

Natalia Manola
University of Athens
Department of Informatics and Telecommunications

OpenAIRE

From Pilot to Service

The Open Knowledge Infrastructure for Europe



Outline

- **Open Access in Europe**
- **Brief history of OpenAIRE**
- **Overview of the system**
- **Services**
- **Collaborations**



It's not **IF** Open
Access

It's **HOW** Open
Access

Neelie Kroes
Vice President of the EU Commission - Digital
Agenda

EC Open Access policies



OpenAIRE

- **2009:** FP7 OA Pilot and ERC OA guidelines
 - 20% of FP7 in seven scientific areas
- **2012:** EC Communication “Towards better access to scientific information: Boosting the benefits of public investments in research” (17th July)
 - Open Access of all publications in H2020
 - Pilot scheme on open access to and re-use of research data generated by projects in selected areas of H2020.
- **2012:** EC Recommendation on access to and preservation of scientific information (17th July)
 - Member states should define clear policies for Open Access to results of publicly funded research (publication & data)



A bit of history

From 2005 ...

- DRIVER 2005 – 2007
 - Network of 51 repositories in 5 countries
- DRIVER II 2007 – 2009
 - Pan-European network of 345+ **validated** repositories
- OpenAIRE 2009 – 2012
 - Implementing the FP7 OA pilot (links to EC funding)
- OpenAIREplus 2011 – 2014
 - Supporting OA in all Europe (links to all European funding)
 - Providing links to data
 - Expanding to Scientific Information Infrastructure

Who we are

Multifaceted consortium

- **Scholarly communication institutions**
 - Gottingen, Ghent, Minho, e-IFL, DTU, SURF – OA policies, digital library services
- **Technological institutions**
 - CNR-ISTI, UoA, ICM – data infrastructures
 - Bielefeld Library IT, CERN Digital Library Services – library IT & digital library
- **Scientific communities**
 - EBI (life sciences), DANS (social sciences), CGIAR (agriculture), BADC (climate), WDDC (climate)
- **National Open Access Desks**

• **32 members**

MEDOANET Workshop © Athens, December 6, 2012

What does
it mean?

Human
PARTICIPATORY DESIGN
Technical

Technical Infrastructure

Multifaceted endeavour

**24x7
OPERATIONAL
SYSTEM SINCE
2010**

*Number of unscheduled
downtimes = 0*

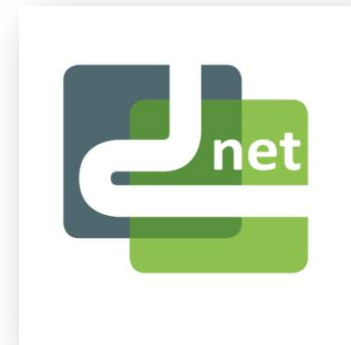
Building on **existing efforts** in the
scholarly communication and OA
domain

- Publication and research data repositories/data infrastructures
- Open Access Journals
- Funders' systems
- Authoritative registries
- Usage data from repositories
- 3rd party services

Technology re-use

Building a community around the OpenAIRE (D-NET) technology

- **National repository infrastructures**
 - Recolecta – Spain
 - CEON - Poland
 - SIU - Argentina
- **Europeana satellite projects**
 - EFG & EFG1914 (filmography)
 - HOPE (history of labour)
- **Data Infrastructures**
 - ESPAS – Near Earth Space Science
- **Usage statistics**
 - MadIS system from OpenAIRE



