for new services built on e- Infrastructures and leading to new policies which stimulate international cultural collaboration on top of international e-Infrastructures;
- Between cultural heritage organisations and e-Infrastructures providers, leading to new policies which govern the relationships between e-Infrastructures and cultural heritage;
- Between countries in the EU and those beyond it (specifically in the Mediterranean countries), regarding harmonised e-Infrastructures for digital cultura heritatge, both internally and across national and EU boundaries.

The policy results have been widely disseminated, particularly to governments and agencies responsible for e-Infrastructures, to e-Infrastructures bodies themselves, and to international strategic bodies such as e-IRG and ESFRI. The participation of Ministerial partners (ICCU, MCC, CULTNAT, DA, MCT) from Mediterranean countries (both EU and non-EU) represented an important mean to reach the highest political level in the cultural heritage field, as well as to involve the widest number of cultural institutions in the dissemination and awareness actions organised by the project. INDICATE led to the formulation of harmonised policies for e-Infrastructures-enabled cultural projects. It's extra- European scope means that

---

the policies are not formulated specifically for an EU audience, but are indeed focused on sharing the benefits of intra-EU research with a wider audience, thus fostering a culture of cooperation between EU stakeholders and those in third countries (e.g. Egypt, Jordan and Turkey).

One of the major results of the project is the Paris Declaration. This document is a shared vision of the INDICATE network of interest for the progress of Digital Cultural Heritage in future years. It was conceived during the “Strategy and future plans workshop” which took place in Paris the 7th June 2012, and amended during the final INDICATE Conference which took place in Ankara the 15th-16th October 2012. It details the future priorities and commitments of the network beyond the lifetime of INDICATE. The shared vision of the INDICATE network is that in ten years’ time, access and use of digital cultural heritage will be available to all and that collaboration with the e-Infrastructures community will facilitate realisation of this vision.

Over the course of the INDICATE project, current best practices have been identified through pilots and use case studies, and disseminated to the larger DCH community. However, the work of INDICATE will continue beyond the project lifetime as outlined in the Paris Declaration. The INDICATE network of common interest has identified a number of key areas for future dialogue and strategic development in the area of access and use of digital cultural heritage through collaborations with the e-Infrastructures community, and has declared its commitment to pursue further progress in a number of key areas through dialogue and collaboration between cultural heritage, ICT and e-Infrastructures stakeholders.

### ***2.3 Address of the project public website***

The address of the project public website is [www.indicate-project.org](http://www.indicate-project.org) (also accessible through [www.indicate-project.eu](http://www.indicate-project.eu)).

The screenshot displays the INDICATE website interface. At the top, there is a navigation bar with a search function and language options (English, Italian, Español, Català, Türkçe, العربية, Français, Slovenščina). The main banner features a collage of cultural heritage items including a bust, a clock, and an open book. A left-hand navigation menu lists various site sections. The main content area is divided into several sections:

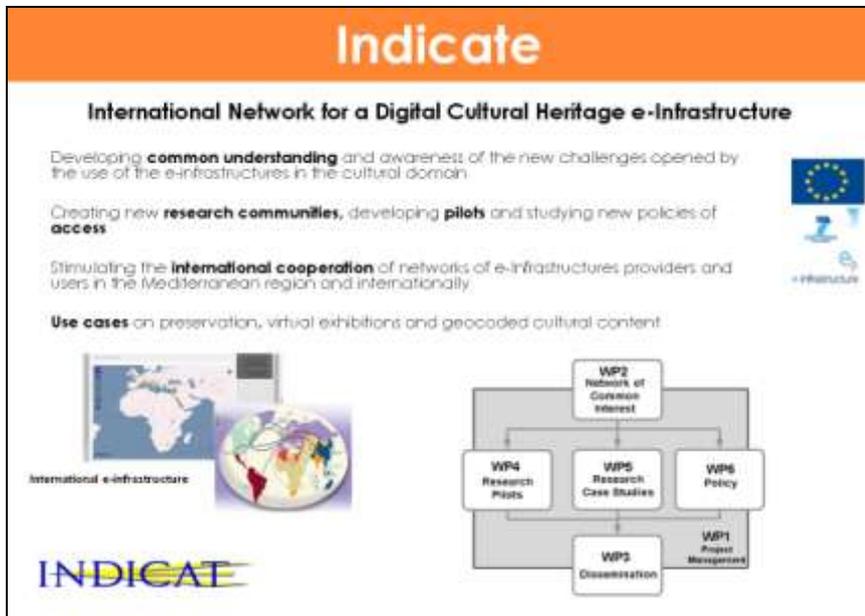
- About:** A brief description of the INDICATE project as an EU FP7 initiative.
- INDICATE FINAL CONFERENCE:** A section detailing the conference held in Ankara, Turkey, in October 2012, which concluded the project's activities and presented its results.
- PARIS DECLARATION: SIGN IT:** A call to action for the Paris Declaration, a shared vision for the future of Digital Cultural Heritage.
- INDICATE PUBLICATIONS:** A section for a handbook on virtual exhibitions and performances, version 1.0 (August 2012).

