



ICC
Institut Cartogràfic
de Catalunya



LIGUE DES BIBLIOTHÈQUES EUROPÉENNES DE RECHERCHE
ASSOCIATION OF EUROPEAN RESEARCH LIBRARIES

Metadata and heritage dissemination: opportunities and challenges. Participating in Europeana

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18a Conferència del LIBER Groupe des Cartothécaires | Maps Expert Group
Barcelona, 17-18 Abril 2012

Biblioteca de Catalunya

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Opening times
Contact details
Ask a librarian
Online Shop
Adopt a book
Donation to the BC

Archive Art Associations and foundations archives

Diary 1 2 Activities

General information

- ✓ Founded in 1907
- ✓ Collection of more than 3.000.000 documents
- ✓ Annual growing of around 115.000 documents
- ✓ 229 reading places in 3.060 m²
- ✓ Budget 2012: 8,2 M€
- ✓ 168 employees
- ✓ + 65 km of shelving
- ✓ Since 2008 → high density cooperative stack

padicat
Google books
,CANTIC,
CCPBC
RACO

Legal notice

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The Biblioteca de Catalunya is the Catalan national library. Its mission is to gather, preserve and disseminate the bibliographical output of Catalonia and that production related with the Catalan linguistic field; it has also competences on bibliographic standards and cataloging. It receives and manages the legal deposit of Catalonia and assigns the ISSN number to Catalan periodical publications.

It was created in 1907 and has a rich collection of more than three million documents of different types and formats: old and modern books, maps, manuscripts, papers, journals, plates, photographs, sound recordings, etc. that grows thanks to the legal deposit, purchases and gifts; its annual growth is around one hundred fifteen thousand documents.

The image shows the website of the Biblioteca de Catalunya. At the top left is the library's logo and name. To the right are links for 'BC Blog', 'Login', and 'English'. A search bar is located below the header. The main navigation menu includes 'Home', 'About us', 'Visit us', 'Collections', 'Catalogs', 'Services', and 'Professionals'. A central red menu lists various collection types: Special Acquisitions, News in the catalog, Search collections, Works in reading rooms, Treasures from BC, Archives, Manuscripts, Printed books, Periodicals, Graphic materials, Photographs, and Maps and plans. On the left side, there are links for 'Opening times', 'Contact details', 'Ask a librarian', 'Online Shop', 'Adopt a book', and 'Donation to the BC'. On the right side, there are links for 'Website map', 'Suggestions and complaints', 'Working at the BC', 'Contractor Profile', 'Grants', and 'Environmental management'. Below these are logos for 'ajca', 'MDC', 'padiat', 'Google books', 'CANTIC', 'CCPBC', and 'RACO'. At the bottom right, there is a Creative Commons license logo and a 'Legal notice' link.

Use of the library 2011

- ✓ Consultation of more than 90.000 physical documents at the reading rooms
- ✓ Consultation of 2.568.238 digital objects at the digital repositories
- ✓ 3.494.104 searches to online catalog
- ✓ 163 sessions for groups (academics, professionals, adults, students...) = 3.553 people
- ✓ Near of 300.000 copies to users (digital & paper)

Every year the library gives access to near one hundred thousand documents at the reading rooms, and receives more than two million five hundred thousand accesses to digitized documents that are made available on the net.

