OpenAIRE services and tools for Open Science



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www.openaire.eu



OpenAIRE's e-infrastructure Commons



KEY STAKEHOLDERS SERVICES

Funders, research admins, research communities



- Research impact
- Project reporting and monitoring
- Open Access trends



Content providers

- Repository validation
- Repository notification broker
- Repository analytics and usage stats



Researchers

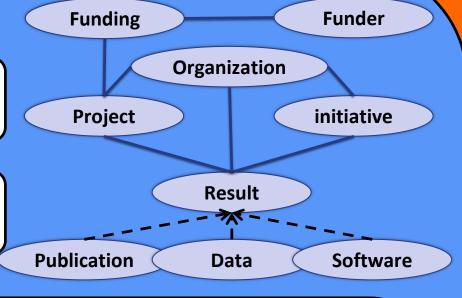
- Claim publications, datasets, software
- Deposit publications, datasets, software
- Search & browse: interlinked publications, datasets, projects
- Open Access & DMP Helpdesk
- End-User feedback



Cleaning

De-duplication

Enrichment By inference





Validation

CONTENT PROVIDERS

Research Data repositories

CRIS systems

zenodo

Software Repositories

Publications repositories

Registries (e.g. projects)

OA **Journals**

Key to Open Science uptake: services for all







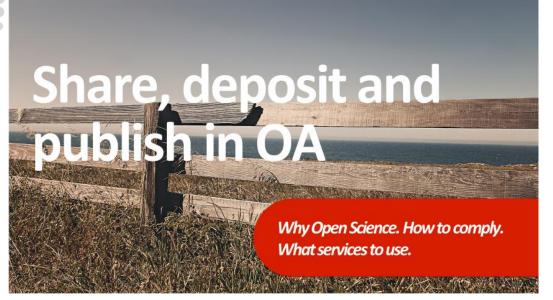




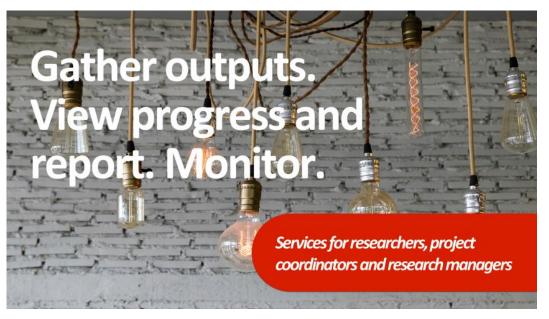








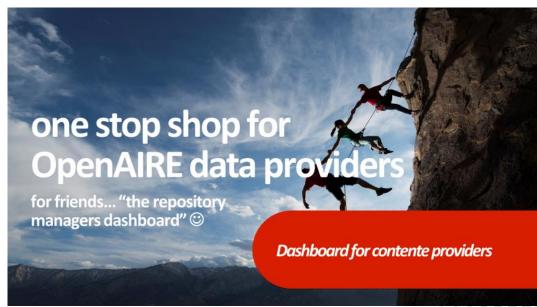






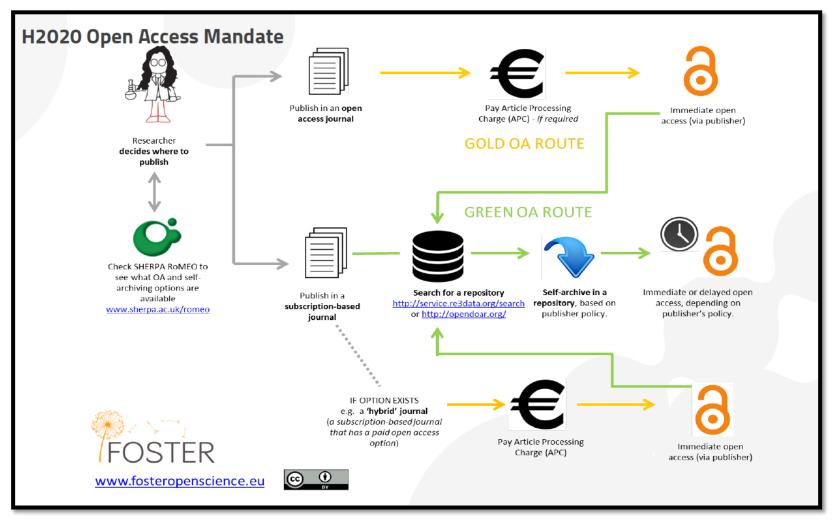


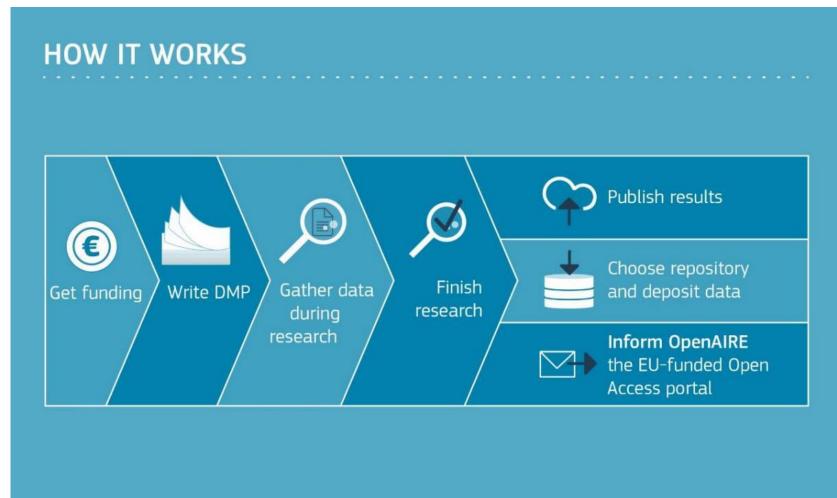






Open Access & Open Research Data in H2020









Deposit once!

- Locate an appropriated repository via OpenAIRE.
 - If no repository is available: use Zenodo (OpenAIRE/CERN repository).
- Acknowledge project funding in the publication or dataset metadata record.
- Use a fully OpenAIRE compatible repository.
 If don't... use the OpenAIRE linking services
 afterwards and associate your research
 results (Link/Claim publication or datasets
 to projects).
- But we don't stop there! We apply cleaning, transformation, disambiguation processes, and identify relationships among all research entities:

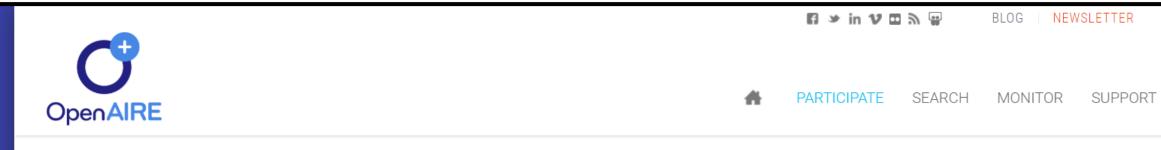
- publications, data, funding...
- All publications accessible via OpenAIRE and linked to a project will be displayed automatically in the reporting section of the EC Participant Portal for the project.

We did it!





Find where to deposit



DEPOSIT PUBLICATIONS

Are you a grant recipient from the following: H2020; FP7 with SC39; or ERC? Then you are required to publish in open access. One way to do this is to deposit your publications into an open access repository.

Click the following to find more information: FP7 guidelines, H2020 guidelines, ERC guidelines OR ask a question to OpenAIRE's national representative.

LOCATE DATA PROVIDER VIA YOUR INSTITUTION

Vysoká škola báňská-Technická univerzita Ostrava (VŠB Technical University of Ostrava) (VŠB-TUO)

Datasource type

- Publication Repository
- Publication Repository Aggregator
- 💡 🗹 Journal Aggregator/Publisher
- ✓ Institutional Repository
- Thematic Repository
- Registry

Compatibility

- ✓ OpenAIRE Basic (DRIVER OA)
- OpenAIRE 3.0 (OA, funding)
- ✓ OpenAIRE 2.0+ (DRIVER OA, EC funding)
- under validation
- collected from a compatible aggregator
- ✓ OpenAIRE 2.0 (EC funding)

Country [select all|none]

all countries selected

- Albania Algeria
- Argentina
- Australia Austria

SELECT



OpenAIRE

NEWSLETTER



□ DSPACE NA VŠB-TUO

HI. PEDRO PRINCIPE

OPFN ACCESS

DSpace at VSB Technical University of Ostrava

Institutional Repository Type Items 2131 Publications

Compatibility OpenAIRE 3.0 (OA, funding) OAI-PMH http://dspace.vsb.cz/oai/request

More information □ Detailed data provider information (OpenDOAR)

Publications (2131) Research Data (0)

view all 2131

Type grain-size curves focusing on the zone of polygenetic loess sediments in the selected part of Ostrava Basin

