



Pedro Principe

University of Minho. OpenAIRE Support Officer.

OpenAIRE

INFRAESTRUCTURA Y SERVICIOS

novedades sobre los servicios para proveedores de contenido
y servicios de monitorización de financiadores



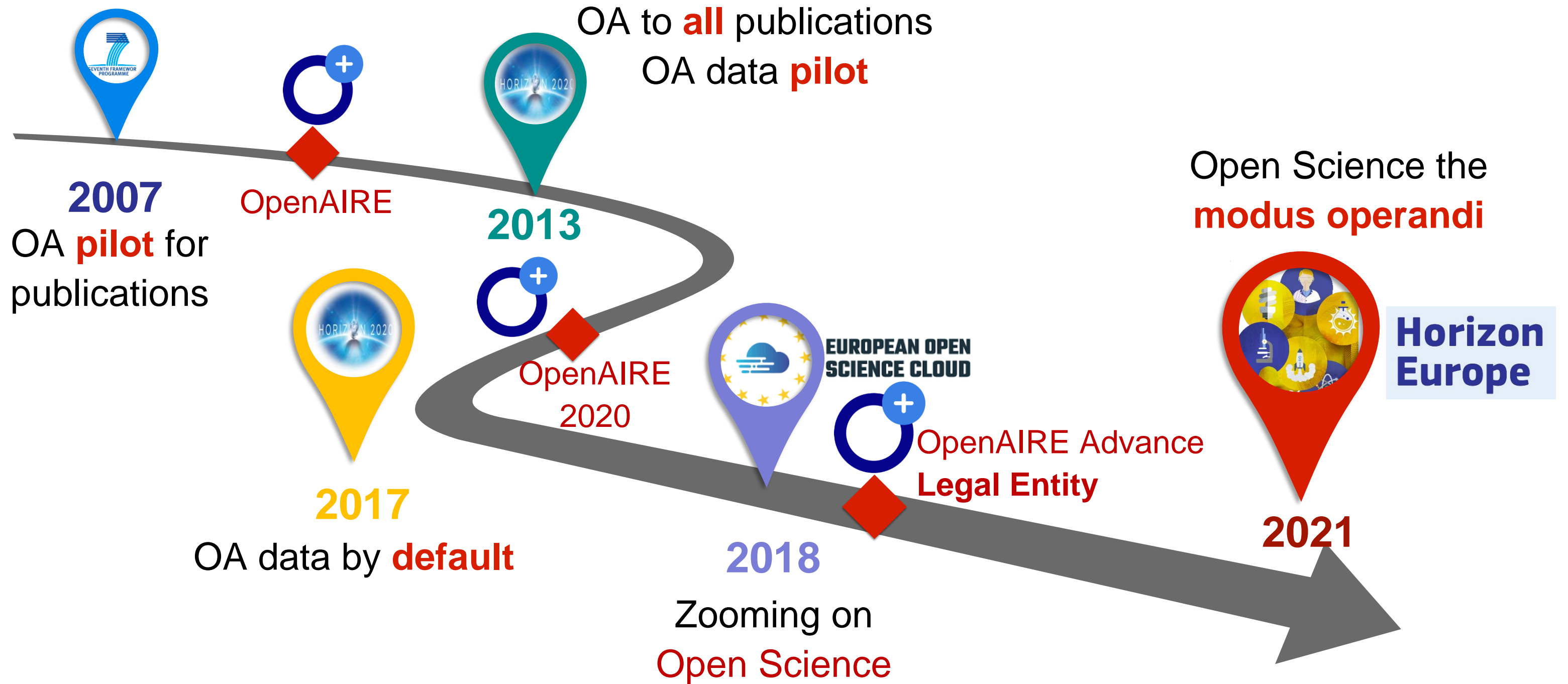
OpenAIRE Workshop @ OS REPOSITORIOS | 25/09/2019



@openaire_eu



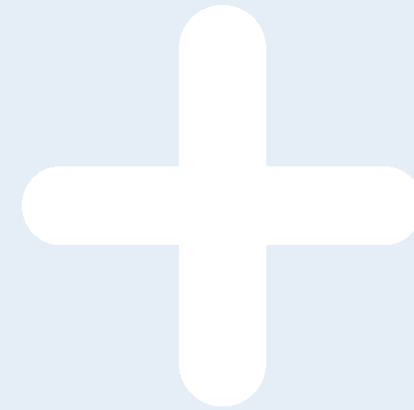
Open Science en la UE y el proyecto / infraestructura OpenAIRE



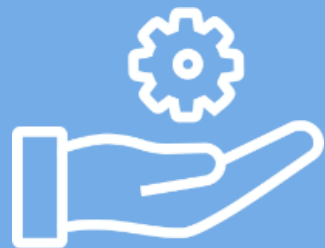


POLÍTICAS

Alignment



**3 PILARES
DE ACCIÓN**



SERVICIOS

Conectando



FORMACIÓN

Empoderamiento

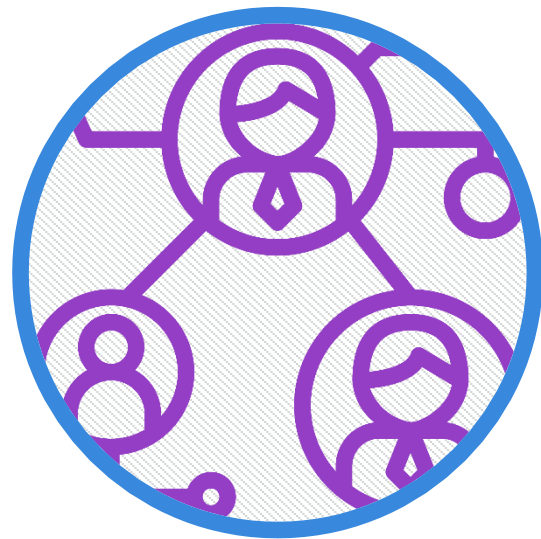
3 NIVELES DE OPERACIÓN



OpenAIRE

OpenAIRE National Open Access Desks

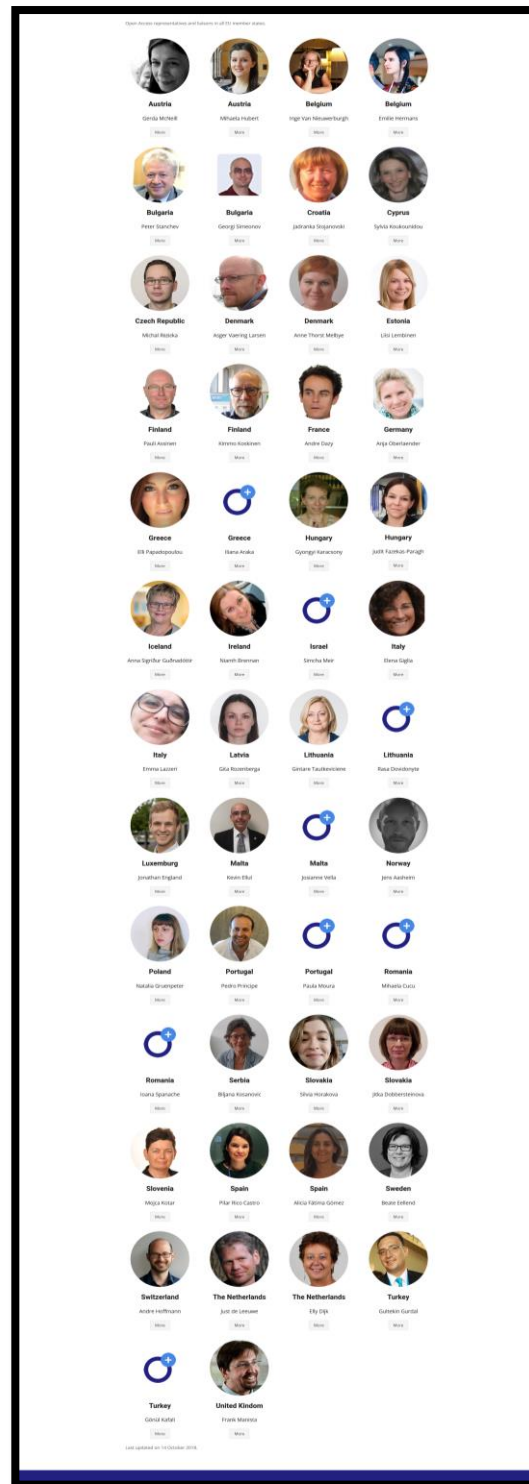
Representantes y puntos de contacto de acceso abierto en todos los estados miembros de la UE



Outreach



Support

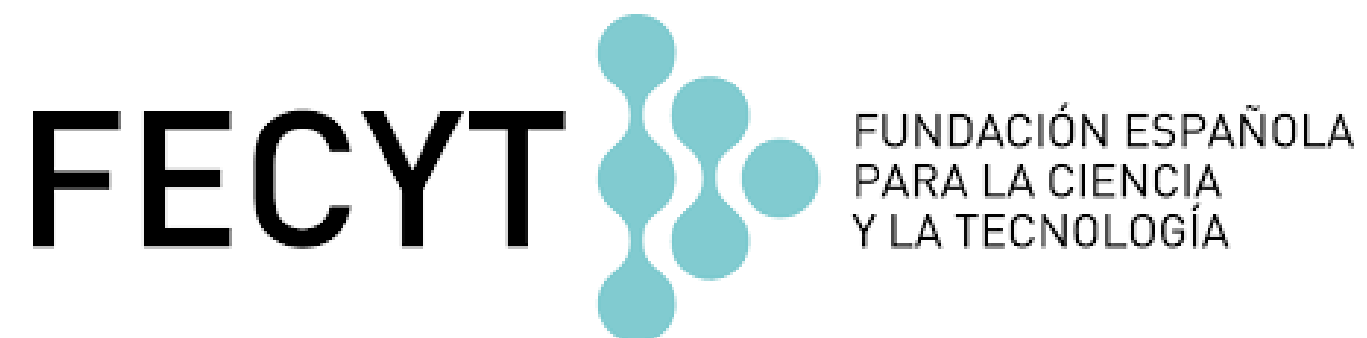


Training



Policy

OpenAIRE NOAD in Spain



Spain

Pilar Rico Castro



Spain

Alicia Fátima Gómez



Spain

Laura Valeria Bonora

<https://www.openaire.eu/contact-noads>

**UNA INFRAESTRUCTURA DE
BASE PARTICIPATIVA**

**REPOSITARIOS
COMO
INFRAESTRUCTURA**

**RED DE
REPOSITARIOS**

**OpenAIRE y EL PODER DE
LOS REPOSITARIOS**



El valor real de los repositorios recae en el potencial de interconexión para crear una red de repositorios

**¡Son un buen ejemplo!
GRACIAS A MUCHOS
DE LOS GESTORES DE
REPOS DE ESPAÑA**

Visión general de Infraestructura y servicios OpenAIRE [actualizado]