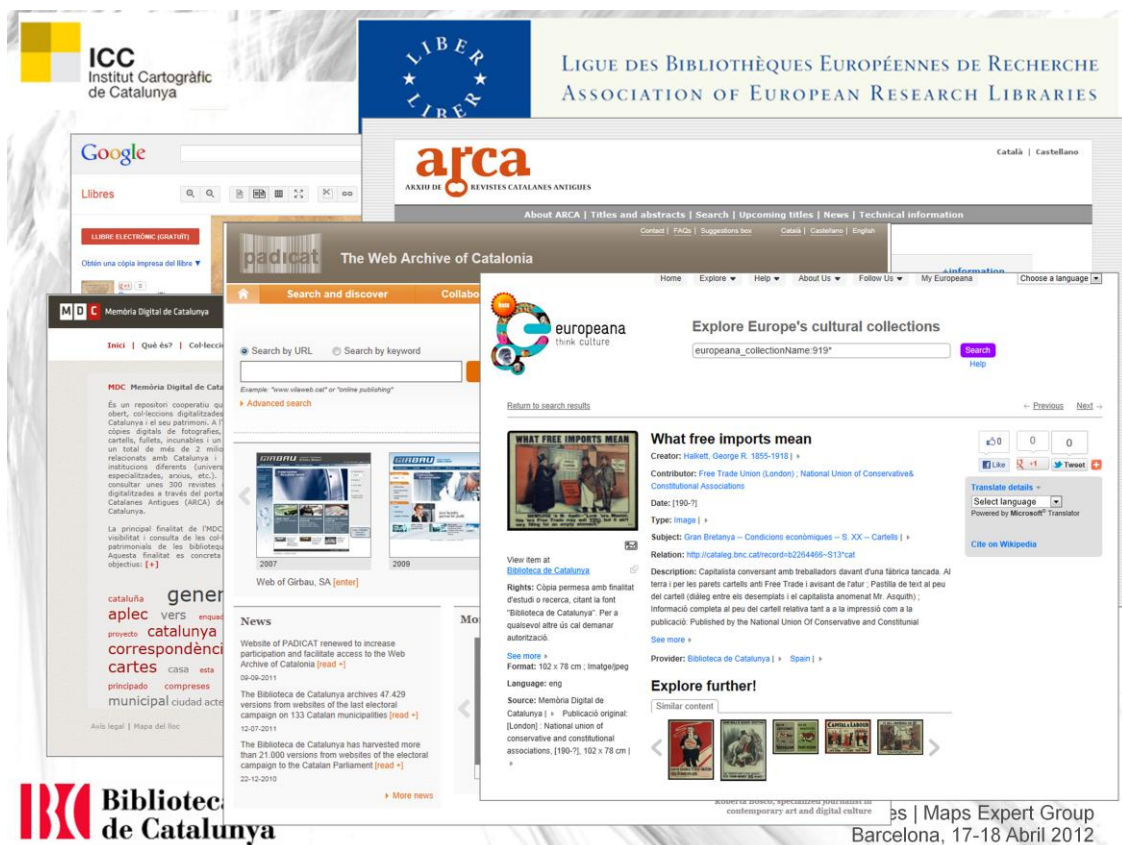
Analogical documents digitized and available on the net

	Documents	Images
Posters	305	305
Artistic bindings	181	340
Photographs	10.686	10.686
Institutional archives	166	113.665
Periodicals	295	1.000.000
Personal papers	6.723	23.490
Incunabula	461	134.225
Old printed books	60.576	7.645.000
Manuscripts	1.266	156.270
Maps	501	954
Graphic material	401	6.742
Printed music	170	16.632
TOTAL	81.731	9.108.309

→ 2.568.238
digital documents
accessed per year
and growing!!

This slide shows you in detail the volume of our digitized documents available at the Internet. Just these 81.000 digitized documents generate thirty times more consultations than the whole analogical collection of more than 3M items. This statistic supports our strategic lines of work and demonstrates the importance of putting more and more content in the Net.

Let me remark that this statistic is only figures of our own digital repositories. It doesn't include accesses to our documents from international portals or projects as Europeana or Google Books.



Since the beginning of this century the *Biblioteca de Catalunya* is paying special attention to understanding the new digital context and to finding out current and futures needs of society; it has progressively adapted procedures, techniques and priorities to face the changes and challenges of this new scenario.

