

# Research Libraries at the forefront

Empowering Open Science  
decision making with the  
OpenAIRE Graph

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Outreach and Engagement Officer

# About OpenAIRE

## OPENAIRE AMKE

- Non-profit organisation, established **Oct 2018**
- **Mission:** Shift scholarly communication towards openness and transparency and facilitate innovative ways to communicate and monitor research
- A **Scholarly Communication e-Infrastructure** that brings together **human capital** and advanced **ICT services**
- A **network of experts** from major national organisations (National Open Access Desks) in operation since 2009

# Strategy 2023-25

*Our commitment to  
facilitate Open Science*



### STRATEGIC PRIORITIES 2023-2025

1 Infrastructure for Open Scholarly Communication

2 Data and service quality assurance

3 Responsible research & career assessment that includes Open Science

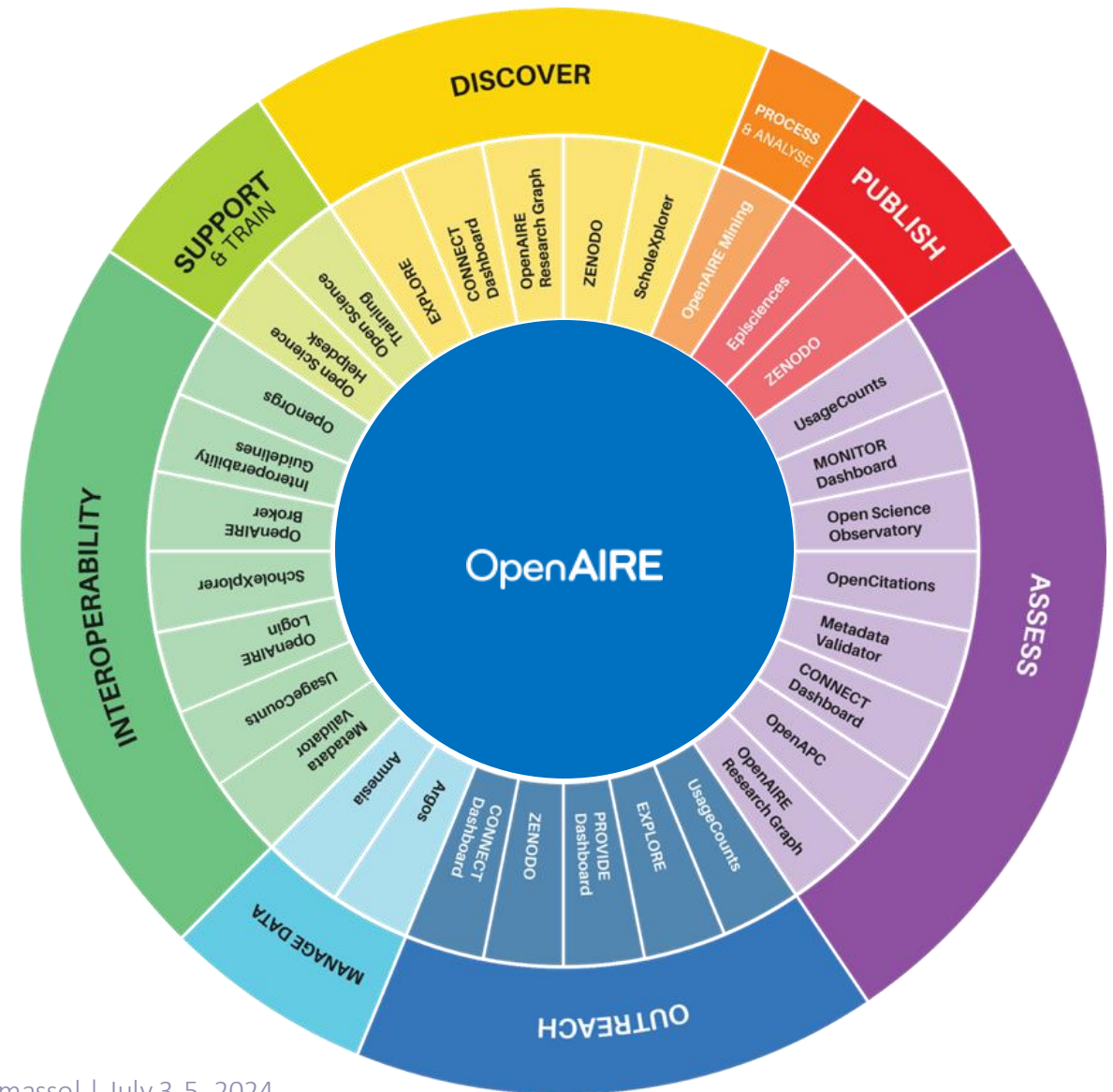
4 Innovation in research communication & dissemination