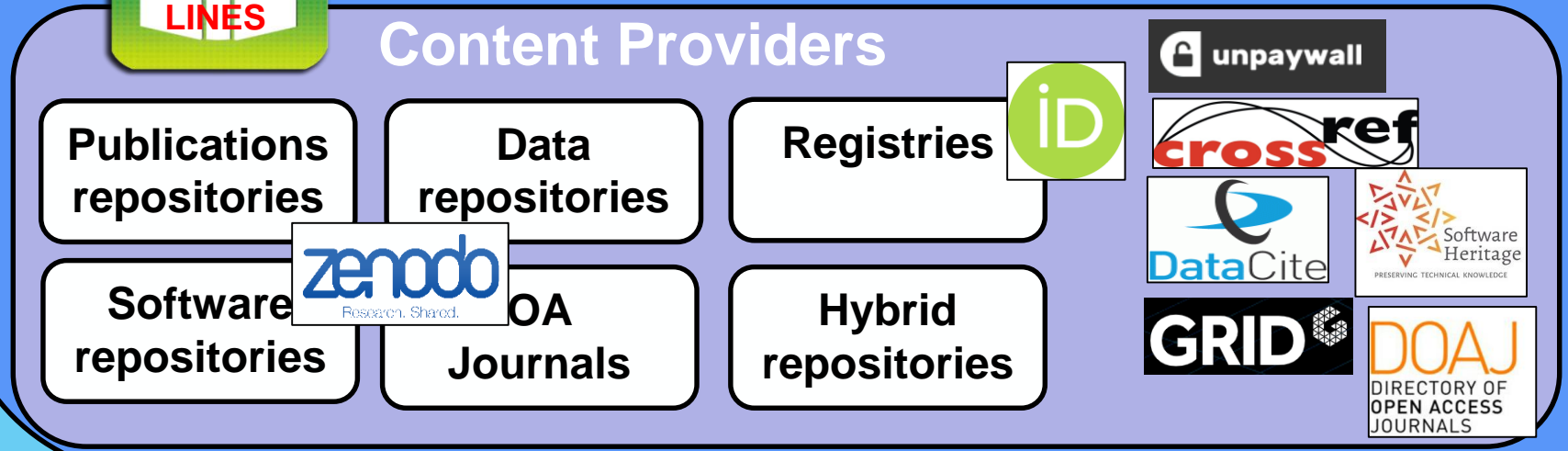
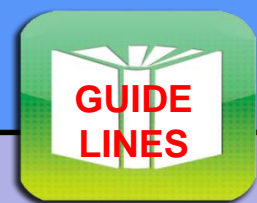
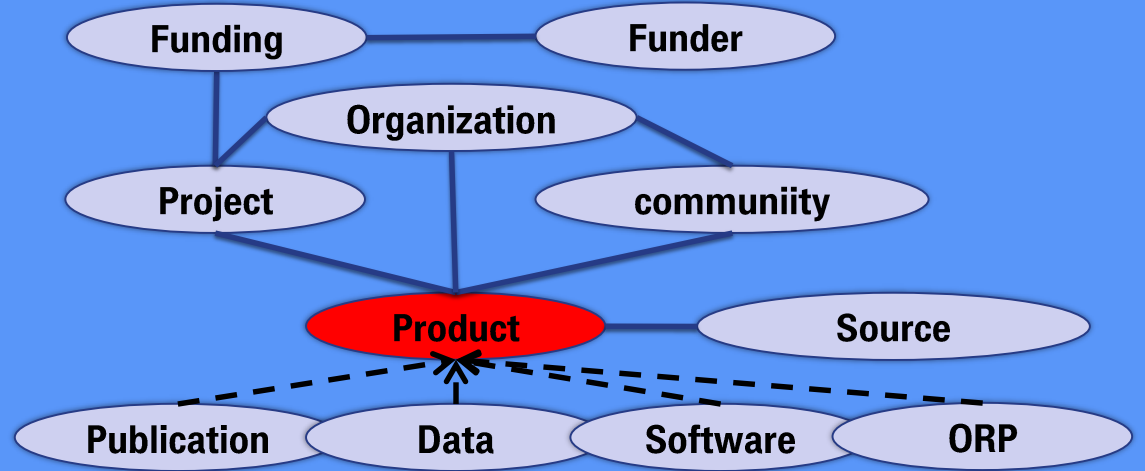
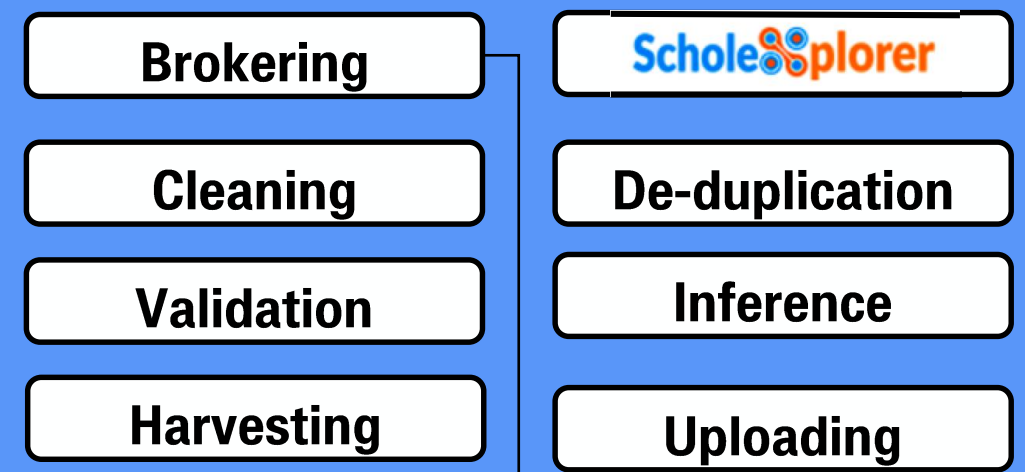
CONNECT
Research communities

EXPLORE
Researchers (All)

PROVIDE
Content providers

DEVELOP
Innovators

MONITOR
Research managers
Funders



INFRAESTRUCTURA



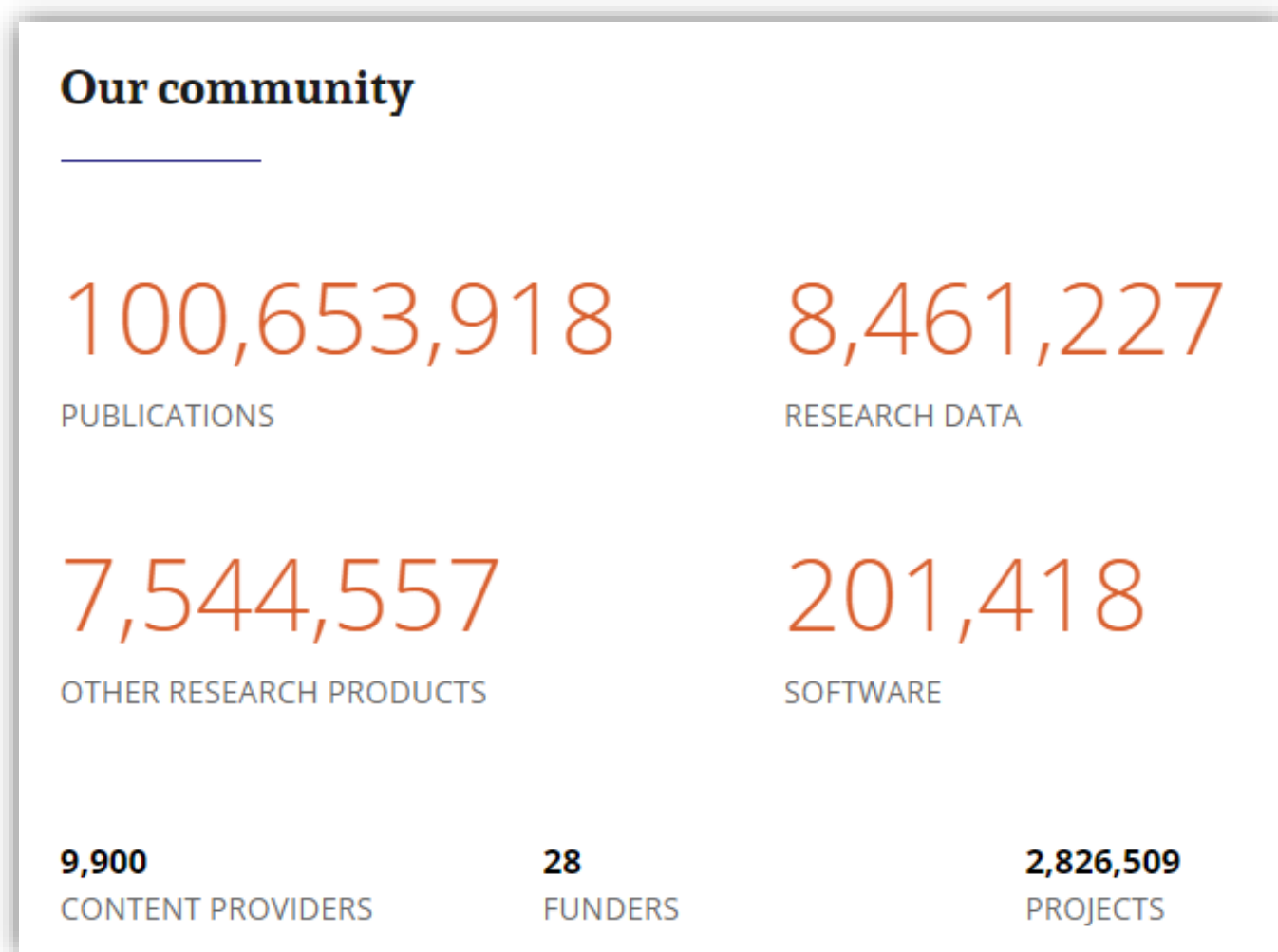
OpenAIRE graph en expansión

Nueva política de
adquisición de contenidos

un *academic graph* que agrega
toda la información requerida para
entregar herramientas de monitoreo

OpenAIRE research graph

Creación y mantenimiento de un **open metadata research graph** de productos científicos **interconectados**, con información de **acceso abierto**, vinculado a **información de financiamiento y comunidades**.

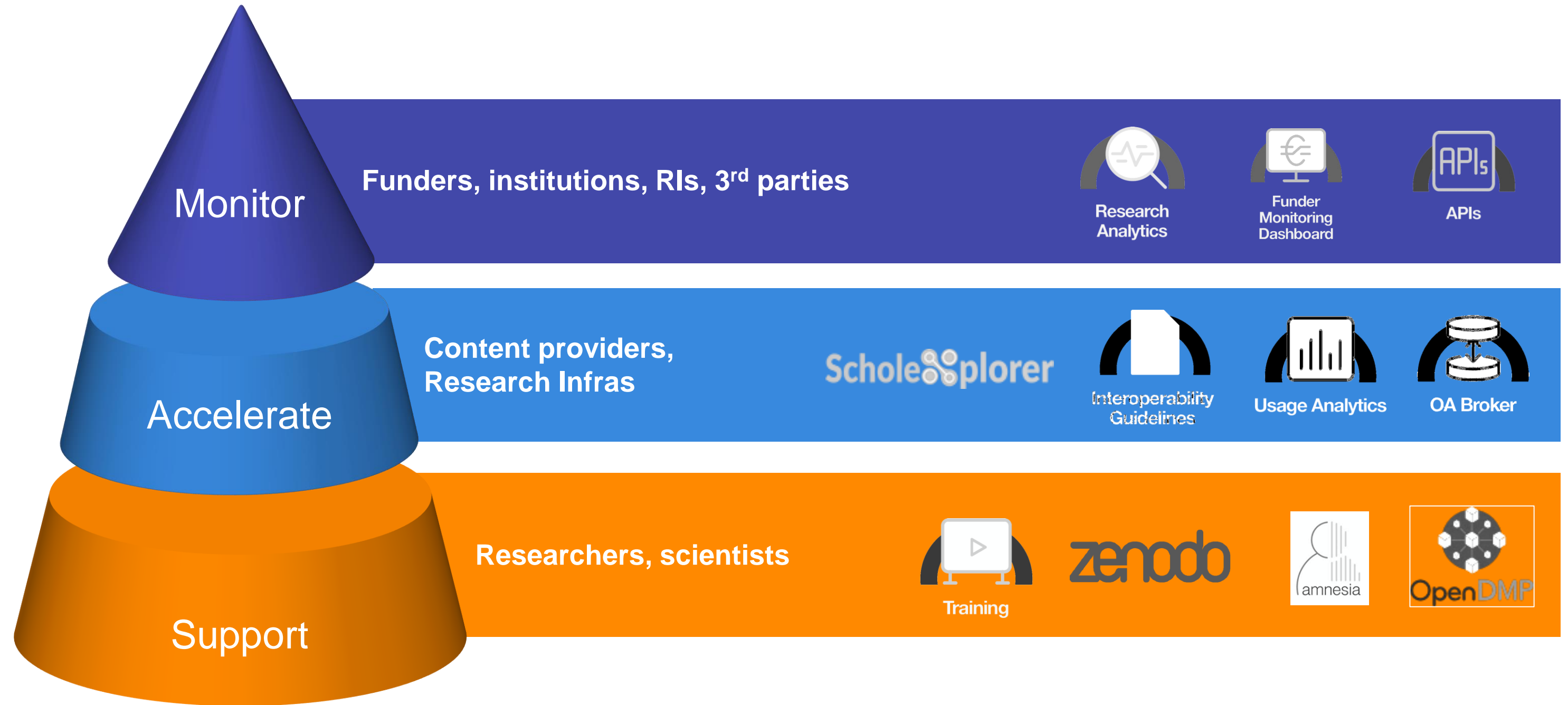


A silhouette of five people standing on a rocky cliff, celebrating with their arms raised. The background is a sunset sky with a gradient from dark blue to orange. The overall scene is dark, with the silhouettes and the sunset providing the main visual elements.

Servicios OpenAIRE

DESDE EL NIVEL DE INFRAESTRUCTURA BÁSICA HASTA EL VALOR AÑADIDO

Servicios para todas las partes interesadas!