In fact, year 2004 may be considered the real starting point on digital matter at the *Biblioteca de Catalunya*. It was that year when the Governing Board of the library approved its first strategic plan for the period 2004-8 that was reinforced with the next strategic plan for the period 2009-2012. Both plans highlighted three lines of activity to be focused on, all of them close related to information technology: the improvement of virtual services for users, the dissemination of digitized documents through the Internet, and the harvesting of the Catalan web. Going after these objectives in 2005 the *Biblioteca de Catalunya* set up ARCA (*Arxiu de Revistes Catalanes Antiques=Old Catalan Serials Archive*), MDC (*Memòria Digital de Catalunya=Digital Memory of Catalonia*) and PADICAT (*Patrimoni Digital de Catalunya=Digital Heritage of Catalonia*), and it signed an agreement to participate in *Google Books* project; in 2007, from the beginning, collaborates with *Europeana*, the European cultural portal. I will go back to Europeana later, as it is a good example of the evolution and challenges we are facing now and will do in the future.

In any case, nowadays, thanks to technology cooperation among institutions, universities and other agents of knowledge and culture is much easier as well as waking up curiosity of new users and getting interest of private partners, specially toward cultural heritage. Internet and the IT (information technologies) have provided heritage institutions with efficient tools to disseminate the cultural heritage and created tailored virtual services according to individual interests of users.




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Disseminating heritage through the web

Tradition in cooperation

- Union catalogs
- Cooperative authority files
- Cooperative guidelines on different matters

Digitization for access and preservation

- Guidelines of digitization (based on best practices) (2000-)
- Translation and guidelines for applying Dublin Core (2001-)
- Selection of a software to manage digitized collections (2004)



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Libraries in Catalonia have a long tradition of cooperation, thanks to it we have several cooperative tools: union catalogs, cooperative authority files, guidelines ... so when we began to prepare the implementation of digital repositories we did it again in cooperation.

We prepared guidelines on how to digitize for different uses (access and preservation) and types of documents, they were prepared in the frame of the Consortium of University Libraries of Catalonia, to which the Biblioteca de Catalunya belongs; as well as we translated and defined how to apply the metadata of Dublin Core. This aspect was specially significant and necessary as we were planning to share also the technological platform, which selection was also done together with CBUC.

All these documents haven been updated when needed.



In 2005 we set up the projects I mentioned before, all of them cooperative and also cross domain, with the participation of organizations of different nature: archives, museums, cultural institutions, ... together with libraries.




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Participation in Europeana



The Biblioteca de Catalunya is partner of it since the beginning, and was able to provide content thanks to operate under standards: standards of communications (OAI-PMH) and standards for the description of the data (Dublin Core).