5 Monitoring uptake of Open Science policies

<https://www.openaire.eu/strategy-2023-25>

# Services in our core

- **Researchers** – discover, plan, anonymize, publish
- **Providers** – interoperate, enrich metadata
- **Research Funding & Performing organisations** – track, assess, monitor research & open science
- **Policy makers & public agencies** – assess R&I investments



# The key roles of Librarians

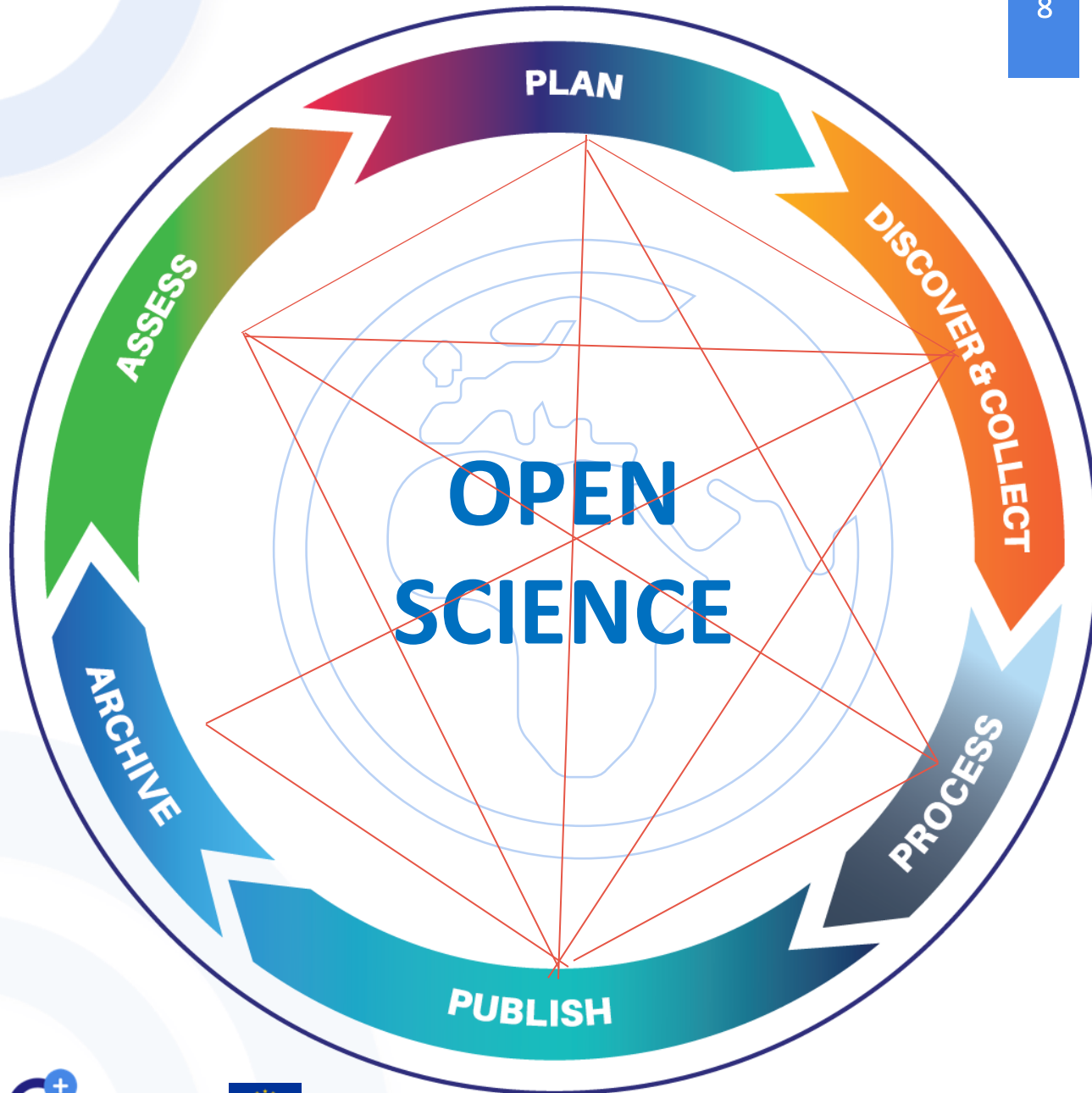
# RESEARCH LIBRARIANS IN SCHOLARLY RESEARCH COMMUNICATION

## HOW WE SEE YOU

- Key role in Open Science
- At the forefront of collecting and support researchers in **sharing and publishing research**
- **Training** and Researchers' support
- **Negotiation** with Publishers
- **Tracking the resources, services and tools** for research and its assessment
- **Support the institutional decision makers** for investing in Open Science