Servicios y herramientas OpenAIRE

Una mirada sobre las novedades y características

OpenAIRE | EXPLORE
Discover and share research



explore.openaire.eu

OpenAIRE RESEARCH GRAPH
Putting research into context.
Making the connections.



explore.openaire.eu

OpenAIRE | DEVELOP
APIs to access the
OpenAIRE Research Graph



develop.openaire.eu

OpenAIRE | PROVIDE
A one-stop-shop
for content providers



provide.openaire.eu

OpenAIRE | CONNECT
Build an Open Research
Gateway for your community

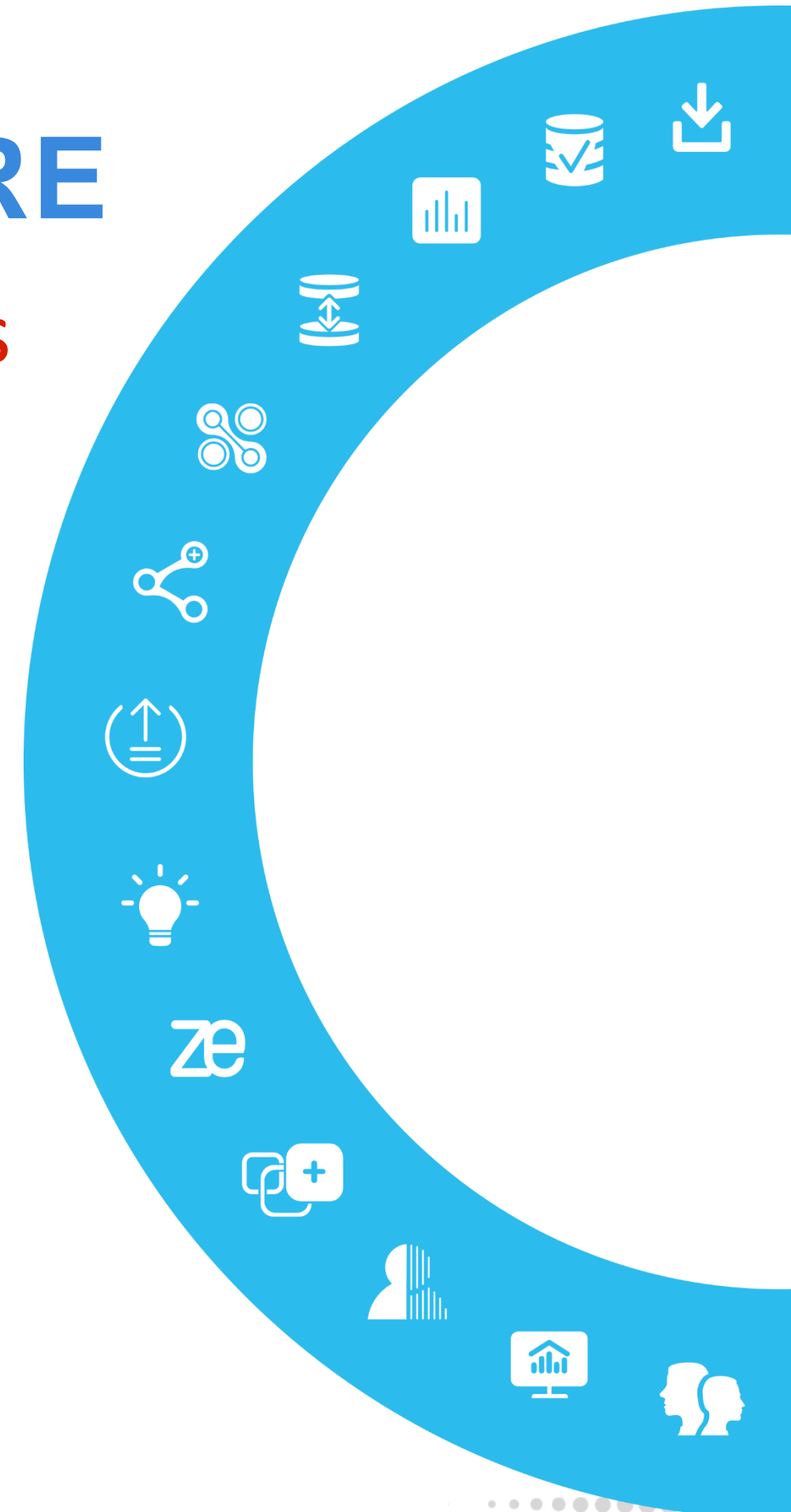


connect.openaire.eu

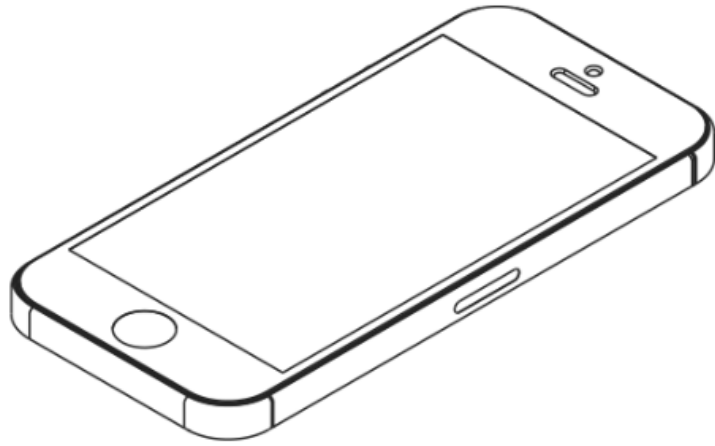
OpenAIRE | MONITOR
Simplify research tracking
& monitoring



monitor.openaire.eu



Ve a www.menti.com y utiliza el código 41 56 07



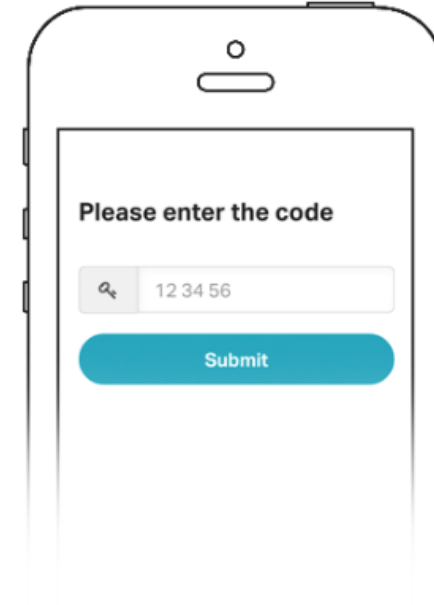
1

Toma tu telefono

www.menti.com

2

Ve a www.menti.com



3

Escribe el código 41 56 07 y vota!



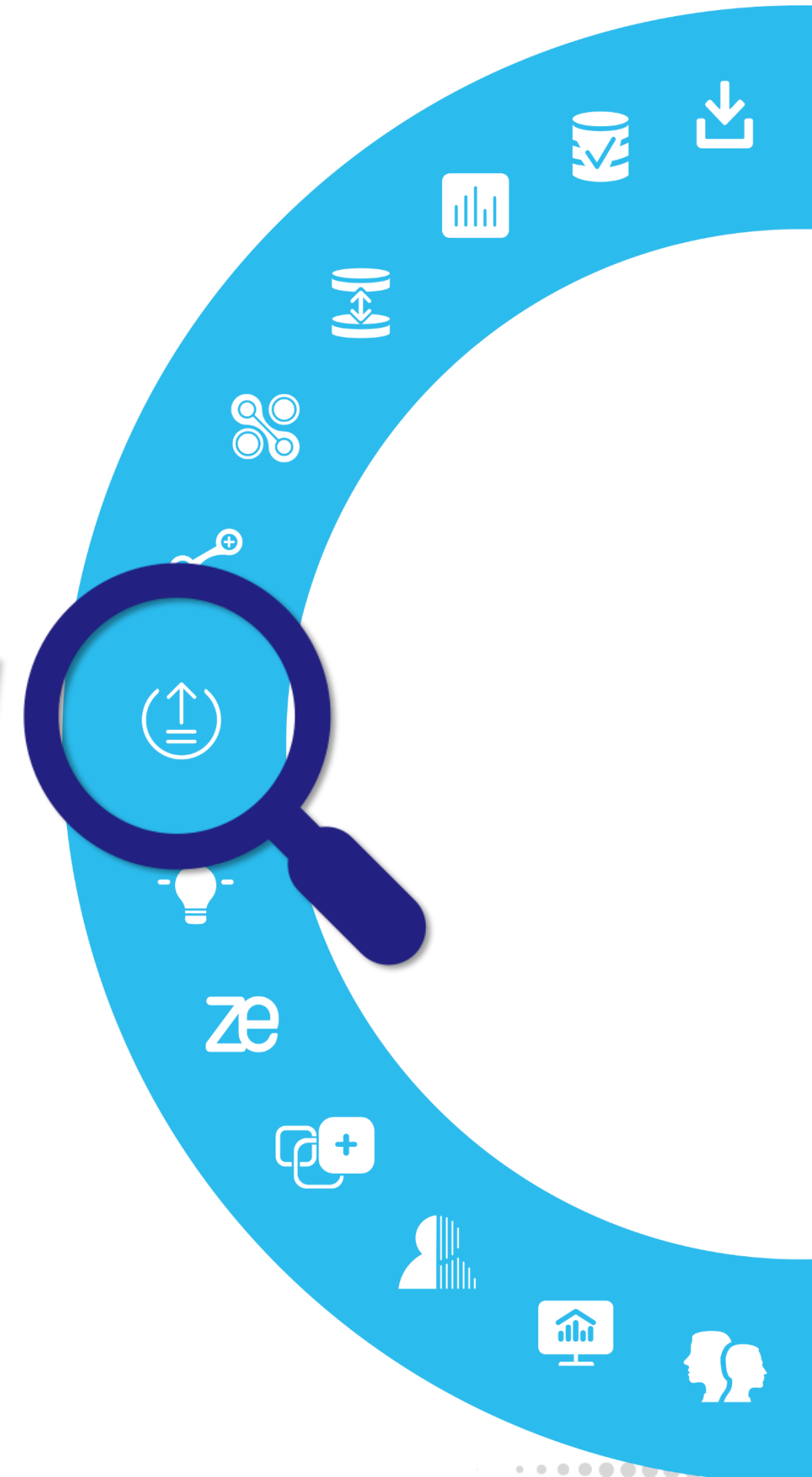
OpenAIRE | EXPLORE

Discover and share research



explore.openaire.eu

- **Search research results:**
publications, data, software
- **Look up research in context:**
funders, projects, organizations
- **Link** them together
- **Use apps** for reporting



Researcher?

Explore all OA research results.
Link all your research. Build
your profile

OpenAIRE.EXPLORE

<https://explore.openaire.eu>



Explore

Discover linked open
research



Share

Deposit in a repository
of your choice



Link

Connect all your
research

Search for research results, projects, content providers & organizations in OpenAIRE



Publications

Research Data

Software

Other Research
Products

Projects

Content Providers

Organizations

Funder

European Commissi... (600,379)
National Institutes of... (205,280)
National Science Fou... (183,827)
Wellcome Trust (66,126)
Research Council UK (55,622)

[View more](#)

Access Mode

Open Access (25,118,841)

Project

ICEDIG (263,097)
ASIA (3,833)
Programs on Critical ... (1,849)
EUROfusion (1,562)
COLLMOT (1,271)

[View more](#)

Type

Article (13,617,077)

Publication Date

2016 (1,819,078)
2015 (1,810,410)
2017 (1,751,724)
2014 (1,747,851)
2013 (1,602,859)

[View more](#)

Language

English (13,315,412)



Putting research into context.
Making the connections.





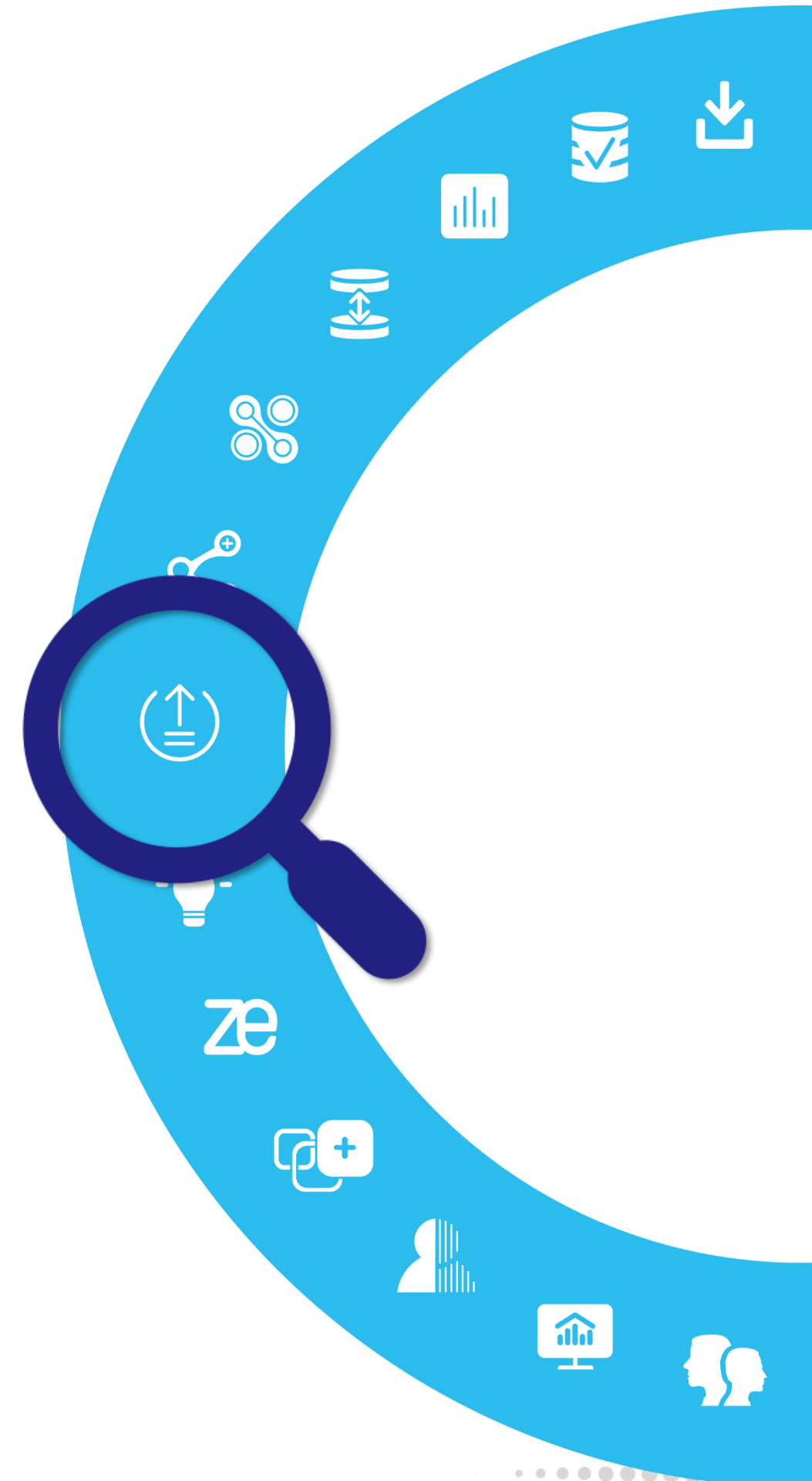
explore.openaire.eu

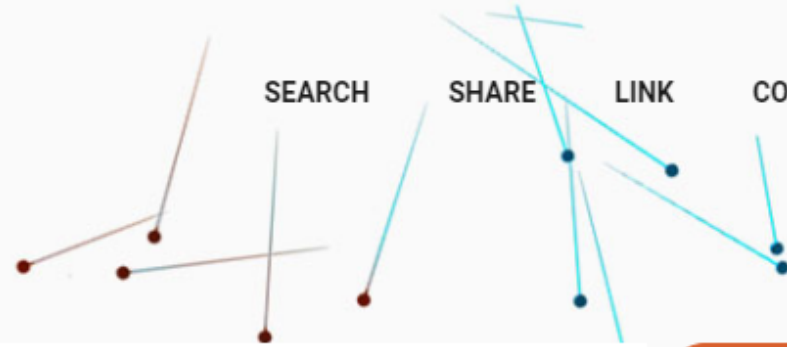
Because **relationships** matter as much
as **research results**:

- Who has produced them,
- How they are linked and cited
- Under which grant,
- Using which facility and e-science services,
- How open and FAIR are they,
- How much and by whom they have been used.

