Open Access to Grey Resources
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Assisting scientists to make their research results world wide freely available: an experience begun in the 90s

Stefania Biagioni
Institute of Information Science and Technologies (ISTI)
Italian National Research Council (CNR)

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An experience begun in the 90s

1996 CNR (ISTI) is appointed as coordinator of the

“Ercim* Digital Library Initiative” and is given the task of creating a research community in the Digital Library (DL) field in Europe.

One of its activities** is setting its own DL up to assist scientists to rapidly access, disseminate, manage and preserve over long term their intellectual output, in digital format, world wide over the web.

*European Research Consortium for Informatics and Mathematics

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An experience begun in the 90s (cont.)

1996-97 Ercim Librarians and Members of DL WG meet in Budapest and in Pisa and decide to build the the **ERCIM Technical Reference Digital Library**

as a specialized sub-collection of

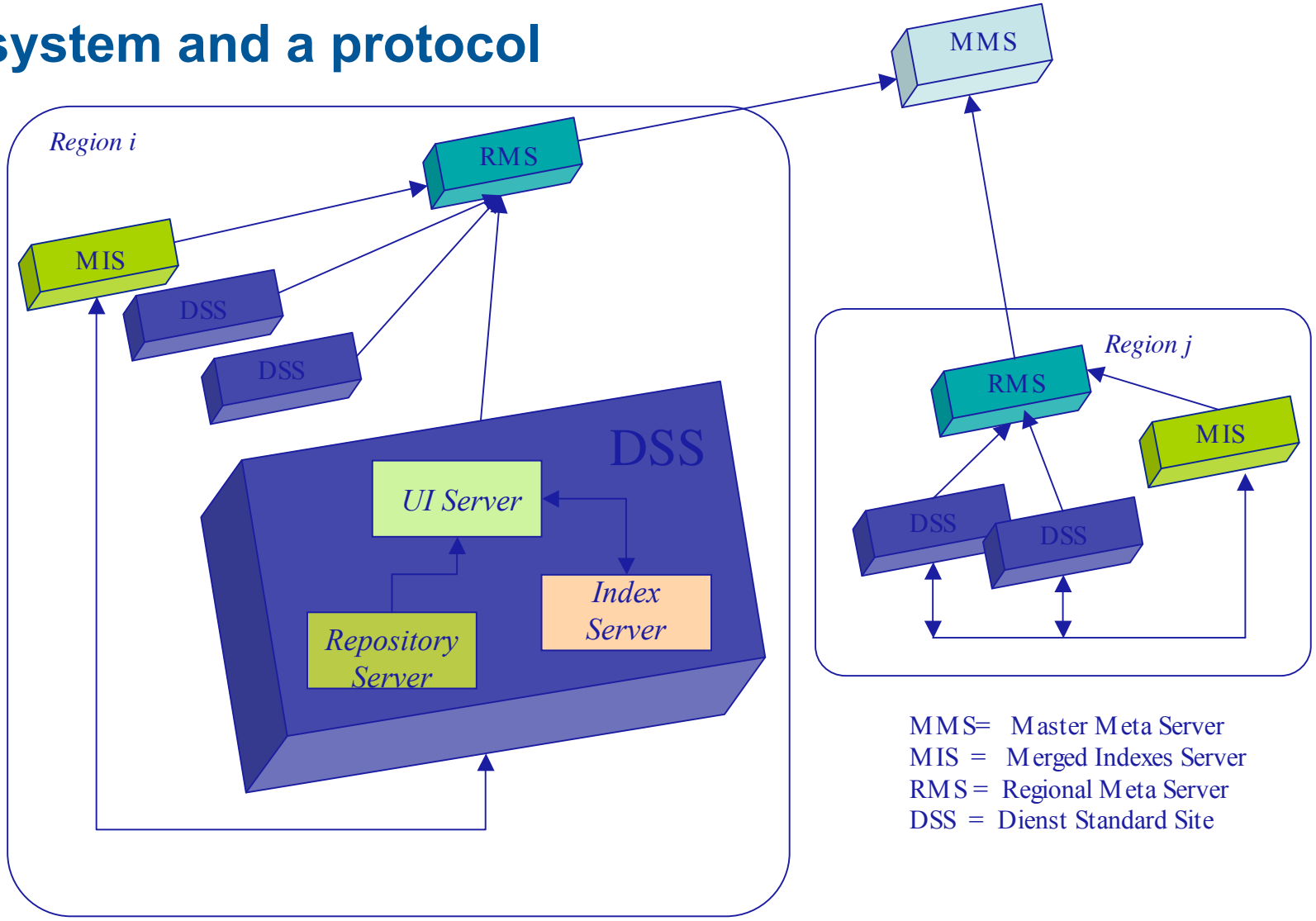
NCSTRL - U.S. Networked Computer Science Technical Reference Library

with extended functionality to meet the needs of a European Digital Library service

using **Dienst** technology **(**in collaboration with US Cornell University)

which allows: ***networked access*** to a globally distributed collection of grey resources and ***on-line services*** to assist scientists in publishing their work results, to review papers and administrate the repositories

