

# OpenAIRE

Open Scholarly Communication eInfrastructure

Natalia Manola

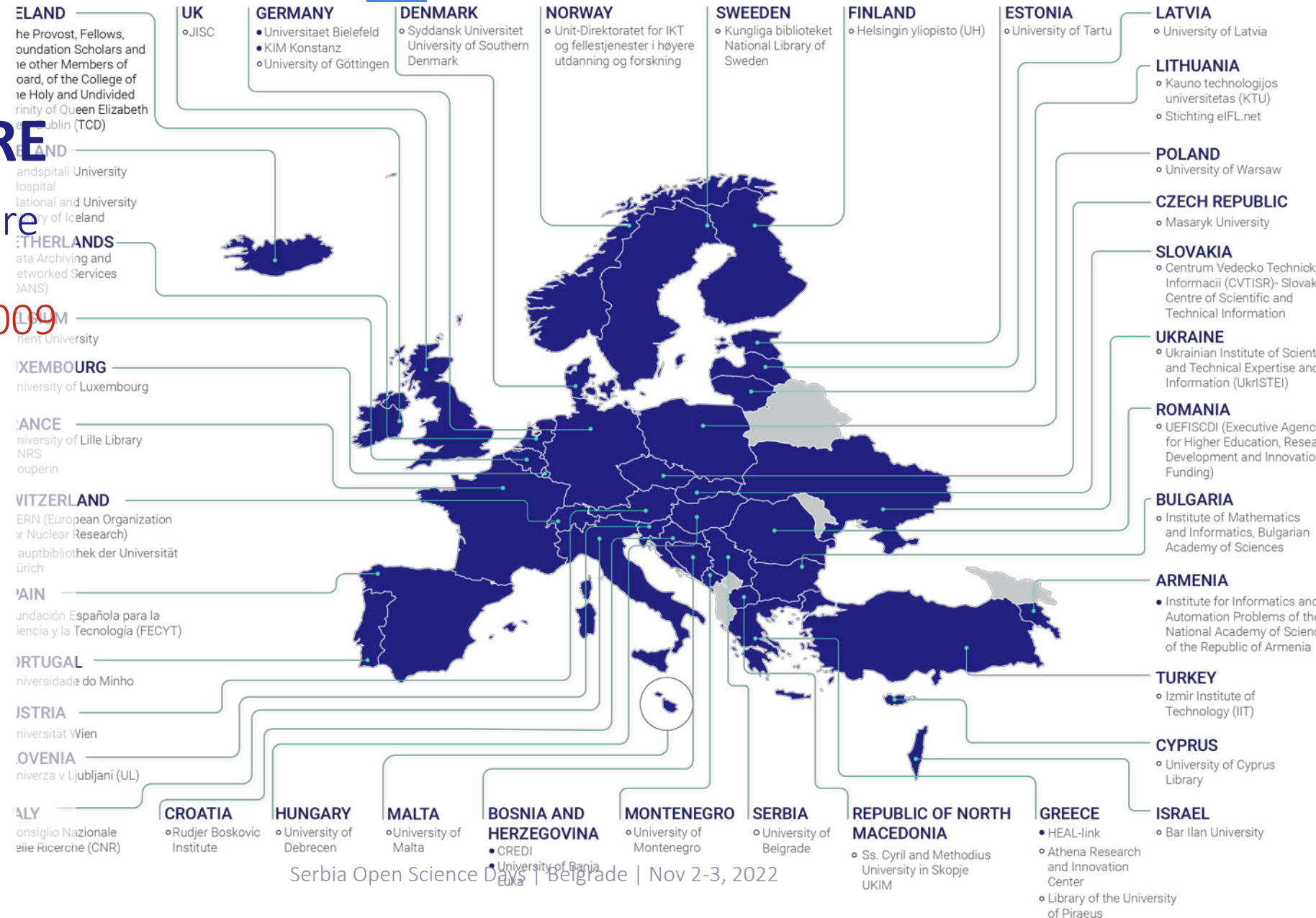
OpenAIRE, CEO

