

 **SCIENCE.
SET FREE.**

Open Science Monitoring in Europe

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About OpenAIRE

ABOUT

A **Scholarly Communication e-Infrastructure** that brings together **human capital** and **advanced ICT services**.

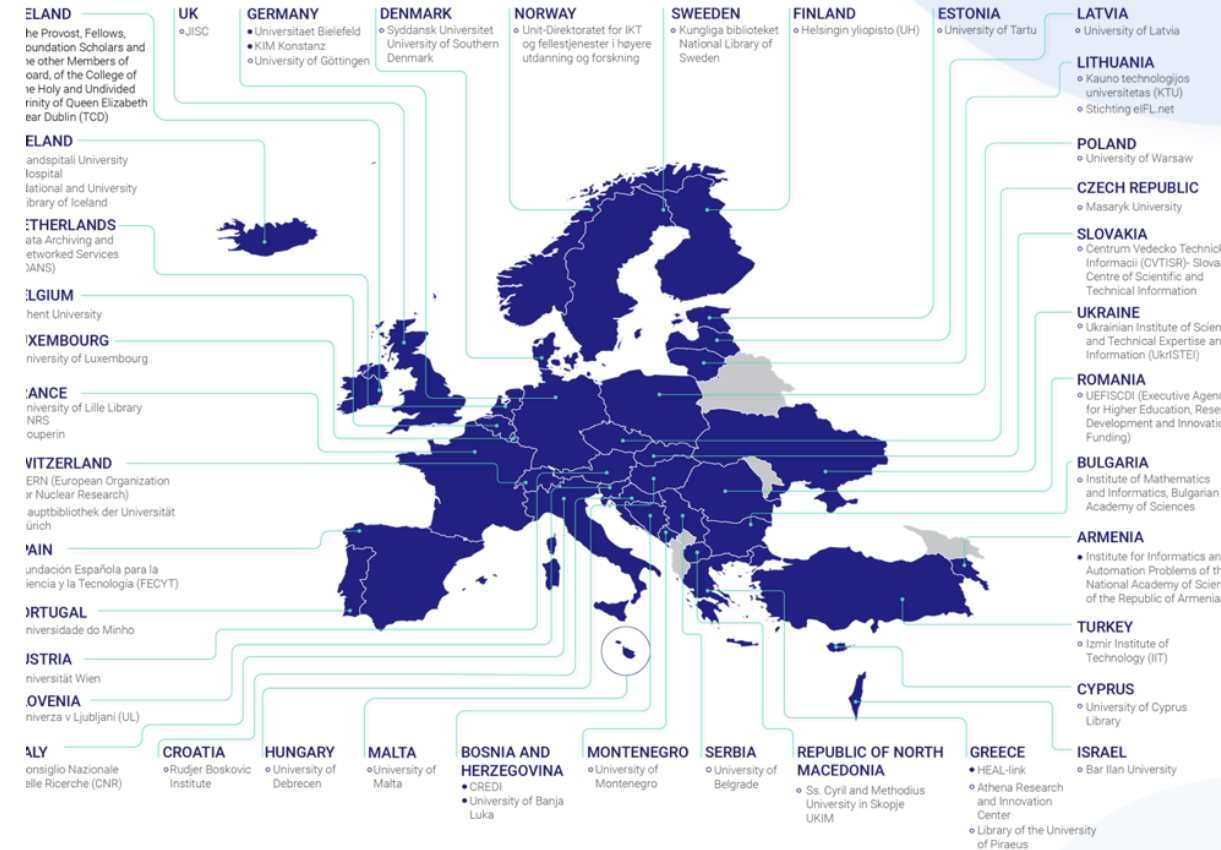
- Aligning policies
- Operating services
- Offering training

A network of experts (**National Open Access Desks**) and services in operation **since 2009**

A non-profit organisation as of 2018

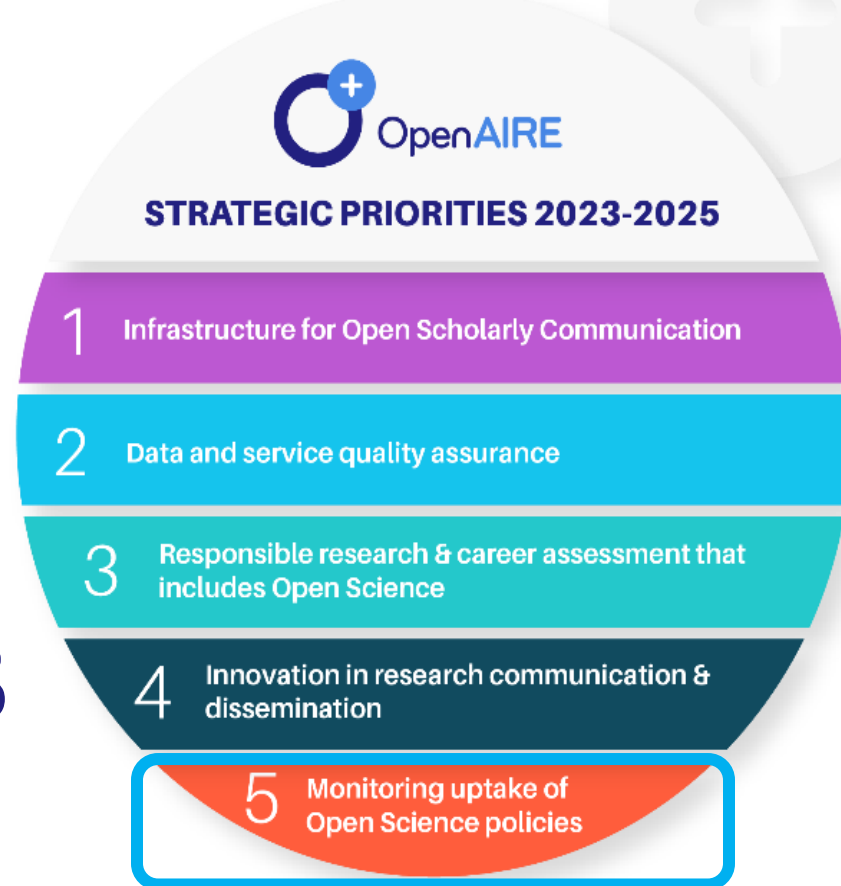
- 50 members
- From 36 countries

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



OpenAIRE strategy 2023-25

Available [here](#)