Dienst architecture: a distributed system and a protocol



MMS= Master Meta Server
MIS = Merged Indexes Server
RMS = Regional Meta Server
DSS = Dienst Standard Site

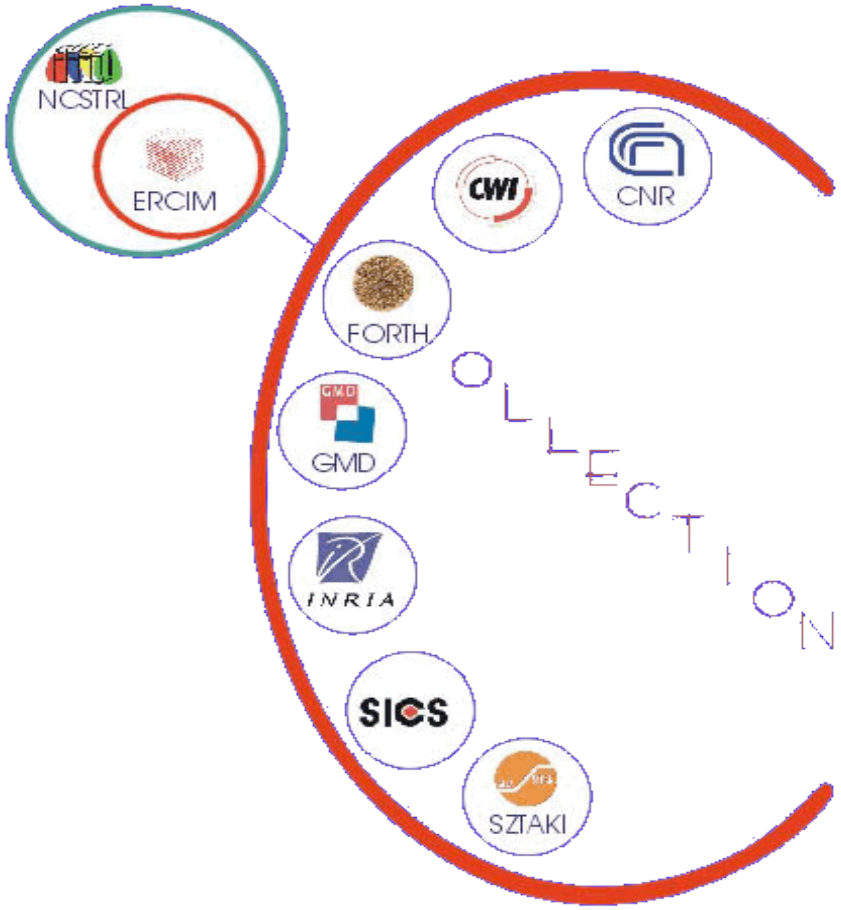
the first prototype (1997-1999)