# WHO IS OPENAIRE

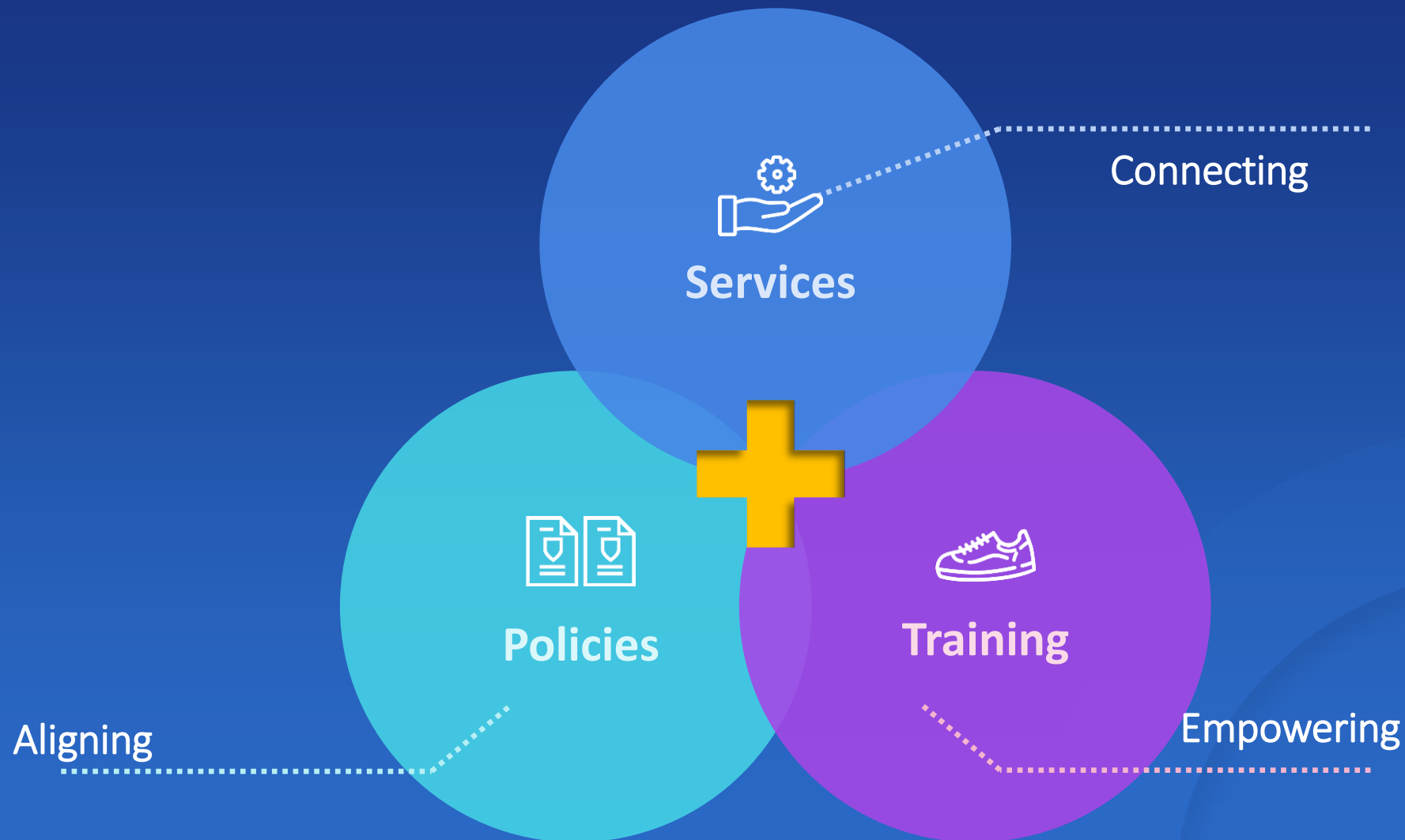
A European infrastructure  
on open scholarly  
communication since 2009