ACTION LINES

SERVICES

1. Make OpenAIRE infrastructure and services core elements in the Open Science ecosystem

TRAINING

3. Develop and operate a hub of quality training material for open science

POLICIES

5. Develop collaborative communities of practice that strengthen Open Science adoption through

About Monitoring

WHAT WE MONITOR



POLICIES



PRACTICES



UPTAKE

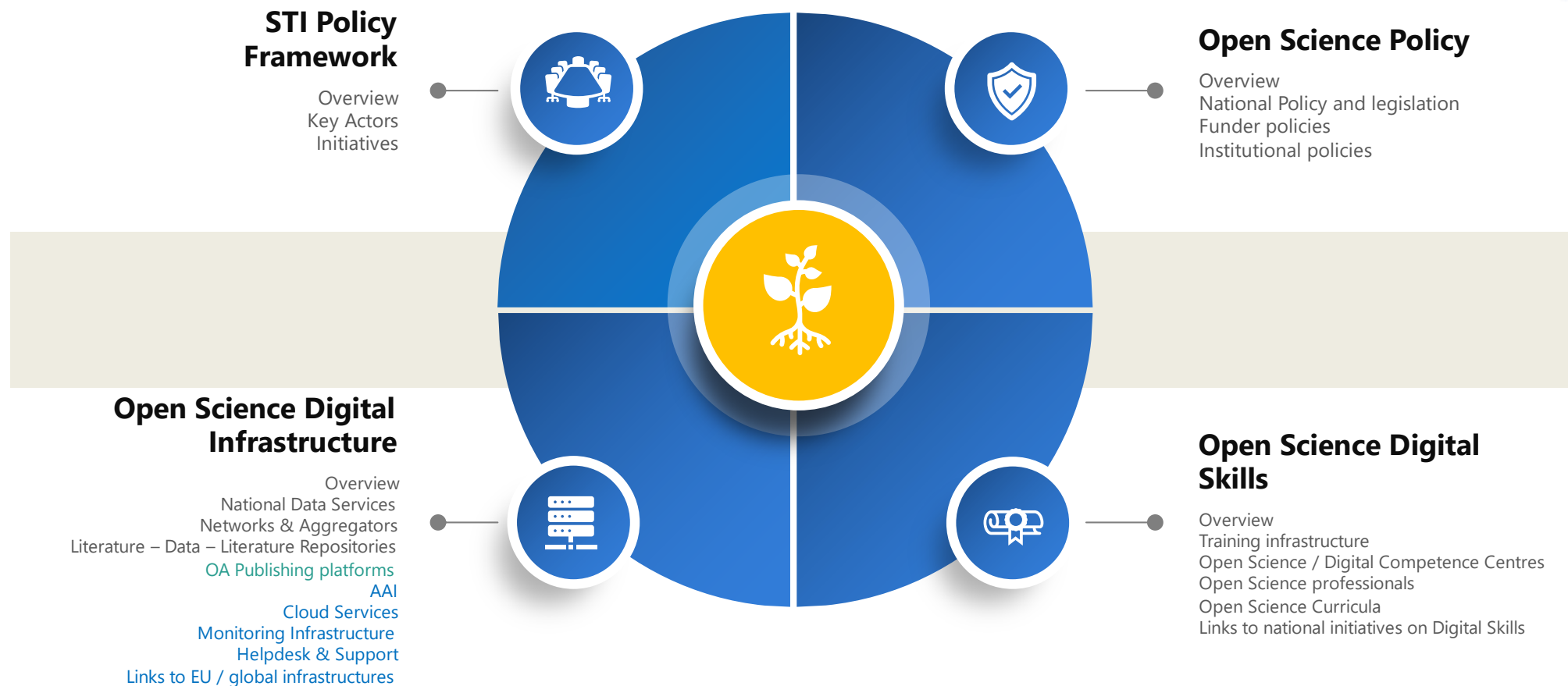


IMPACT



Monitoring Policies - The OpenAIRE Network

Country pages – A narrative with learning objective





Monitoring Policies - the OpenAIRE Network

Country pages - A live example



Spain

Data Last Updated: Feb 1, 2023

National Policy and Legislation

The national open science policy is framed by the [Law for Science, Technology and Innovation](#) (approved on June 1st, 2011, and reformulated on September 5th, 2022). Article 37 Open Science of the Law establishes the following:

- 1. All public agents of the Spanish Science, Technology and Innovation System will promote the dissemination of research and its results, including scientific publications, and make them available in open access. Free open access to the results will be promoted through the development of institutional or thematic open access repositories, either their own or shared.*
- 2. Public sector or publicly funded research personnel disseminating their research outputs through scientific publications must deposit a copy of the final version accepted for publication and their associated data in institutional or thematic open access repositories, simultaneously with the publication date.*
- 3. Beneficiaries of publicly funded research projects must comply with the obligations set forth in the terms and conditions or grant agreements of the corresponding calls for proposals. In addition, they shall ensure to retain the intellectual property rights necessary to comply with the open access requirements.*
- 4. The open access version of the research outputs must be used by the Public Administrations for research assessment purposes.*

Institutional policies

An increasing number of universities and research performing institutions have developed their own open access institutional policies, aligned with the national and the European mandates. Whether in the form of institutional declarations, recommendations or mandatory requirements, institutions are taking determined steps towards open access. 44 [institutions](#) in Spain have published their open access policy in [ROARMAP](#).