Human infrastructure

Research is globalizing, policy implementation is at the local level



All member states

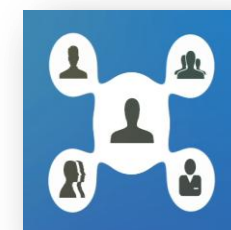
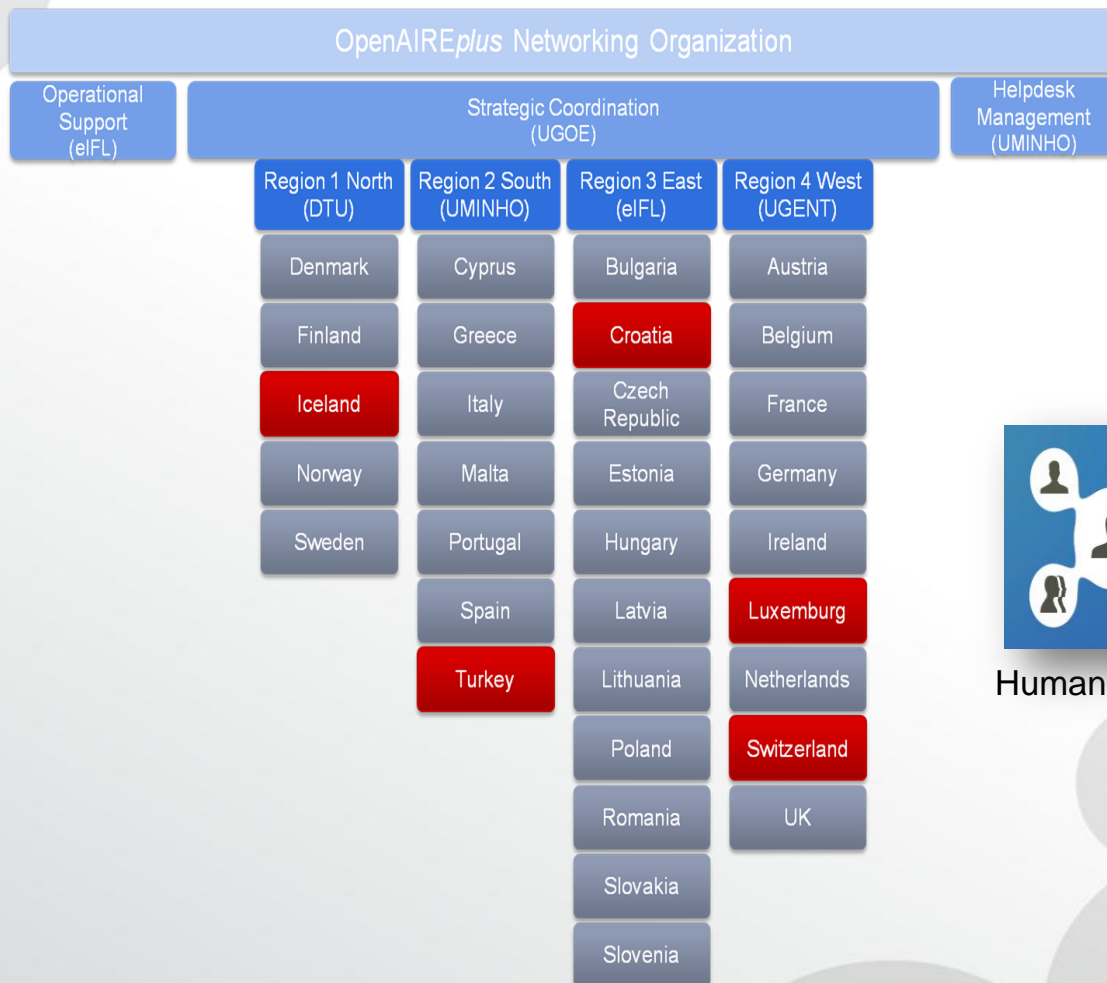
Challenge - Aggregate at a global level this local information, taking into account socio-cultural & regional differences of the communities involved

- **32 Network of National Open Access Desks**
 - Diverse national research environments
- **OA advocacy through targeted activities**
 - Reach out to researchers, organizations, infras - Helpdesk, workshops, training
- **European network of people sharing experiences & best practices**

National Open Access

Desks

European footprint



Human Network

What is OpenAIRE?