On the right side, a 'PARTNERS' section lists various collaborating organizations, including ICCU, the European Commission, and the Consortium GARR. Logos for the European Commission and the project's partners are also visible at the bottom of the page.





Poster



**Indicate**

**International Network for a Digital Cultural Heritage e-Infrastructure**

Developing **common understanding** and awareness of the new challenges opened by the use of the e-infrastructures in the cultural domain

Creating new **research communities**, developing **pilots** and studying new policies of **access**

Stimulating the **international cooperation** of networks of e-infrastructures providers and users in the Mediterranean region and internationally

**Use cases:** on preservation, virtual exhibitions and geocoded cultural content

International e-infrastructure



WP2 Network of Common Interest

WP4 Research Pilots

WP5 Research Case Studies

WP6 Policy

WP3 Dissemination

WP1 Project Management

INDICATE

Leaflet

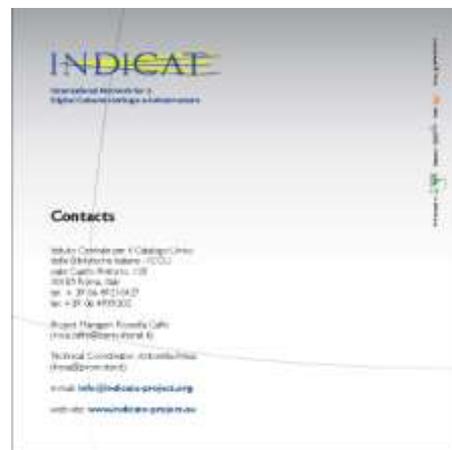


**INDICATE**

International Network for a Digital Cultural Heritage e-Infrastructure

Cultural Heritage & Research without limits

Best practices and use cases about digital preservation, virtual exhibitions, geocoded cultural content, access, user-centred, international all around the Mediterranean region and internationally



**INDICATE**

International Network for a Digital Cultural Heritage e-Infrastructure

**Contacts**

Walter Condoleo (Coordinator)  
Indicate@indicate-project.eu  
Indicate@indicate-project.eu  
Indicate@indicate-project.eu  
Indicate@indicate-project.eu  
Indicate@indicate-project.eu

Roger Hargrave (Project Officer)  
Indicate@indicate-project.eu

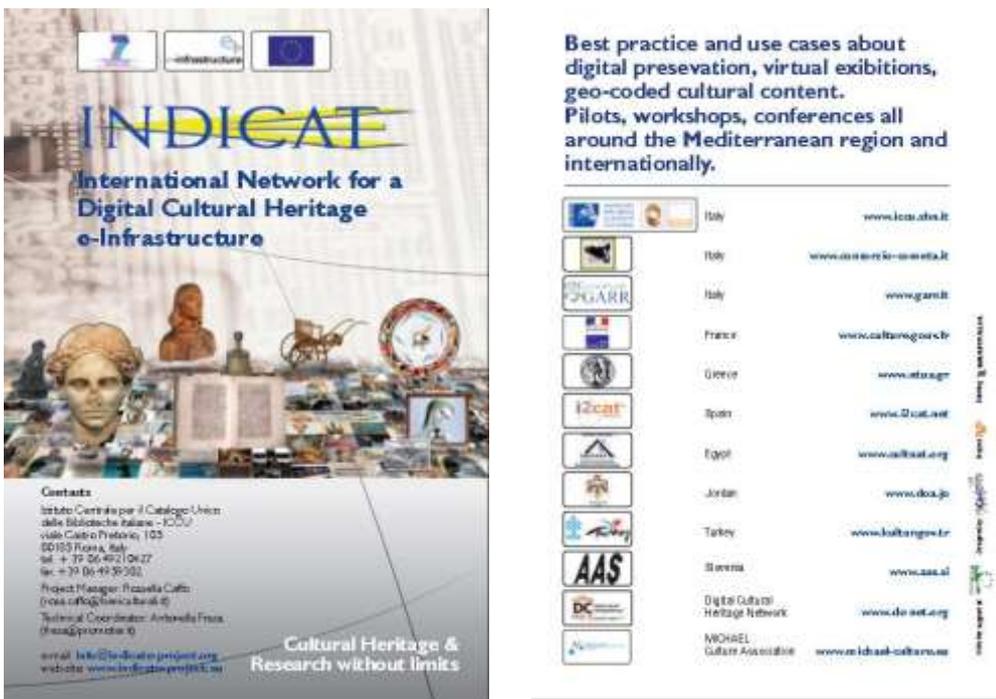
National Coordinator: Indicate@indicate-project.eu