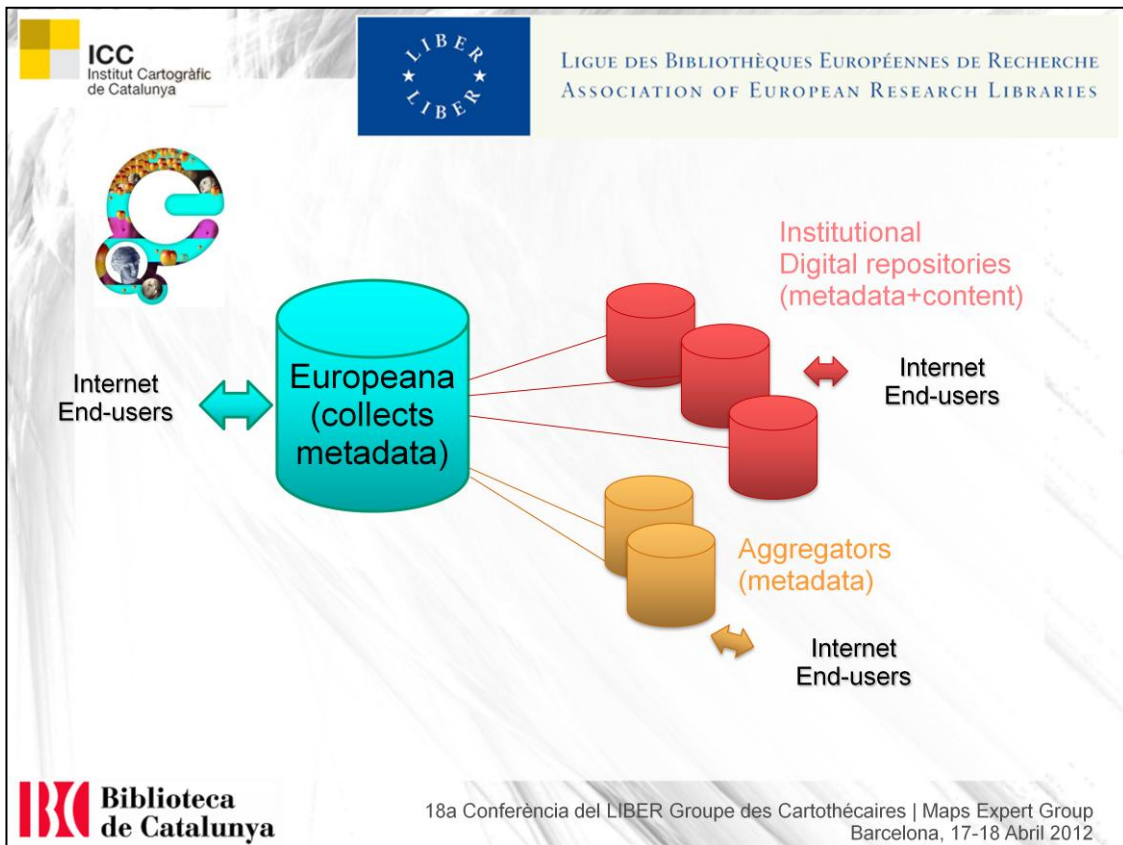
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In 2007 Europeana began to prepare its prototype; In fact, at that moment, it was not yet called Europeana, it was the European Digital Library Network – EDLnet; EDLnet was founded in the frame of the eContentPlus EU's program. Its goals were to design, first a model and then a prototype of the European digital library to be operational at the end of 2008.

EDLnet has more than 100 representatives of heritage and knowledge, IT experts from throughout Europe.

And, in July of that year, the Biblioteca de Catalunya was invited to join the network and to participate both in working groups and providing content.

I believe that the incorporation of Catalan collections was interesting for Europeana because reinforced the idea of a portal where the rich diversity of European languages and cultures were represented.



The way that Europeana usually operates is like the slide shows. Europeana collects metadata and thumbnails in most of cases, from digital repositories and aggregators through OAI-PMH protocol. Metadata are indexed and managed in Europeana in order to answer user queries. The results that Europeana offers are just the descriptions, which are linked to digital objects in the repositories of provenance, where they remain.

Europeana 2008-2009



Any standard schema of metadata was accepted

Institutions just had to assure a minimum of metadata fields and create a mapping from their metadata system to ESE; then Europeana harvested and converted data.

It was very easy for institutions to contributing content.

2008 November: Europeana prototype was set up as operational service with more than 2 million of digital objects.

When the prototype was launched it was really easy for providers to participate in Europeana; any schema of metadata was accepted, and institutions with an OAI-PMH implemented, had just to map their fields to the schema based on Dublin Core created for Europeana.

2008-2009

Mapping for "Fons Fotogràfic Salvany"

Created by Eugenia Serra

Source Data (Please list below all elements (tags) found in this collection/dataset. Keep the original order of the elements)	Europeana Elements (Please indicate below the European element that corresponds to the Source element)
<dc:title>Riera d'Agrafull</dc:title>	<dc:title>
<dc:description />	<dc:description>
<dc:subject>Prats de Molló i la Presta ; França ; Rieres</dc:subject>	<dc:subject>
<dc:creator>Salvany i Blanch, Josep, 1866-1929</dc:creator>	<dc:creator>
<dc:publisher>Biblioteca de Catalunya</dc:publisher>	<dc:publisher><dc:source>
<dc:date>2006</dc:date>	<dc:date>
<dc:date>1911</dc:date>	<dc:date>
<dc:type>Imatge</dc:type>	<dc:type>
<dc:format>Imatge/jpeg</dc:format>	<dc:format>
<dc:source>Placa de vidre estereoscòpica, 6x13 cm. Fons	<dc:medium><dc:extent>
<dc:rights>Còpia permesa amb finalitat d'estudi o recerca	<dc:rights>
<dc:identifier>http://mdc.cbuc.cat/u?/bcsalvany,0</dc:identifier>	<europeana:isShownBy>