## Non-profit organization

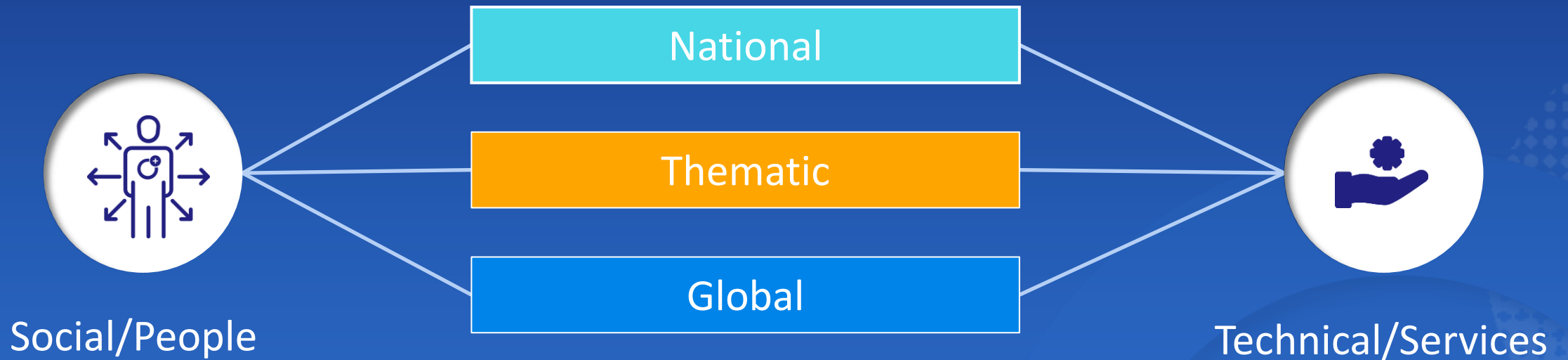
- Established Oct 2018
- Headquarter Greece, virtual office
- 49 members
- From 34 countries



# 3 pillars of action



# 3 levels of operation



# #1 – The OpenAIRE network

*It's about connecting people and learning from each other*

# National Approach

## National Open Access Desks (NOADs)

A pan-European network to address **diversity** in culture & **maturity** of national/local infras



**34** countries

→ Key national organizations, experts on OA and Open Science

Coordination on

- Policies
- Infrastructure
- Research data management
- Legal issues
- Training
- ...

# NOADs activities

Promote Open Scholarship	Promote open access and open science of all research outcomes. Inform researchers, data librarians and national infrastructures about OS tools.
Outreach to national key players	Identify <b>national key players</b> , NCPs, National Funders, Discipline-specific Research groups, Research Infrastructures, Open science (or Open Access, Open Research Data, RDM) working groups and initiatives, and promote and advise on OS, especially on how align and take up of OA policies and take up of OpenAIRE services.
Align OA/OS policies	Contact policy decision makers ( <b>funding bodies, ministries, RPO heads</b> ) to align OA / Open Research Data / RDM / OS policies.
Organize national workshops	Coordinate <b>high-profile workshops</b> on topic of open science with key scholarly infrastructures and funders in region.
Engage with funders	Getting funder buy-in to OpenAIRE infrastructure to reach economies of scale
Gather research outputs	Over: infor  Assist
Support Research Data Openness & Fairness	Supp point repos wher
Train for RDM	Share experiences and expertise on local or institutional RDM activities. Activate local RDM training. Participate, or lead webinars to train the OpenAIRE community. Provide feedback on the DMP template.
Provide expert advice	Participate in Training, webinars on expert topics. E-research support: connecting researchers with tools. Digital Preservation and repositories: good practice.
Support community	<b>Assist repository managers</b> (literature and data), CRIS managers and PA journal publishers to make their repositories and journals compliant with the OpenAIRE Guidelines. Promote the OpenAIRE guidelines for literature and data repository managers and for OA journal editors/publishers/aggregators- Contact CRIS implementers to promote uptake of OpenAIRE's CRIS guidelines- Inform about OpenAIRE's text mining services to identified funded publications Outreach to EC funded projects. <b>Answer helpdesk queries.</b>
Disseminate national and EU	<b>Promote OpenAIRE</b> and dissemination materials at key events. Contribute to <b>OpenAIRE Blog</b> and <b>Newsletter</b> Updating portal pages with key information.

We are here to amplify, learn from,  
and support each other.