Juriš, Peter; Marschalko, Marian; Fojtová, Lucie; Kovář, Luděk (2007)

Spectral analysis of metallic surfaces topography generated by abrasive waterjet

Brillová, Kateřina; Ohlídal, Miloslav; Valíček, Jan; Kozak, Dražan; Hloch, Sergej; Zeleňák, Michal; Harničárová, Marta: Hlaváček, Petr (2012)





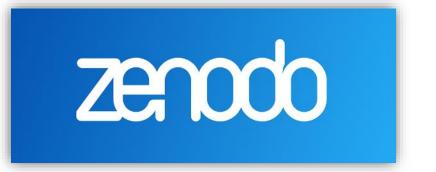
Short Facts about Zenodo

- Catch-all repository for EU funded research
- Up to 50 GB per upload
- Data stored in the CERN Data Center
- Persistent identifiers (DOIs) for every upload
- Includes article level metrics
- Free for the long tail of Science
- Open to all research outputs from all disciplines
- Easily add EC funding information and report via OpenAIRE





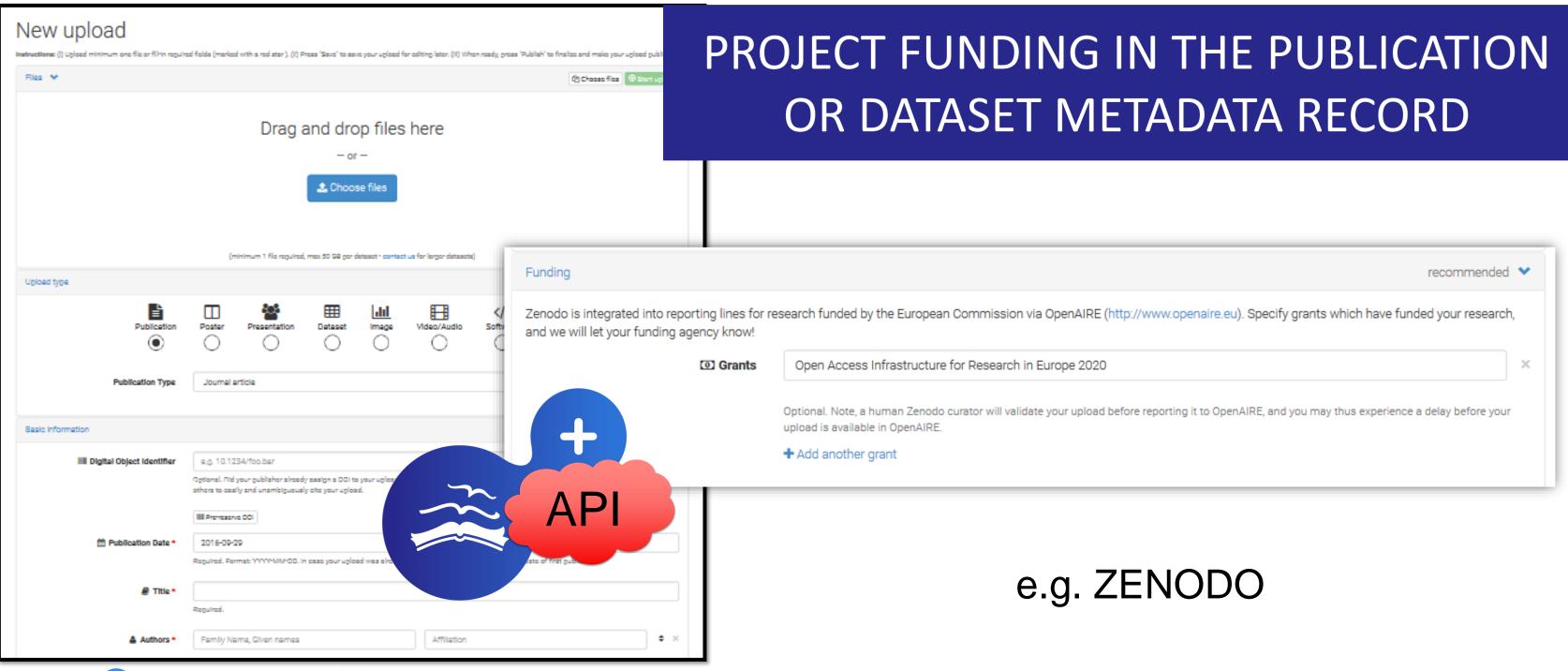






PROJECT FUNDING IN THE PUBLICATION OR DATASET METADATA RECORD

ACKNOWLEDGE



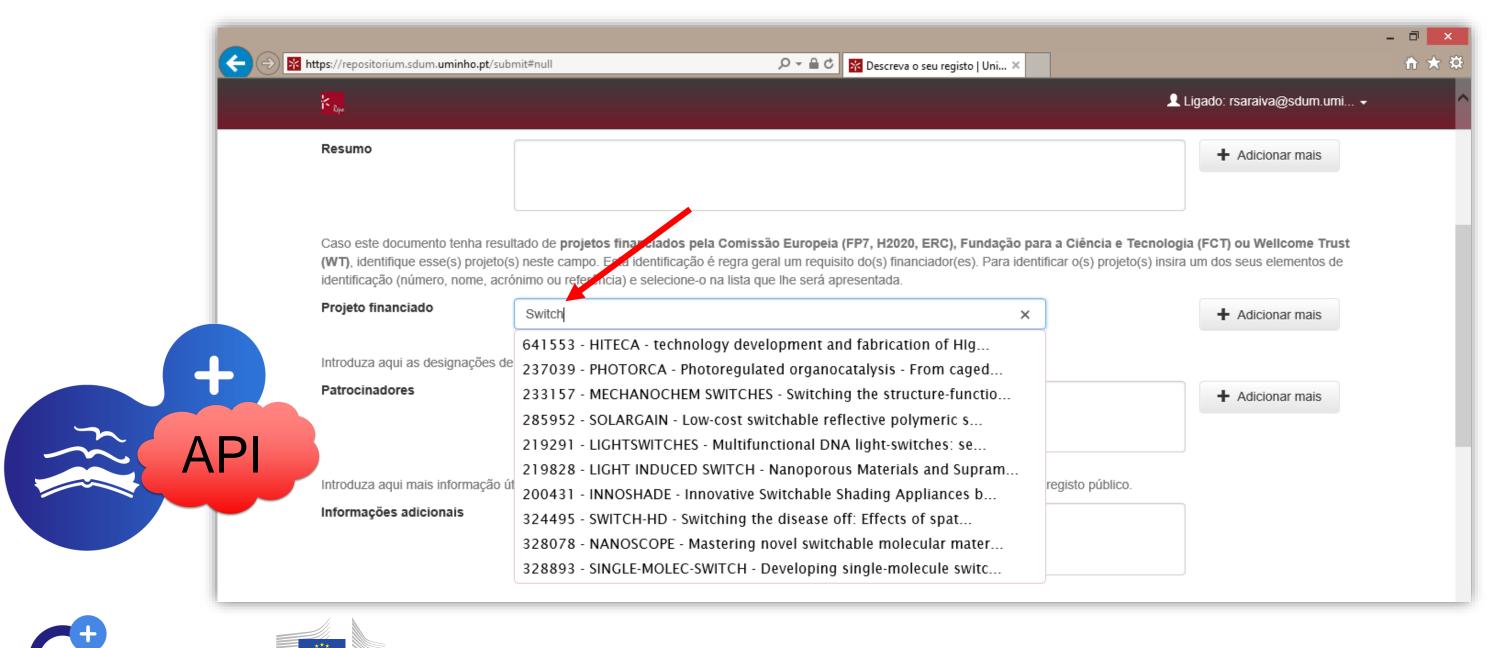




OpenAIRE Funders Projects List

REPOSITORIES DEPOSIT WORKFLOW:

Searching by the name, acronym or the project id number... Select the project and accept



Discover, Access and Reuse

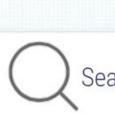
For all OpenAIRE stakeholders...