Global, open, trusted, co-created.

 DEVELOP,  EXPLORE





Search in OpenAIRE for scholarly works



101mi publications, 8mi research data, 8mi other research products, 201K software from 9,900 content providers and 28 funders linked together for an integrated discovery of research outcomes



Explore



Share



Link

Our community

100,653,918

PUBLICATIONS

8,461,227

RESEARCH DATA

7,544,557

OTHER RESEARCH PRODUCTS

201,418

SOFTWARE

9,900

CONTENT PROVIDERS

28

FUNDERS

2,826,509

PROJECTS

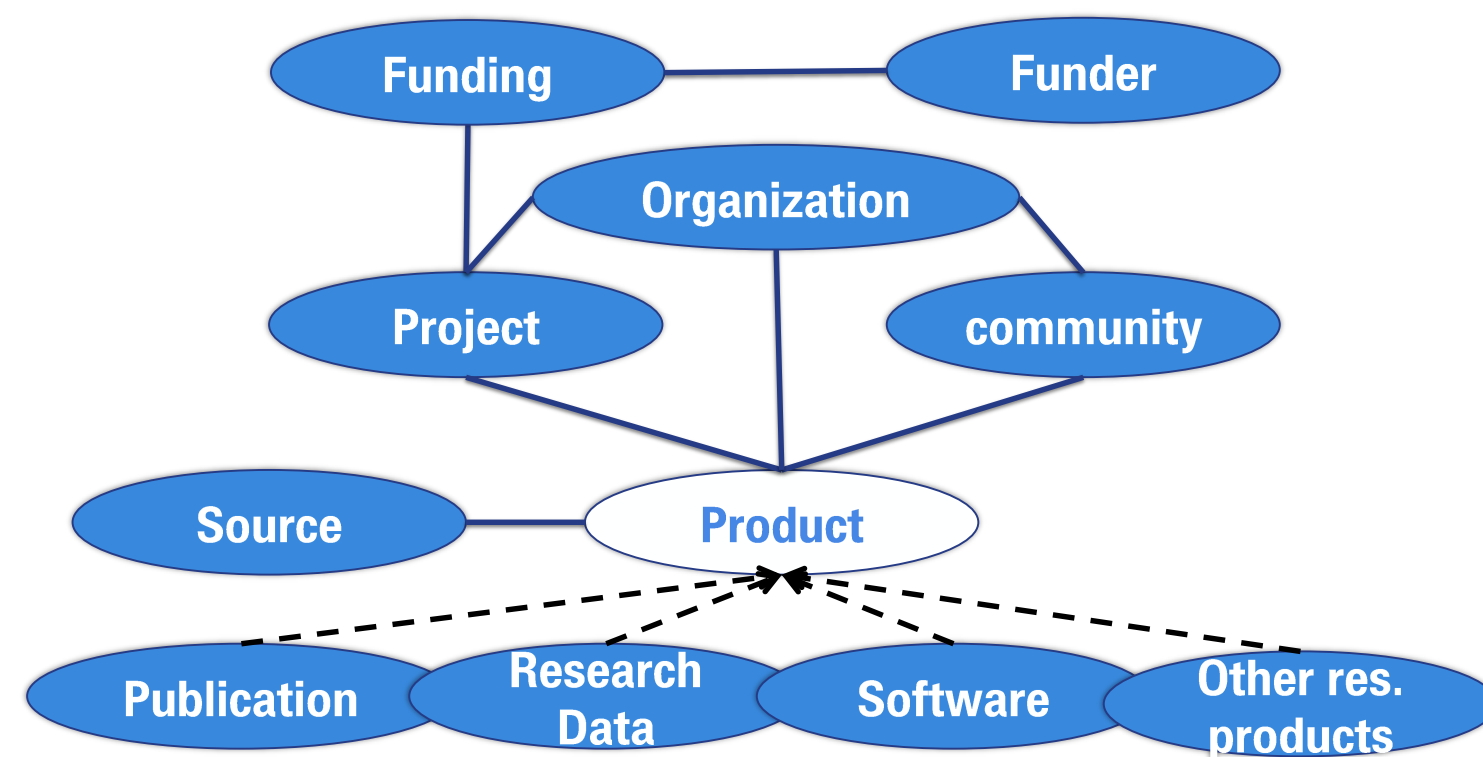
OpenAIRE infrastructure

Materializing the Open Science graph

- Harvested data sources
 - 10K +
- Harvested records
 - 500Mi +
- Publication full-texts
 - 7.5Mi (soon 10.5Mi+)
- Harvested/mined links
 - 200Mi +

CONNECT **PROVIDE** **EXPLORE**

DEVELOP **MONITOR**



Deduplication



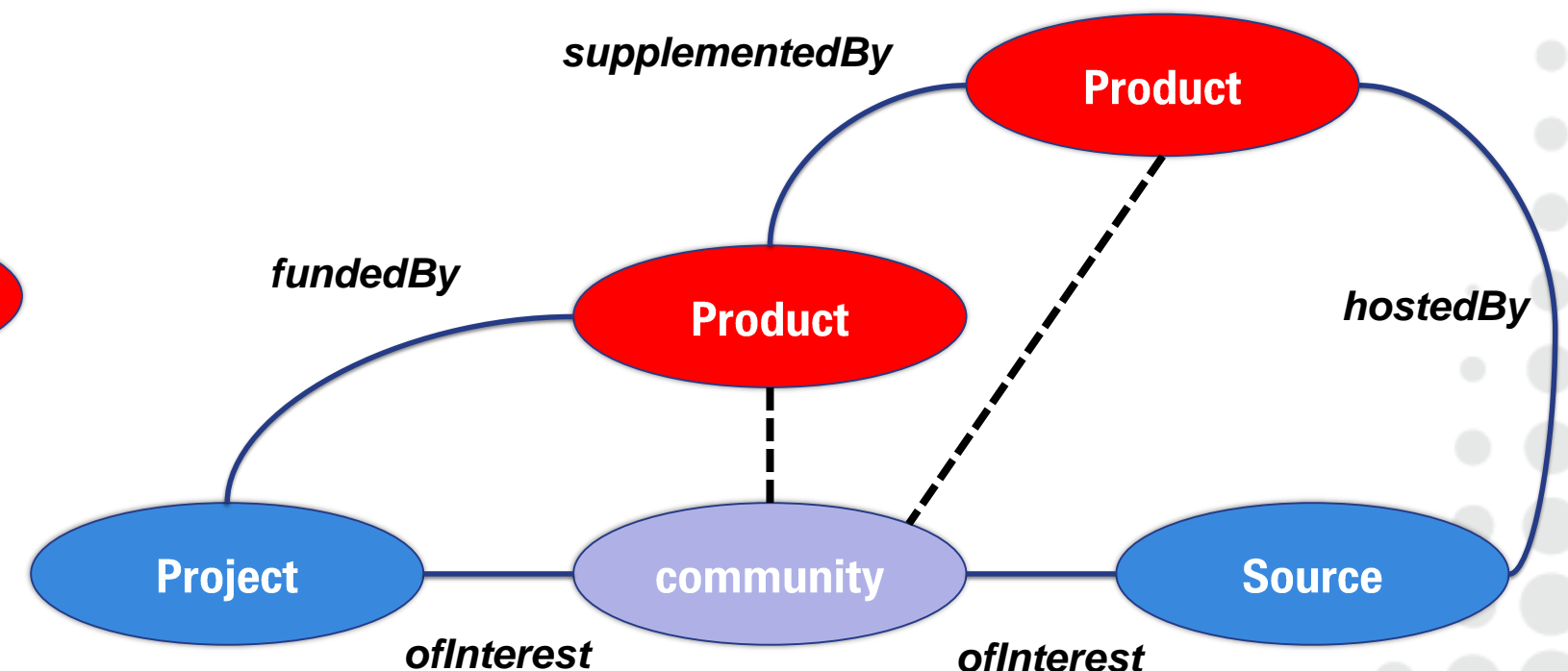
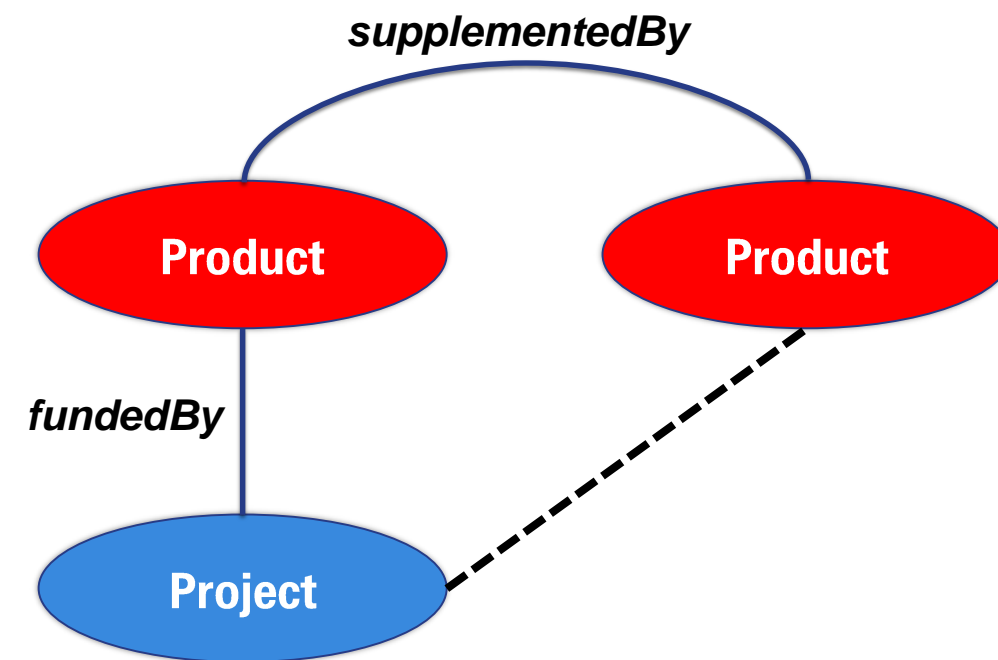
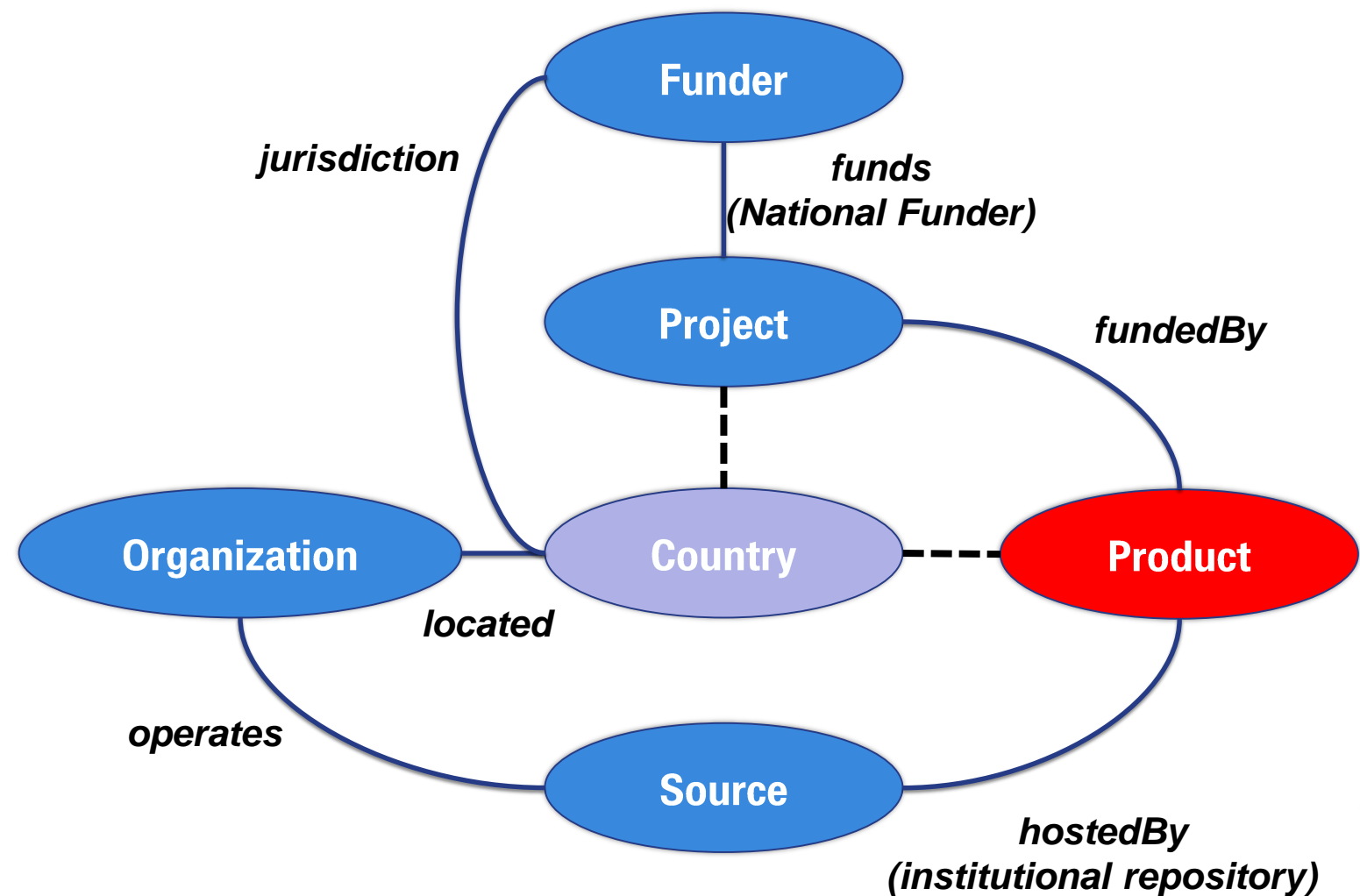
Harvesting