THE OPEN ACCESS KNOWLEDGE
INFRASTRUCTURE FOR EUROPE

The “new” publication



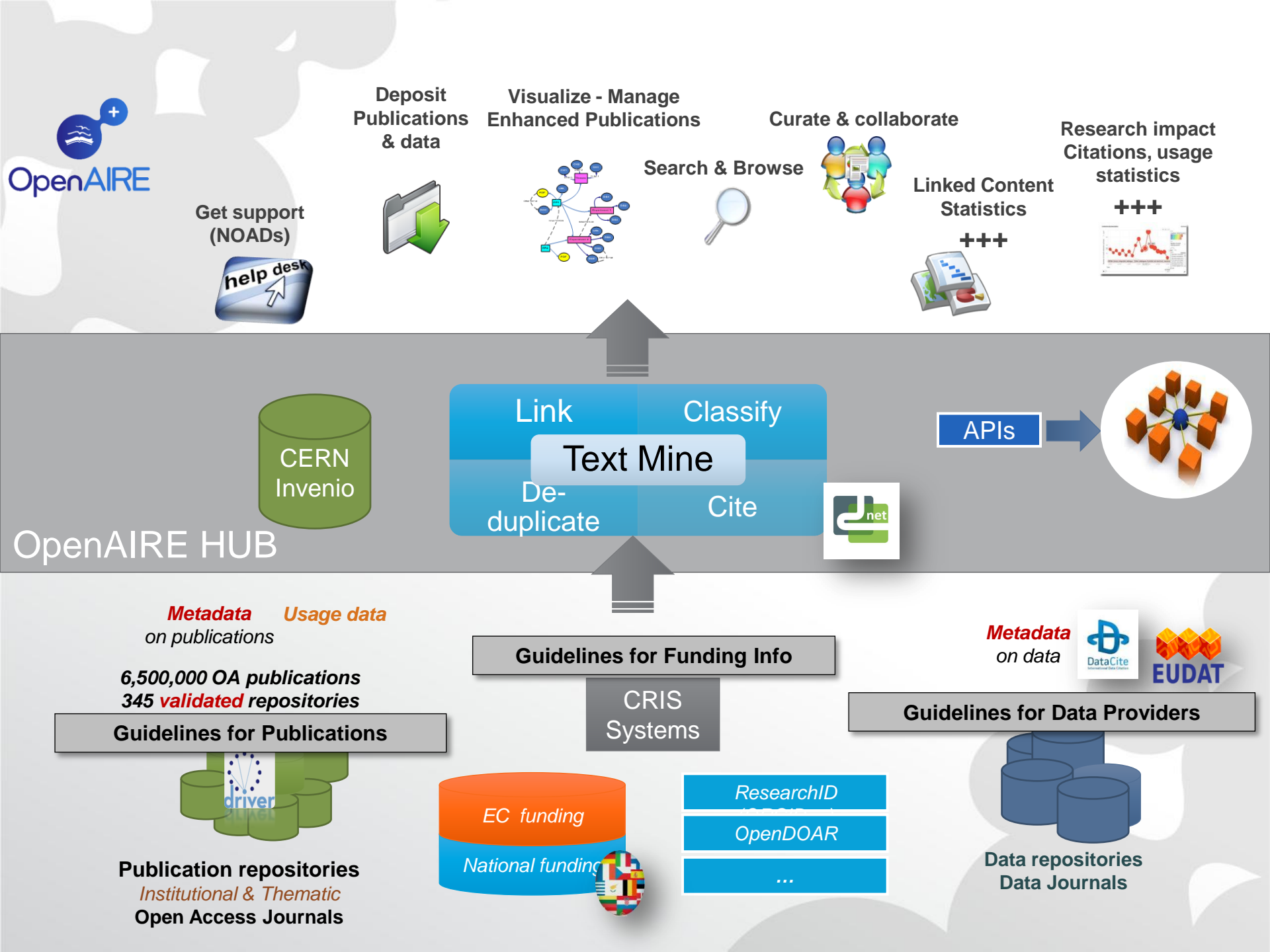
Scholarly Communication Model in transition
Information in Context

