OpenAIRE

Open Access Infrastructure for Research in Europe

Open Access e-Infrastructure for Research in Europe

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Outline

- e-Infrastructure: some preliminaries

- OpenAIRE e-Infrastructure (and related products): past, present and future

Infrastructure

«Infrastructure is a fundamentally **relational concept,** becoming real infrastructure in relation to organised practices»

«Infrastructure **is sunk into and inside** of other structures, social arrangements, and tecnologies»

S.Leigh Star & K. Ruhleder (1996) «Steps towards an ecology of infrastructure: Design and access for large information space»

e-Infrastructure

Platform operated by a **responsible entity** offering an open set of **basic enabling facilities** (including access to resources) to a **Community of Practice**. By sharing these facilities the members of the Community of Practice realise **economies of scale**.
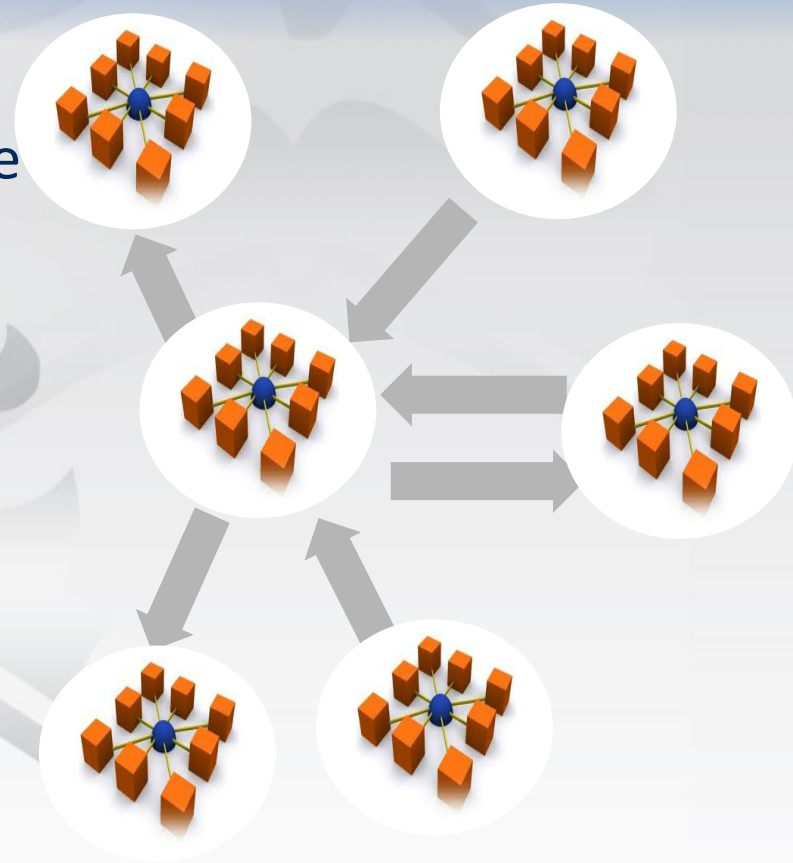
Leveraging on existing platforms

An ecosystem of e-Infastructures

○ **Interaction**

- Each e-Infrastructure can outsource required services to other e-Infrastructures