# #2 – Services

*for all R&I actors*



# OPENAIRE SERVICES IN A NUTSHELL

1

## Tracking open research

Reproducibility and transparency require tracking of all outcomes of **science and related "context"**

2

## Discovering open research

Discovery of **reproducible science** outcomes must find new ways, driven by **"scientific intentions"** that go beyond the "find articles related to a research topic"

3

## Assessing & monitoring (open) research

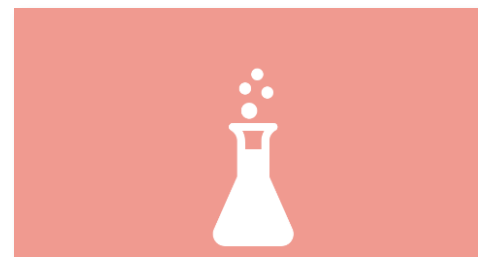
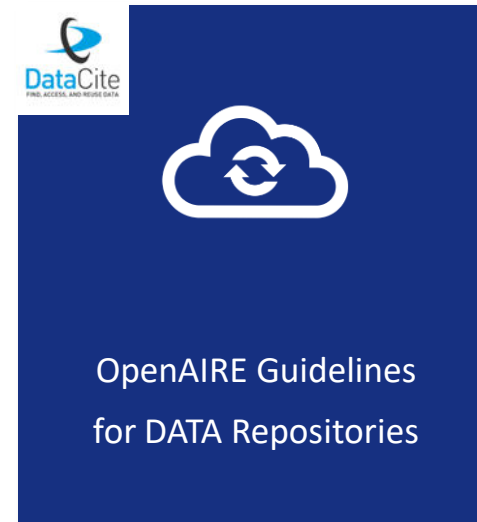
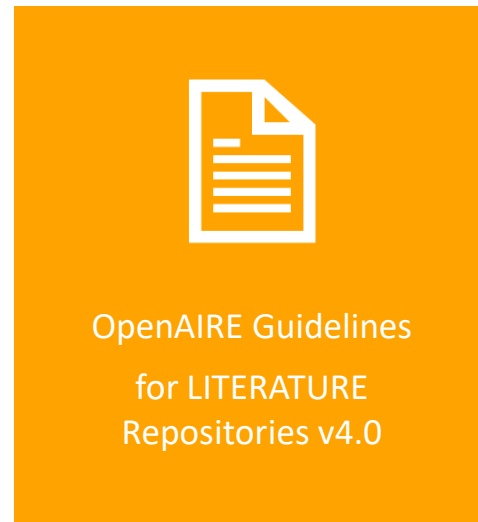
Monitoring quality, impact, and **"open scienceness"** of science should be a transparent, reproducible process for all, inclusive of research "context"