The OpenAIRE data model

Main entities and relationships



- Research results & licences
 - Publications
 - Research data (datasets & databases)
- People
 - Authors, PIs
- Research organizations
- Funders and funding schemes
- Data Sources
 - Repositories, aggregators, registries, CRIS



Researchers

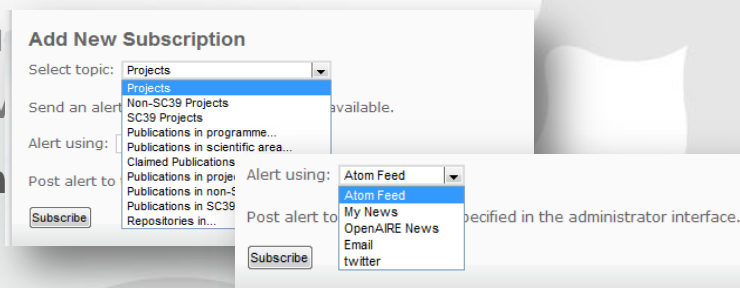
...except for the usual benefits of Open Access.

Are you a
Researcher?

Deposit Open Access.
Share results.
Reuse research output.



- One stop-shop for deposition – **publications & data**
 - Identify your local or thematic repository
 - Deposit in CERN repository for “homeless” researchers
- Mechanisms to link publications to **projects & data**
 - Harvesting and aggregation
 - Manual - through the portal
 - Automated - through (repositories, ArXiv)
- Alerts and Notification
- Online curation



Data Providers

... part of the global community – Interoperation through internationally accepted guidelines

Are you a Data Provider?

Join the Open Access Network.
Increase visibility.
Impact Open Science.



- **Different levels of compatibility**
 - Publication, funding, research data
 - Usage statistics (impact)
- **Get back enriched information**
 - Links to funding and research data
 - Aggregated statistics
- **Enrich content through notifications about publications in other repositories**

Project Coordinators

... tools to ease everyday workflows

Are you a
**Research
Coordinator
or Project
Manager?**

Report open access publications.
Monitor, disseminate research
results.

Dissemination of research output and reporting



OpenAIRE
Open Access Infrastructure for Research in Europe

PRIME-XS

Home About PRIME-XS Research Access to Facilities Events

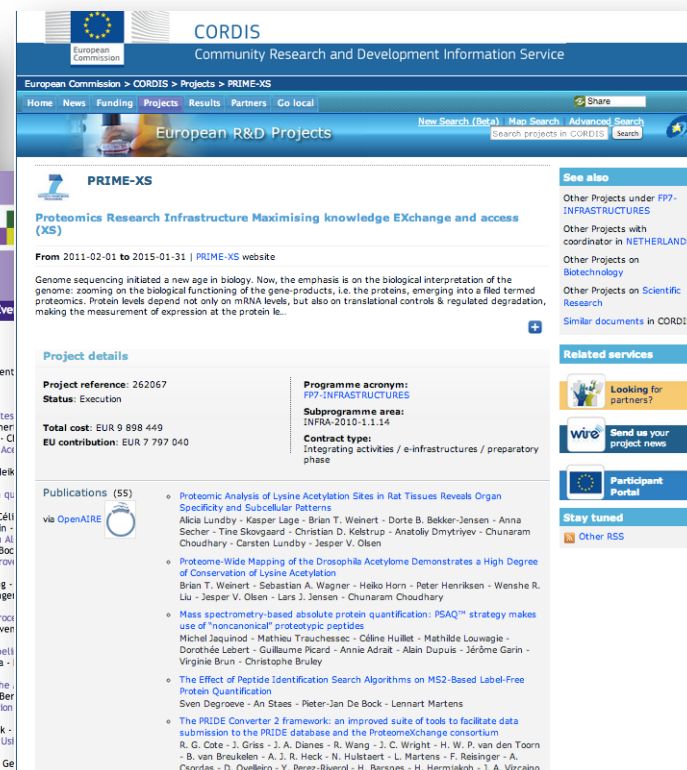
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[Publications \(via OpenAIRE\)](#)
[Vacancies](#)