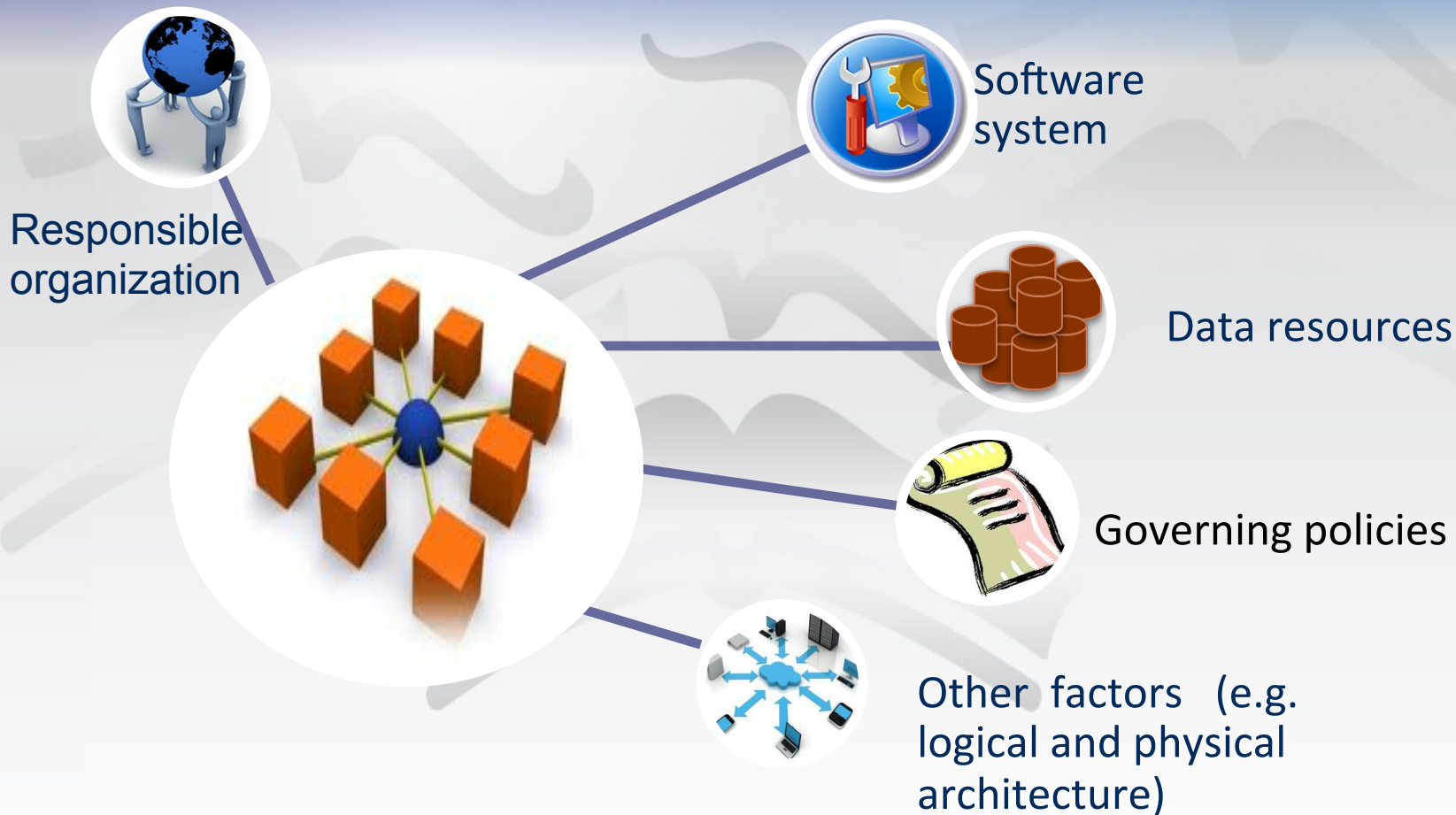- The same e-infrastructure can play both provider and consumer roles