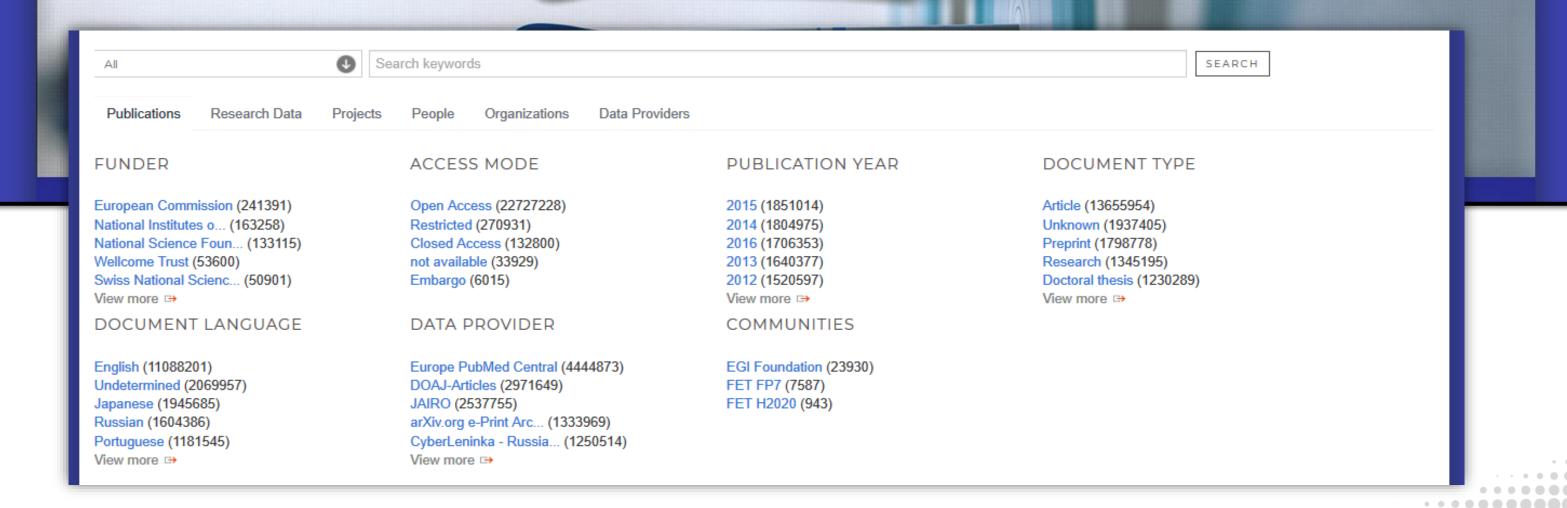


SUPPORT

OPEN ACCESS



Search in 24,085,848 publications 688,870 datasets from 11,465 repositories and OA journals



Search all entities

All • Se	earch keywords		SEARCH
Publications Research Data Projects	People Organizations Data Providers		
FUNDER	ACCESS MODE	PUBLICATION YEAR	DOCUMENT TYPE
European Commission (241391) National Institutes o (163258) National Science Foun (133115) Wellcome Trust (53600) Swiss National Scienc (50901) View more ➡	Open Access (22727228) Restricted (270931) Closed Access (132800) not available (33929) Embargo (6015)	2015 (1851014) 2014 (1804975) 2016 (1706353) 2013 (1640377) 2012 (1520597) View more ➡	Article (13655954) Unknown (1937405) Preprint (1798778) Research (1345195) Doctoral thesis (1230289) View more ➡
DOCUMENT LANGUAGE	DATA PROVIDER	COMMUNITIES	
English (11088201) Undetermined (2069957) Japanese (1945685) Russian (1604386) Portuguese (1181545) View more ➡	Europe PubMed Central (4444873) DOAJ-Articles (2971649) JAIRO (2537755) arXiv.org e-Print Arc (1333969) CyberLeninka - Russia (1250514) View more ➡	EGI Foundation (23930) FET FP7 (7587) FET H2020 (943)	







#

PARTICIPATE S

SEARCH MONITOR

TOR SUPPORT

OPEN ACCESS



Title Runtime Exploitation of Application Dynamism for Energy-efficient eXascale

computing

Funding EC | H2020 | RIA

Call H2020-FETHPC-2014

Contract (GA) number 671657 Start Date 2015/09/01

End Date 2018/08/31

Open Access mandate yes
Data Pilot no

Organizations NUI Galway, VSB, GNS, INTEL, TUM, NTNU, TUD

Publications (15)

Research Data (0)

Statistics 🕒





PARTICIPATE SEARCH

EI y IN V III N W



괴 The energy consumption optimization of the BLAS routines ∂

Sojka, Radim; Říha, Lubomír; Horák, David; Kružík, Jakub; Beseda, Martin; Čermák, Martin (2017)

Languages: English

Types: Conference object

Subjects: BLAS, READEX, energy consumption, CPU frequency

DEPOSIT PUBLICATIONS

Show additional classifications + Identifiers: ☐ doi:10.1063/1.4992522

The paper deals with the energy consumption evaluation of selected Sparse and Dense BLAS Level 1, 2 and 3 routines. Authors employed AXPY, Sparse Matrix-Vector, Sparse Matrix-Matrix, Dense Matrix-Vector, Dense Matrix-Matrix and Sparse Matrix-Dense Matrix multiplication routines from Intel Math Kernel Library (MKL). The measured characteristics illustrate the different energy consumption of BLAS routines, as some operations are memory-bounded and others are compute-bounded. Based on their recommendations one can explore dynamic frequency switching to achieve significant energy savings up

LINK TO PROJECT

INK TO RESEARCH DATA

SHARE - BOOKMARK





DOWNLOAD FROM

☐ DSpace at VSB Technical University of Ostrava

FUNDED BY PROJECTS

EC | READEX (i)

RELATED TO

FET-H2020 → FET HPC: HPC Core

Technologies, Programming Environments and Algorithms for Extreme Parallelism and

Extreme Data Applications

EET HOOOD - EET

view all 15

Autotuning of MPI Applications Using PTF

Sikora, Anna; César, Eduardo; Comprés, Isaías; Gerndt, Michael (2016)

Projects: EC | READEX (671657)

a

DATA PROVISION - 3rd party providers

OpenAIRE API – Bulk

- OAI-PMH
 - http://api.openaire.eu/oai_pmh
- Bulk access to projects
 - DSpace endpoint:
 http://api.openaire.eu/projects/dspace/\$fundingStrea
 m/ALL/ALL
 - ePrints endpoint:
 http://api.openaire.eu/projects/eprints/\$fundingStre
 am/ALL/ALL
- Examples:
 - http://api.openaire.eu/projects/eprints/WT/ALL/ALL
 - http://api.openaire.eu/projects/eprints/FP7/SP2/AL

OpenAIRE API – Selective

The number of total results returned by one query is limited to 10,000.

http://api.openaire.eu/search/publications http://api.openaire.eu/search/datasets http://api.opanaire.eu/search/projects XML, JSON, TSV, CSV.

Examples:

http://api.openaire.eu/search/publications?FP7Project ID=246686

http://api.openaire.eu/search/projects?funder=EC Participant portal.





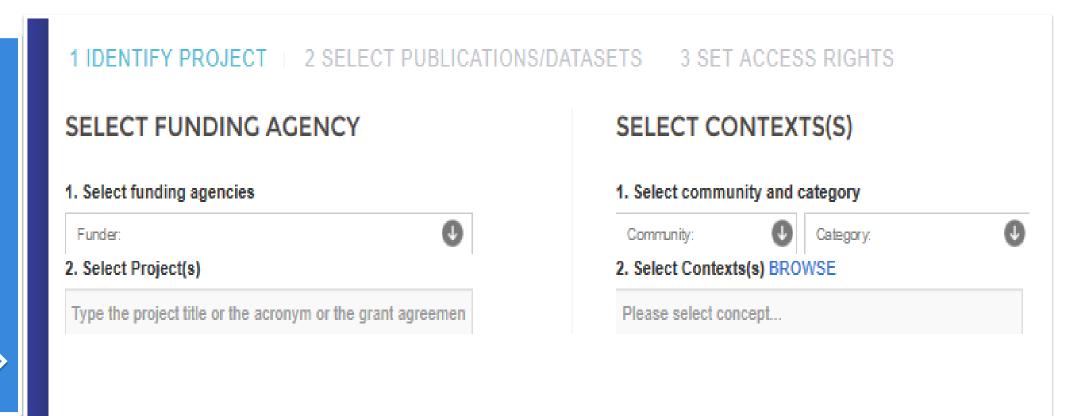


LINK RESEARCH RESULTS TOOL

https://www.openaire.eu/participate/claim

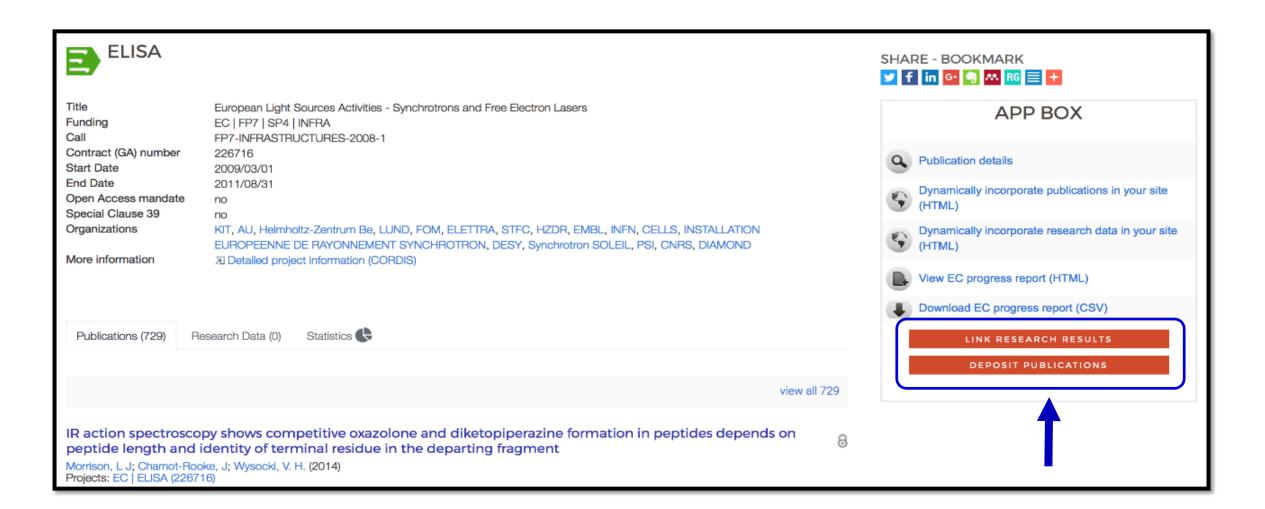
Link publication or datasets to projets.