Publication List (OpenAIRE)
 Below are all PRIME-XS publications that are current

PRIME-XS publications

- Proteomic Analysis of Lysine Acetylation Sites
 Alkia Lundby - Kasper Lage - Brian T. Weiner
 Christian D. Kelstrup - Anatoly Dmytriyev - Cl...
- Proteome-Wide Mapping of the Drosophila Acetylome
 Brian T. Weiner - Sebastian A. Wagner - Heik
 Jensen - Chunaram Choudhary
- Mass spectrometry-based absolute protein qu...
 proteotypic peptides
 Michel Jaquinod - Mathieu Trauchesse - Céli
 Annie Adrait - Alain Dupuis - Jérôme Garin
- The Effect of Peptide Identification Search Al...
 Sven Degroeve - An Staes - Pieter-Jan De Bo
- The PRIDE Converter 2 framework: an improv...
 and the ProteomeXchange consortium
 R. G. Cote - J. Griss - J. A. Dienes - R. Wang -
 Heck - N. Hulstaert - L. Martens - F. Reisinger
 Hermyjakob - J. A. Vazquez
- Combining quantitative proteomics data proci...
 Niikaas Colzaert - Christophe Van Huele - Sven
 Martens
- Applications of stable isotope dimethyl labeli...
 Duangnapa Kovanich - Salvatore Cappadona -
 R. Heck
- TOPPAS: A Graphical Workflow Editor for the...
 Johannes Junker - Chris Bielow - Andreas Ber
- Targeted analysis of tyrosine phosphorylation...
 prior to mass spectrometric analysis
 Adja D. Zoumaro-Djayoon - Albert J.R. Heck -
- Improving Depth in Phosphoproteomics by Us...
 Multidimensional Separation Approach
 Marco L. Heinrich - Vincent Groenewold - Ge



CORDIS
Community Research and Development Information Service

European Commission > CORDIS > Projects > PRIME-XS

Home News Funding Projects Results Partners Go local

PRIME-XS

Proteomics Research Infrastructure Maximising knowledge EXchange and access (XS)

From 2011-02-01 to 2015-01-31 | PRIME-XS website

Genome sequencing initiated a new age in biology. Now, the emphasis is on the biological interpretation of the genome: zooming on the biological functioning of the gene-products, i.e. the proteins, emerging into a field termed proteomics. Protein levels depend not only on mRNA levels, but also on translational controls & regulated degradation, making the measurement of expression at the protein le...