Mining



Propagación de contexto (OpenAIRE beta)



COBERTURA COMPLETA DE AGREGACIÓN

 **GitHub**
... and more



PARTHENOS
Pooling Activities, Resources and Tools
for Heritage E-research Networking,
Optimization and Synergies



DARIAH-EU

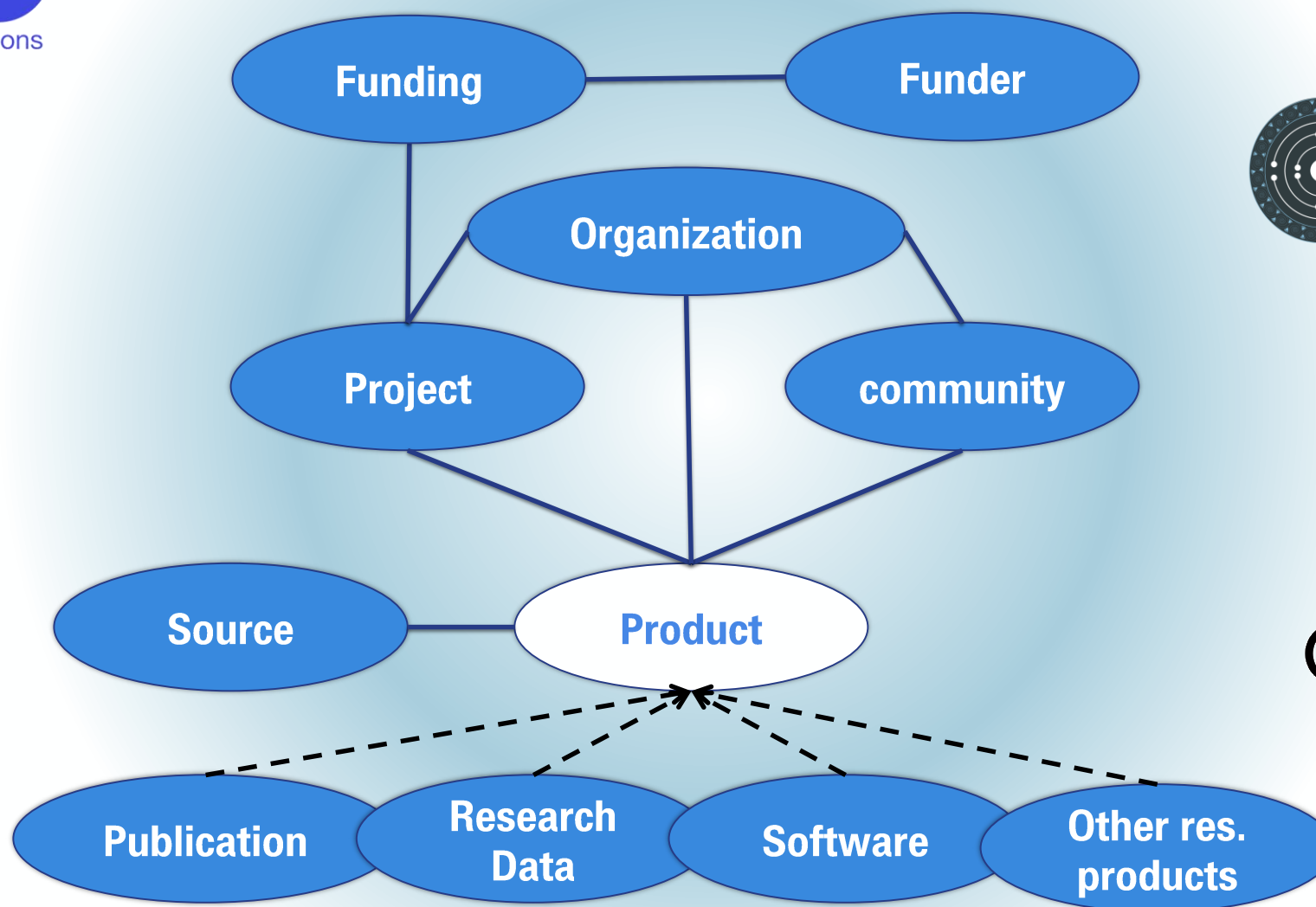
... and more



schema.org



... and more



OpenDOAR



ORCID ... and more



RePEc

... and more



OpenAIRE | DEVELOP

APIs to access the
OpenAIRE Research Graph

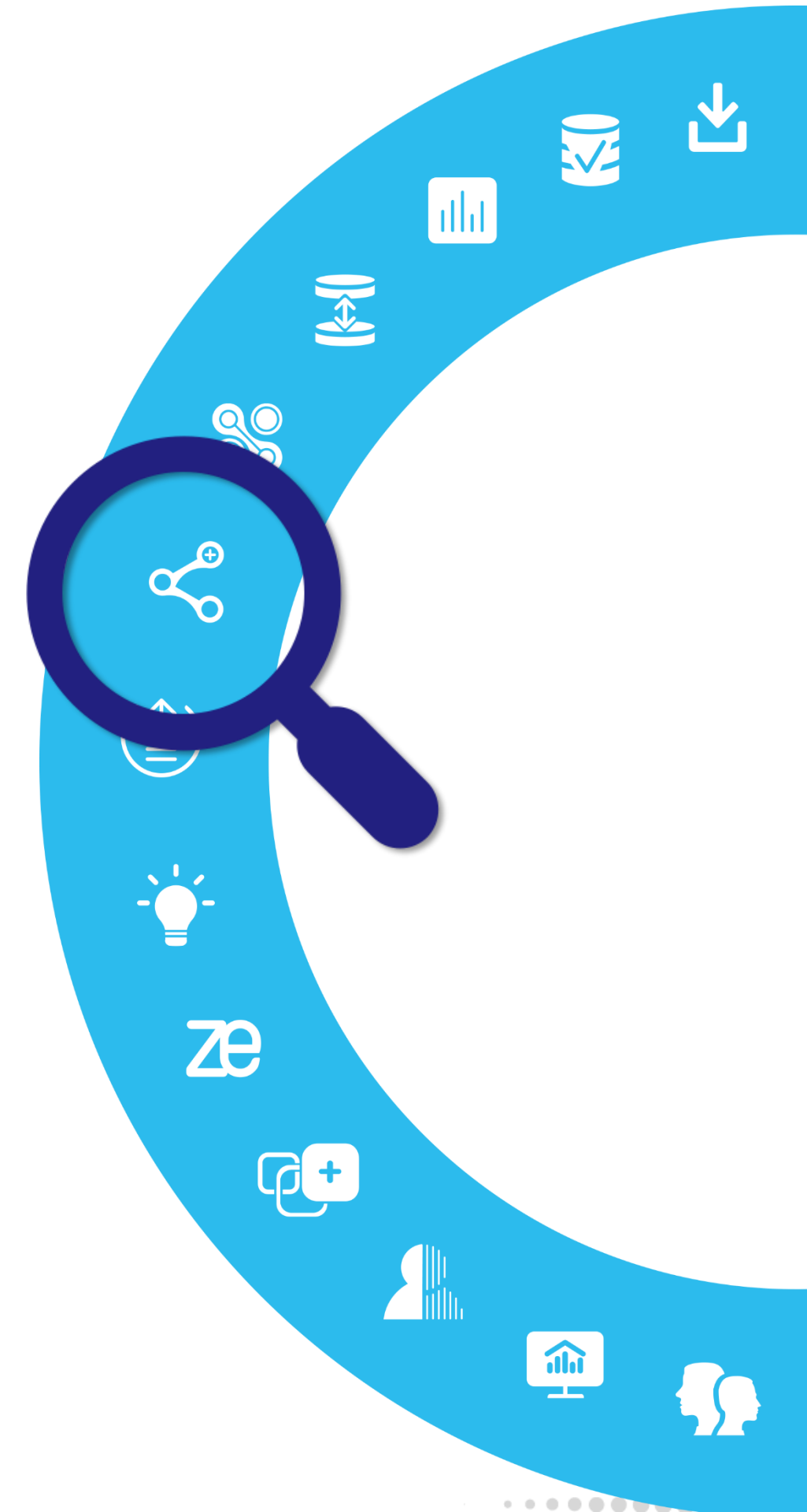


develop.openaire.eu

Gain full or selective **access** to
OpenAIRE **data** via:

- **OAI-PMH**
(full graph or project information)
- **Linked Open Data**
(SPARQL endpoints, RDF dump)
- **HTTP API**

All data available CC-BY





Openaire XML Schema has been changed! Please [click here](#) to learn more!

The OpenAIRE API allows developers to access the metadata information space of OpenAIRE programmatically.

If you have any question, please open a ticket to the [OpenAIRE Helpdesk](#).

Bulk access

OAI-PMH

[Bulk access to projects](#)

Selective access via HTTP API

Publications

Research data

Software

Other Research Products

Projects

Linked Open Data

Documentation

[OpenAIRE LOD Ontology](#)

[OpenAIRE RDF dump](#)

[SPARQL endpoint](#)

TERMS OF USE AND SLA

OpenAIRE HTTP API: the APIs are free-to-use (no sign-up needed) by any third-party service. Note that:

OpenAIRE | PROVIDE

A one-stop-shop
for content providers



provide.openaire.eu

- **Interoperability:** Validate via the OpenAIRE Guidelines
- **EOSC catalogue:** Register and expose your content
- **Knowledge:** Provide your content for text and data mining
- **Routing:** Automatically enrich your repository
- **Analytics:** Use comparable, standard-based metrics



METADATA VALIDATOR

Helping you apply
the OpenAIRE Guidelines



provide.openaire.eu

USAGE ANALYTICS

Make your content count



provide.openaire.eu

OA BROKER

Routing information
across content providers



provide.openaire.eu

An **OpenAIRE** interoperability
service for:

- Publication repositories
- OA journals
- Data repositories
- Software repositories
- CRIS systems
- Aggregators

Available for local installations.
Configurable to other metadata schema.