Partners

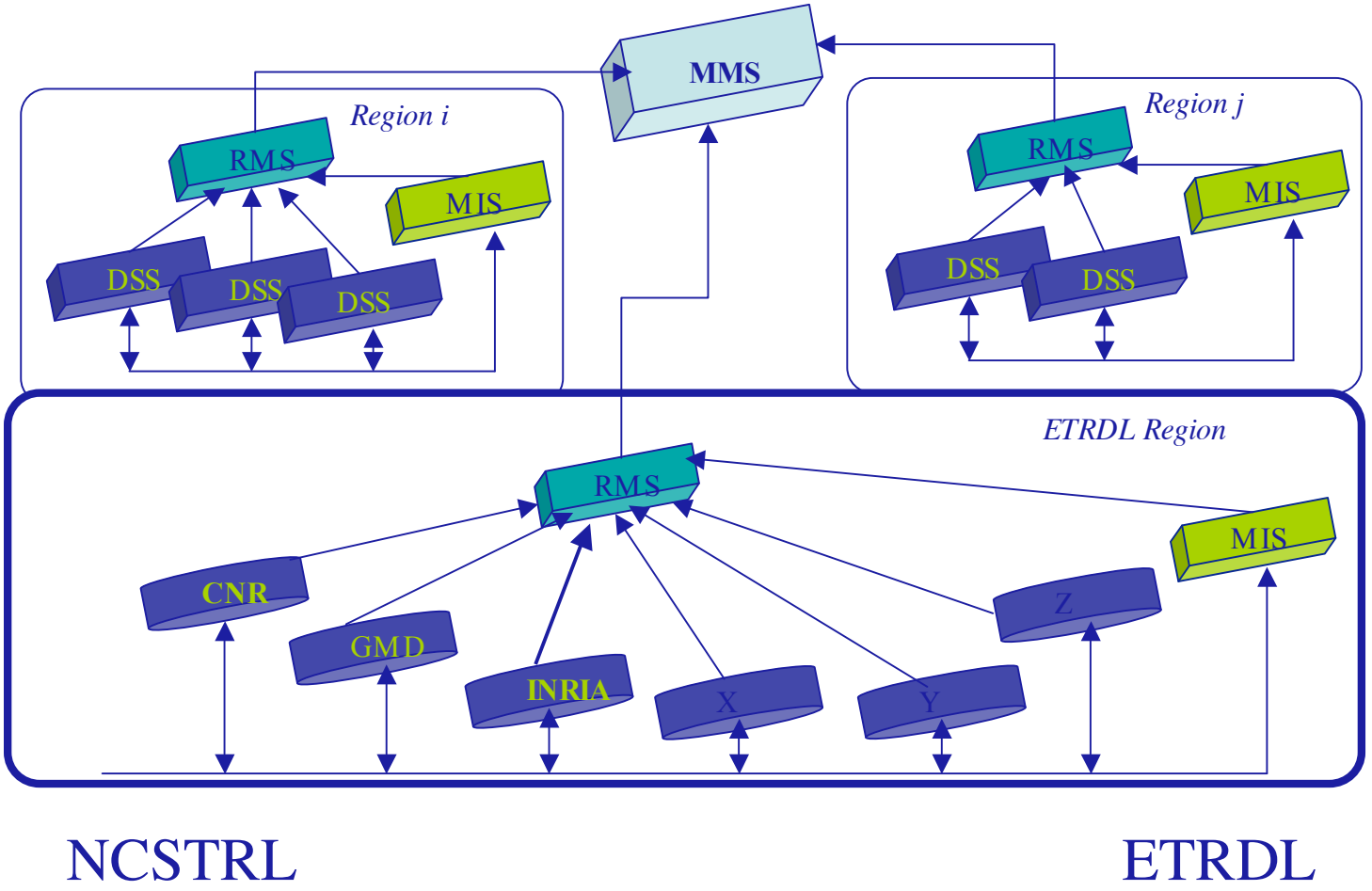
CNR - *Italy*
CWI - *The Netherlands*
FORTH - *Greece*
GMD - *Germany*
INRIA - *France*
SICS - *Sweden*
SZTAKI - *Hungary*

FIMU - *University of Masaryk*
(Czech Republic)

(http://dienst.isti.cnr.it)