Identify the project, select publications or datasets and set the access rights.

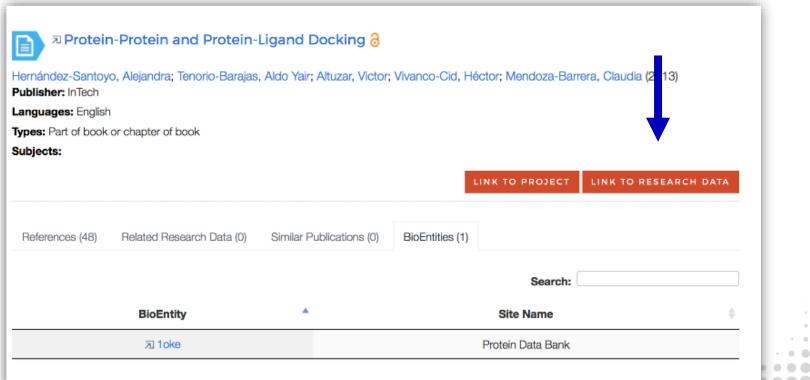








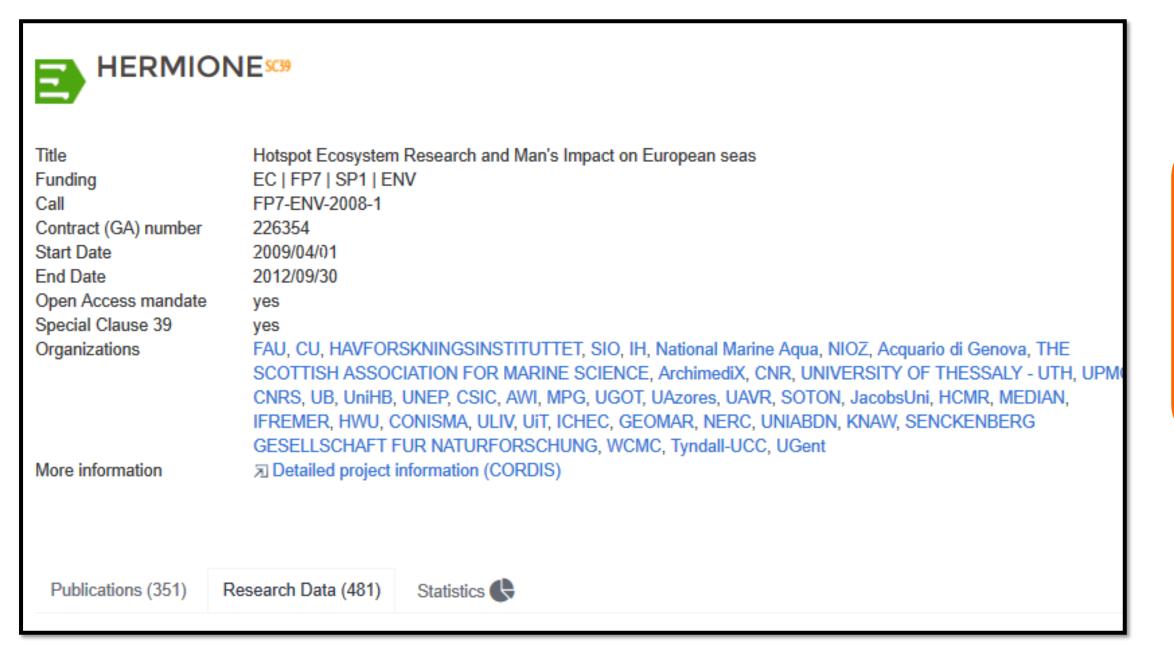


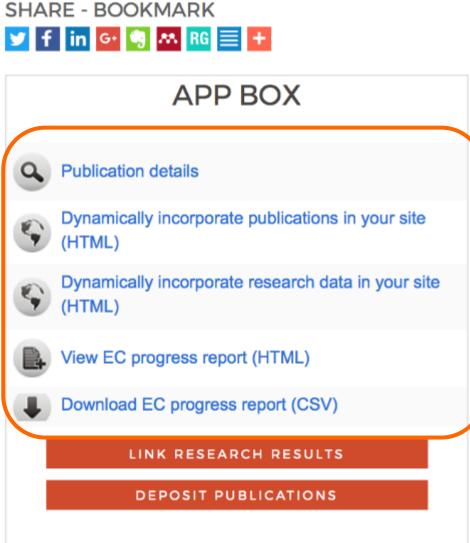


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Projects: publications and data