○ **Competition**

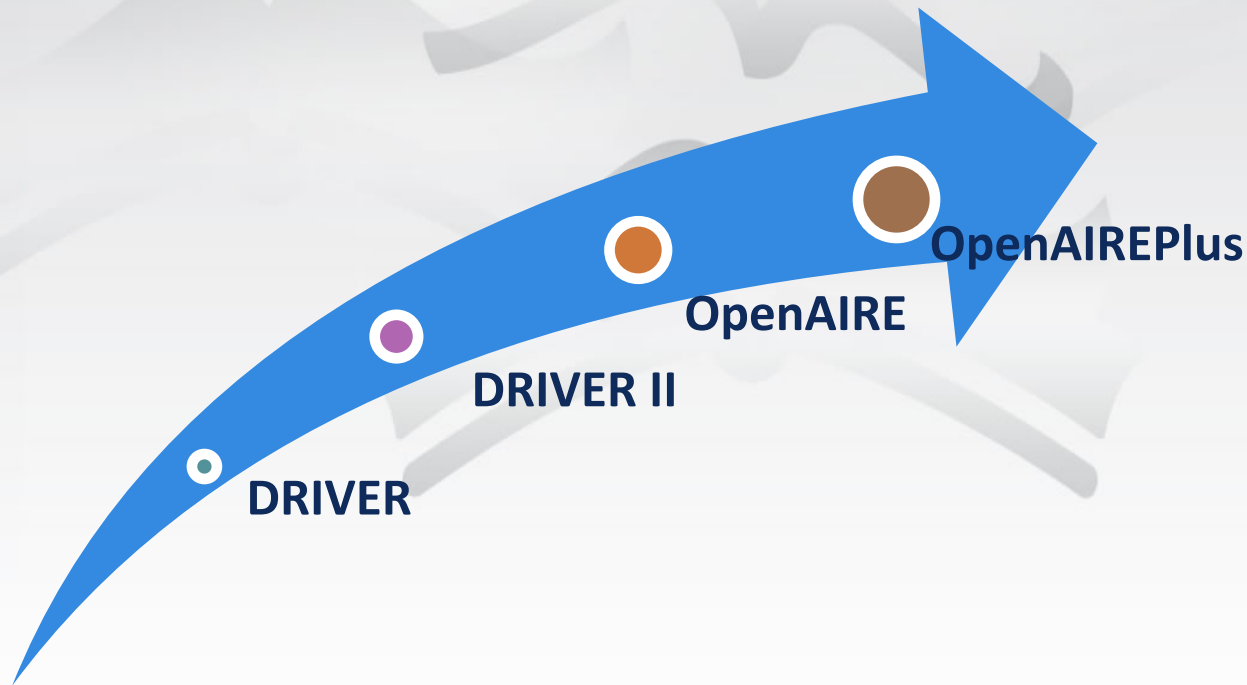- The most effective and sustainable e-Infrastructures will survive

COAR General Assembly, 21-22 May, 2012, Uppsala

e-Infrastructure dimensions

Software system

Responsible organization

Data resources

Governing policies

Other factors (e.g. logical and physical architecture)

Our focus

Open Access e-Infrastructure for Research

OpenAIREPlus

OpenAIRE

DRIVER II

DRIVER

COAR General Assembly, 21-22 May, 2012, Uppsala

DRIVER

Simplify retrieval and access of OA scientific documents

Basic components:
- search, browse
- repository registration & validation
- create profile and communities
- user interface