# GUIDELINES FOR CONTENT PROVIDERS

A COMMON METADATA FRAMEWORK AND BEST PRACTICES



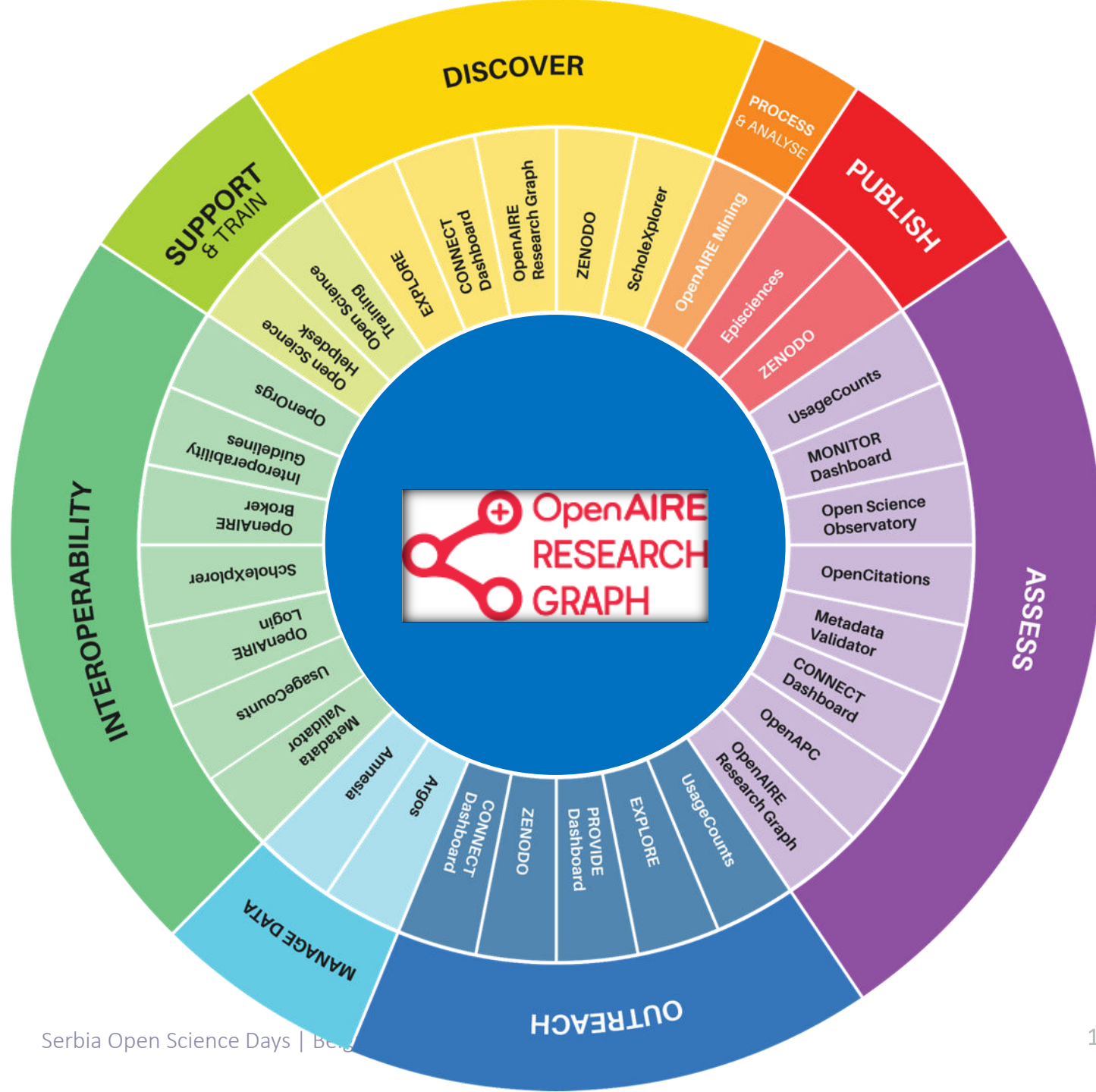
<https://guidelines.openaire.eu>

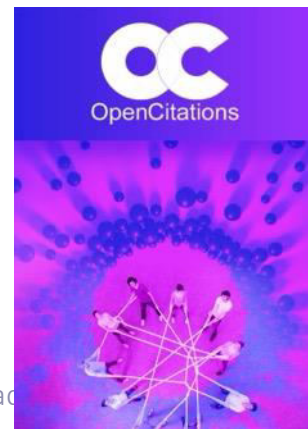
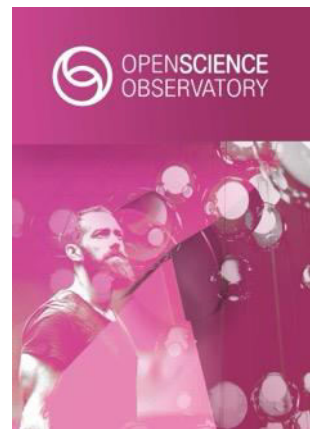
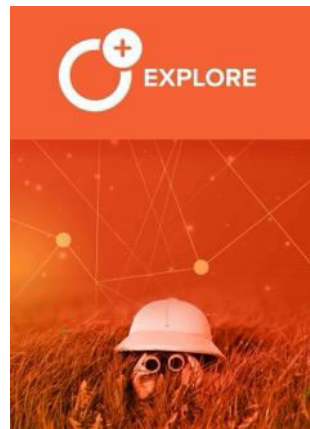