This is an example of the mapping for one of the collections of Biblioteca de Catalunya

2008-2009

128 manuscripts

101 incunables

9.777 photographic plates

124 artistic binding



When the prototype was opened there were about 10.000 digital objects of the Biblioteca de Catalunya

128 manuscripts

101 incunabula

9.777 photographic plates

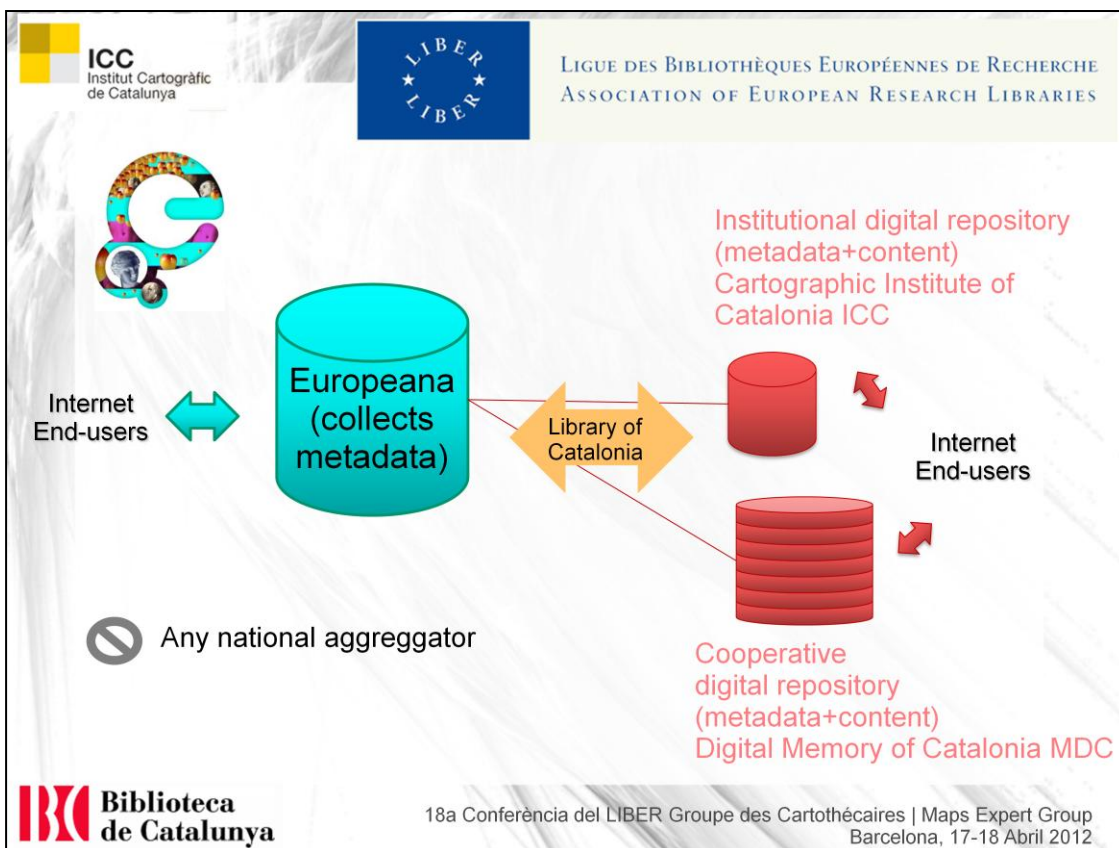
124 artistic bindings

ESE Europeana Semantic Elements 2008-2009

DC title	Europeana userTag
DC creator	Europeana unstored
DC subject	Europeana object
DC description tableOfContents	Europeana language
DC publisher	Europeana provider
DC contributor	Europeana type
DC date created; issued	Europeana uri
DC type	Europeana year
DC format extent; medium	Europeana hasObject
DC identifier	Europeana country
DC source	Europeana isShownBy
DC language	
DC coverage spatial; temporal	
DC rights	
DC terms provenance	