CNR, NKUA,
UniBi, ICM

5.160.000 documents
in 331 repositories
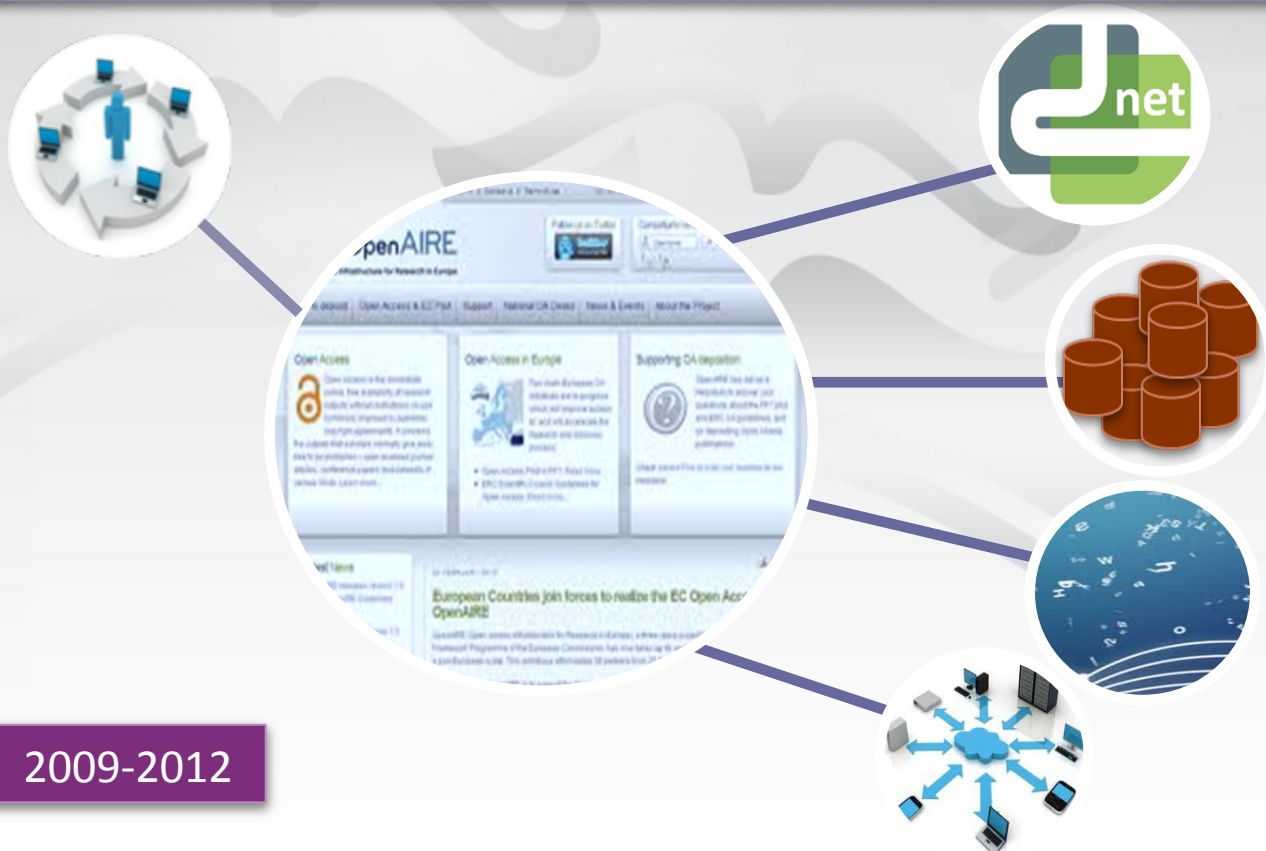from 45 countries

DRIVER Guidelines 2.0

Service sites hosted at CNR,
content storage and curation in local
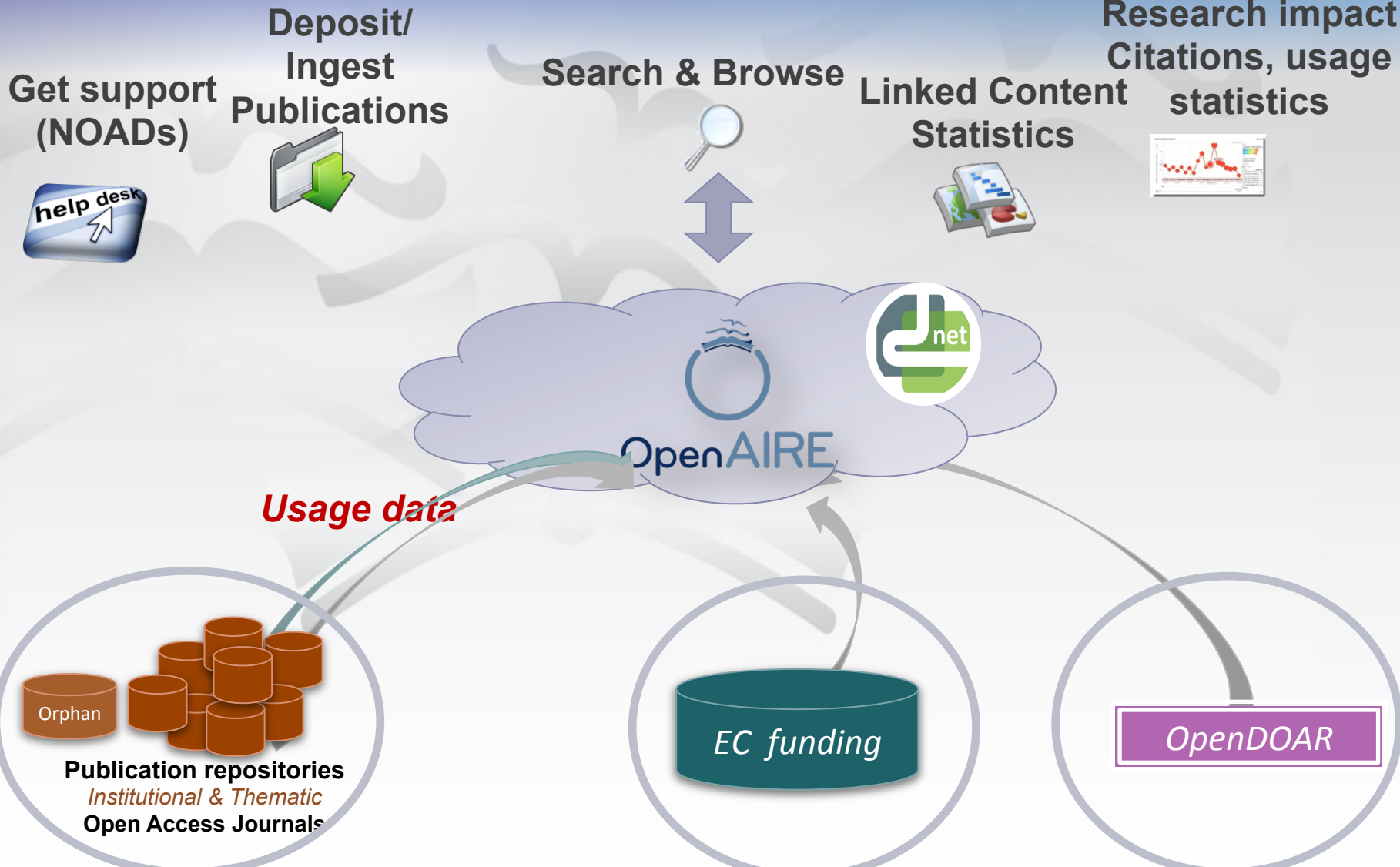repositories