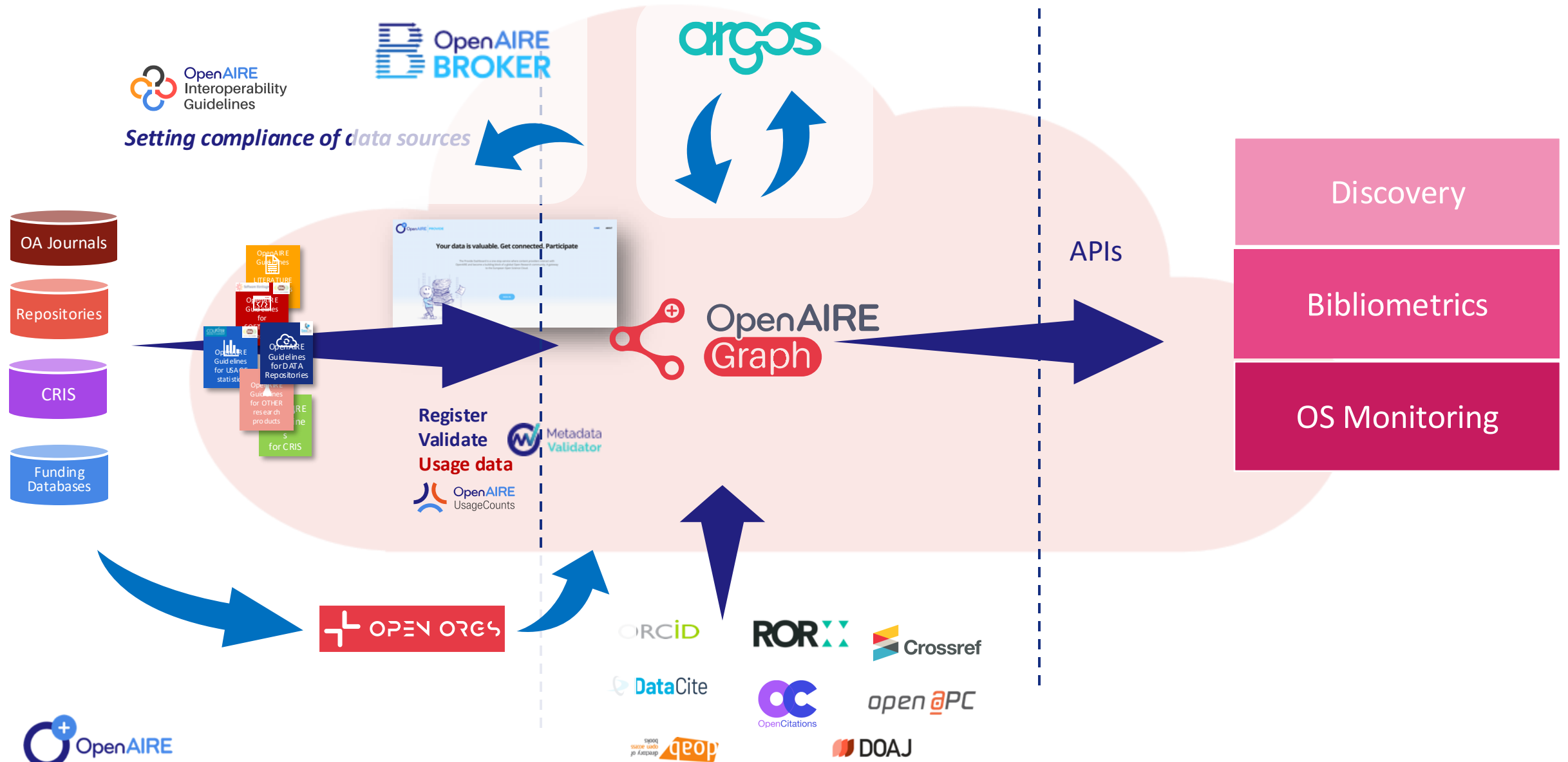


# From publishing to assessing...

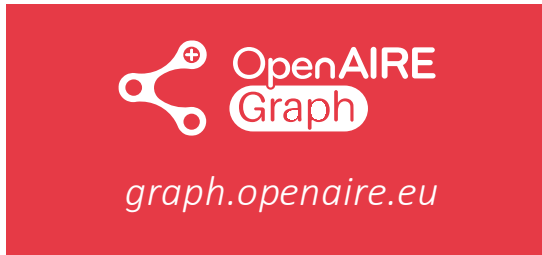


- Research life cycle is **interconnected**
- Data is **the glue** (Web of FAIR Data)
- **Open Science** goes beyond Open Access publications
- The research community needs **collaborative work** to enhance the **quality** of the research to tackle:
  - Global societal challenges
  - Digital Transformation
  - Being compliant with the European Strategy, Directives, and Regulation

# CLOSING THE CYCLE: FROM PUBLISHING TO ASSESSMENT



# The OpenAIRE Graph: the basics



## Scientific Knowledge Graph:

A collection of metadata describing **entities** of the research lifecycle and **relationships** among them