The largest research institution in Spain, the Spanish National Research Council (CSIC), includes as part of its institutional strategy an [open access mandate](#) to publications and research data. In addition, research assessment at the institutional level required a compliance of the open access mandate.

communities will promote open science, the use of open access to knowledge to the society. National and regional infrastructures for the publication of scientific outputs, as developed in Article 38.

research, development and innovation outputs prior to the publication of scientific outputs, and the retention of intellectual and industrial property rights, plant

Basque Country, Asturias and Catalonia through their regional open access mandates.



Monitoring Policies - EOSC Observatory

In collaboration with the EC and the EOSC Strategic Board (EOSC Future Project)

Potentially to be ren

General

Researchers

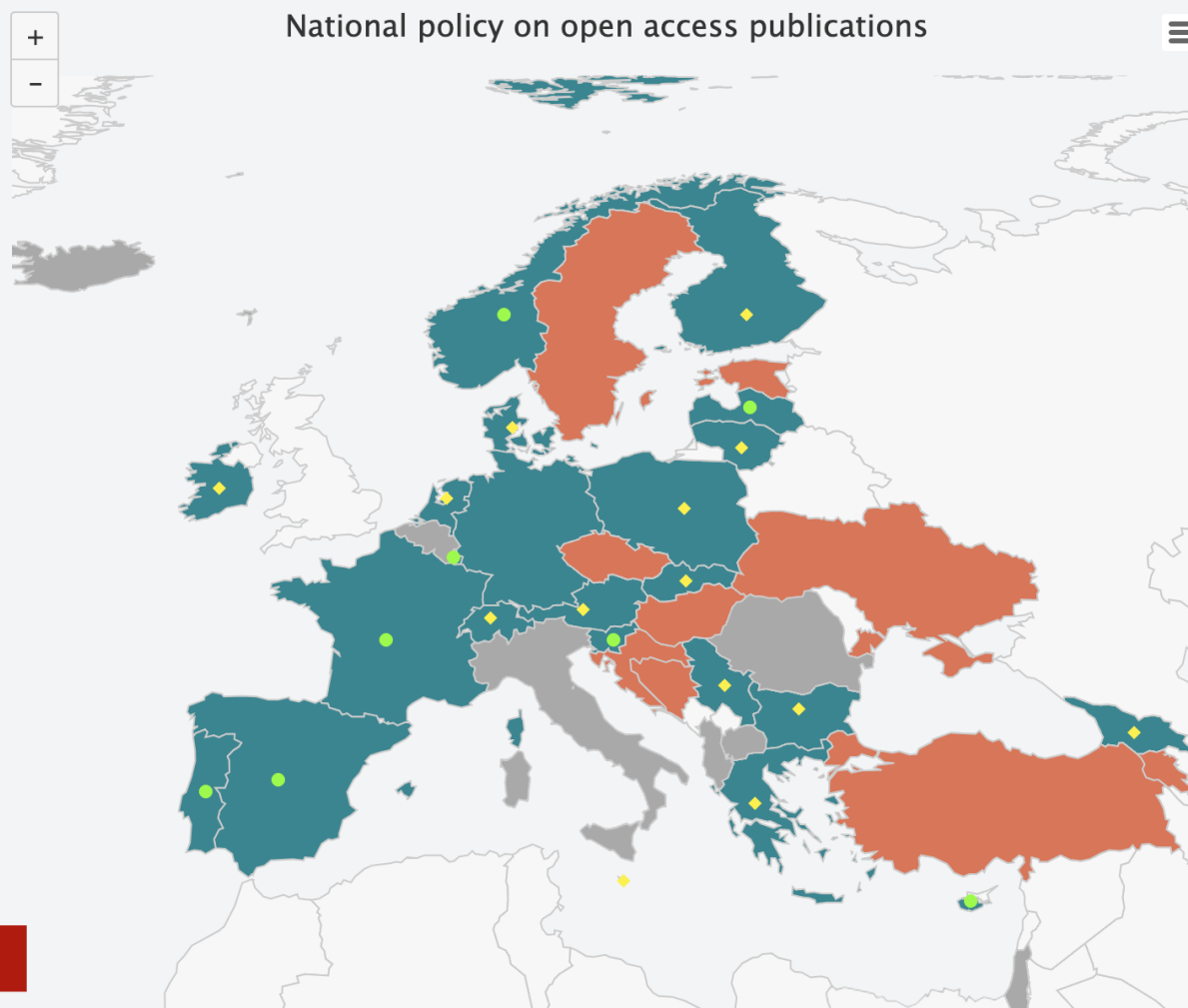
RPOs

RFOs

Repositories

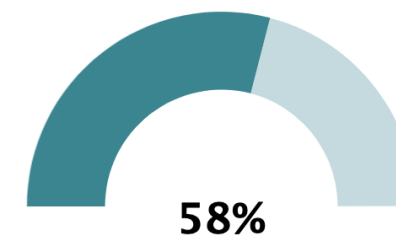
Investments

Facets for each



23 out of 40
countries have a national policy
on open access publications

Percentage of
countries with a
national policy on
open access
publications





Monitoring Policies - EOSC Observatory

Next phase – A comprehensive country page with all information collected in one space