PROVIDE



An **OpenAIRE** service that:

- collects **usage activity** from your repository / journal
- aggregates, cleans, de-duplicates and **analyzes** them
- provides comparable, standards-based **reports** (COUNTER, SUSHI-Lite)

PROVIDE



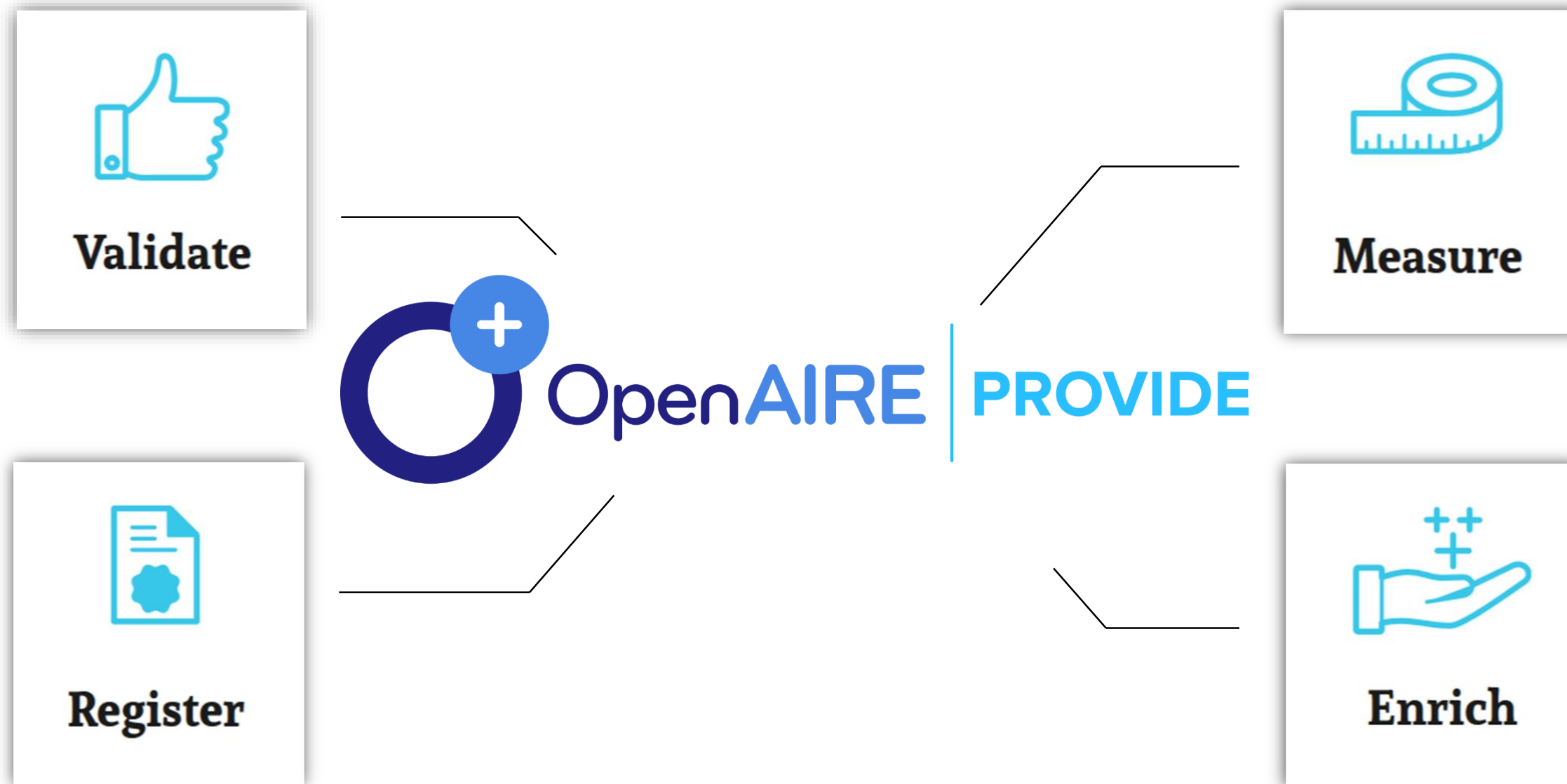
An **OpenAIRE** service to
enrich your repository with
latest content and compre-
hensive metadata

- Based on the enriched **OpenAIRE Research Graph**.
- Supported by a **notification** system tailored to your needs.

PROVIDE



QUE ES Y QUE HACE



One-stop-shop web service where content providers (repositories, data archives, journals, aggregators, CRIS systems) interact with OpenAIRE. It provides the front-end access to many of OpenAIRE's backend services.

DASHBOARD USAGE



USUARIOS

Gestores de repositorios (pubs, datos), bibliotecas, proveedores de contenido, editores, agregadores nacionales.

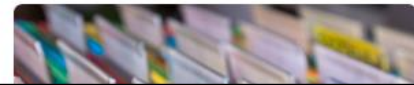
USUARIO BASE

En producción desde octubre de 2018 y sirve a 1318 proveedores de contenido (comenzó más centrado en los repositorios de publicaciones)

VALOR

Mejore las colecciones y el contenido del repositorio para mejorar la visibilidad y el acceso. Memoria institucional mejorada. Mejor evaluación de la investigación institucional. Cumplimiento de las normas del financiador. Mejora la interoperabilidad del repositorio.





Register



Validate

2019-09-08
Aggregation stage - TRANSFORM
Number of records - 58993

2019-08-31
Aggregation stage - TRANSFORM
Number of records - 58914

2019-08-24
Aggregation stage - COLLECT
CollectionMode - REFRESH
Number of records - 59434

2019-08-16

2019-09-08
Aggregation stage - COLLECT
CollectionMode - REFRESH
Number of records - 59588

2019-08-31 Indexed version
Aggregation stage - COLLECT
CollectionMode - REFRESH
Number of records - 59509

2019-08-16
Aggregation stage - TRANSFORM
Number of records - 58839

Collection monitor proporciona el historial de agregación



Register

Register



Validate



EL SERVICIO RECOGE Y EXPLOTA ESTADÍSTICAS DE USO COMO DESCARGAS Y VISTAS DE METADATOS (tracking plugin, SUSHI endpoint, COUNTER reports)

Metrics Configuration & Software Details

OpenAIRE's usage statistic service uses the *Piwik Open Source Analytics platform* (piwik.org) to track usage activity enabled for a repository. Two unique identifiers are generated - a piwik-ID that associates the repository with its authentication-ID that allows to track usage activity on the Piwik platform. Metadata views and item downloads are automatically sent to Piwik. Statistics are generated using the COUNTER Code of practice directives.

OpenAIRE's usage statistics service tracking code exploits Piwik's API. In order to make the tracking of usage even more robust, it was necessary to implement repository platform specific patches and plugins starting with DSpace maintained on Github:

- as a patch for various versions of DSpace (<https://github.com/openaire/OpenAIRE-Piwik-DSpace>)
- as an EPrints plugin for version 3 (<https://github.com/openaire/EPrints-OAPiwik>)

To configure your repository to allow tracking in Piwik platform, please change the configuration files with the following values, generated for your site:

PiwikID
104

AuthenticationToken
106629304

Get usage statistics report for Universidade do Minho: RepositoriUM

Supported Reports



Article Report 1, number of successful article download requests by month and repository.



Item Report 1, number of successful item download requests by month and repository.



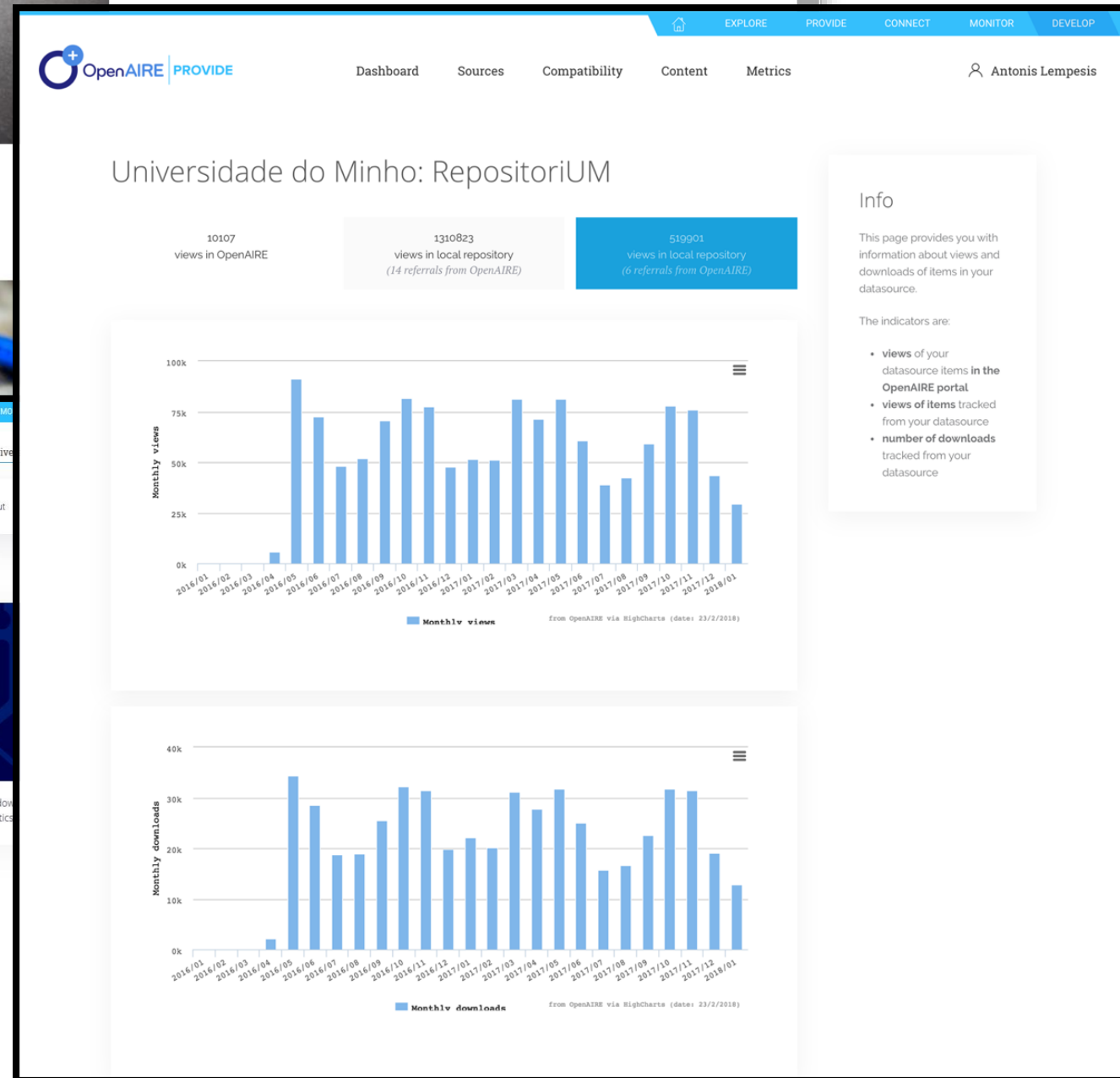
Repository Report 1, number of successful item downloads from all repositories participating in the usage statistics.



Book Report 1, number of successful title requests by month and title.



Book Report 2, number of successful section requests by month and title.



Register

Validate

Enrichments for Universidade do Minho: Rep

ENRIQUECIMIENTOS DE METADATOS DEL SERVICIO DE BROKER DE OPENAIRE (notificaciones mensuales)

MORE

EVENTS THAT MAY ENRICH UNIVERSIDADE DO MINHO: REPOSITORY CONTENT # OF EVENTS

<p>ENRICH/MORE/OPENACCESS_VERSION <i>OpenAIRE discovered another Open Access version of a publication</i></p>	18296
<p>ENRICH/MORE/PID <i>OpenAIRE discovered another persistent identifier associated to your publications</i></p>	5725
<p>ENRICH/MORE/SUBJECT/JEL <i>OpenAIRE discovered more Journal of Economic Literature (JEL) classification terms that can be associated to your publications</i></p>	4151

MISSING

EVENTS THAT MAY ENRICH UNIVERSIDADE DO MINHO: REPOSITORY CONTENT # OF EVENTS

<p>ENRICH/MISSING/PROJECT <i>OpenAIRE discovered references to research projects that can be associated to your publications</i></p>	3422
<p>ENRICH/MISSING/PID</p>	3132
<p>ENRICH/MISSING/SUBJECT/DDC <i>OpenAIRE discovered Dewey Decimal classification terms (DDC) that can be associated to your publications</i></p>	736

Eventos de enriquecimiento del servicio de broker

MORE metadata

PROJECT, PID, ABSTRACT,
OPENACCESS_VERSION,
DATE, SUBJECT...

PROJECT, PID, ABSTRACT,
OPENACCESS_VERSION,
DATE, SUBJECT...

MISSING metadata

Nuevos eventos Broker: ORCID > Publications/Datasets/software; Datasets > Projects; Publications <-> Software; Publications <-> Datasets

Services Public Roadmaps

The screenshot shows a Trello board for the 'OpenAIRE PROVIDE Roadmap'. The board is organized into four columns: 'In Progress', 'Planned', 'Under consideration', and 'Launched'. Each column contains cards representing tasks or milestones. The 'In Progress' column has four cards, including 'Finalize the dashboard entry page with information of the repository' and 'Configuration of the metadata rules for the Guidelines 4.0 in the validator'. The 'Planned' column has one card: 'New broker events: orcid'. The 'Under consideration' column has two cards: 'Change the look for a more administrative look and feel to match other OpenAIRE products' and 'Usage stats service for data repositories'. The 'Launched' column has one card: 'New support guides available via the help text info and the homepage'. A sidebar on the left features the 'OpenAIRE PROVIDE' logo and a cartoon character pushing a cart. An 'About This Board' panel on the right provides details about the board's creator, 'OpenAIRE', and its description, which includes the status 'in production since October 2018' and a list of services: Register, Enrich, and Assess.

New services to export metadata enrichments: **CSV...**

New broker events,

Collection monitor feedback – request harvesting,

Consolidated usage stats reports,

...