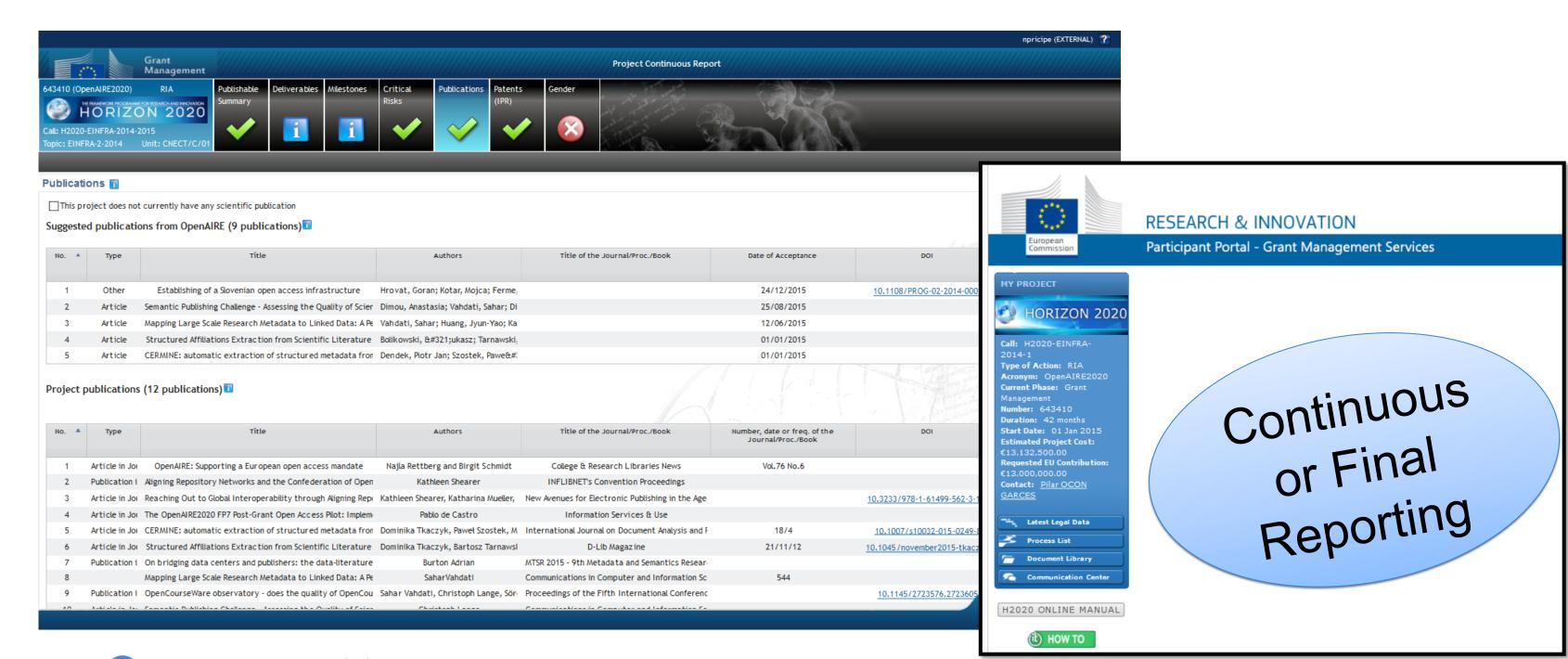


Automatically





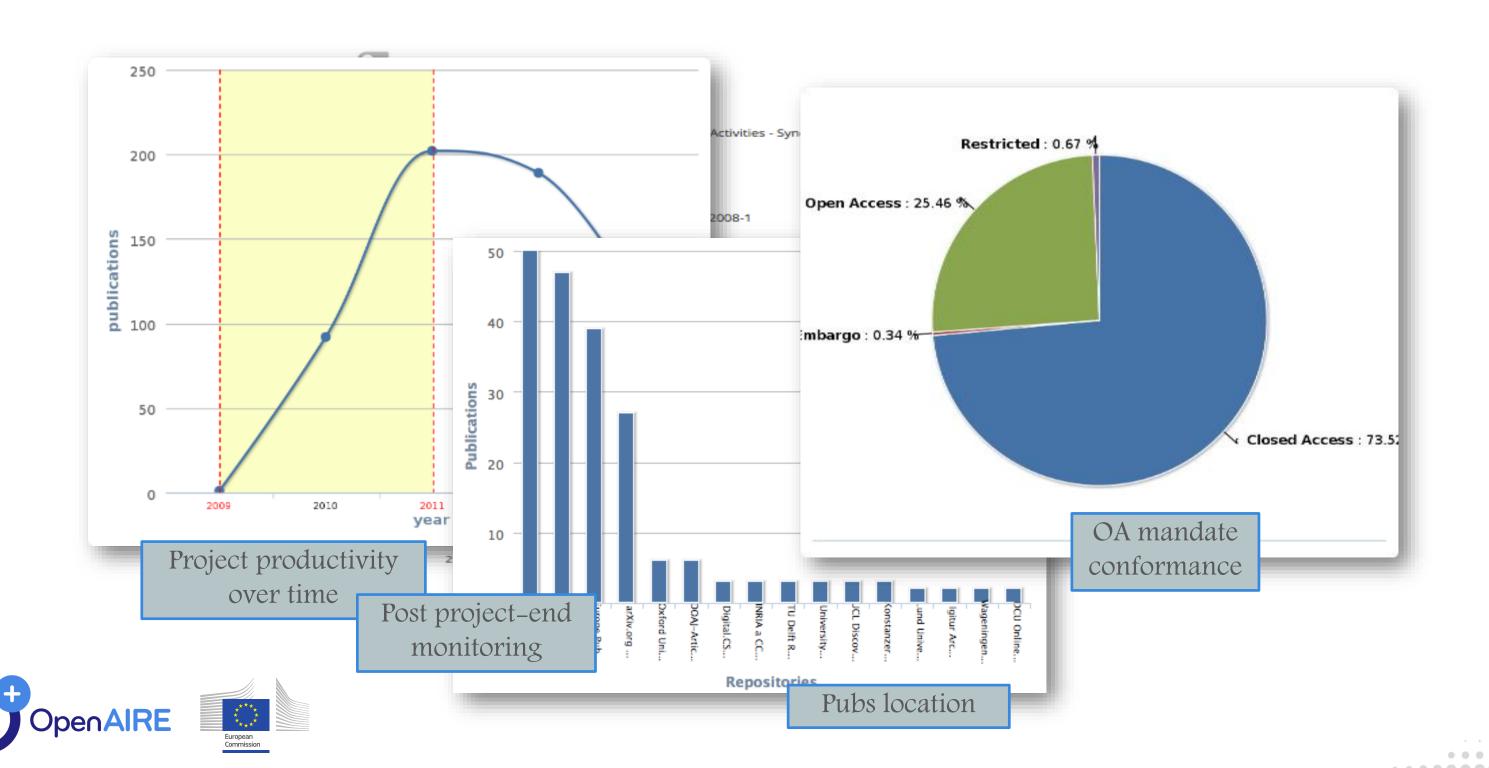
EC's participant portal





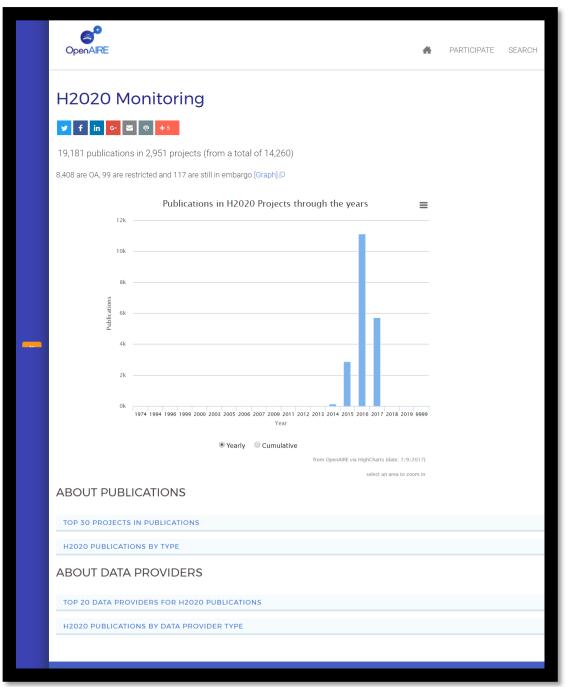


Project overview





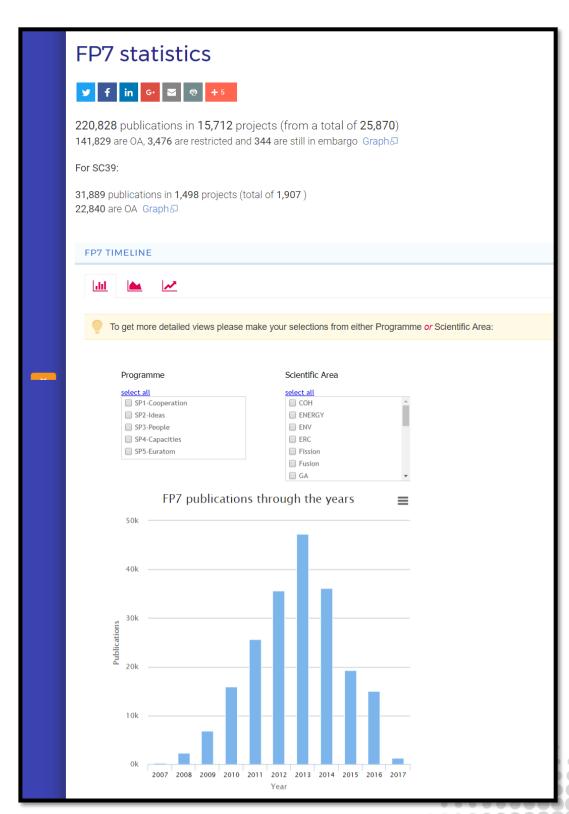
EC projects and funding streams pages and stats











Funders related activities in OpenAIRE



Align and support OA policies



APIs with projects list for repository software



Sync infrastructures and Support national e-infrastructures



Text mining and inference



Guidelines for metadata funding info



Statistics and reporting



Monitor mandate compliance



Analytics and trends





Funders Integration status (April. 2018):

Funder	Country	Status
European Commission (FP7 & H2020)	EU	Production
Portuguese Foundation for Science and Technology (FCT)	Portugal	Production
Wellcome trust (WT)	UK	Production
National Science Foundation (NSF)	US	Production
National Health and Medical Research Council (NHMRC)	Australia	Production
Australian Research Council (ARC)	Australia	Production
Ministry of Education, Science and Technological Development (MESTD)	Serbia	Production
Ministry of Science Education and Sport (MZOS/MSES)	Croatia	Production
Croatia Science Foundation (HRZZ/CSF)	Croatia	Production
Netherlands Organisation for Scientific Research (NWO)	Nederlands	Production
Science Foundation Ireland (SFI)	Ireland	Production
National Institute of Health (NIH)	US	Production
Swiss National Science Foundation (SNSF)	Switzerland	Production
Austrian Science Fund (FWF)	Austria	Production
Research Council UK (RCUK)	UK	Production
Tara Expedition Foundation (TARA)	France	BETA
Scientific and Technological Research Council of Turkey (Tubitak)	Turkey	Production
Academy of Finland	Finland	BETA
CONICYT	Chile	BETA
Ministry of Economy, Industry and Competitiveness	Spain	BETA
German Research Foundation (DFG)	Germany	BETA

Funder integration in OpenAIRE: simplified workflow



- 1. Obtain list of projects
- 2. Data analysis for integration and inference module
 - 3. Integration on DB
- 4. IIS module integration

5. Inference6. Data provision on beta

7. Quality check
Results available on the
OpenAIRE portal





Results from national EU funders

NWO - Netherlands Organisation for Scientific Research

Updated on 18 May 2017



11,926 publications in 3,661 projects (total of 24,180 projects)

11,368 are OA, 9 are restricted and 0 are still in embargo.