EOSC OBSERVATORY

National Contributions to EOSC

Login

Home > Greece



Greece

Last update: 21 June 2022

EXPORT

POLICIES



National OA policy



Financial strategy on OA



PRACTICES



12,875

Open Access publications

4.5mi

investments in data management

IMPACT



128

▲ 10%
on collaborations



120

▲ 2%
In patents

R&D Information

From EUROSTAT

1.18%

of GDP for 2018 R&D
expenditure

3k

projects funded by the
European Commission
since 2013

44

funding organizations

5

funders

Total researchers

12k

by sectors of performance

Doctorate students

12k

in science and technology
fields

Last update: Nov 20, 2022

Monitoring Practices



Practices related to Open Science



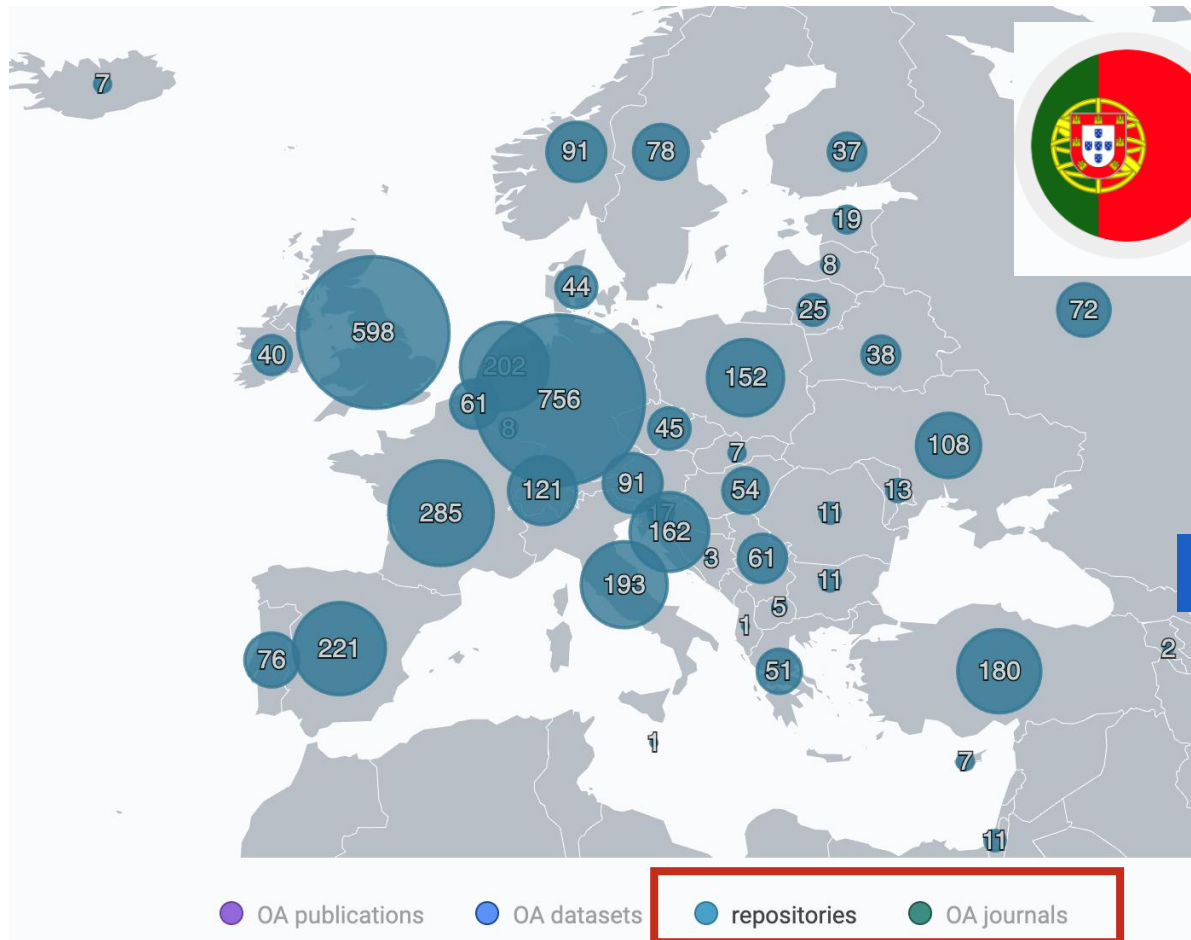
Compliance with standards, best practices, OS Guidelines



Implementation and/or use of infrastructure



Monitoring Practices - Infrastructure



Portugal

76

repositories in openDOAR & re3data

72.4% validated

174

Open Access journals in DOAJ

87.9% validated

Registries

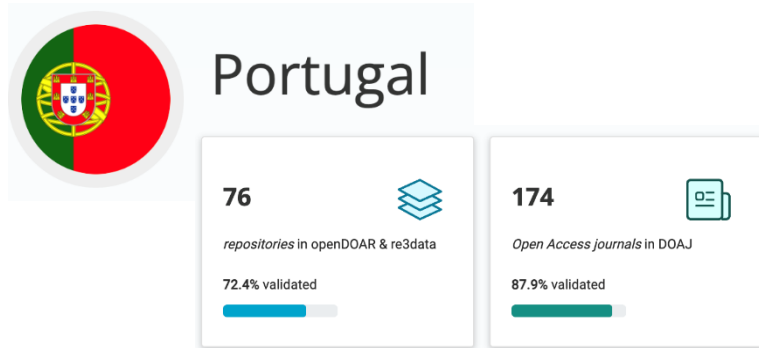
Surveys

- Overview
- National Data Service
- Networks & Aggregators of Scientific/Research Content
- Literature repositories
- Data repositories
- Software repositories
- OA Publishing Platforms**
- Monitoring Infrastructure
- Helpdesk and Support
- Links to European and Global Infrastructures