Alineamiento internacional - interoperabilidad y servicios



OpenAIRE | MONITOR

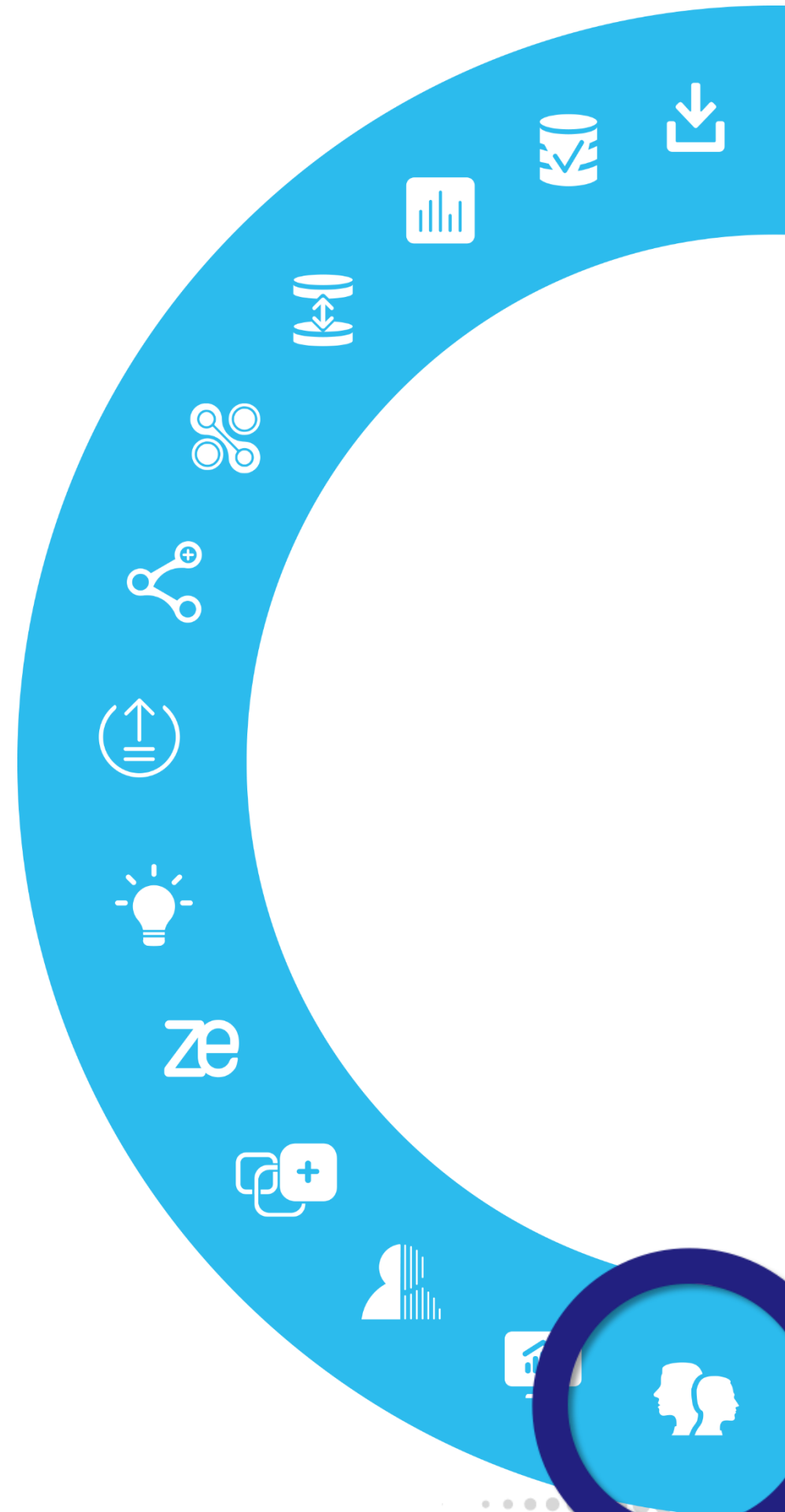
Simplify research tracking
& monitoring



monitor.openaire.eu

Funders – Institutions – Projects:

- Track your organization's research output
- Identify research trends
- Correlate with others
- Monitor your Open Science progress





EXPLORE

PROVIDE

CONNECT

MONITOR

DEVELOP



FUNDERS

RESEARCH INITIATIVES

SUPPORT

Tracking, reporting, monitoring made easy

31729560
PUBLICATIONS

1645315
DATASETS

105290
SOFTWARE

18
FUNDERS



Are you a funder?




Advanced Analytics



Have more questions?

monitor.openaire.eu

In production:



European Funders

Austria
FWF - Austrian Science Fund

Croatia
HRZZ - Croatian Science Foundation (CSF)
MZOS - Ministry of Science, Education and Sports of the Republic of Croatia (MSES)

Finland
AKA - Academy of Finland

France
Tara - Tara Expeditions Foundation

Ireland
SFI - Science Foundation Ireland

Netherlands
NWO - Netherlands Organisation for Scientific Research


Portugal
FCT - Fundação para a Ciência e a Tecnologia

Serbia
MESTD - Ministry of Education, Science and Technological Development of Republic of Serbia

Switzerland
SNSF - Swiss National Science Foundation


Turkey
Tubitak - Türkiye Bilimsel ve Teknolojik Araştırma Kurumu

United Kingdom
RCUK - Research Council
WT - Wellcome Trust



European Union

European Commission – H2020
European Commission – FP7
ERC - European Research Council (EU)



International Funders

Australia
ARC - Australian Research Council
NHMRC - National Health and Medical Research Council Statistics

USA
NIH - National Institutes of Health
NSF - National Science Foundation

In beta:

Germany
DFG

Italy
Miur (Italian Ministry of University and Research)

Belgium
INNOVIRIS

Greece
GSRT

Cyprus
RPF

Canada
CIHR, NSERC, SSHCR

France
French National Research Agency funder (ANR)

Chile
CONICYT

Spain
FECYT (Ministry of Economy, Industry and Competitiveness)

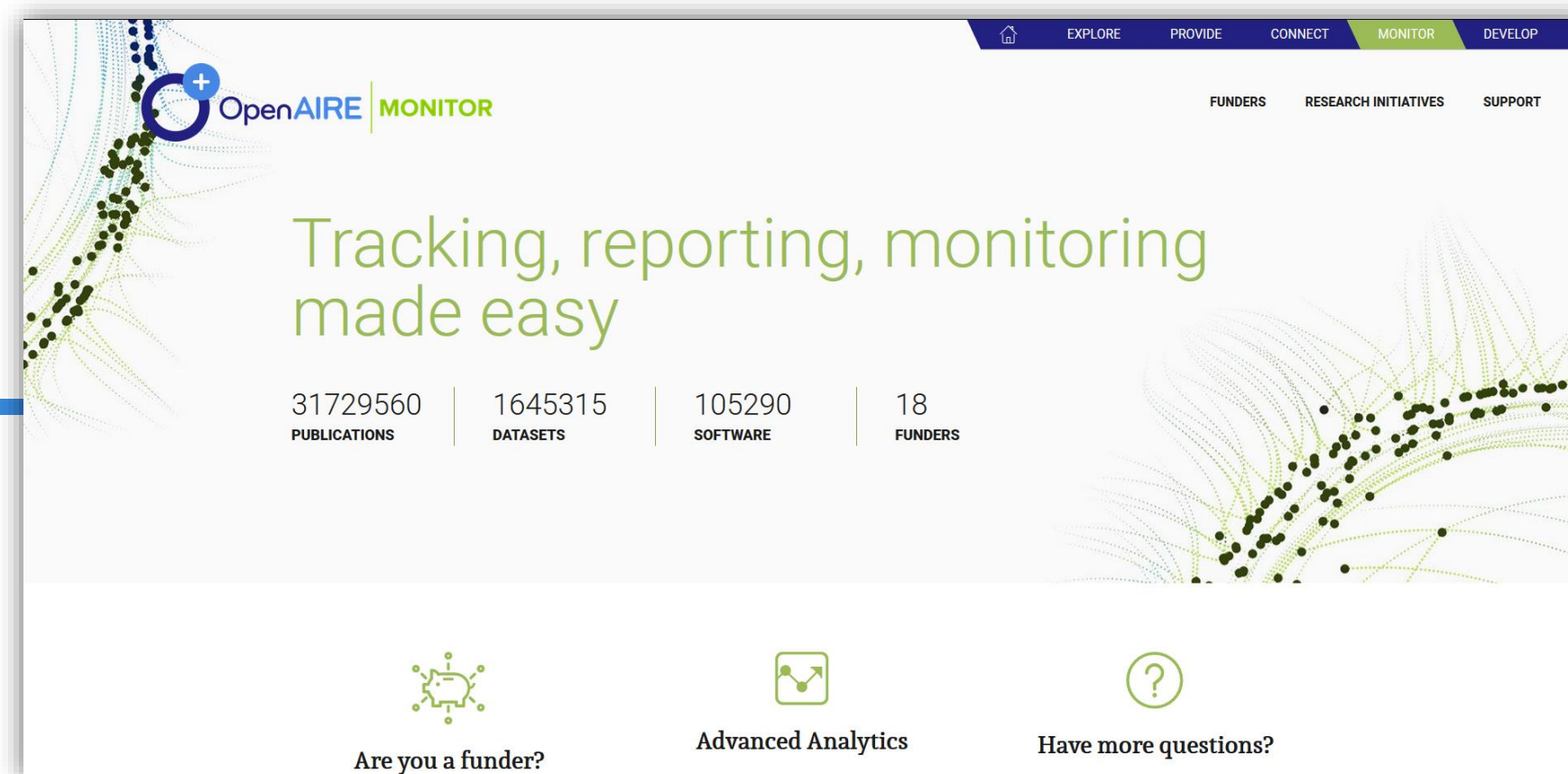
Monitor: Funder dashboard – objetivos

Impacto de financiamiento

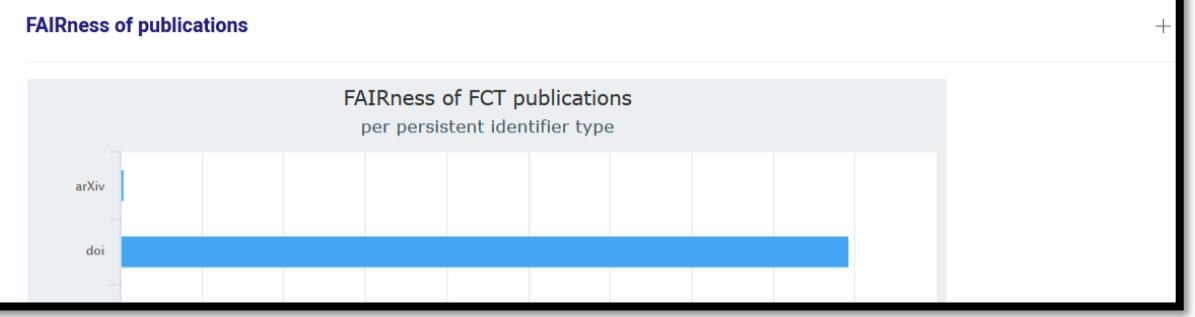
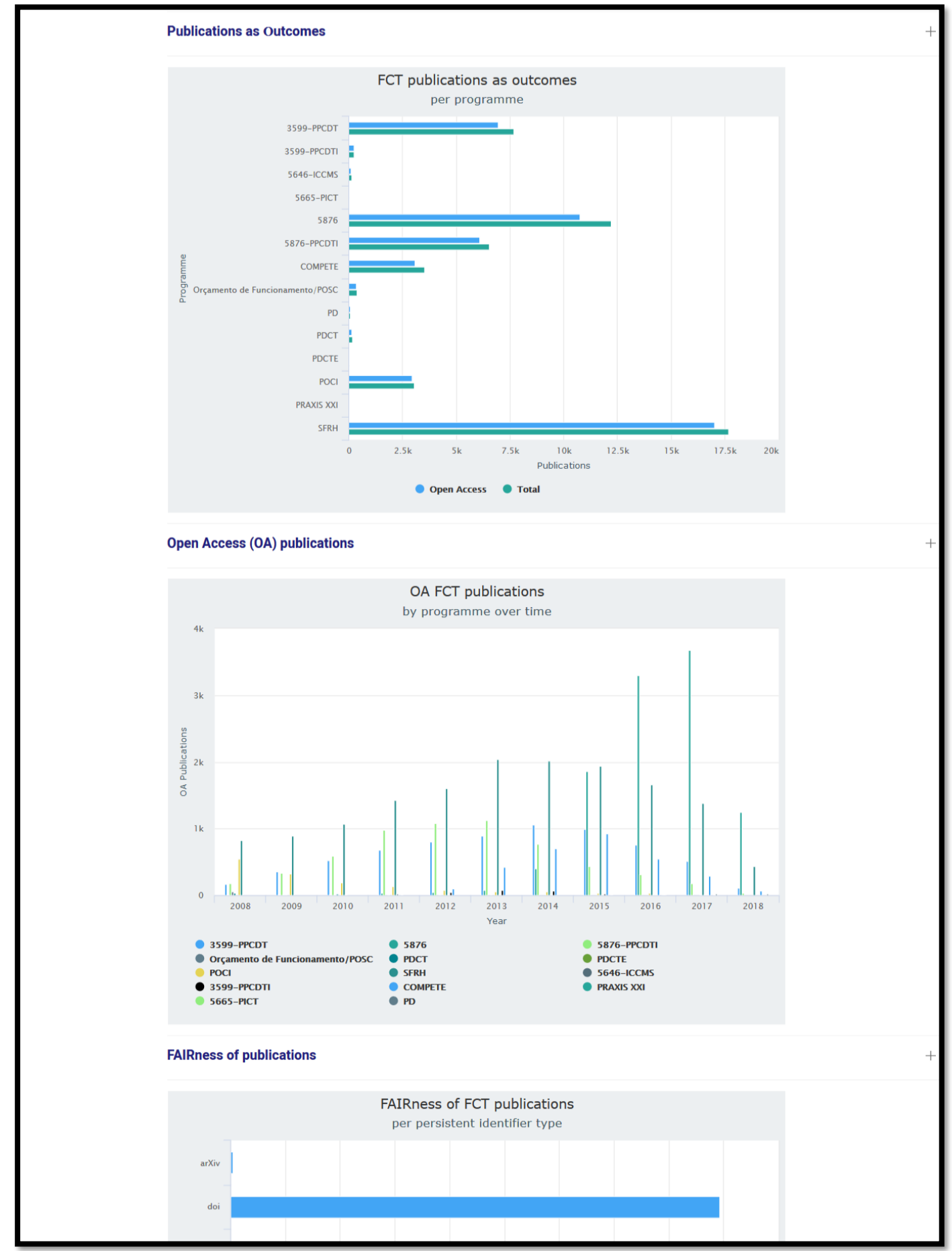
Publicaciones, datos de investigación, software publicado gracias a subvenciones del financiador