Only few mandatory

This is the schema to which had to conform. Only three of the new fields added by Europeana were mandatory: provider, to maintain a list of contributors, type, to be able to refine results, and isShownBy, to link metadata to the digital object in its original context.



After the good experience of the Library of Catalonia with Europeana, in 2010 other Catalan institutions were interested in participating too.

From the point of view of metadata, to add more institutions to the portal was not really complex due to in many cases were institutions used to describe documents in the bibliographic catalog, which is just another different code of description but based on a same conceptual understanding, and they were used to work under standards .

So what we did was to check the use done by institutions of each one of the mandatory elements which Europeana required, and to prepare the mapping for all of them.

Related to Europeana the situation of Catalonia is a little bit different from other European countries.

There is not any national aggregator, there are single institutional repositories such as Cartographic Institute of Catalonia and cooperative digital repositories as Digital Memory of Catalonia. The Digital memory of Catalonia consists of a single platform and instance where several institutions maintain their digitized collections, which can be managed and customized in a separate way. Even though the singularity and particular needs are respected, there are some minimal guidelines that everyone is following.

The role of the Biblioteca de Catalunya is of intermediation: we inform institutions about changes and requirements, propose uses for certain fields to be according ESE, check the collections before being harvested, distribute agreements, and we are the contact with Europeana.

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Europeana 2010→

Contributors should make their own conversion and provide data in ESE (Europeana Semantic Elements) schema

The market was not yet prepared to ESE, then institutions had to create their own tools of adaptation to Europeana requirements

A significant amount of work was transferred to institutions

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In 2010 when we contacted again with Europeana to update the collections, the scenario had changed. Contributors had not only to map data, but also provide these data in ESE format, so a significant part of work that Europeana did until that moment, was transferred to institutions.

In Catalonia most of the collections are managed with commercial software, and these software were not adapted to Europeana schema, so we had to develop an external tool of conversion, and we did it. Even it was not complex the fact was that we had to invest resources and money to do it.

Europeana 2011

The ESE (Europeana Semantic Elements) schema introduces some more mandatory fields

Some commercial softwares introduce ESE schema in their new versions, but is not yet a generalized situation.

Institutions should continue investing resources to adaptat to Europeana requirements

One year later, Europeana introduced some new elements, basically to make more visible the information about aggregators and to standardize the rights over the object and metadata. So, again we had to adapt our tools.

Europeana 2011

Main changes in ESE schema

Europeana:rights	Changed to mandatory and standardized
Europeana:dataProvider	Changed to mandatory
dc:language	Changed to mandatory for objects with type TEXT, strongly recommended for other types where appropriate.
dc:title and dc:description	Mandatory to provide one of these two
dc:subject, dc:type, dc:coverage; dcterms:spatial	Mandatory to provide one of these four

Main changes in ESE schema

Europeana:rights	
Public Domain Mark (PDM)	
Creative Commons Zero Public Domain Dedication (CC0)	
Creative Commons - Attribution (BY)	Only can be applied with the authority of the right holders
Creative Commons - Attribution, Share Alike (BY-SA)	
Creative Commons - Attribution, No derivatives (BY-ND)	
Creative Commons - Attribution, Non-commercial (BY-NC)	
Creative Commons - Attribution, Non-commercial, Share Alike (BY-NC-SA)	
Creative Commons - Attribution, Non-commercial, No derivatives (BY-NC-ND)	
Rights Reserved - Free Access	Data provider
Rights Reserved - Paid Access	
Rights Reserved - Restricted Access	
Unknown	