FCT - Fundação para a Ciência e a Tecnologia

Updated on 08 May 2017











27,230 publications in 11,566 projects (total of 37,277 projects)

25,239 are OA, 895 are restricted and 82 are still in embargo Graph ₽





SFI - Science Foundation Ireland

Updated on 25 July 2017

2,209 publications in 597 projects (total of 3,411 projects)

1,955 are OA, 2 are restricted and 0 are still in embargo Graph

MESTD - Ministry of Education, Science Republic of Serbia

Updated on 24 July 2017

9,527 publications in 745 projects (total of 777 projects)

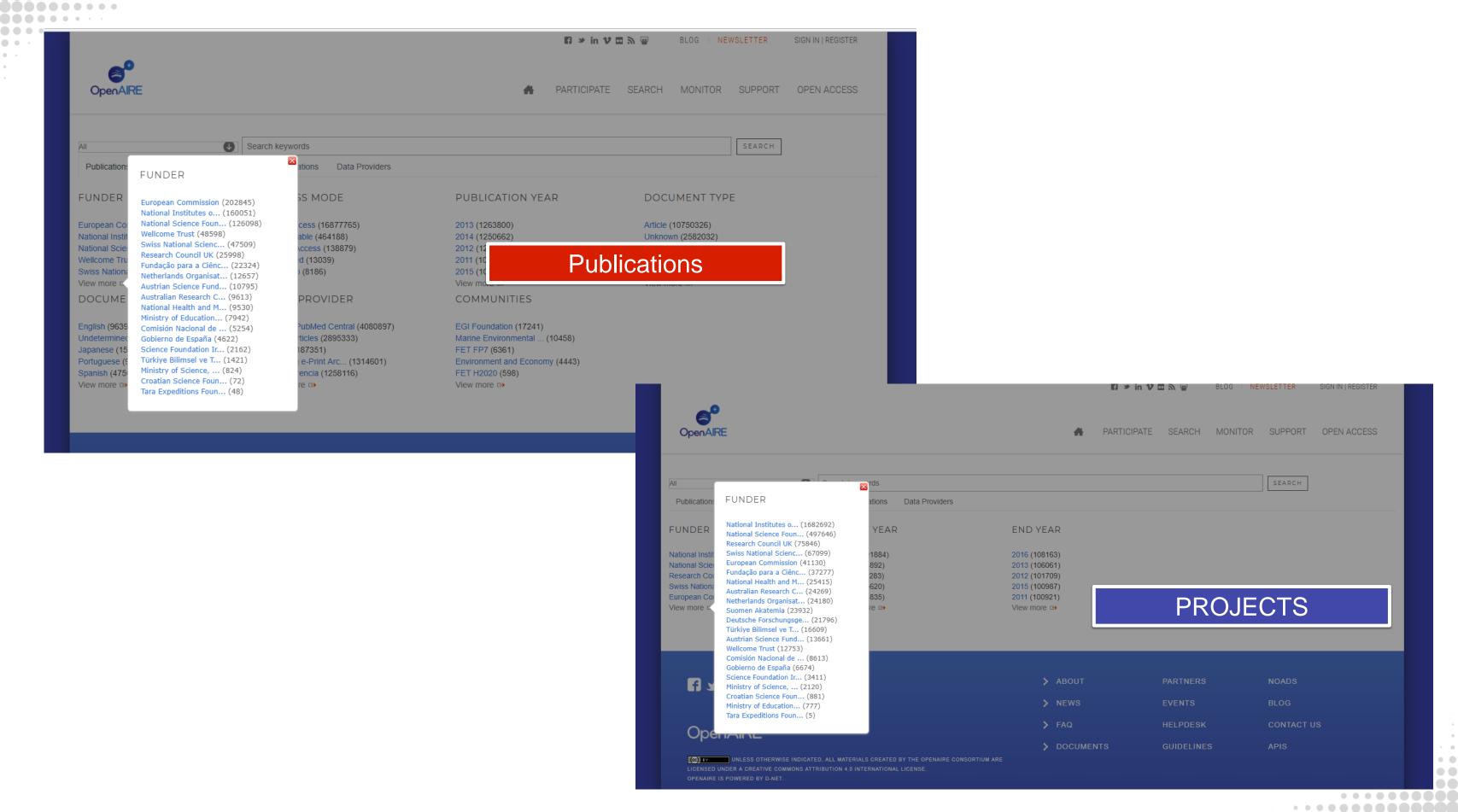
9,335 are OA, 0 are restricted and 0 are still in embargo Graph₽

MZOS - Ministry of Science, Education (MSES)

Updated on 25 July 2017

824 publications in 312 projects (total of 2,120 projects)

750 are OA, 0 are restricted and 0 are still in embargo Graph 5







PARTICIPATE

SEARCH MONITOR



□ FCT - FOUNDATION FOR SCIENCE AND

SHARE - BOOKMARK









FCT Fundação para a Ciência e a Tecnologia

Name

FCT - Fundação para a Ciência e a Tecnologia

Funder database Type

Compatibility proprietary

OAI-PMH

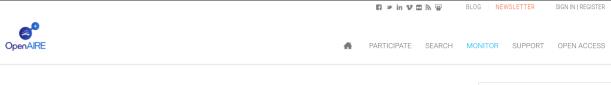
Publications (0)

Research Data (0) Statistics



No data provider research data found

Content provider

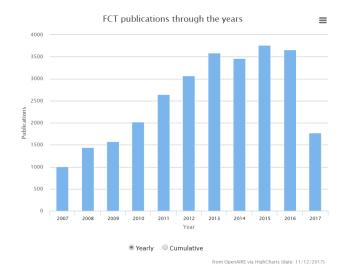


FCT - Fundação para a Ciência e a Tecnologia

y f in G ≥ +

30,197 publications in 12,793 projects (total of 37,277 projects)

28,185 are OA, 963 are restricted and 78 are still in embargo Graph



ABOUT PUBLICATIONS

TOP 30 PROJECTS IN PUBLICATIONS

FCT AND FP7 PUBLICATIONS

TOP 30 PROJECTS IN DATA

ABOUT DATA PROVIDERS

TOP 20 DATA PROVIDERS FOR FCT PUBLICATIONS

Statistics

OA in Europe

EC FUNDING

FP7

H2020

FET

EU FUNDERS

FCT

NWO MESTD

MZOS

RESEARCH COMMUNITIES

OpenAIRE computes statistics based on data retrieved from a range of sources: OA repositories and journals (literature and data), CRIS systems, library databases and end-user feedbacks.

employ a variety of deduplication, cleaning, tranforming and text-mining as on the actual content when this is

Please let us know how we can improve with new stats, or tell us if you see any discrepancies that we should know about:



Features OpenAIRE can provide to funders

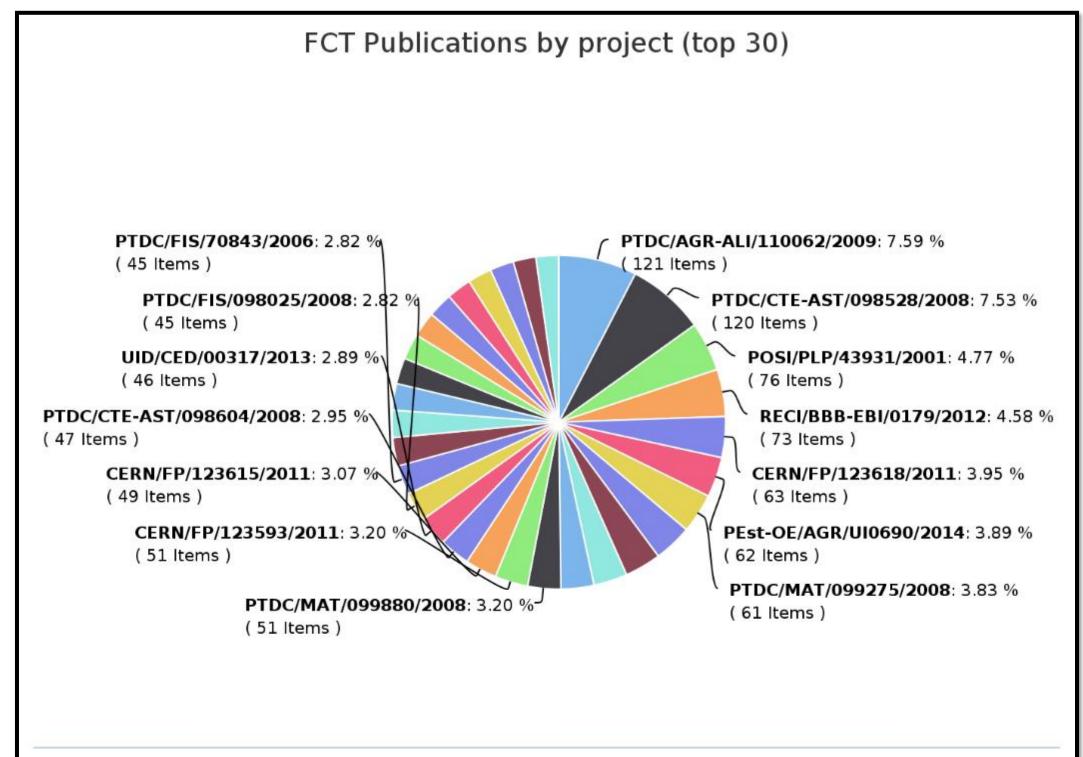
Using the OpenAIRE portal, funder can:

- filter publications/data by funder and browse by specific funding streams
- search via project title, acronym or grant agreement and view specific statistics of the project: publications/data over time, OA status, where they were published/deposited, etc.
- view overall funder/funding stream statistics (facets over time, data source, institution, etc.)
- correlate author/institution output with funding information
- visualize clusters of publications/data or funding based on their interlinking (national or ERAwide level).