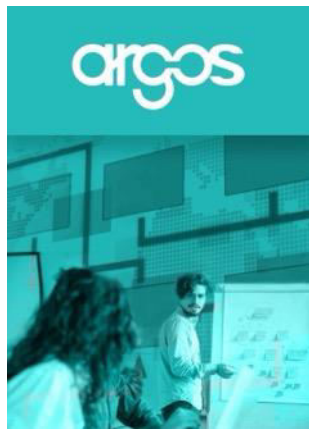
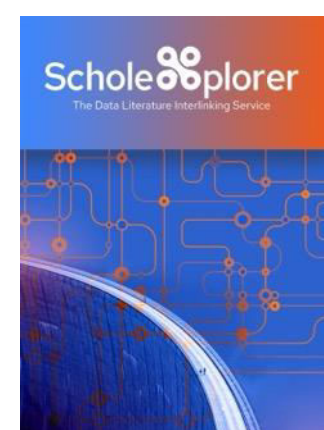
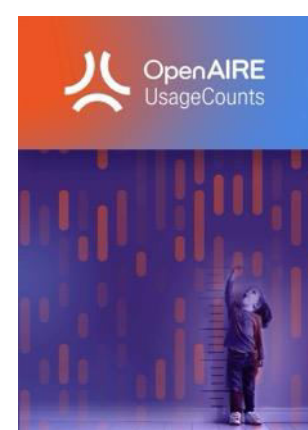
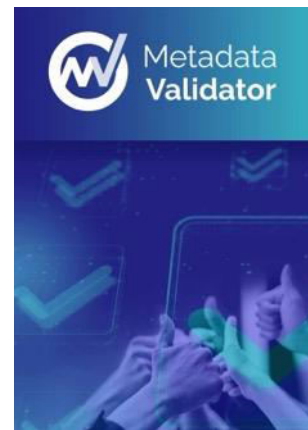
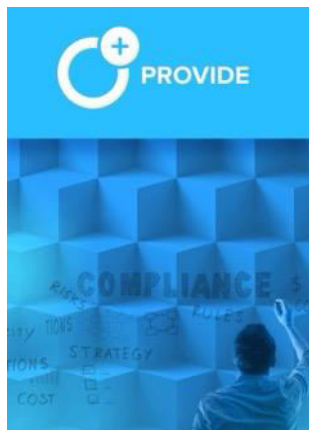


Part of EOSC Rules of Participation for Content Providers (EIF). Global adoption.