Catalonia in Europeana

Until now Catalan institutions have provided 41.313 documents

- single as photographs, posters, maps, drawings ...
- and compound as books, periodicals or personal papers

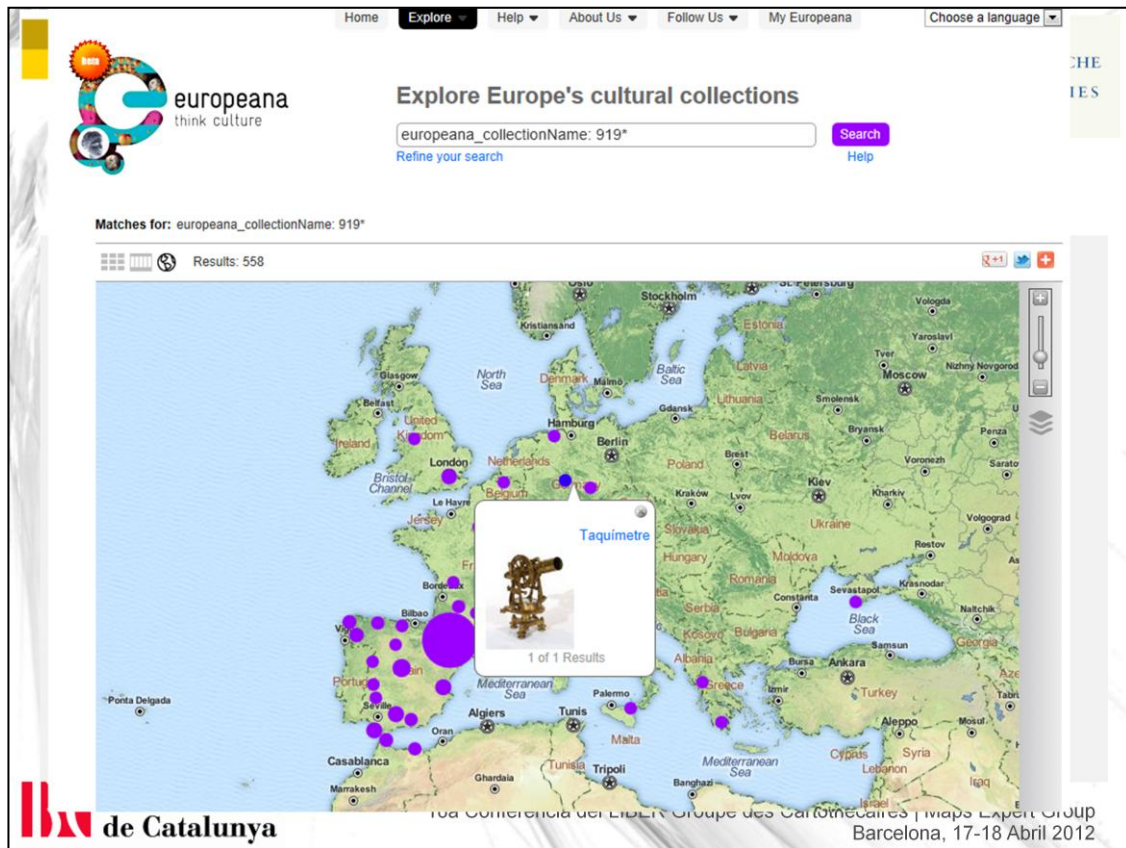
19 institutions.

Today, Catalan institutions are contributing to Europeana with 41.313 documents, some of them are single as photographs, posters, maps, drawings ... and some other compound documents like books, periodicals, personal papers, ... contributed by the repositories of the Institut Cartogràfic de Catalunya and the Digital Memory of Catalonia.