24x7 since 2007

9

OpenAIRE Pilot

Support the OA mandate for peer-reviewed publications across Europe and monitor its impact

2009-2012

OpenAIRE current services

Get support
(NOADs)

Deposit/
Ingest
Publications

Search & Browse

Linked Content
Statistics

Research impact
Citations, usage
statistics

OpenAIRE

net

Usage data

Orphan

Publication repositories
Institutional & Thematic
Open Access Journals

EC funding

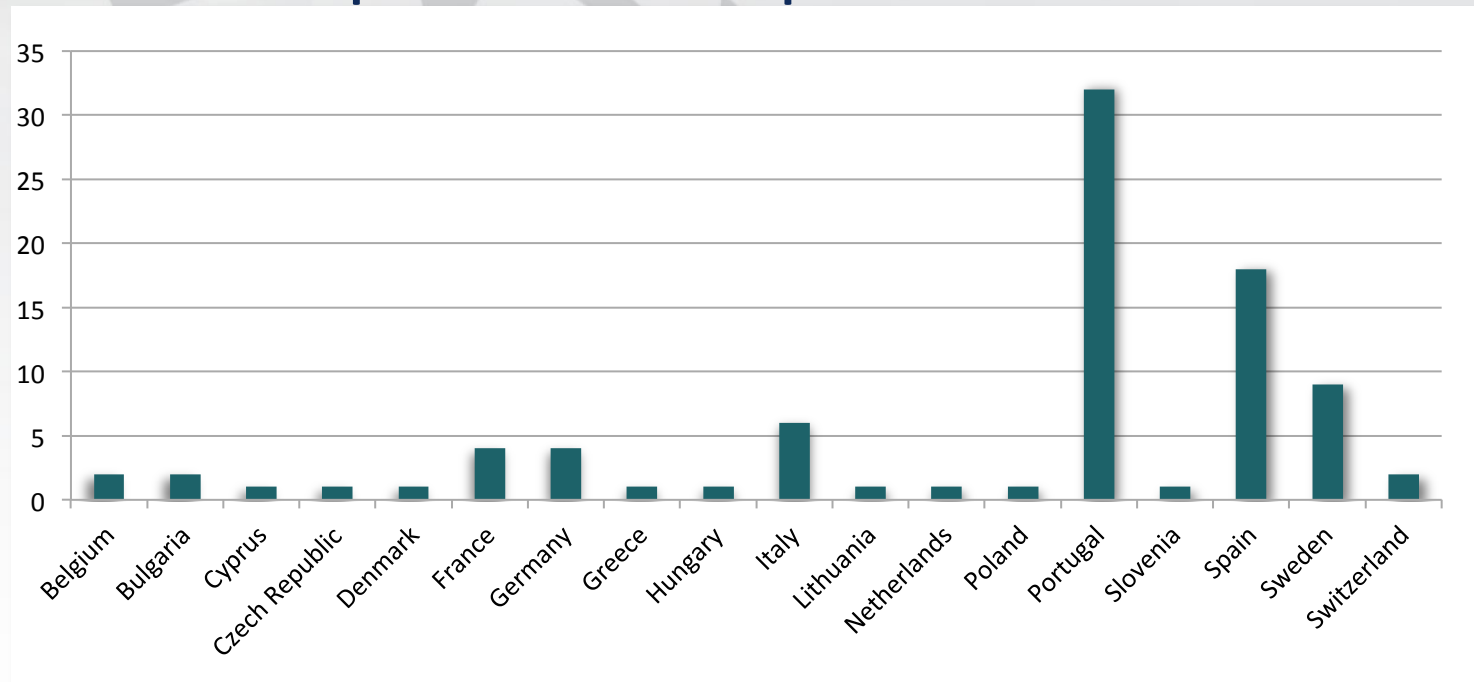*OpenDOAR*

OpenAIRE in numbers

- 26, 030 FP7 publications from 5000 projects

- ~ 10,300 Open Access

- 94 OpenAIRE compliant OA Repositories & Journals
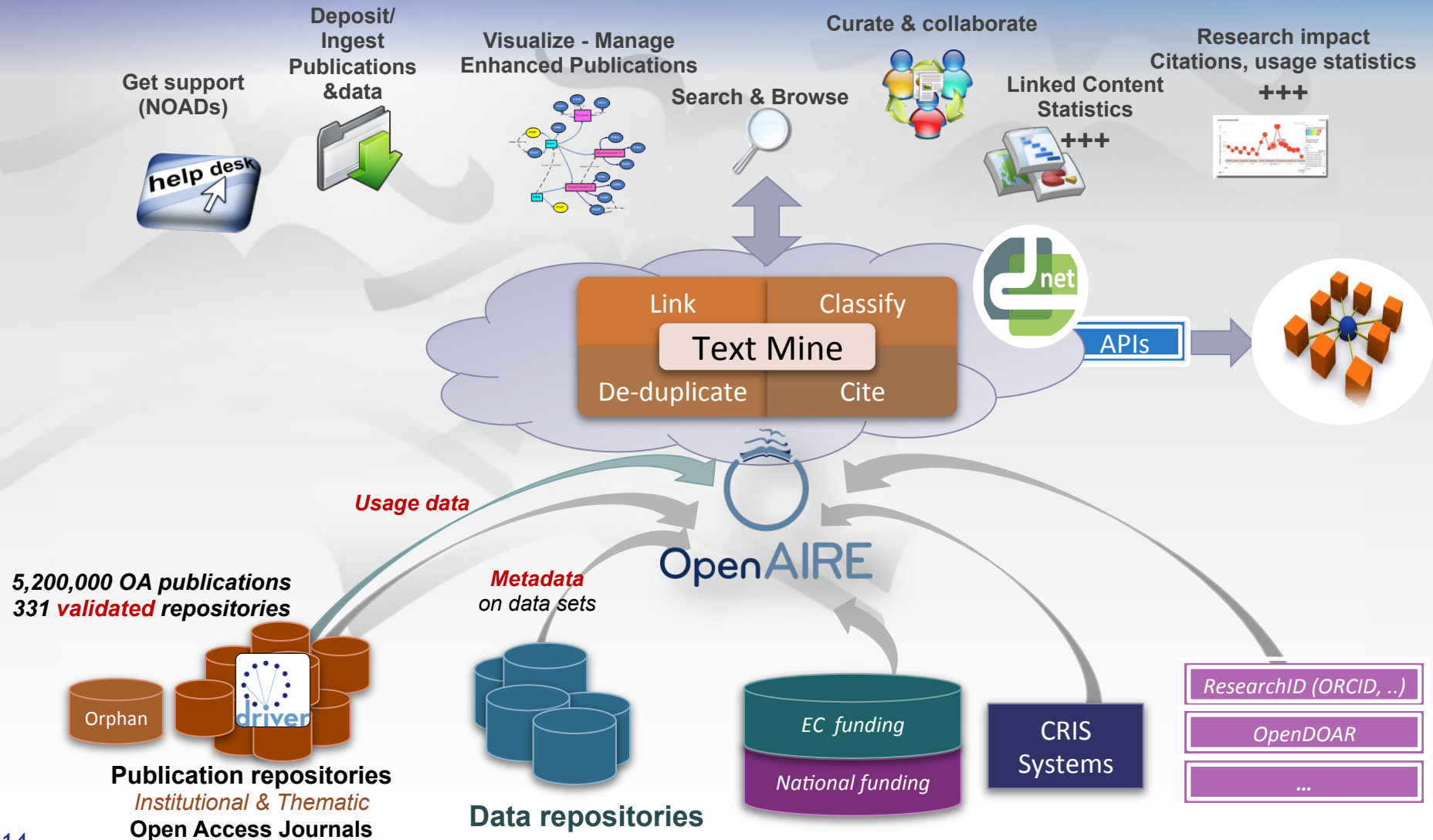
OpenAIREPlus