Monitor and reporting: statistics service, portal info







Co-funded publications



Assessing connectivity in coastal systems as a tool for fish management and conservation



SHARE - BOOKMARK



reference

rancisco M.; Baynam,

dentification of areas for ene and protein name

However, phenotypes

ated text is available for

manually annotated with

ice standard for free text

cognition error analysis,













□ Universidade de Lisboa: Repositório.UL



Santos, Patrick Reis, 1979- (2013)

Languages: English

Types: Doctoral thesis

Subjects: Aquacultura, Viveiros, Estuários, Teses de doutoramento (co-tutela) - 2013, Otólitos

Connectivity is a critical component of m under

Funding

Go to: ▼

SHARE - BOOKMARK











DOWNLOAD FROM

□ Oxford University Press

FUNDED BY PROJECTS

WT | Wellcome Trust Sanger Instit... (i)

FCT | PTDC/EIA-EIA/119119/2010 (i)

ARC | A framework for building dy... (i)

EC | PHENOMINER (i)



T.G. gratefully acknowledges the support by the Australian Research Council Discovery Early Career Researcher Award (ARC DECRA DE120100508). N.C. gratefully acknowledges the support of the Marie Curie (PI: Phenominer, grant number 301806). A.O. and D.S. kindly acknowledge the support by the Wellcome Trust grant (098051) and National Institutes of Health grant (NIH) (1 U54 HG006370-01). F.M.C. gratefully acknowledges the support by the Portuguese FCT through the LASIGE Strategic Project (PEst-OE/EEI/UI0408/2014) and SOMER project (PTDC/EIA-EIA/119119/2010). G.B. acknowledges the RD-Connect FP7 grant (EU: 205444 RD-Connect), the corresponding NHMRC-EU grant (NHMRC: APP1055319) and the Raine Clinician Research Fellowship (201401). P.N.R. acknowledges the supported by the Bundesministerium für Bildung und Forschung (BMBF 0313911). Funding for open charge: Australian Research Council - Discovery Early Career Researcher Award (DE120100508).

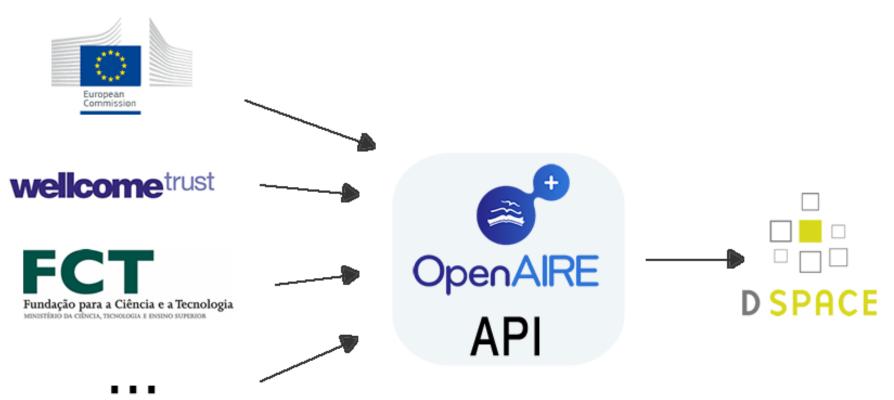
incorporating 32 different types of test cases corresponding to 2164 HPO concepts. Finally, three established phenotype concept recognizers (NCBO Annotator, OBO Annotator and Bio-LarK CR) were comprehensively evaluated, and results are reported against both the text corpus and the test suites. The gold standard and test suites corpora are available from http://bio-lark.org/hpo_res.html.

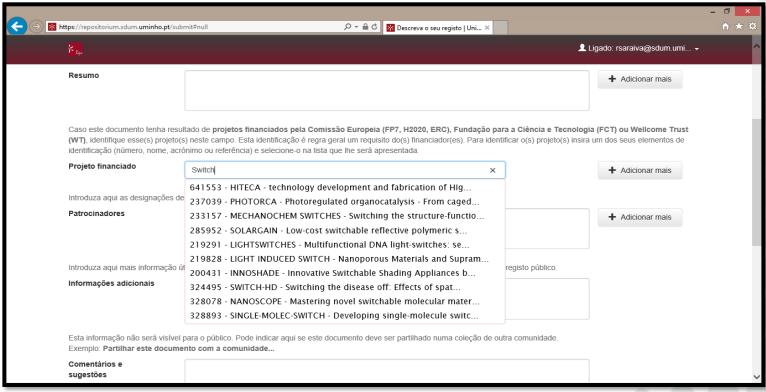


OpenAIRE API

The APIs offer custom access to metadata about projects funded by all funders integrated in the OpenAIRE info space (Dspace, Eprints, other repository platforms).

(E.g. Funders Projects List Dspace Add-on)