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Open



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Complete

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De-duplicated

---

Transparent

---

Participatory

---

Decentralized

---

Trusted

# Key characteristics of the OpenAIRE Graph



The OpenAIRE Graph is the largest Open Science SKG

Broader coverage of publications, research data, and research software, together with links between them



The OpenAIRE Graph is open

Accessible via APIs and datasets in Zenodo under CC-BY



The OpenAIRE Graph is transparent

We document the process of generation and track provenance of individual bits of information



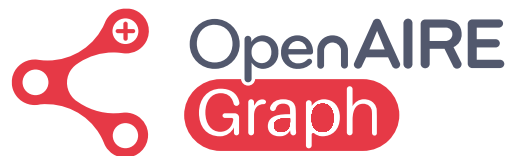
The OpenAIRE Graph is a public good

The Graph a public infrastructure (like highways), operated by OpenAIRE AMKE, a no-profit organisation based on membership participation



The OpenAIRE Graph is participatory

We welcome and enable data contributions from communities, service providers, organisations, and researchers



# A KEY ASSET FOR EUROPE & THE WORLD

## Where is it **used**?

### Scientific Discovery

The Graph is used in the **OpenAIRE EXPLORE** service, enabling users to efficiently search and navigate through an

research ecosystem.

resource supporting the exploration and

Research Communities as the primary resource supporting the exploration and **EOSC EU Node** (EOSC Portal).

EOSC EU Node

Research Communities

Next Step: LLMs

### Bibliometrics

Used for research evaluation in replacement of proprietary databases such as **Web of Science** or **Scopus**, with several benefits, including openness and transparency, embedded citation metrics and indicators, access to information beyond publications such as data and software, and the ability to easily integrate your own databases. Get a glimpse in **OpenAIRE MONITOR**.

Ongoing : APIs

### Open Science Monitoring

The Graph maintains data related to monitoring Open Access and Open Science policies. It is currently used in services such as the **Open Science Observatory**, the **EOSC Observatory**, and the **Irish National OA Monitor**. Also check **OpenAIRE MONITOR** to view out of the box indicators for organisations.

Ongoing: Country Monitors

# Discovery: OpenAIRE EXPLORE and CONNECT

<https://explore.openaire.eu/>

OpenAIRE | EXPLORE

Search Deposit Link Data sources

## Discover open linked research.

A comprehensive and open dataset of research information, publications, 18m research data, 304k research software sources, linked to 3m grants and 178k organizations. All linked together through citations and semantics.

Type  
All Content

Scholarly works  
Search in ...

Try browsing by:

 SUSTAINABLE DEVELOPMENT GOALS (SDGs) →

 FIELDS OF SCIENCE (FOS) →

<https://dh-ch.openaire.eu/>



Home

Deposit

Link

Search

About

Develop

Sign in

## Digital Humanities and Cultural Heritage

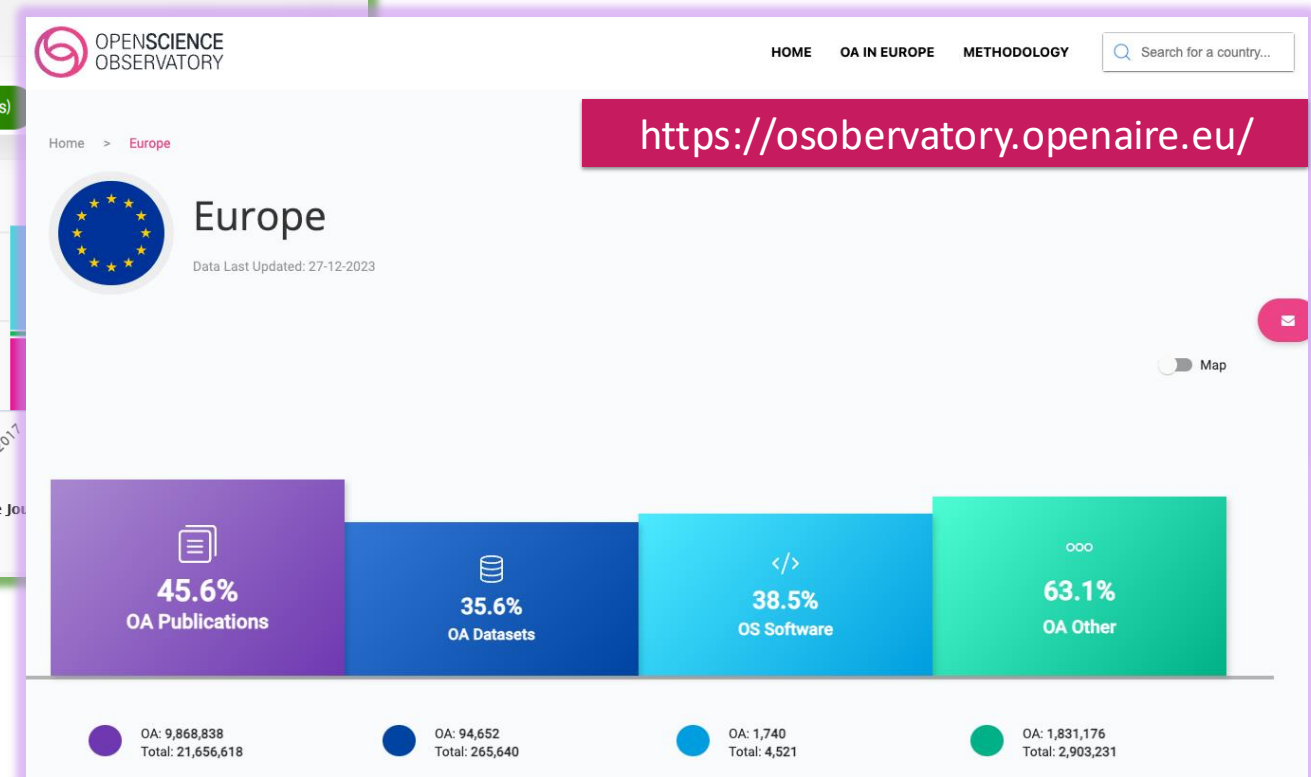
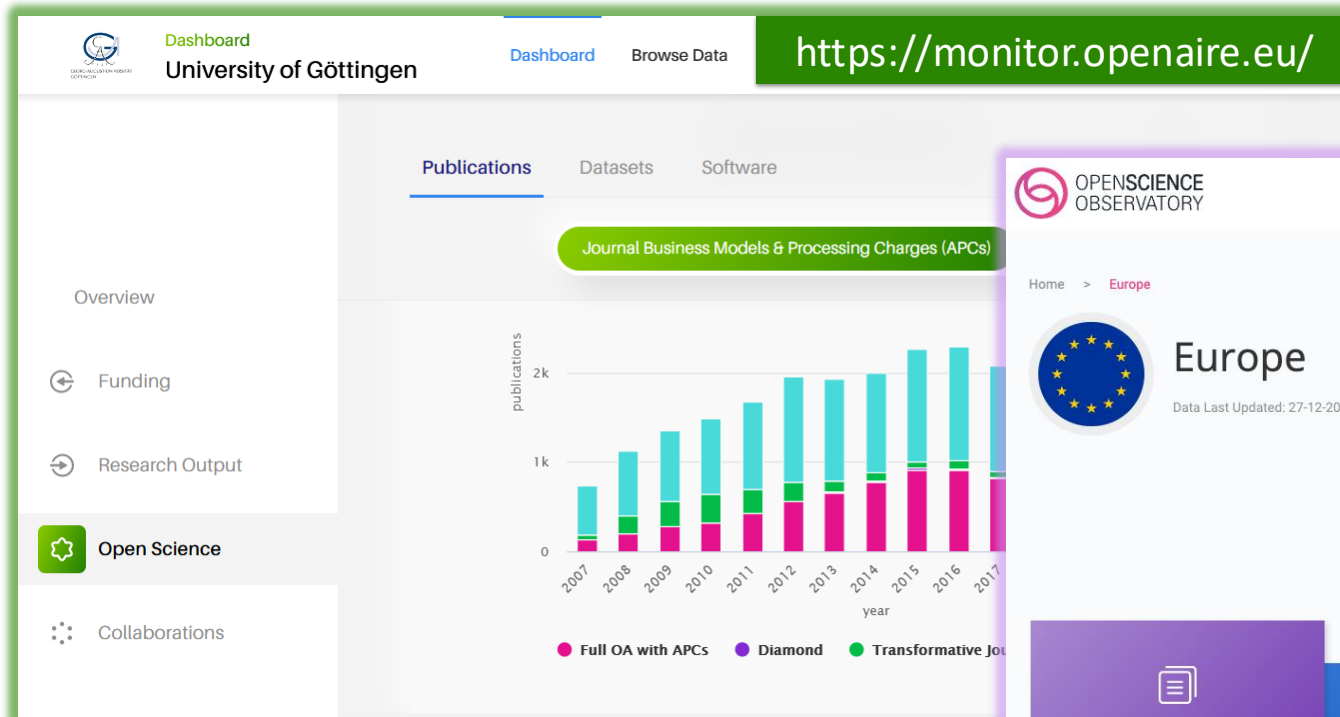
 Join