Impacto Open Access/Science

Monitoreo del impacto de Open Science: datos /software, FAIRness, tendencias de reproducibilidad



Funder Dashboard



Financiador(es) de España

- ✓ OpenAIRE puede proporcionar un servicio valioso.
- ✓ Necesitamos un plan de intervención para integrar los datos del financiador en la infraestructura.
 - ✓ pero ya hay una prueba!
- ✓ Proporcionaríamos una API para la integración de la información del repositorio (plugin DSpace por ejemplo)
- ✓ Enriquecimientos de metadatos visibles en bróker (provide)



OpenAIRE | EXPLORE

Government of Spain

Gobierno de España
FUNDER DATABASE

Projects (6,674) VIEW ALL 6,674 RESULTS →

ARASERTACONAZOL NITRATO. DESARROLLO CLÍNICO DE FASE III DE UN NUEVO ANTIFÚNGICO PARA EL TRATAMIENTO DE LA CANDIDIASIS VULVOVAGINAL. (IDI-20120220)
SGOV

NUEVAS HERRAMIENTAS DE SELECCIÓN BIOLÓGICA DE VARIEDADES DE UVA APIRENA. (2/4) (IDI-20120475)
SGOV

DISEÑO OPTIMO DE AUTOBUSES Y SEMIRREMOLQUES ALIGERADOS BASADO EN PREDICCIÓN DE VIDA FRENTE A FATIGA, MEDIANTE TÉCNICAS DE ENSAYOS VIRTUALES Y DATOS OBTENIDOS EN SERVICIO REAL (TRA2012-38826-C02-02)
SGOV
Start year: 2011 - End year: 2013

GRAVITACION, COSMOLOGIA Y ASTROFISICA RELATIVISTA (FIS2012-30926)
SGOV
Start year: 2011 - End year: 2013

OpenAIRE | CONNECT

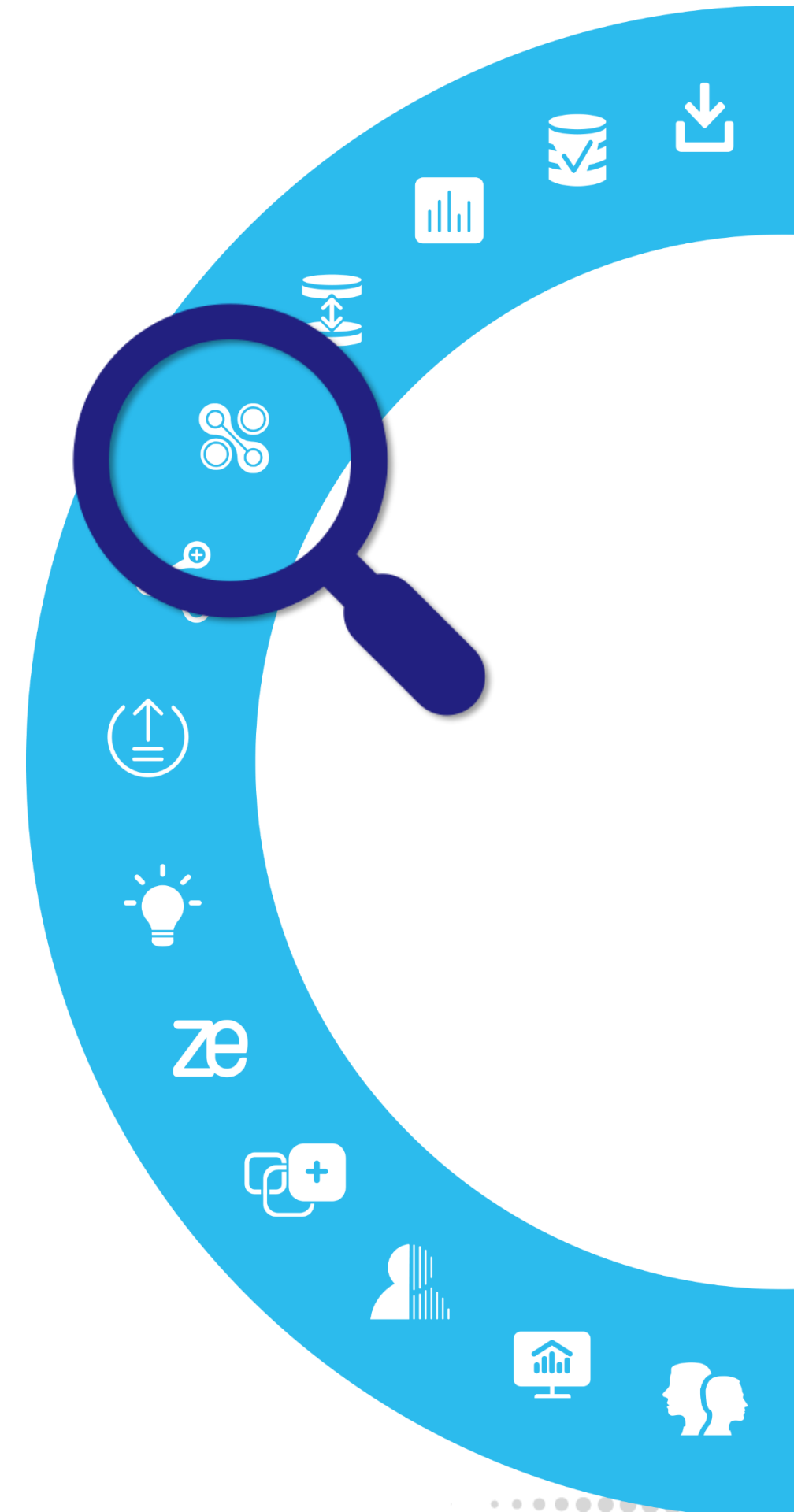
Build an Open Research Gateway for your community



connect.openaire.eu

An overlay platform to **share, link, disseminate** and **monitor** all your publications, data, software, methods

- In one place
- Open Science out of the box
- An integral part of the European Open Science Cloud





EXPLORE

PROVIDE

CONNECT

MONITOR

DEVELOP



Research Community Dashboard

Your view to open science

START HERE

connect.openaire.eu

A VIRTUAL ENVIRONMENT DESIGNED FOR COMMUNITIES

Services

**Implement the latest Open Science trends:
FAIR data, open data**



Share

all your research results:
publications, data, software, methods



Link

all your research effectively



Gather

all your research results in one place



Monitor

and report your community's progress

Benefits

▶ **Community-oriented Open Science publishing tools**

Scientists may continue using RI services and publishing practices, but, if needed, can find support for publishing/interlinking any kind of products.

▶ **Collaborative curation of a community-specific scholarly communication information space**







Community information space to share, discover, interlink, gather and reuse (reproduce) scientific results.

▶ **Community-oriented Reporting and Open Science monitoring**

Enable reporting to funders, development of scientific reward strategies inclusive of all products of science.

OpenAIRE Research Communities/Initiatives Dashboard

COMMUNITY

 <p>European Marine Science</p>	 <p>Neuroinformatics</p>	 <p>Agricultural and Food Sciences</p>
 <p>Fisheries and Aquaculture Management</p>	 <p>Digital Humanities and Cultural Heritage</p>	 <p>Sustainable Development Solutions Network - Greece</p>

RESEARCH INITIATIVE

 <p>Instruct-ERIC</p>	 <p>ELIXIR-GR</p>	 <p>DARIAH EU</p>
 <p>EGI : advanced computing for research</p>	 <p>Research Data Alliance</p>	 <p>Common Language Resources and Technology Infrastructure</p>

Objetivos: publicar, compartir y descubrir

Objetivos: impacto de la investigación

Servicios y herramientas para apoyar las políticas de acceso abierto y los datos abiertos en el H2020

- ✓ **Depósito** en acceso abierto
- ✓ Almacenamiento de datos de investigación en **Zenodo**
- ✓ **Conectar** publicaciones y conjuntos de datos
- ✓ **Informes** de resultados de investigación
- ✓ **Descubrir**, analizar y acceder
- ✓ Material de soporte y **Helpdesk**
- ✓ Material de **capacitación** y apoyo

zenodo

a catch-all-repository



www.zenodo.org

An **OpenAIRE** service to **publish, share** your **publications data, software** and all your research materials

Hosted by **CERN**



ARGOS

Plan and follow your data

- Identify actions to ensure quality and durability for your data
- Turn your data into FAIR data by design
- Link to trusted sources
- Configure to our community's needs

amnesia

Anonymize your datasets



amnesia.openaire.eu

An **OpenAIRE** service to let you easily **anonymize** sensitive **research data** and share with others.

- In line with open data and privacy **rules** (GDPR)
- Adaptable and ready to be integrated in your environment



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OPEN SCIENCE HELPDESK

www.openaire.eu/support



Primers

Getting started on Open Science good practices

www.openaire.eu/os-primers



Guides

Howto's on practicing Open Science and on using OpenAIRE services

www.openaire.eu/guides



Factsheets

Quick references on Open Science in H2020 topics

www.openaire.eu/openaire-h2020-factsheets



FAQs

Quick answers to Open Science practices and OpenAIRE services issues

www.openaire.eu/faqs



Use cases

of OpenAIRE services for different stakeholders

www.openaire.eu/use-cases



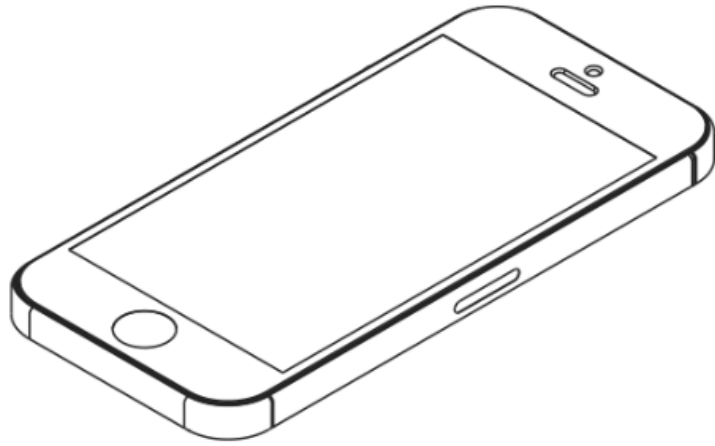
Webinars

Training on Open Science topics

www.openaire.eu/frontpage/webinars

The screenshot shows the OpenAIRE support page. At the top left is the OpenAIRE logo. To the right are navigation links: SERVICES, SUPPORT, OPEN SCIENCE IN EUROPE, ABOUT, and SIGN IN. The main heading is "Guiding you in Open Science". Below this is a dark blue box titled "Researchers" containing a list of links: "How to comply with H2020 mandates - publications", "How to comply with H2020 mandates - research data", "Research Data Management costs in H2020 projects", "How to make your data FAIR", "How to find a trustworthy repository for your data", "How to create a Data Management Plan for H2020 projects", "Data formats for preservation", "How do I know if my research data is protected", "How do I license my research data", "Can I reuse someone else's research data", "How to deal with non-digital data", "How to deal with sensitive data", "Raw data, backup and versioning", and "How can identifiers improve the dissemination of your research outputs?". Below this are three boxes for "Content providers", "Funders", and "Research Administrators". The "Content providers" box includes links for "Making your repository Open", "Follow the OpenAIRE Guidelines", and "Follow the OpenAIRE Usage Statistics Guidelines". The "Funders" box includes "Why OpenAIRE Monitor" and "How to join OpenAIRE". The "Research Administrators" box includes "Open Access policies guide: designing your Open Access policy - Coming soon!". Below these is the heading "Guides for OpenAIRE services" and a grid of eight service cards: "Deposit your research outcomes" (for researchers, Zenodo), "Anonymize your data" (for researchers, Anonymization), "Report your publication and data to the EC" (for project coordinators, Search & Share), "Claim a publication or data to your funding" (for researchers, Search & Share), "Link literature & data" (for content providers, SCholExplorer), "Register & Validate your repository" (for content providers, Validator), "Content Enrichment" (for Repository Managers, OA Broker), and "Track the usage activity of your repository" (for content providers, Usage Analytics).

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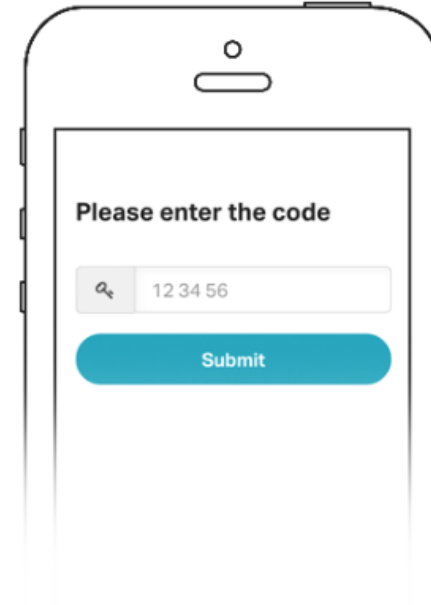
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3

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make a wish!



Thank you!



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