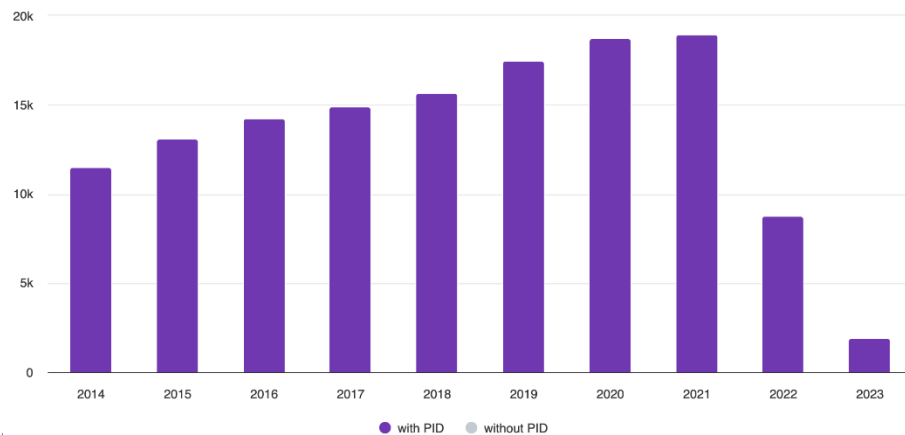


Monitoring Practices – Compliance & Standards

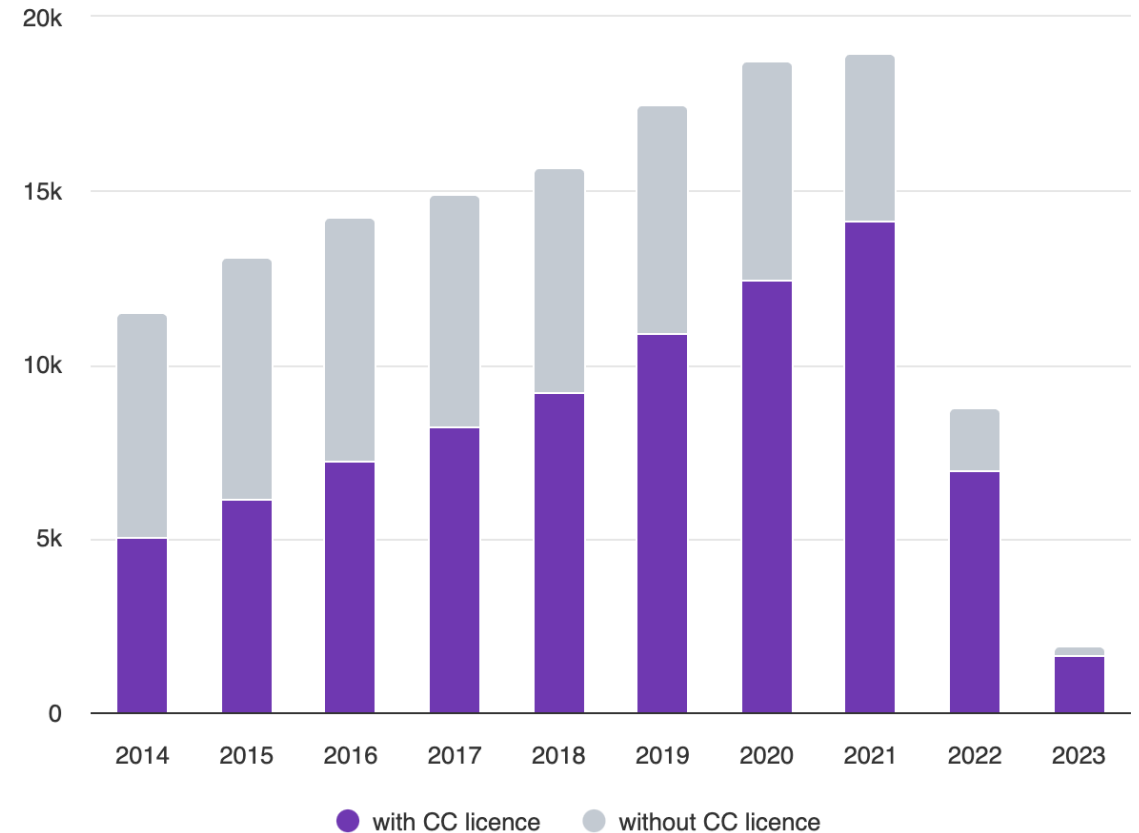
Validation



Open Access publications with PID over time



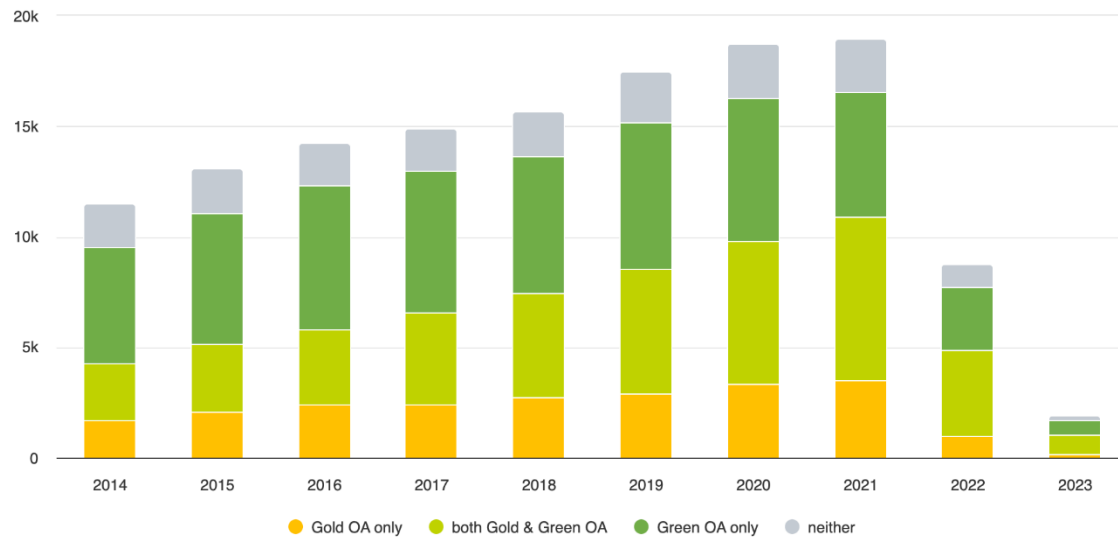
Open Access publications with CC licence over time