email: [info@indicate-project.eu](mailto:info@indicate-project.eu)

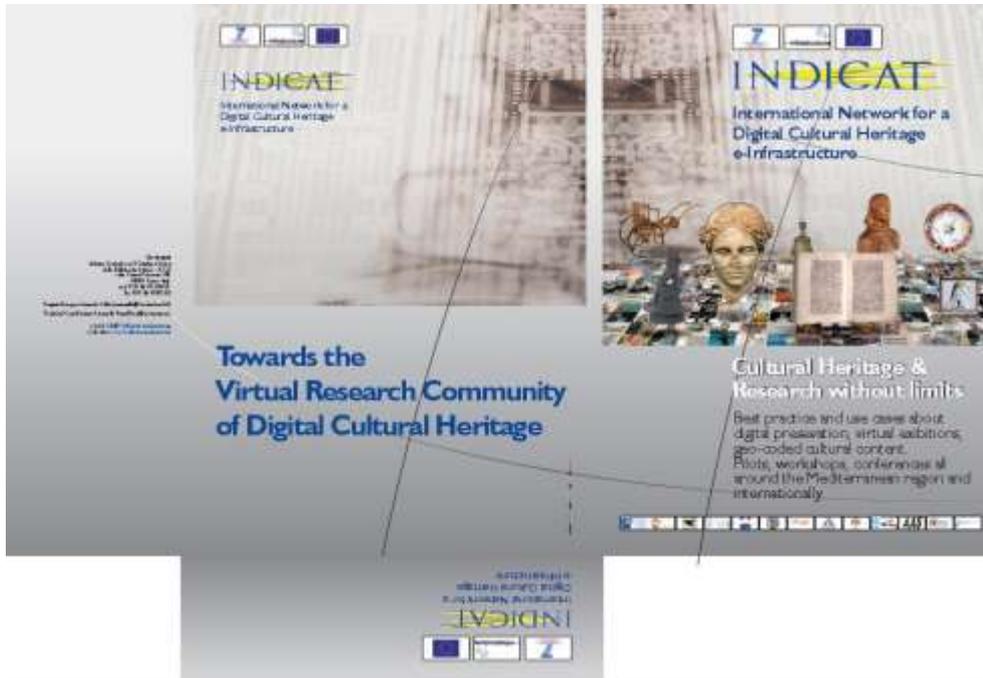
website: [www.indicate-project.eu](http://www.indicate-project.eu)