# OpenAIRE

A RANGE OF SERVICES COVERING ALL RESEARCH LIFE CYCLE



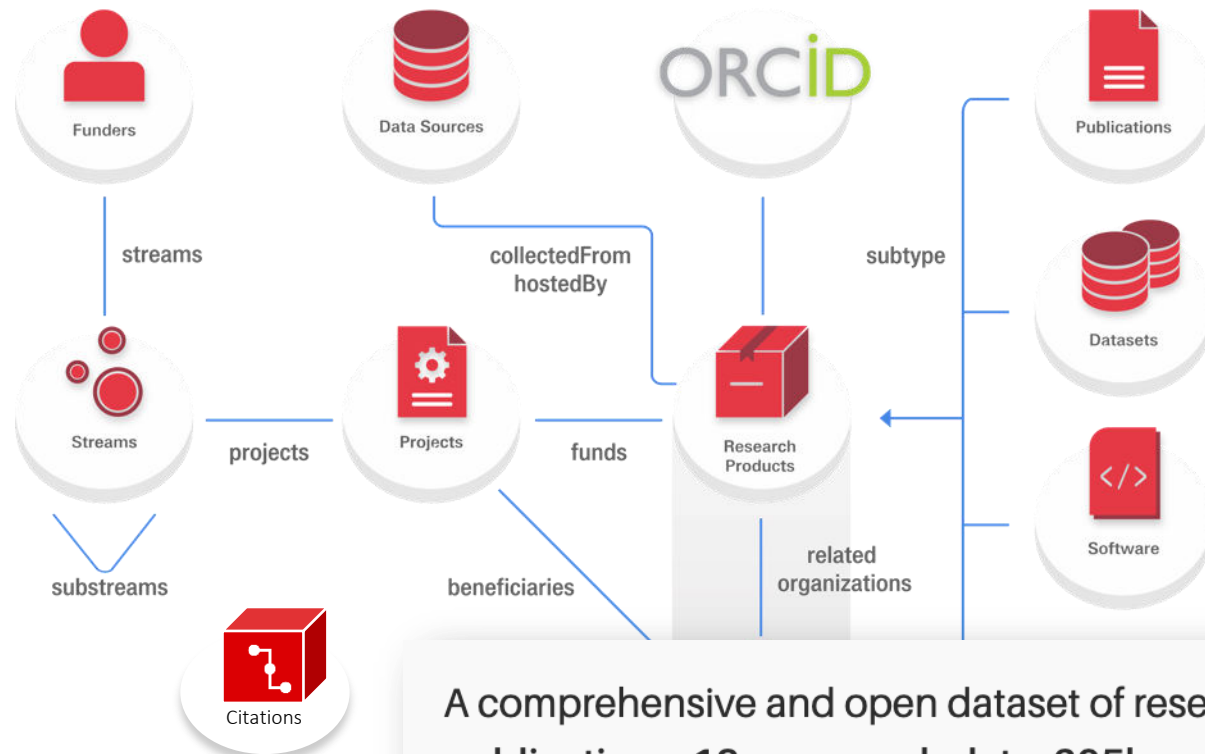


Scholarly  
communication  
services  
for all

<http://catalogue.openaire.eu>

# OPENAIRE **RESEARCH GRAPH** – KEY ASSET IN OPEN SCIENCE INFRASTRUCTURE

INCLUSIVE, TRANSPARENT, REPRODUCIBLE



- Based on **Open Science principles**
- High **relevance** to the research community

A comprehensive and open dataset of research information covering 145m publications, 18m research data, 305k research software items, from 110k data sources, linked to 3m grants and 178k organizations.

All linked together through citations and semantics.

**OpenAIRE Research Graph** has global coverage

Open and authoritative sources, open APIs, well established metrics

Indicators and visualisations for all needs

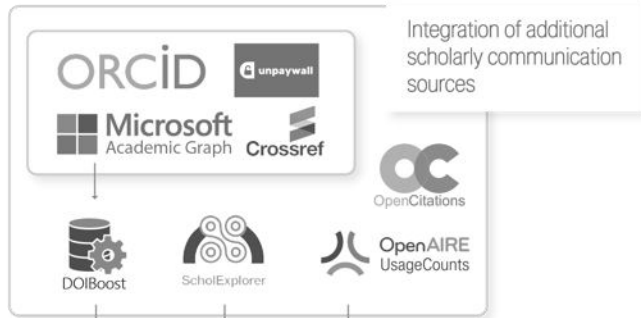


# OPENAIRE RESEARCH GRAPH – THE BASICS

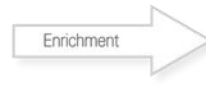
1. Combining data from than more than 10K sources



Collection and harmonisation



Different records representing the same entity (results or organisation) are merged in one



Inference of new properties and links via full-text mining

Inference of new properties and links from meta-data

2. A big data, AI-driven infrastructure to extract information

3. A community to develop indicators and validate data



# OPENAIRE SERVICES: END-TO-END STORY



# Some numbers (this year to date)

- **Graph:** 35M API requests, 6K dumps
- **EXPLORE:** 1700 users have claimed 61K research results to 1700 projects and 35K claims to ORCID
- **OpenCitations:** 1.3B citation records, 82M API requests
- **MONITOR & CONNECT:** 40+ dashboards in use
- **Episciences:** 25 Journals, 10K users and 500 submissions
- **AAI:** 24K users actively using OpenAIRE AAI, *even though most services do not require login*
- **Zenodo:** 181K researchers have shared 66PB of data
- **Amnesia:** 15K visits, 450 downloads (installations?)
- **Argos:** 2K researchers making their DMPs
- **PROVIDE:** 2.5K data sources registered & validated, generating 25M brokering events
- **UsageCounts:** 500 repositories capturing 785M downloads



# THANKS

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