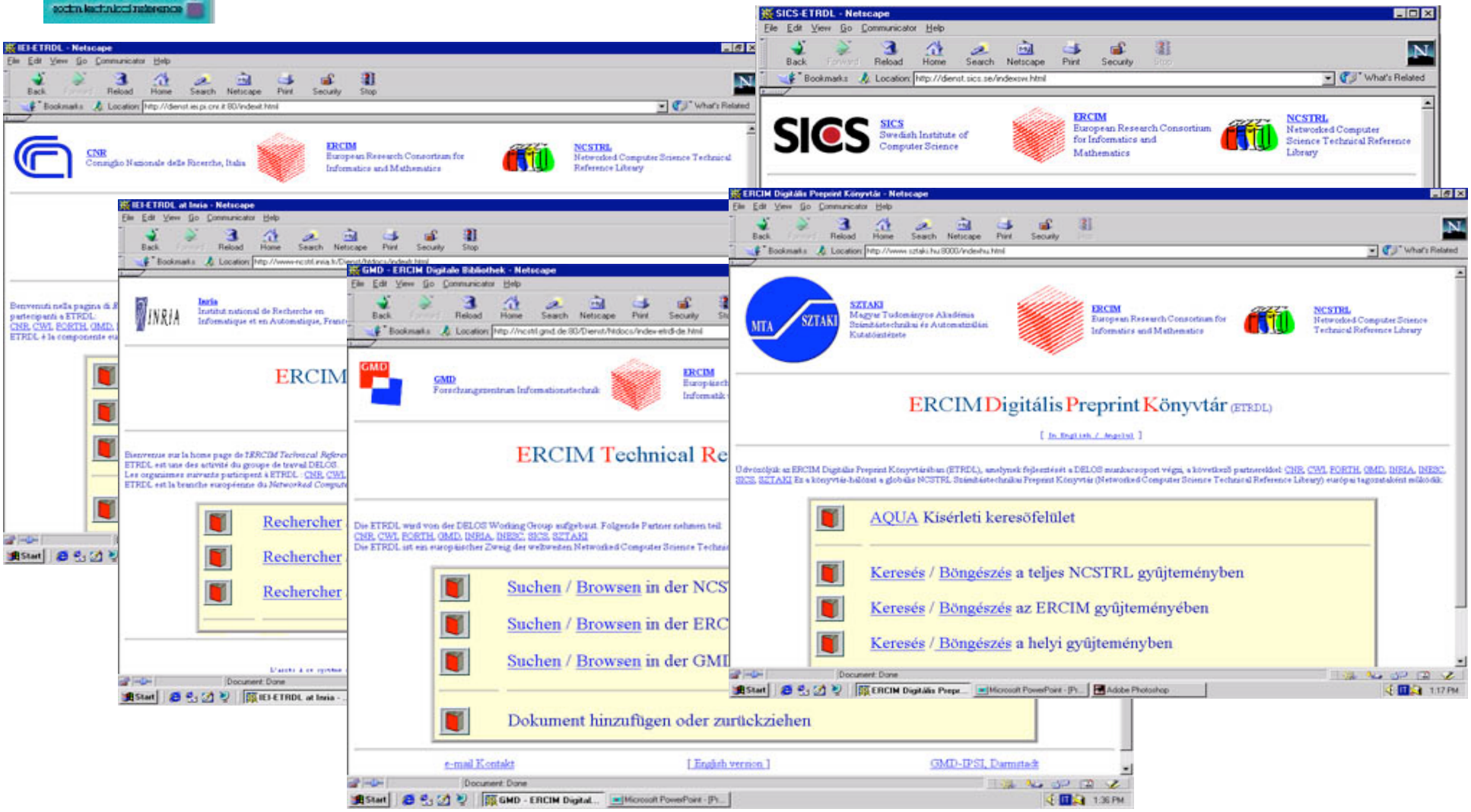
Dienst --> ETRDL region



additional functionality to meet the European needs

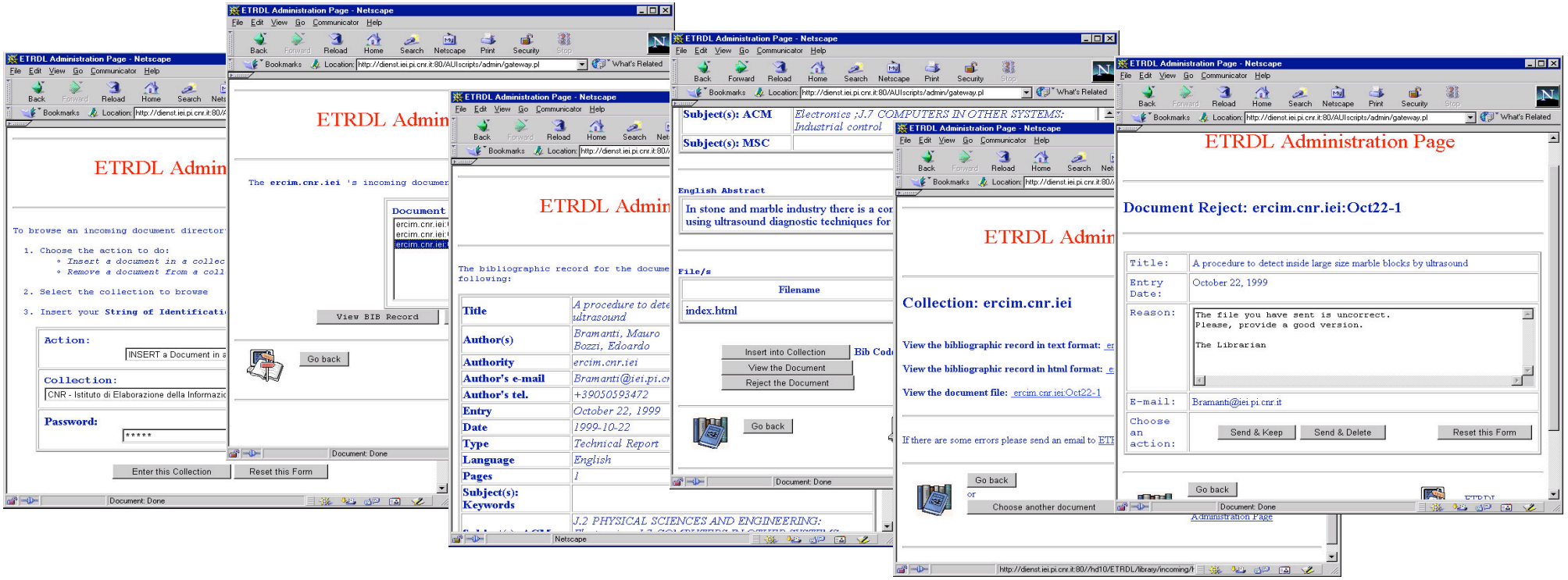
- Multilingual information access
  - user interface localization
  - different character set manipulation
  - cross language search
- Search and Browse
  - Browsing extensions by subject (ACM, MSC, Free keywords)
  - Search extensions by subject, date, language, type
  - more complex query structures
- Services
  - submission, withdrawal
  - administration

Multilingual information access and submission



Administration service

Partners are responsible for implementing their own administrative procedures.
Here below we show the default system interface.