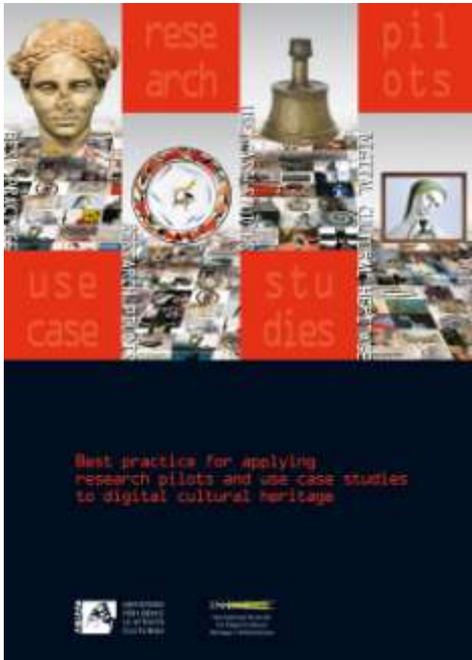
Postcard



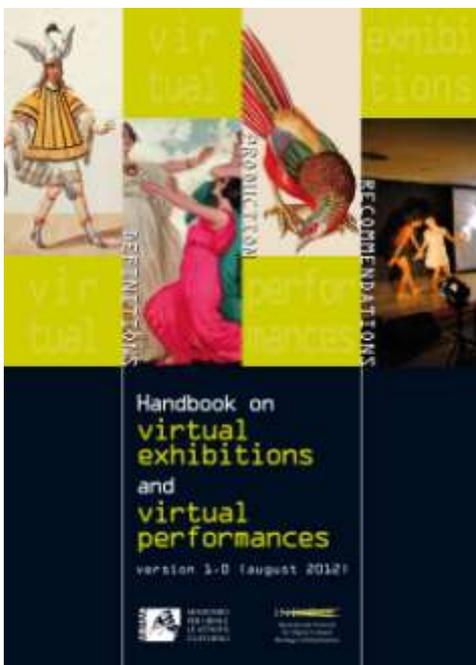
Folder



**Handbook: Best practice for applying research pilots and use case studies to digital cultural heritage**

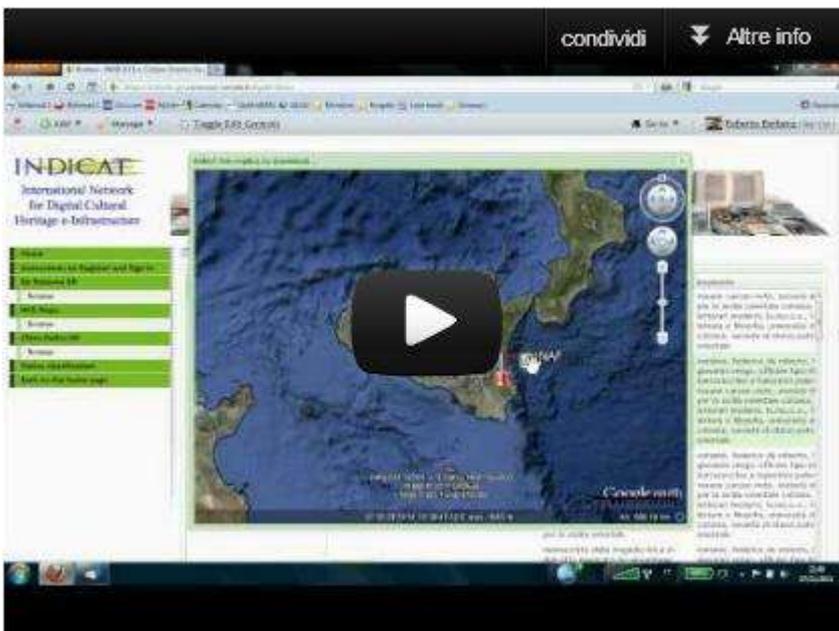


### Handbook on virtual exhibitions and virtual performances



## Videos

The INDICATE e-Culture Science Gateway: <http://www.youtube.com/watch?v=97DcfC6ZYA8>



The Social Networks' Bridge Identity Provider: <http://www.youtube.com/watch?v=w6wfuGUwVVU>



### Digital Meets Culture Portal Showcase



## Contact details of the partners

INDICATE is coordinated by Istituto Centrale per il Catalogo Unico delle biblioteche italiane e per le informazioni bibliografiche (ICCU).

The project gathers 10 partners from 8 countries.

### Egypt

- Center for documentation of cultural and natural heritage (<http://www.culnat.org/>)

### France

- Ministère de la culture et de la communication (<http://www.culture.gouv.fr/>)

### Greece

- National Technical University Of Athens (<http://www.ntua.gr/>)

### Italy

- Istituto Centrale per il Catalogo Unico delle biblioteche italiane e per le informazioni bibliografiche (<http://www.iccu.sbn.it/>)
- Consortium GARR (<http://www.garr.it/>)
- COMETA - Consorzio multi ente per la promozione e l'adozione di tecnologie di calcolo avanzato (<http://www.consorzio-cometa.it/>)

### Jordan

- Department of Antiquities (<http://www.doa.jo/doa1.htm>)

### Spain

- Fundacio privada I2CAT, internet i innovacio digital a Catalunya (<http://www.i2cat.net/en>)

### Slovenia

- Avtorska Agencija za Slovenijo Doo (<http://www.aas.si/>)

### Turkey

- Türkiye Cumhuriyeti Kültür ve Turizm Bakanlığı (<http://www.kultur.gov.tr/>)
-