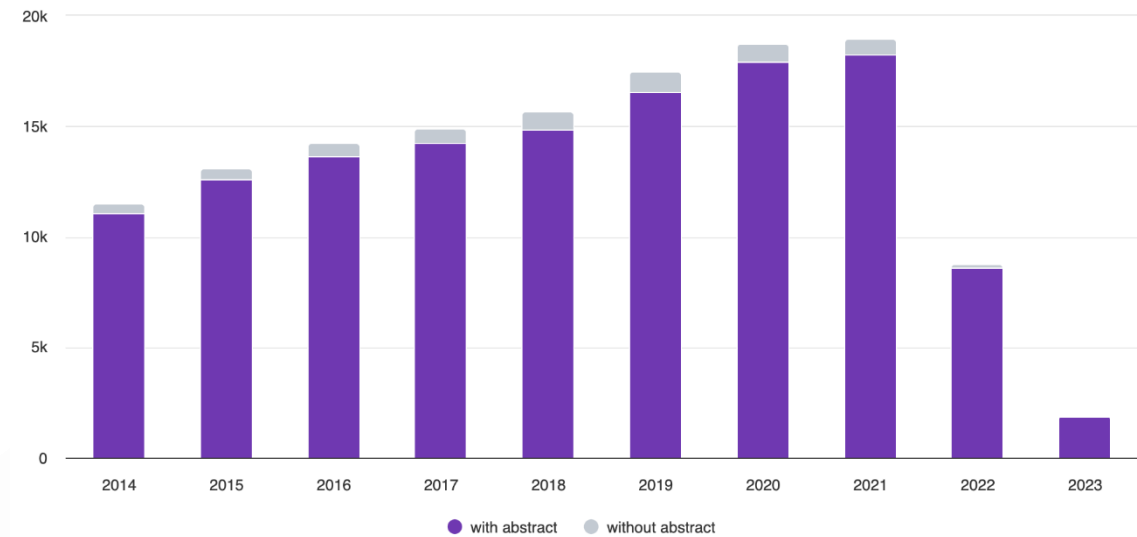


Monitoring Practices - Other

Gold vs Green Open Access publications
over time



Open Access publications with abstract
over time



Based on the uptake we can measure practices on licencing, relationships between entities, etc.



Monitoring Practices - Other

- Important to measure practices **not related to outcomes**
- Participation in citizen science
- Contribution to Open Educational Resources
- Participation in open-source community projects
- Participation in open hardware
- ...

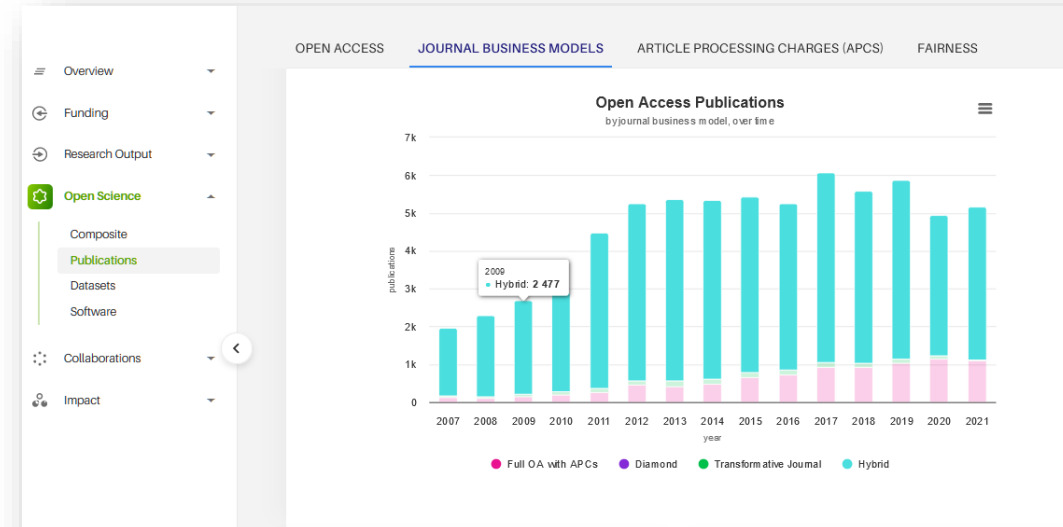
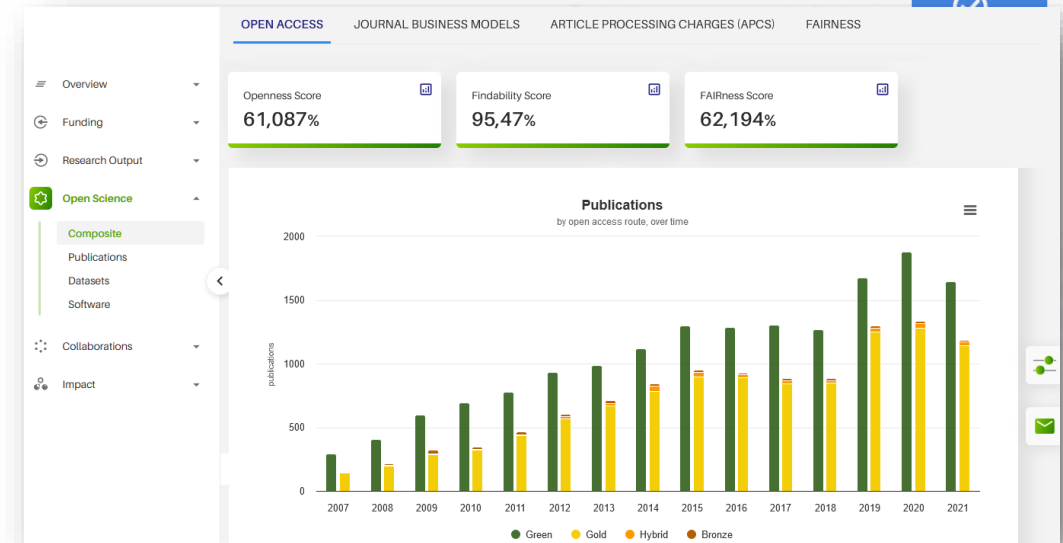