Catalonia in Europeana



- Arxiu Històric de Girona
- Ateneu Barcelonès
- Biblioteca de Catalunya
- Biblioteca de Comerç i Turisme
- Biblioteca Museu Víctor Balaguer
- Centre de Lectura de Reus
- Centre de Promoció de la Cultura Popular i Tradicional Catalana
- Centre Excursionista de Catalunya
- Consell Català de l'Esport.
- Biblioteca de l'Esport
- Il·lustre Col·legi d'Advocats de Barcelona
- Institut Cartogràfic de Catalunya
- Institut d'Estudis Ilerdencs
- Rosa Sensat
- Universitat Autònoma de Barcelona
- Universitat de Barcelona
- Universitat de Girona
- Universitat de Lleida
- Universitat Politècnica de Catalunya
- Universitat Pompeu Fabra

This is the complete of Catalan institutions that are contributing to Europeana



The map shows the coverage of some of these documents. This is one of the new features recently implemented by Europeana thanks to metadata.

The example is a tachymeter, an instrument of measurement, that belongs to the collection of the Institut Cartogràfic de Catalunya. The object is located at Germany because is where it was manufactured.



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Europeana 2012→

EDM (Europeana Digital Model) will be (maybe) a mandatory requirement in future, but metadata ESE are still accepted.

EDM, which applies principles of the semantic web:

- ✓ links data using authority international files,
- ✓ finds new meaningful associations between different objects from different institutions
- ✓ translates metadata by way of association

EDM contributes to the improvement of existing data by potentially identifying duplicate records.



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The current situation is more or less the same that last year, but we know that EDM is the Europeana future.

EDM enables the data enrichment from a range of selected authoritative sources. For example, a digital object from one provider may be contextually enriched by Europeana by the addition of data from authority files held by another provider.

EDM allows:

Link across language, domain and institutional views through alignment to both authoritative vocabularies. To find new meaningful associations between different objects from different institutions.

Contribute to the improvement of existing data by potentially identifying duplicate records

Europeana 2012→

EDM represents a major change, it is much more than a set of metadata fields, it will require an enrichment of information for digital object.

We are working to develop a new tool to adapt EDM to our repositories.

The implementation of EDM is a requirement to obtain grants from the Spanish Ministry of Culture to digitize.

EDM is not an update of ESE, it is a major change which implies to enrich current metadata and the ones created hereinafter. Without this enrichment, even though the digital objects could have a format conform to EDM, their information will be not enough to apply the improvements of semantic web.

So, we have started to work to create a new tool conform to EDM. In Catalonia, apart from all these reasons, the Spanish Ministry of Culture has announced that EDM will be mandatory for institutions that ask for a grant to digitize.

Conclusions

Europeana is a great project, which makes European culture visible and well-known worldwide

If not, it should be created, no doubt. It is a powerful tool for democratization and access to culture and knowledge.

Europeana allows to tell complete stories through putting together different materials from different countries about a same topic.

Conclusions

The report “New Renaissance” by the Comité de Sages, as well as the Europeana’s strategic documents published last year: *Strategic Plan* and *Bussiness Plan*, highlighted the need of finding a

“Sustainable funding model”

for the next years.

Conclusions

It's true that a sustainable financial model is needed to guarantee the perpetuity for Europeana, but, beyond this, Europeana should also find a sustainable operational model, with a well balanced distribution of work and efforts among contributors and Europeana.

The institutions, specially the medium and small ones, cannot afford such frequent changes of technical requirements in a context of cuts of budgets and resources

Conclusions

The metadata schema ESE and the digital model EDM should be consolidated and become more permanent.

Contributors should invest their resources and efforts in digitizing and publishing.

Metadata are important but is much more critical to increase the mass of digital content available.

Metadata are important, due to they allow engines discover content and are essential for use and re-use of information, as well for developing new and tailored services to end-users. But ESE and EDM should be consolidated and become permanent.

Nowadays the priority of institutions should be, from my point of view, to increase the critical mass of heritage available on the web. There is yet a long way to achieve that at least all the documents in public domain will be available, and this should be our main goal.

Thank you!