Outline

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

**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
e-Infrastructure dimensions

- Responsible organization
- Software system
- Data resources
- Governing policies
- Other factors (e.g. logical and physical architecture)
Our focus

Open Access e-Infrastructure for Research

DRIVER

DRIVER II

OpenAIRE

OpenAIRE Plus
Simplify retrieval and access of OA scientific documents

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

5.160.000 documents in 331 repositories from 45 countries

CNR, NKUA, UniBi, ICM

DRIVER Guidelines 2.0

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

24x7 since 2007
Support the OA mandate for peer-reviewed publications across Europe and monitor its impact.
OpenAIRE current services

- Get support (NOADs)
- Deposit/Ingest Publications
- Search & Browse
- Linked Content Statistics
- Research impact
- Citations, usage statistics

Usage data

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

Get support (NOADs)

Deposit/Ingest Publications & data

Visualize - Manage Enhanced Publications

Curate & collaborate

Search & Browse

Linked Content Statistics

Research impact Citations, usage statistics

+++

Link

Classify

Text Mine

De-duplicate

Cite

APIs

Usage data

5,200,000 OA publications

331 validated repositories

Metadata on data sets

Publication repositories

Institutional & Thematic

Open Access Journals

Data repositories

Orphan

ResearchID (ORCID, ..)

OpenDOAR

EC funding

National funding

CRIS Systems

...
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
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
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
Other D-Net enabled e-infra

- Under construction:
  - Poland
  - Spain
  - Argentina

- Operational:
  - European Film Gateway (EFG)
  - Heritage of the People’s Europe (HOPE)
www.driver-repository.eu/
www.openaire.eu/
www.europeanfilmgateway.eu/
www.peoplesheritage.eu/