Builds **Open Science Profiles**, for researchers to fill in information
→ aggregated at institution level

<https://graspos.eu/>

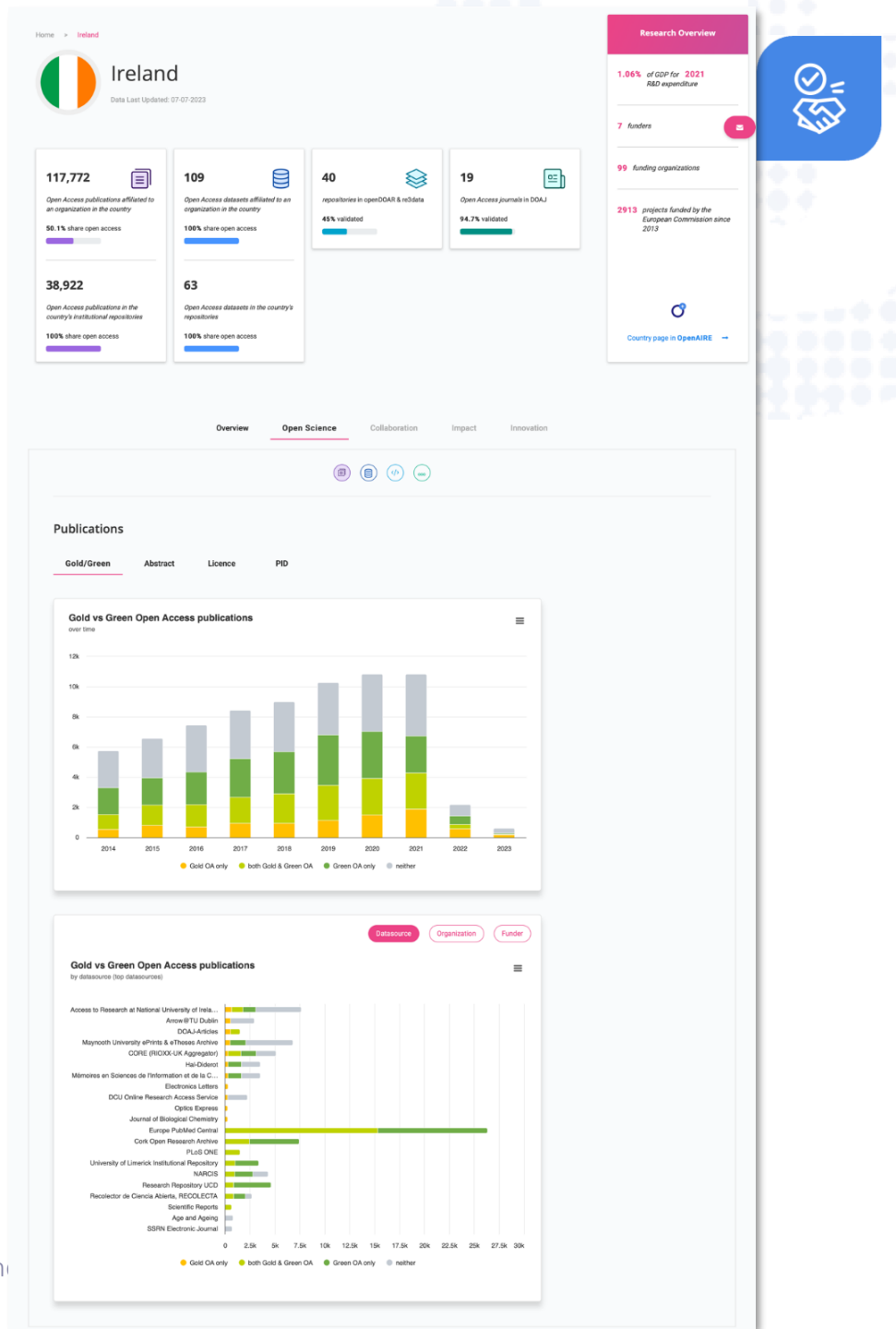
Monitoring Uptake

- Our main indicator is OA or FAIR research outcomes
- Via the **OpenAIRE Graph** and services that provide analytics
 - **MONITOR** Dashboards (on demand, for institutions and funders)
 - **OpenAIRE Open Science Observatory**



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Monitoring impact of Open Science – **Not there yet**