Today: it is an operational service

- **ETRDL** is an institutional repository which collects, manages and disseminates documents of CS and Maths (actuallly working at CNR) integrated in the context of library information systems

  moreover, exchanges metadata with centralized CNR grey literature database

  Together with **PUMA-DL**, a special instantiation to collect published works with controlled access, realizes the bibliography of some CNR Institutions

- **ETRDL-DEMO** has been set up for training courses

Today: special instantiations in the field of Marine Biology

- **MeCME DL - Mediterranean Costal Marine Environment** is a Digital Llibrary made up in order to collect multidisciplinary documentation concerning scientific studies in the Mediterranean coastal areas and in particular in the Southern one, including also specific studies on Taranto Gulf. (Library of the Institute Talassografico “A. Cerruti”- IAMC-CNR) **http://mecme.isti.cnr.it**
- **LVDL - Laguna di Venezia DL** is a multidisciplinary archive created in order to collect the multidisciplinary documentation arising from the scientific studies on the Lagoon of Venice. (Vallisnery Library, Palazzo Grassi and Hydrobiological Station in Chioggia, Geology, Paleontology and Geophysics Library (University of Padova) Naturalistic Observatory of the Lagoon and the Natural History Museum of Venice, Department of Environmental Sciences of the Ca’ Foscari University of Venice). **http://laguna.isti.cnr.it/**

Evolution: migration to OpenDLib

(http://www.opendlib.com)

OpenDLib: the new OAI, compliant DL service system, developed at ISTI following the experience made with ETRDL

- allows to create a digital library easily, according to the requirements of a given user community, by loading or harvesting the content to be managed

Evolution: migration to OpenDLib

OpenDLib is a federation of services which offers:

Main functionality of a digital library

- submission, description, store, access, distribution, long term preservation, peer-review, administration

Users management service:

- registration, maintaining of users profiles, authentication, authorization

Personalization service:

- construction and dynamic modification of personalized virtual views of the information space

Infrastructure service

- shared management and dynamic configuration of services

Evolution: migration to OpenDLib

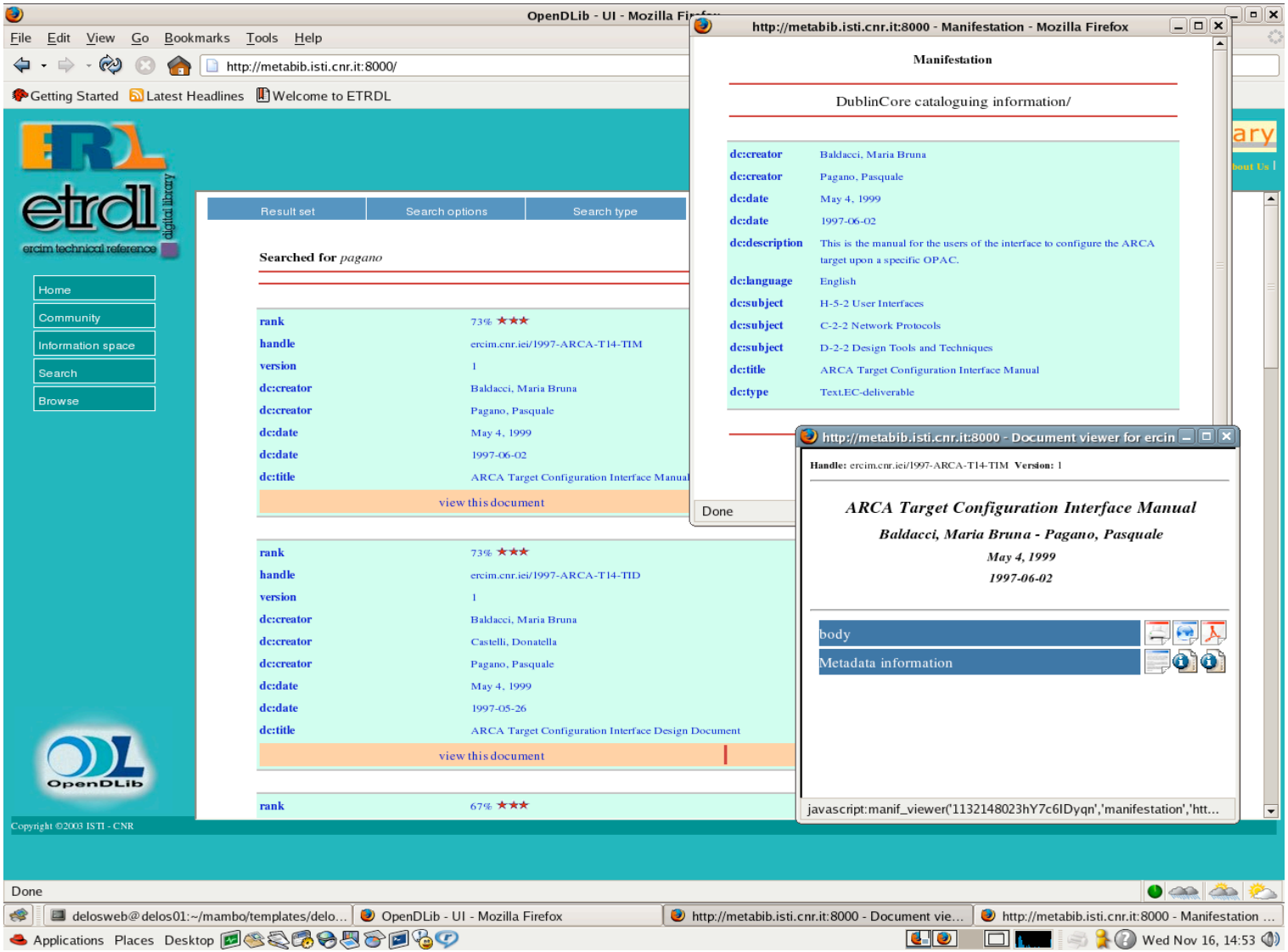
Type of documents:

- a powerful and flexible document model capable to represent
  - multi-edition, structured, multimedia documents that can be disseminated in multiple manifestation formats
- and allows any document to be associated
  - with multiple metadata descriptions in different formats and include semantic relationships with other documents and parts of them

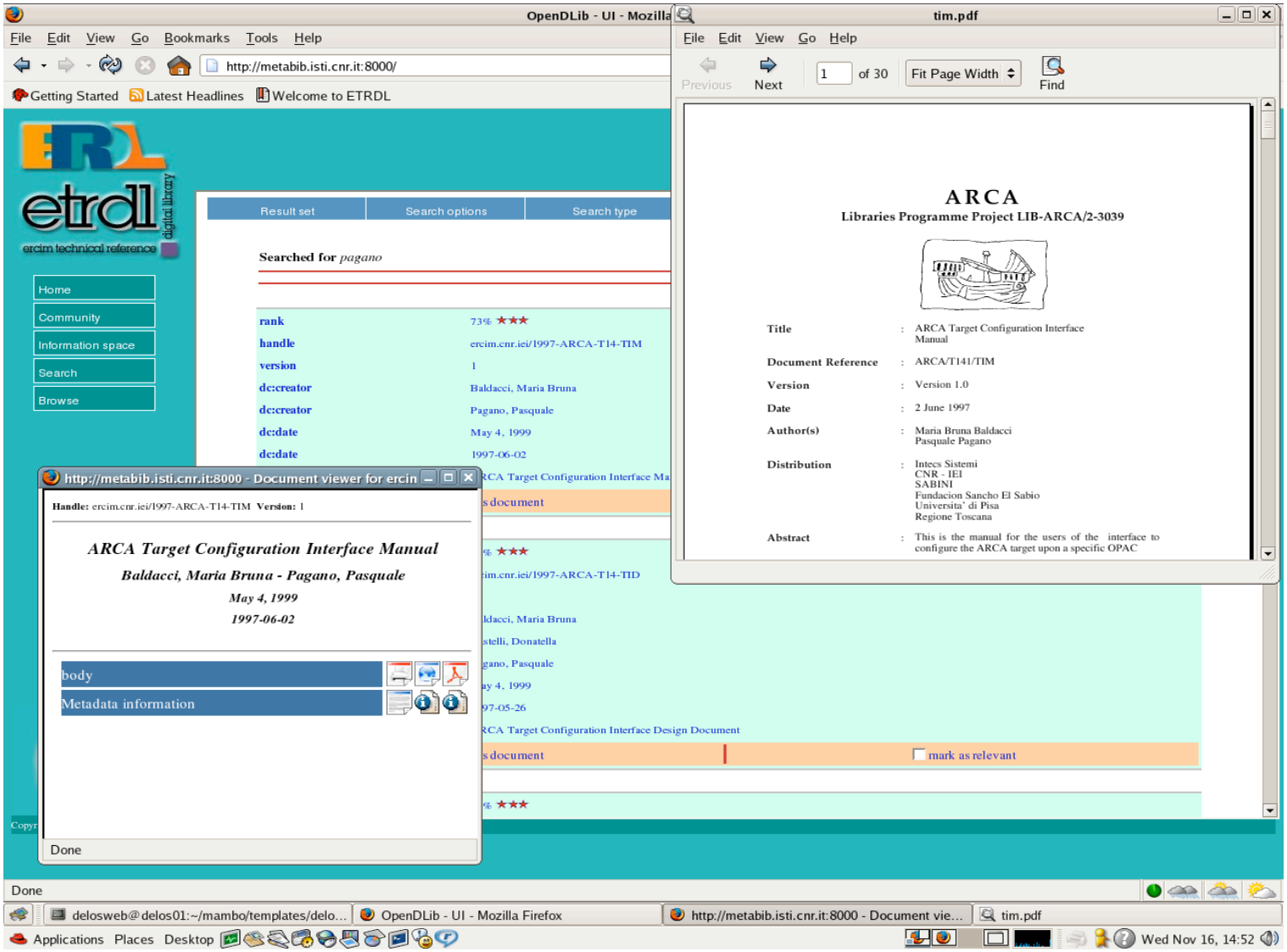
Virtual collections:

- Information space is organized in collections
- Collections are virtual and dynamically defined by authorized users
- Collections content is updated automatically
- Access rules and services may be associated to a collection

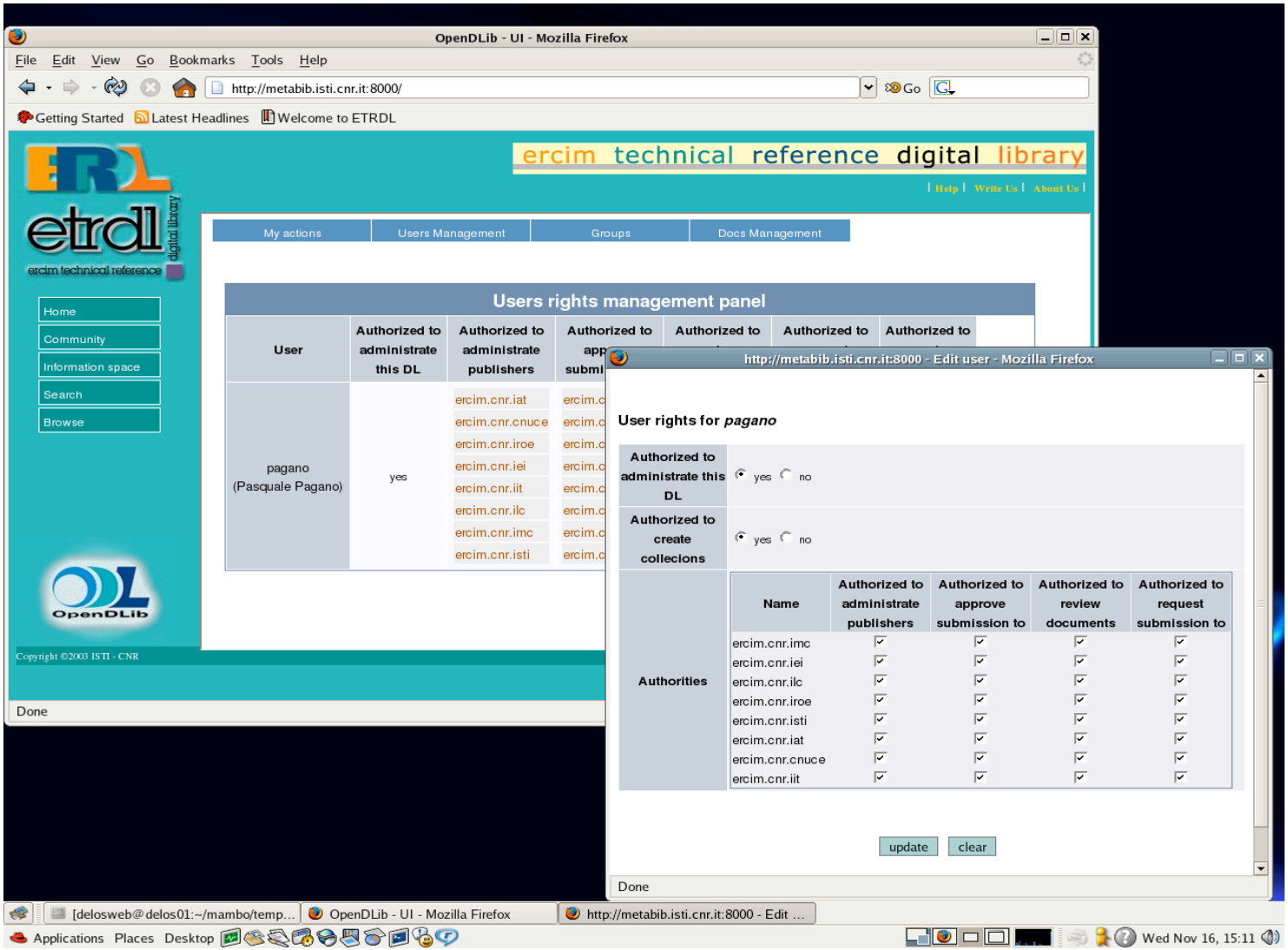
First prototype: ETRDL powered by OpenDLib, search service