Type  
Research products

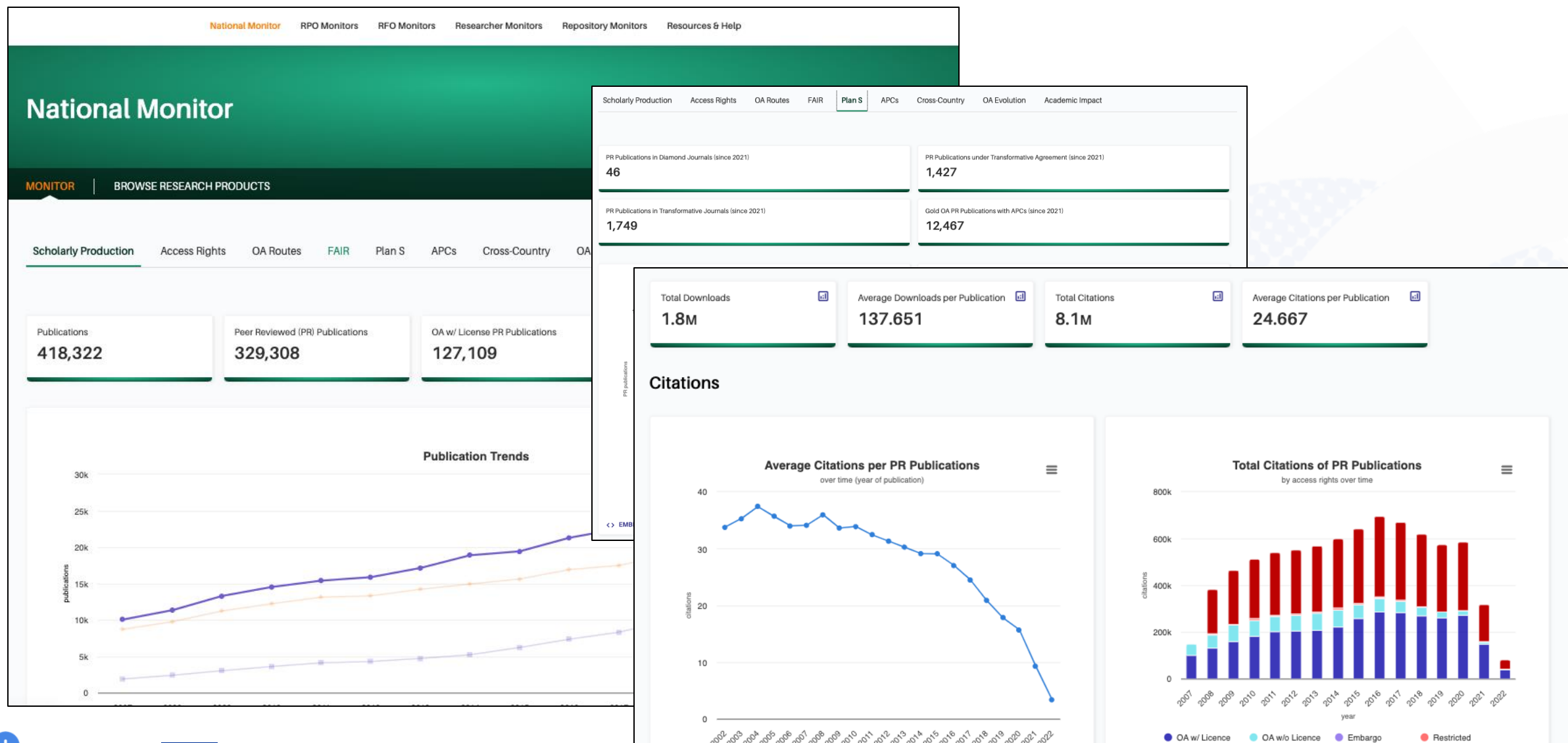
Scholarly works  
Search in OpenAIRE



# OpenAIRE MONITOR and OSmonitor



# National Cases: The Irish OS monitor



# Recent projects and Updates



# graspOS

## Building a Research Assessment Data Space

*data & tools*

# graspOS Researcher Profile

## **Narrative that goes beyond research outputs**

- Supported by evidence
- Using a variety of open data sources

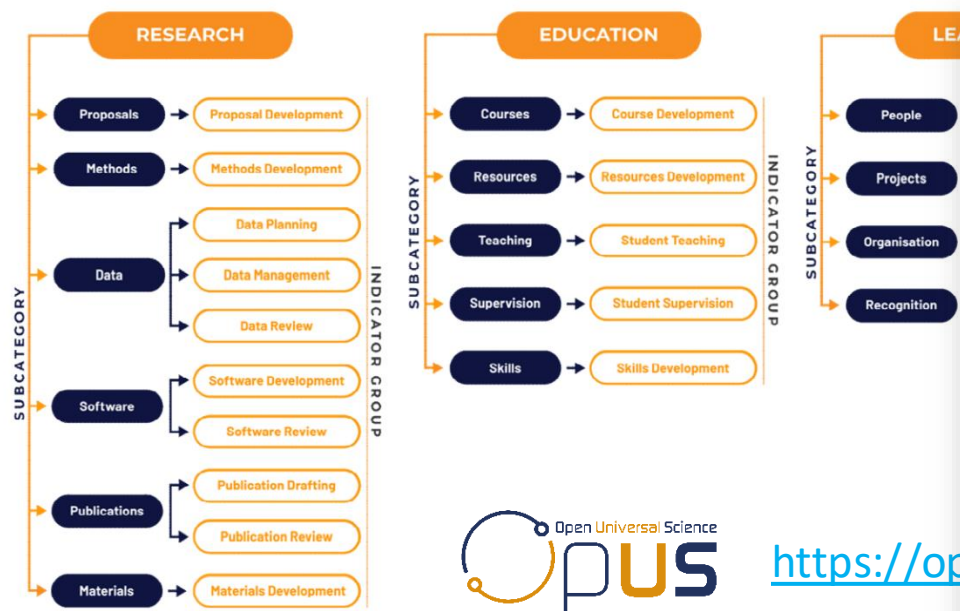
## **How**

- Different templates for different uses
- Novel ideas for presentation

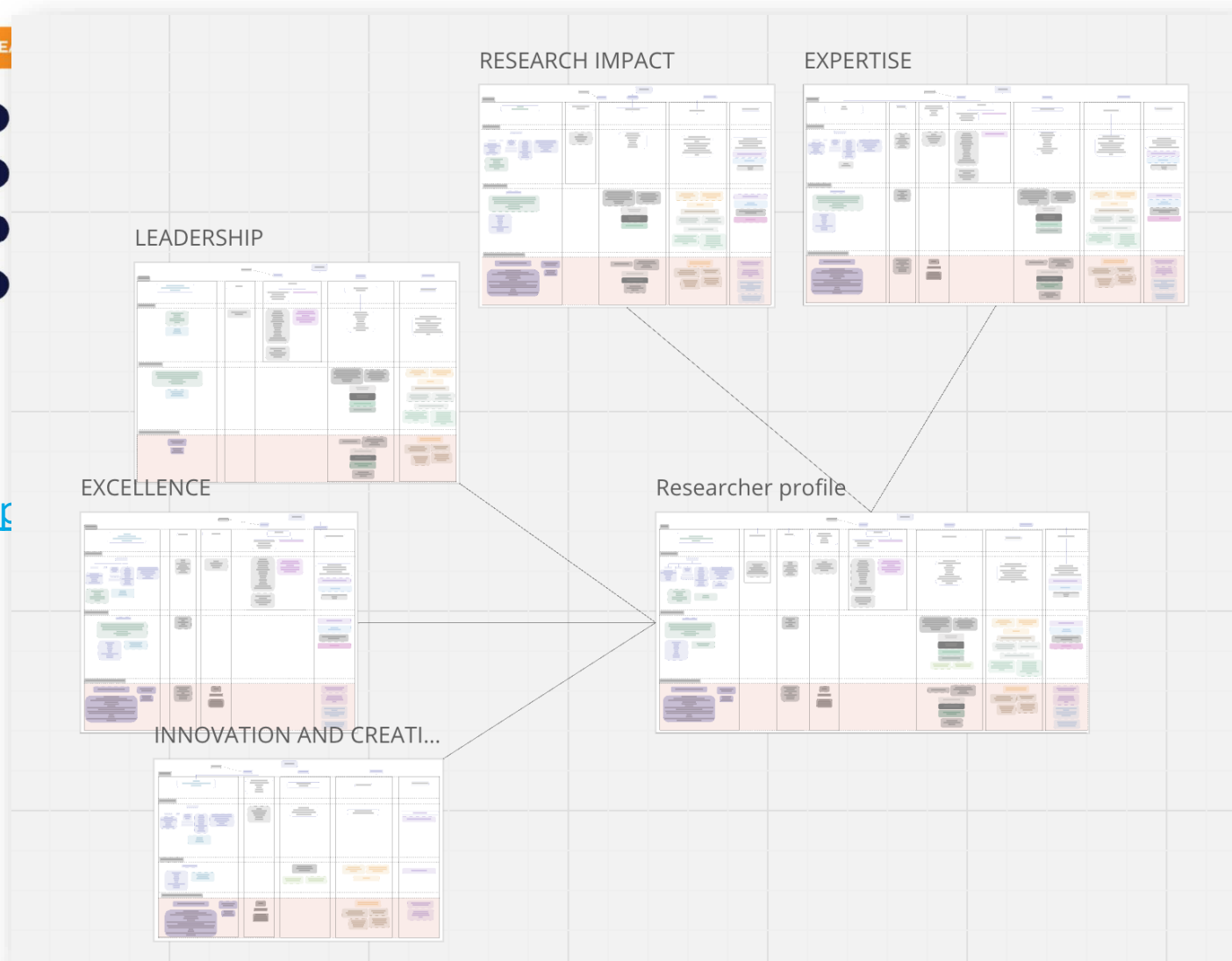
## **Challenges**

- How to capture information beyond research outputs
- ORCID extensions a valuable tool, but far from becoming extensively used

# FROM INDICATORS TO NARRATIVE



<https://openuniversal.science>



GraspOS Profile  
+ Open Science Indicators

# graspOS Researcher Profile - Presentation

Affiliation

Views

Author identifiers

Contact details

00 Button - Compact

Bio

A narrative CV (Curriculum Vitae) is a type of resume or CV format that emphasizes storytelling and provides a more detailed account of a person's professional and academic experiences. Unlike traditional CVs, which typically present information in bullet points and brief summaries, a narrative CV delves deeper into the individual's background, accomplishments, and career journey through descriptive paragraphs and anecdotes.