- PathOS Horizon Europe Project
- Open Science Indicator Handbook
 - Academic-Societal-Economic
 - Ready-to-go recipes to support operationalisation of indicators
 - <https://pathos-project.eu/introducing-the-open-science-indicator-handbook>



<https://handbook.pathos-project.eu>

Irish Open Access Monitor

A National example

Paving the road to 100% Open Access



IRISH OPEN ACCESS MONITOR – **The principles**

- Open data
 - Data backbone: the **OpenAIRE Graph**
- **One-stop-shop** for all stakeholders
- Bringing the **community together**
 - Understanding, transparency and trust among all actors
 - Convergence in indicators
 - Compliance and alignment within the country, Europe, the world
 - Innovation in OA
- A **policy tool** for institutions, funders, policy makers

THE IRISH OA MONITOR – 5 DASHBOARDS



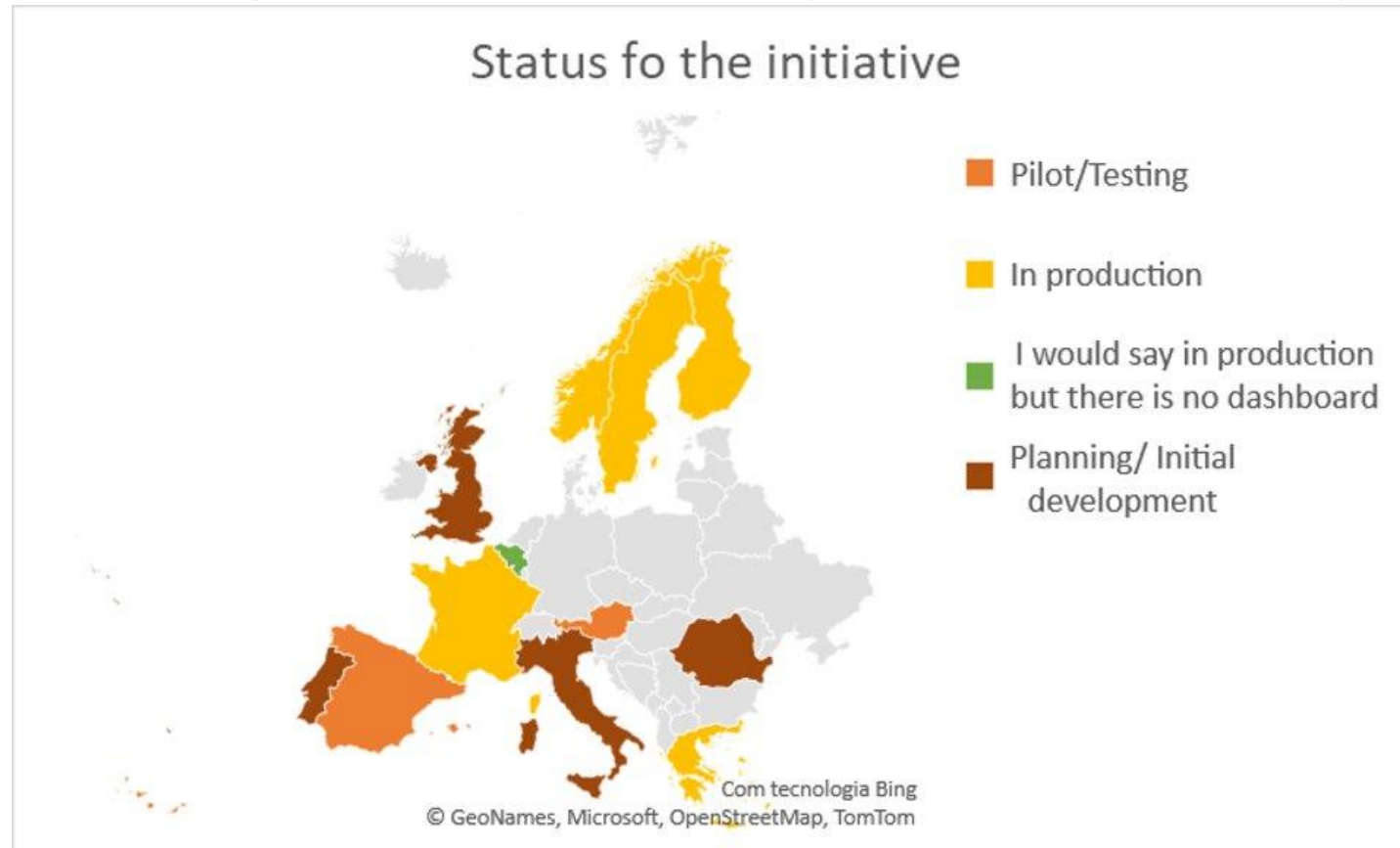
“Monitor” the OS monitoring

OpenAIRE Monitoring Working Group - Objectives

- Keep an **overview on monitoring OA/OS activities in Europe** and identify relevant activities / projects for OpenAIRE to engage in
- **Monitor and liaise with monitoring initiatives outside Europe** (e.g. UNESCO monitoring initiative)
- Stimulate and facilitate the **connection between OpenAIRE services and national/institutional monitoring services** being established
- Contribute for the **identification of relevant indicators for OpenAIRE services** (Monitor and Observatory)

OpenAIRE Monitoring Working Group

- Survey of Monitoring Initiatives in Europe (data from 1st quarter 2023)



OpenAIRE Monitoring Working Group – **Future Work**

- Maintain an updated record of monitoring initiatives in Europe (based on the survey);
- Organize a new Workshop on OS Monitoring (2024);
- Liaise, engage and collaborate with organizations and projects on indicators, data, tools and infrastructures for OS monitoring;

Thank you!

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