Support the OA mandate for research outputs, monitor its impact and facilitate the exploitation of these outputs

2011-2014

OpenAIREPlus services

Get support
(NOADs)

Deposit/
Ingest
Publications
&data

Visualize - Manage
Enhanced Publications

Search & Browse

Curate & collaborate

Linked Content
Statistics
+++

Research impact
Citations, usage statistics
+++

Link | Classify
Text Mine
De-duplicate | Cite

net

APIs

Usage data

Metadata
on data sets

OpenAIRE

5,200,000 OA publications
331 *validated* repositories

Orphan

Publication repositories
Institutional & Thematic
Open Access Journals

Data repositories

EC funding

National funding

CRIS
Systems

ResearchID (ORCID, ..)
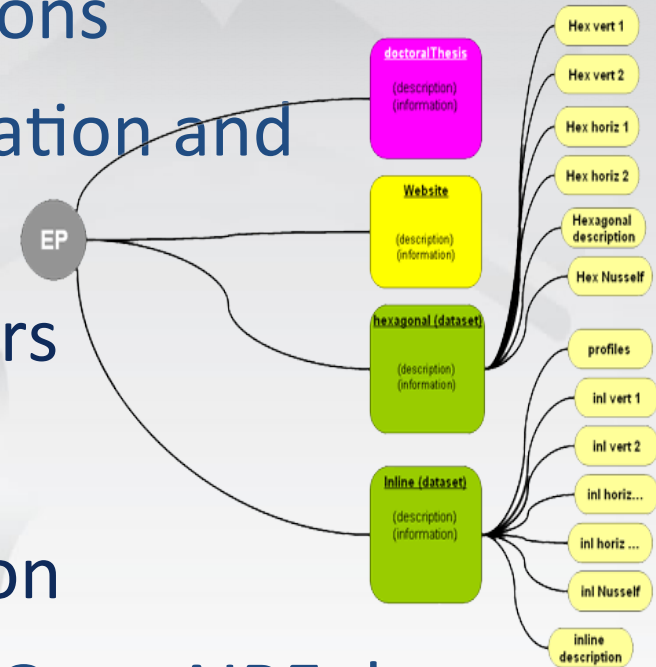
OpenDOAR

...