Project details

Project reference: 262067
 Status: Execution

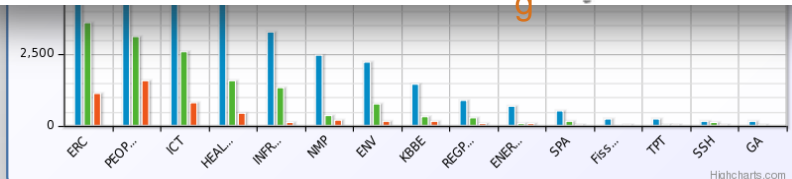
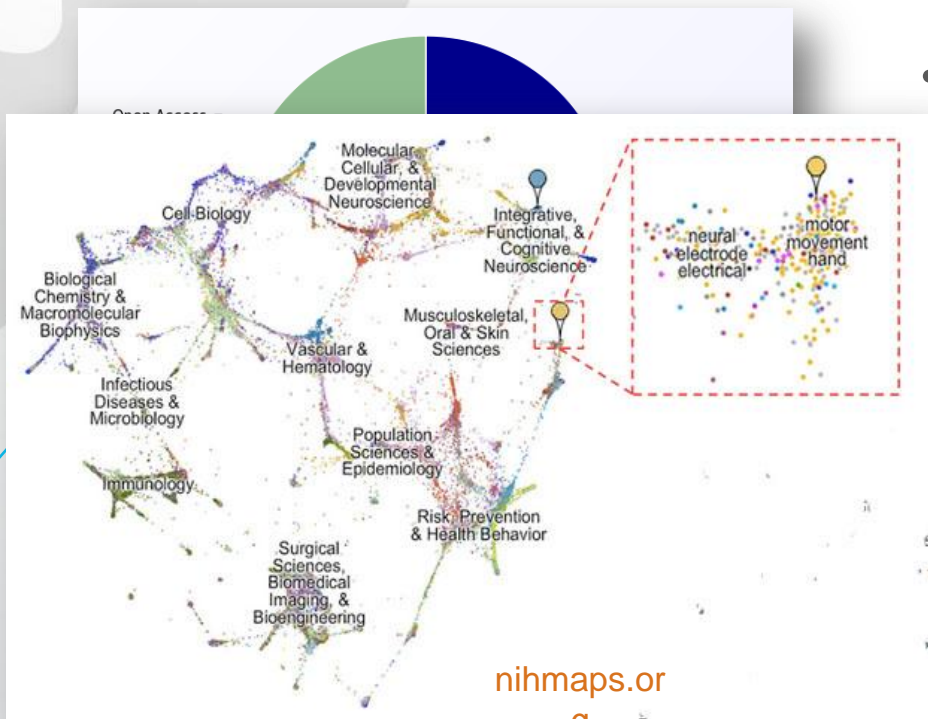
Total cost: EUR 9 898 449
 EU contribution: EUR 7 797 040

Publications (55)

- Proteomic Analysis of Lysine Acetylation Sites in Rat Tissues Reveals Organ Specificity and Subcellular Patterns
 Alkia Lundby - Kasper Lage - Brian T. Weiner - Dorte B. Bekker-Jensen - Anna Secher - Tine Skovgaard - Christian D. Kelstrup - Anatoly Dmytriyev - Chunaram Choudhary - Carsten Lundby - Jesper V. Olsen
- Proteome-Wide Mapping of the Drosophila Acetylome Demonstrates a High Degree of Conservation of Lysine Acetylation
 Brian T. Weiner - Sebastian A. Wagner - Heiko Horn - Peter Henriksen - Wenshe R. Liu - Jesper V. Olsen - Lars J. Jensen - Chunaram Choudhary
- Mass spectrometry-based absolute protein quantification: PSAQ™ strategy makes use of 'noncanonical' proteotypic peptides
 Michel Jaquinod - Mathieu Trauchesse - Céline Hullett - Mathilde Louwagie - Dorothee Lebert - Guillaume Picard - Annie Adrait - Alain Dupuis - Jérôme Garin - Virginie Brun - Christophe Bruley
- The Effect of Peptide Identification Search Algorithms on MS2-Based Label-Free Protein Quantification
 Sven Degroeve - An Staes - Pieter-Jan De Boek - Lennart Martens
- The PRIDE Converter 2 framework: an improved suite of tools to facilitate data submission to the PRIDE database and the ProteomeXchange consortium
 R. G. Cote - J. Griss - J. A. Dienes - R. Wang - J. C. Wright - H. W. P. van den Toorn - B. van Breukelen - A. J. R. Heck - N. Hulstaert - L. Martens - F. Reisinger - A. Cordas - D. Ovelheiro - Y. Perez-Riverol - H. Barnes - H. Hermyjakob - J. A. Vazquez