Read more

Research interests

Field 1Field 2Field 3Field 4Field 5

Research Interests

● Big Data

● Blockchain

● Building Information ...

● Data Compression

● Data Management

201420162018202020222024

20032024

Education (tab)

DOCTOR'S DEGREE

XXXXXXXXXXXXXXXXXXXX

MASTER'S DEGREE

XXXXXXXXXXXXXXXXXXXX

DIPLOMA

XXXXXXXXXXXX

Certification (tab)

Certifications

Drop down list

Experience (tab)

March 2000 - today:

YYYYYYYYYYYYYY

June 2015 - 2022

YYYYYYYYYYYYYYYYYY

.....

Drop down list

Teaching Activities (tab)

Undergraduate: Software development

Graduate: Topics on Database Apps

.....

Drop down list

Awards (tab)

"Chancellor's Distinguished Teaching" Award

.....

Drop down list

Papers

Patents

Projects

YearCitationField

2024202320222021202020192018

Title of the Paper

Authors

Cited (number), Downloads (number) Views (number), Open / Restricted

Drop down list

Papers

Patents

Projects

Patentee:

Description:

Publication Patent Date: XX/YY/ZZ Application Date: XX/YY/ZZ Publication Patent Number: XXXXXX

Drop down list

Papers

Patents

Projects

Title:

Description of the project:

Duration: XX Amount: XXyyZZ Contributors: XXXXXX

Drop down list

Description of your role in the project:

Author statistics

No. of publications (number)

No. open publications (number)

14 publications

41 articles

40 full-texts

40 full-texts

Citations (number)

h-index (number)

i10-index (number)

G-index (number)

Downloads (number)

Peer reviews (number)

Co-Author

Interdisciplinarity

Openess

Name

Affiliation / Field

No. of co-authorship

Drop down list

Co-Author

Interdisciplinarity

Openess

University

Department

Activity co-designed (e.g. research, paper, conferences, workshops)

No. of Activities

Drop down list

Co-Author

Interdisciplinarity

Openess

Pre-prints (number)

Data sharing (number)

Code sharing (number)

Open access peer reviews (number)

Entries in open repositories (number)

Open source software (number)

		Contribution to policy on Y (RPO/National)
	Best paper award	
● 2 courses, 1 seminar	● 11 courses (seminars, workshop, educational support, doctoral courses, specialisations courses, Master courses)	● 7 courses (workshop, educational support, doctoral courses, specialisations courses, Master courses)
● 4 conferences	● 25 conference attendance	● PC Chair in a Conference
● 7 reviews (3 open)	● 5 translations	● 2 articles
● An annotated bibliography	● 2 critics note	● A monograph (OA)
● A translation (from xxx)	● 4 international conference contribution	
● 2 critics note	● 8 articles (6 OA)	
● 2 articles (one in English) (1 OA)	● 2 Editorial curation	
YYY Studies	Research Topics A. B	Research Topics A. C, D
Master degree cum laude	PhD cum laude	PostDoc
1999   2000	2003   2004   2005   2006   2007   2008   2009   2010   2011	PostDoc Funds
XXX University	XXX University	XXX Research Center

 OpenAIRE

Liber 2024 | Limassol | July 3-5, 2024

# Opportunities

# Synergy & Interplay with Librarians

- **Indexing in OpenAIRE by Registering Repositories and CRIS** to increase the discoverability, ensuring that all research outputs are easily accessible and discoverable. And properly attributed.
- **Enhanced metadata and indexing** by providing **detailed and curated metadata** that enhances the discoverability of open research outputs.
- **Standardized data formats:** Open infrastructures can ensure that data is stored in standardized formats, enhancing interoperability and reuse across different platforms and research projects.
- **Impact tracking:** authoritative data from repositories, CRIS, and registries can be used to monitor and report the dissemination and impact of research outputs shared through open infrastructure platforms.
- **Compliance management:** Open Infrastructures can ensure that research outputs meet funder requirements for OA and data sharing, leveraging open infrastructure platforms.

# Time to act

- Transformative potential of the **intersection**
- **Commitment** to openness and collaboration
- Work together across disciplines and borders



# OpenAIRE AMKE

52  
members

36  
countries

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- A **network of experts** from major national organisations (National Open Access Desks) in operation since 2009



Open Membership!  
Join us

Global Collaborations: Latin America, US, Canada, Japan, Korea, ...

Liber 2024 | Limassol | July 3-5, 2024



# Thank you!

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