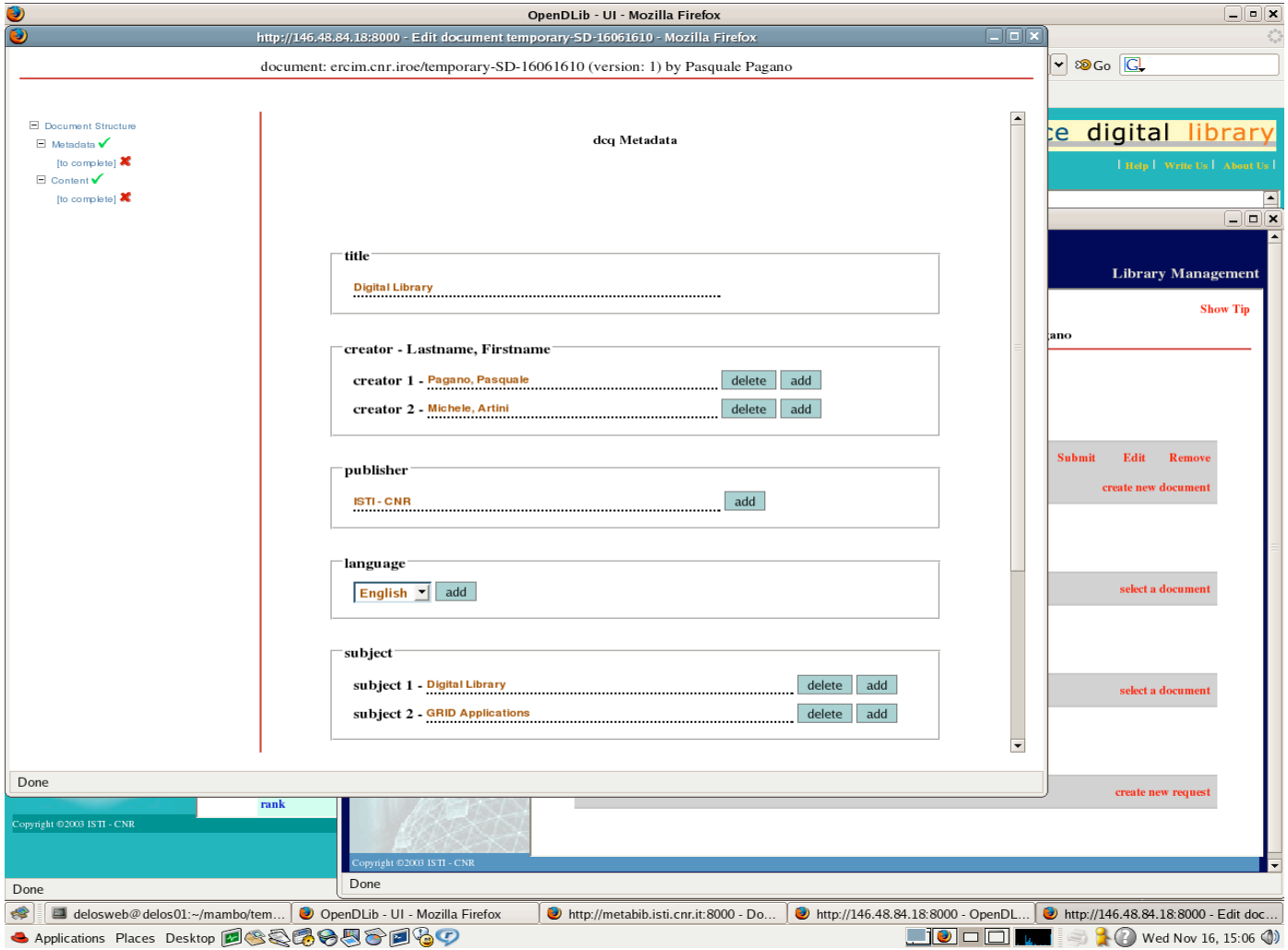
document visualization



user management service



submission service



Conclusions

ETRDL powered by OpenDLib advantages:

- Metadata and documents can be reused
- OAI compliancy
- Curation: automatic migration towards new formats and metadata
- Archiving: preservation on an updated support, advanced according to current technologies
- Dynamic management of collections (also harvesting from other collections)
- Management of document relationships

Conclusions (cont.)

The experience made is a positive one

- From project phase to operational service integrated width library information services
- From original system to an advanced one
- Researchers became used to disseminate their work in a free way and associate different manifestations of documents to the same objects
- Repositories have been also used as test-bed for experimental activities

Conclusions (cont.)

Some difficulties have to be overcome yet at political, social, economic level

- Lack of coordination among different institutions
- Lack of knowledge of existing systems
- Lack of training among librarians
- Lack of being used to adopt such technology by scientists working in some fields of knowledge rather than others
- Lack of funds for involved activities

Get in touch with …

ETRDL / OpenDLib

Stefania Biagioni - ISTI CNR (stefania.biagioni@isti.cnr.it)

Carlo Carlesi - ISTI CNR (carlo.carlesi@isti.cnr.it)

Donatella Castelli - ISTI CNR (donatella.castelli@isti.cnr.it)

Paquale Pagano - ISTI CNR (pasquale.pagano@isti.cnr.it)

Giuseppe Romano-ISTI CNR (giuseppe.romano@isti.cnr.it)

Manuele Simi - ISTI CNR (manuele.simi@isti.cnr.it)

LVDL

Antonella Zane - Bib. Vallisneri (antonella.zane@unipd.it)

Monica Ortolan - Bib. Vallisneri (monica.ortolan@unipd.it)

MeCME

Maria Filippi - Biblioteca Talassografico “A. Cerruti” IAMC CNR (maria.filippi@iamc.cnr.it)