For researchers

- Linked data through *"Enhanced publications"*
  - The new generation publications
  - Representation, end user creation and visualization
- Repository for *"homeless"* authors
  - Publications & data
- End-user data (metadata) curation
  - Send "content feedbacks" to OpenAIRE data curators

Alerts & notifications

Delivery of information to users and services

○ Subscribe to topics of interest

Add New Subscription

Select topic: Projects ▼

| Projects |
| Non-SC39 Projects |
| SC39 Projects |
| Publications in programme... |
| Publications in scientific area... |
| Claimed Publications |
| Publications in project... |
| Publications in non-SC39 projects |
| Publications in SC39 projects |
| Repositories in... |

Send an alert ... available.

Alert using:

Post alert to ... administrator interface.

Subscribe

○ Receive notifications through various means

Alert using: Atom Feed ▼

| Atom Feed |
| My News |
| OpenAIRE News |
| Email |
| twitter |

Post alert to ... pecified in the administrator interface.

Subscribe
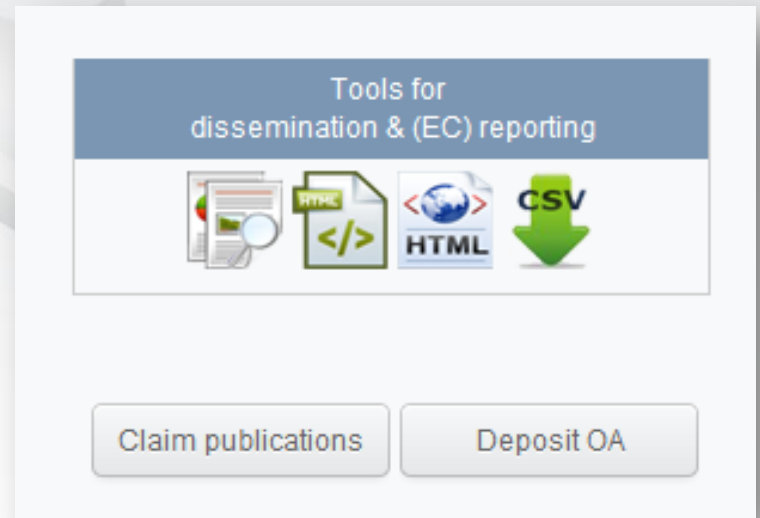
For research administrators
Research and funding evaluation

- Statistics on research output

  - Volume, trends for
    - project/institution/funder/country/scientific area/...

  - Co-authorship graphs

- Statistics on research impact

  - Citation analysis

  - Usage statistics aggregation

  - Research metrics and impact applied to
    - project/organization/country/scientific area/...

For project coordinators
Dissemination & compliance

○ Text mining of various sources to help them in OA compliance

○ Complete lists of project publications

– Use in dissemination – dynamic lists retrieved in XML, HTML format

– Use in EC reporting

Tools for dissemination & (EC) reporting

Claim publications   Deposit OA

Backend services for automated object interlinking

- Authority file management

  - Identification and semi-automated de-duplication of entities: articles, data, organizations, authors, …

- Automated content classification

  - Text/data mining techniques for publication or data clustering

- Advanced citation and similarity analysis

  - Citation discovery in publications & data

  - Author identification tools

- Usage pattern analysis tools

  - Content linking from implicit user actions

Computational power through
— D4Science, other Cloud clusters

For data providers
Guidelines and tools

○ Tools for data source validation and registration

○ Guidelines for publication providers

○ Guidelines for data providers - accessing (metadata of) datasets from providers while minimizing effort to comply

– *Metadata* (synergy with DataCite, EuroCRIS, EBI-EMBL, DANS, STFC/BADC): indications on **minimal metadata** about datasets (e.g., identifiers, date of creations, title, URLs) and best-practices for interlinking datasets and publications

– *Access protocols:* no requirements for adopting precise protocols (e.g., OAI, FTP) or ID/URL frameworks (e.g., OpenURL, DOI) to comply

Other D-Net enabled e-infra

○ Under construction:

– Poland

– Spain

– Argentina

○ Operational:

– European Film Gateway (EFG)

– Heritage of the People's Europe (HOPE)

More info

- www.driver-repository.eu/
- www.openaire.eu/
- www.europeanfilmgateway.eu/
- www.peoplesheritage.eu/