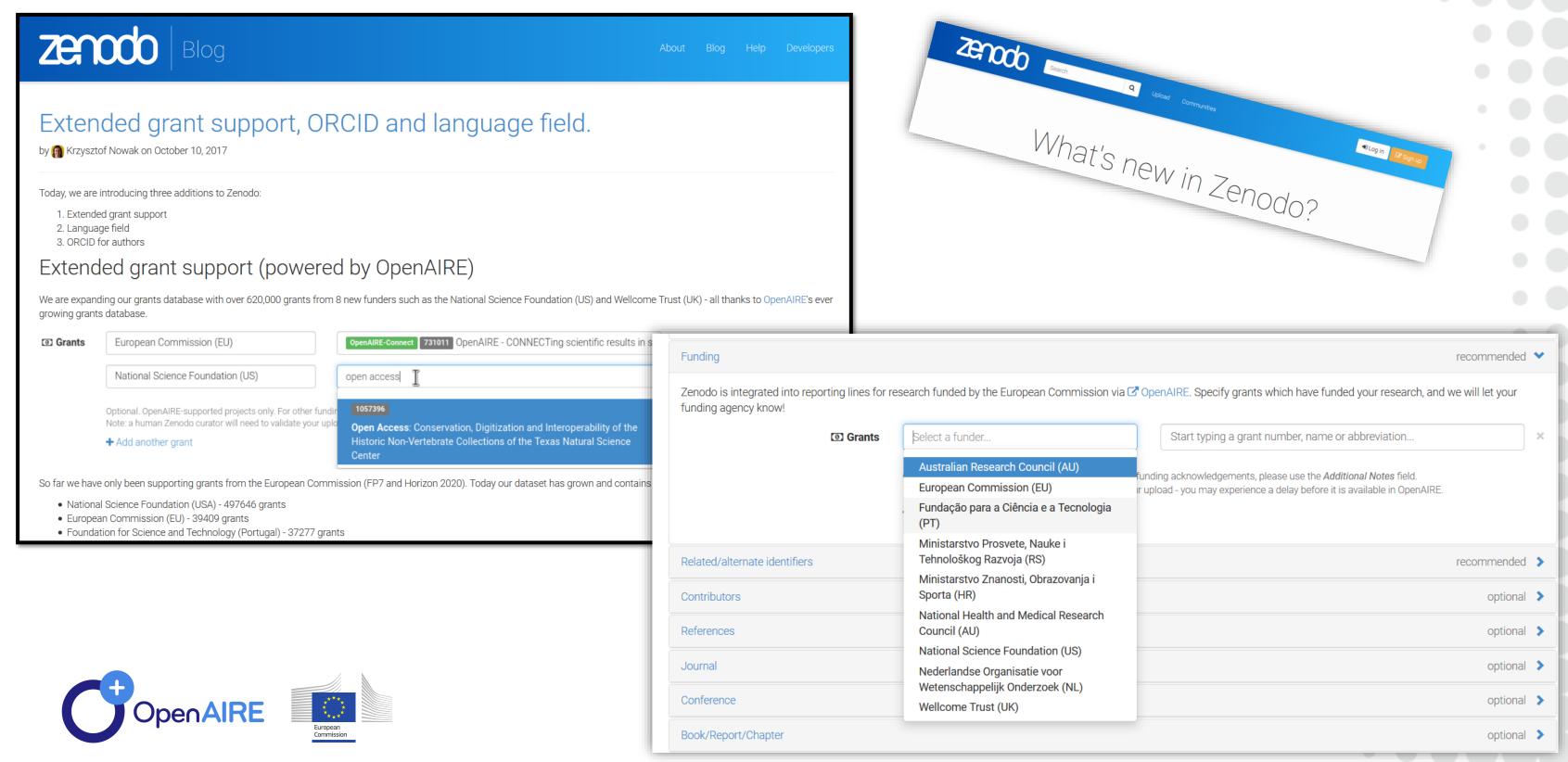








Zenodo – extended grant support





data archives and CRIS managers



Guidelines for Data Providers

Literature Repositories

> (and journal platforms) **Dublin Core (DRIVER)**

Data Repositories

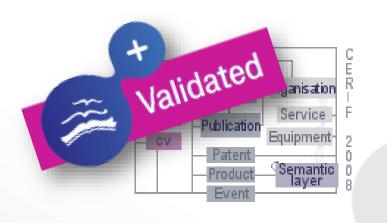
(and archives/data centres)

Datacite

CRIS systems **CERIF-XML**





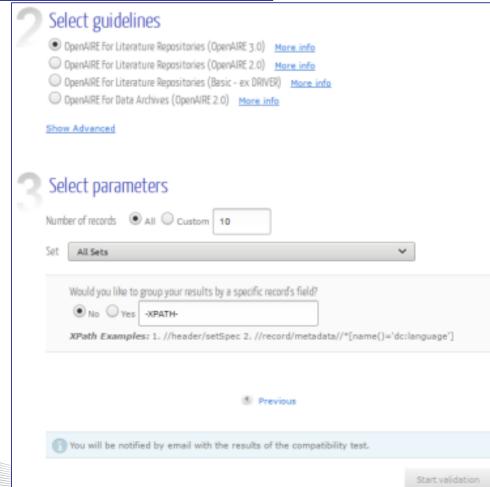




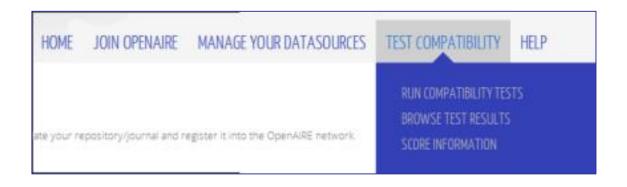


Test the OpenAIRE Compliance

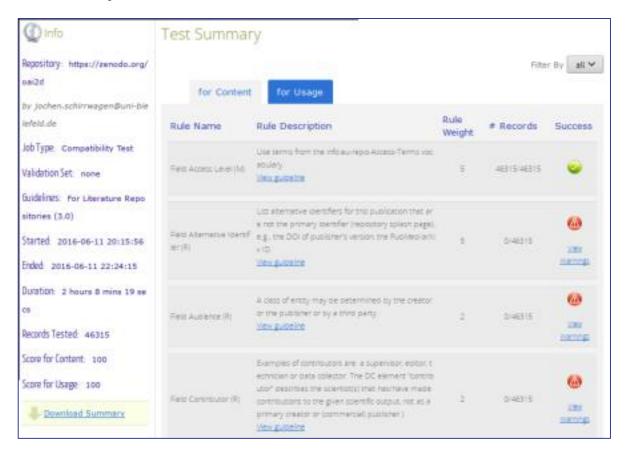




Choose from the menu

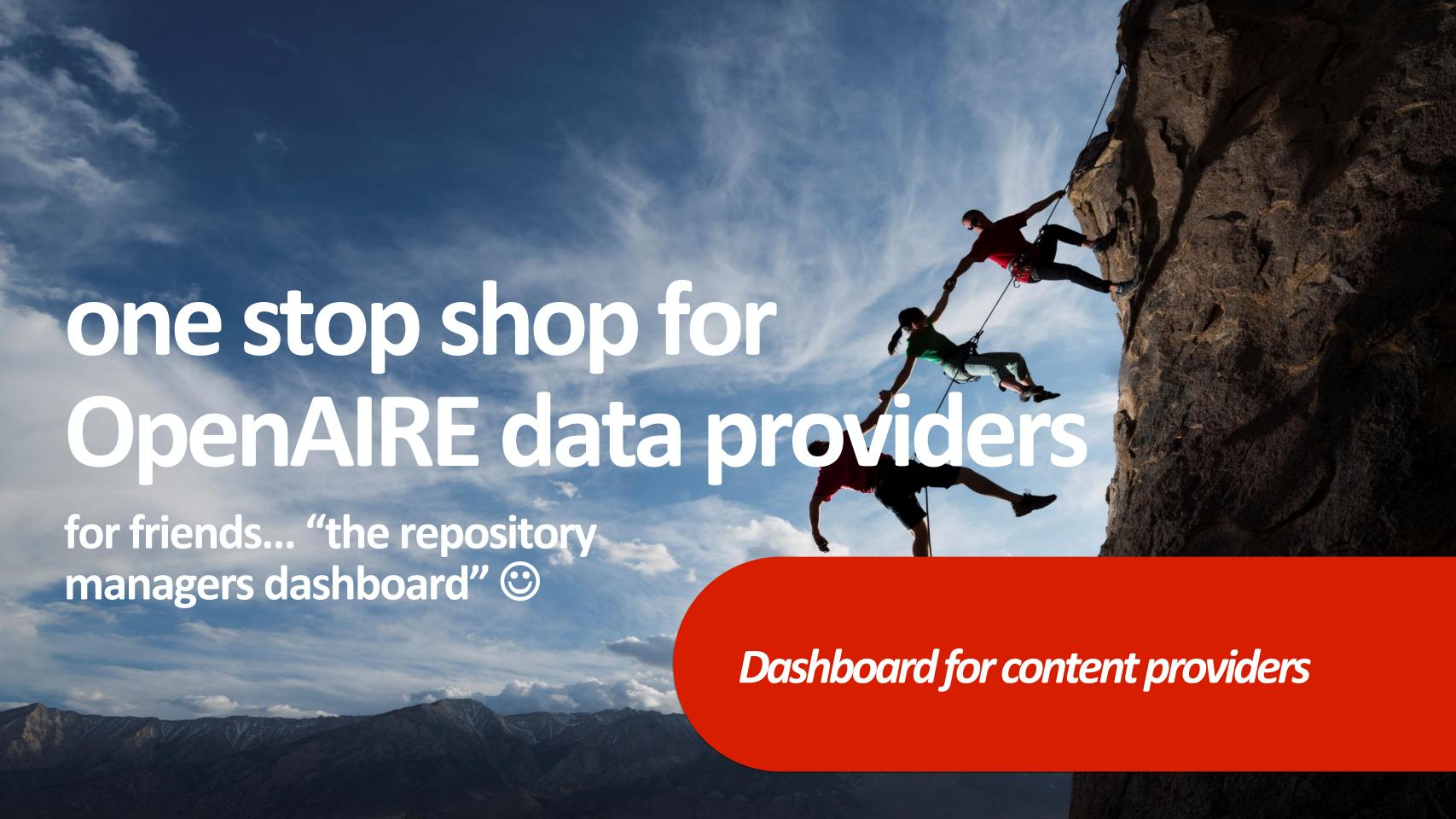


Finally check results



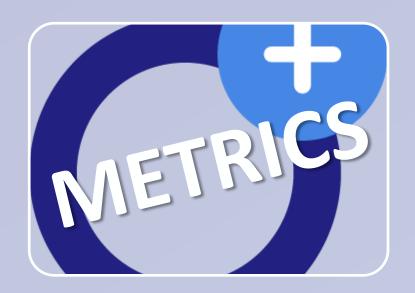












REGISTER

&

UPDATE

registration service

VALIDATE

&

MONITOR

validation service

ENRICHMENTS

&

NOTIFICATIONS

broker service

METRICS

USAGE

STATISTICS

usage stats service





0.000

Home

Sources

Compatibility

Content

Metrics

Admin



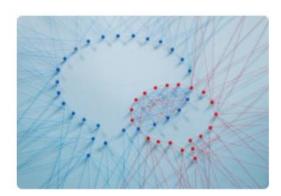
Register

Register data sources in the OpenAIRE infrastructure



Validate

Validate data sources against OpenAIRE guidelines



Notifications

View notifications to enrich the metadata and the content



Metrics

View aggregated, cleaned usage statistics for repository access



News