Research Administrators

Measure OA and Impact; Aggregated statistics for research



- National funders/infras
 - What is the output/impact of your country
- Institutional research admins
 - Link to CRIS systems
 - Output and impact of institution
- Open Access evaluation
- Statistics on projects/scientific areas/countries/institutions
- **Advanced tools for science trends**

Scientific Initiatives

Communities and researcher networks



- **Use OpenAIRE to get the impact**
 - Identify publications/data related to the initiative
 - Provide tools for community curation
 - Export in the community portal for display
- **Use OpenAIRE as the pool of OA publications**
 - Researchers link to OpenAIRE to build their libraries

Usage statistics

... alternative measures of impact

View more 

Document Language

- English (1418)
- French (25)
- Portuguese (16)
- Spanish (13)
- German (6)

View more 

Scientific Areas

- Information and Communication Technologies (491)
- Marie-Curie Actions (316)
- ERC (273)
- Research Infrastructures (74)
- Research Potential (74)

View more 

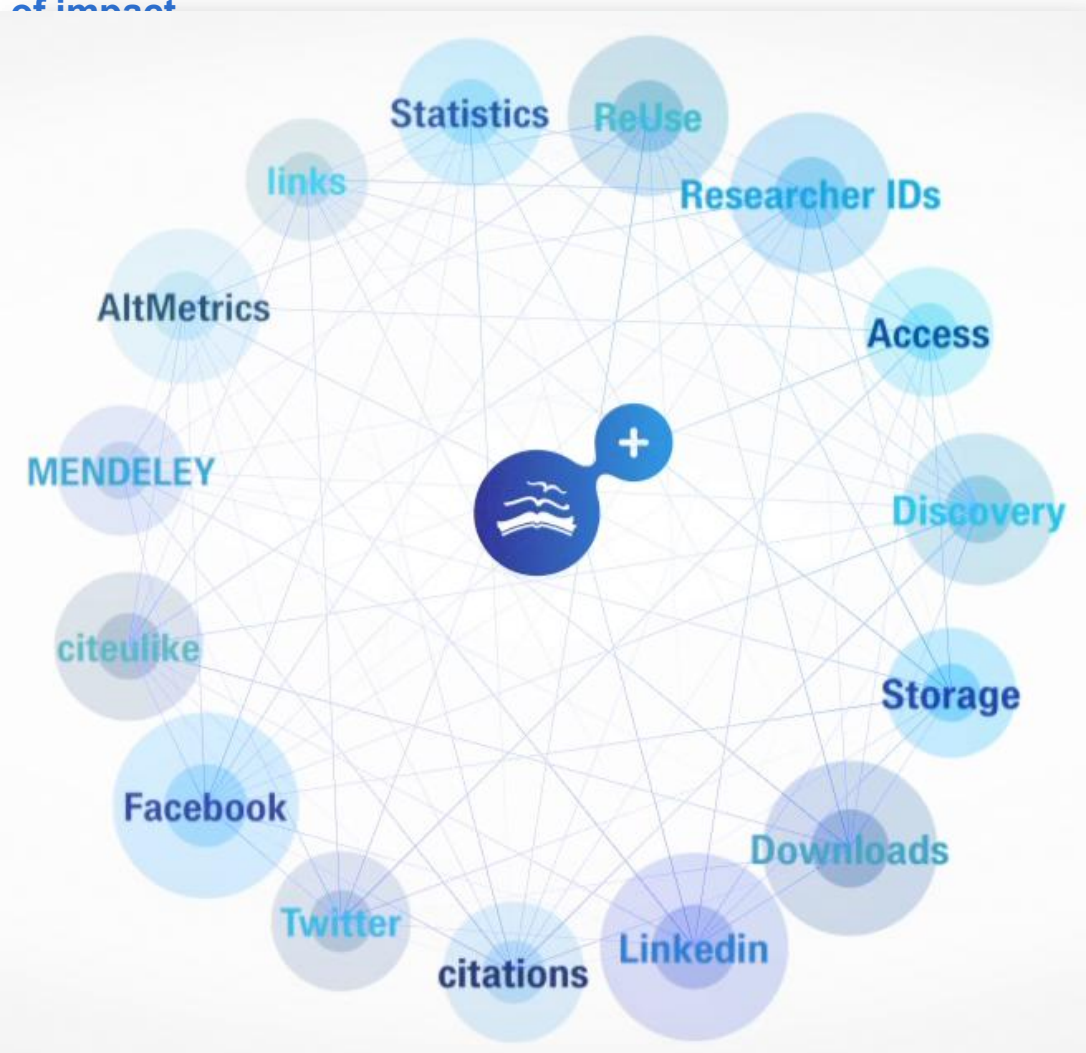
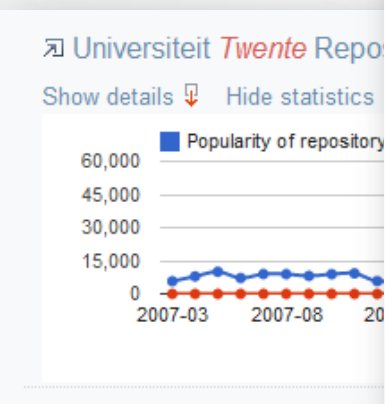
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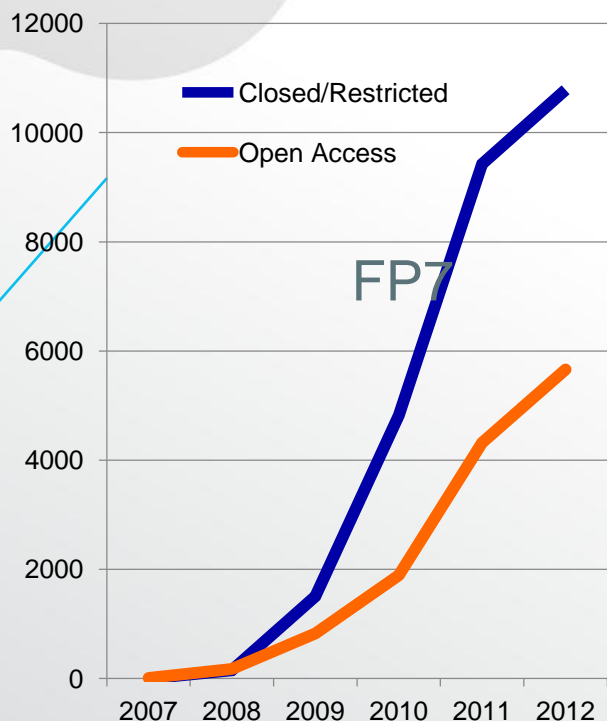


Show details



Where are we so far?

Some numbers and statistics



Current estimate 40% (real number is higher)

- **116** repositories/OA Journals
 - To be increased with the new guidelines
- **43.500** FP7 publications in **~8.000** projects
 - With additional effort to retrieve full text publications and text mine for FP7
- **11.400** Wellcome Trust publications in **~3.900** projects (**49% OA min**)

Collaborations

...24 hours in a day not enough

crossRef – metadata resolver

**EuroCRIS – research data
model**

**OpenDOAR – OA repository
registry**

RepNet – UK OA infrastructure

ORCID – researcher IDs

DataCite – citation for data

CORDIS – EC display portal

**REISearch – researcher social
network**

PLOS – share usage data

**EGI – scientific initiative to
assess impact**

**ENGAGE – exchange data
through CERIF**

**RESEARCH
DATA
ALLIANCE**

www.rd-alliance.org



Working groups on

Legal Interoperability & IPR issues

Publication-data integration



OpenAIRE-ENGAGE

What are the common goals?

Join our network!

Our next meetings: Minho, Portugal in February 2013 – Interoperability
workshop

Ghent Library in May 2013 – Publication – data integration models



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natalia@di.uoa.gr