

French Open Science Policy

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CLOSER "Metadata management in the real world" webinar series
19 March 2025

Outline

- French Plan for Open Science and its main measures
- Assessment of the measures put in place
 - Results of a survey on open science policies adopted by Higher education and research institutes
- OSMI – *Open Science Monitoring Initiative*
- GRIOS – *Global Research Initiative on Open Science*

French Plans for Open Science

First Plan
July 2018



Second plan
July 2021



**4 Paths
12 Flagship measures**

- Path 1.**
Generalising open access to publications
 - 1
 - 2
 - 3
- Path 2.**
Structuring, sharing and opening up research data
 - 4
 - 5
 - 6
- Path 3.**
Opening up and promoting source code produced by research
 - 7
 - 8
 - 9
- Path 4.**
Transforming practices to make open science the default principle
 - 10
 - 11
 - 12

**In total,
102
measures**

The Committee for Open Science



Steering Committee for Open Science

Ministry of Higher Education and Research (MESR), research institutes, Universities, National Research Agency (ANR), Couperin consortium, High Council for the Evaluation of Research and Higher Education (Hcéres)

Makes decisions, arbitrates the use of funds from the National Open Science Fund

Open Science Office at the MESR

National coordinator and his team, the National Chief Data and Software Officer, and the Head of the Scientific and Technical Information and Documentation Network Department

Prepares and implements the Plan, coordinates the Open Science Committee bodies, intra-ministerial, interministerial, and intergovernmental actions

Permanent secretariat for Open Science

MESR, research institutes Universities, ANR, associations dedicated to scientific information and university and research libraries, Hcéres, the Open Science Committee's Colleges and Groups

Prepares decisions, proposes guidelines, monitors work

Colleges and Expert groups

Publications College, Research Data College, Software and Sources Codes College, Open Scientific Publishing Expert Group, Legal Affairs Expert Group

Investigate issues, propose guidelines, initiate and manage projects

Path One : Generalising open access to publications

1

Generalise the obligation to publish in open access all articles and books resulting from publicly funded calls for proposals

2

Support open access economic publishing models that do not require the payment of articles or books processing charges ("diamond" model)

3

Encourage multilingualism and the circulation of scientific knowledge by translating publications by French researchers

"Our goal is to reach **100% of open access publications.**"

Example of a measure: continue developing the HAL national open archive



An international scope

Your publications are easy to find, well referenced by search engines and interconnected with other services (ORCID, preprint servers)

A common good for research

The largest research organizations and the majority of French universities have chosen and support HAL, a public, sustainable and responsible infrastructure.

A large collaborative community

From the researchers to the specialists of the scientific information, HAL federates multiple skills to support the opening of the publications

An archive, some services

HAL guarantees the long-term preservation of your publications. A set of services (CV, institutional portals, collections, documentary watch, APIs, identifiers) contribute to their valorisation.

<https://hal.science/>

Path Two : Structuring, sharing and opening up research data



4

Implement the
obligation to
disseminate
publicly funded
research data (2016
Digital Republic
Law)

5

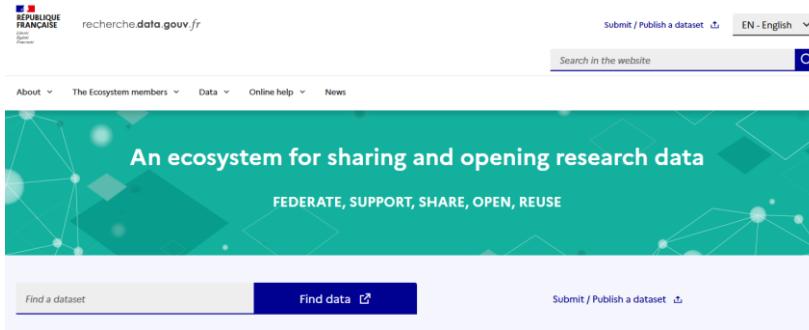
Create Recherche
Data Gouv, the
federated national
platform for
research data

6

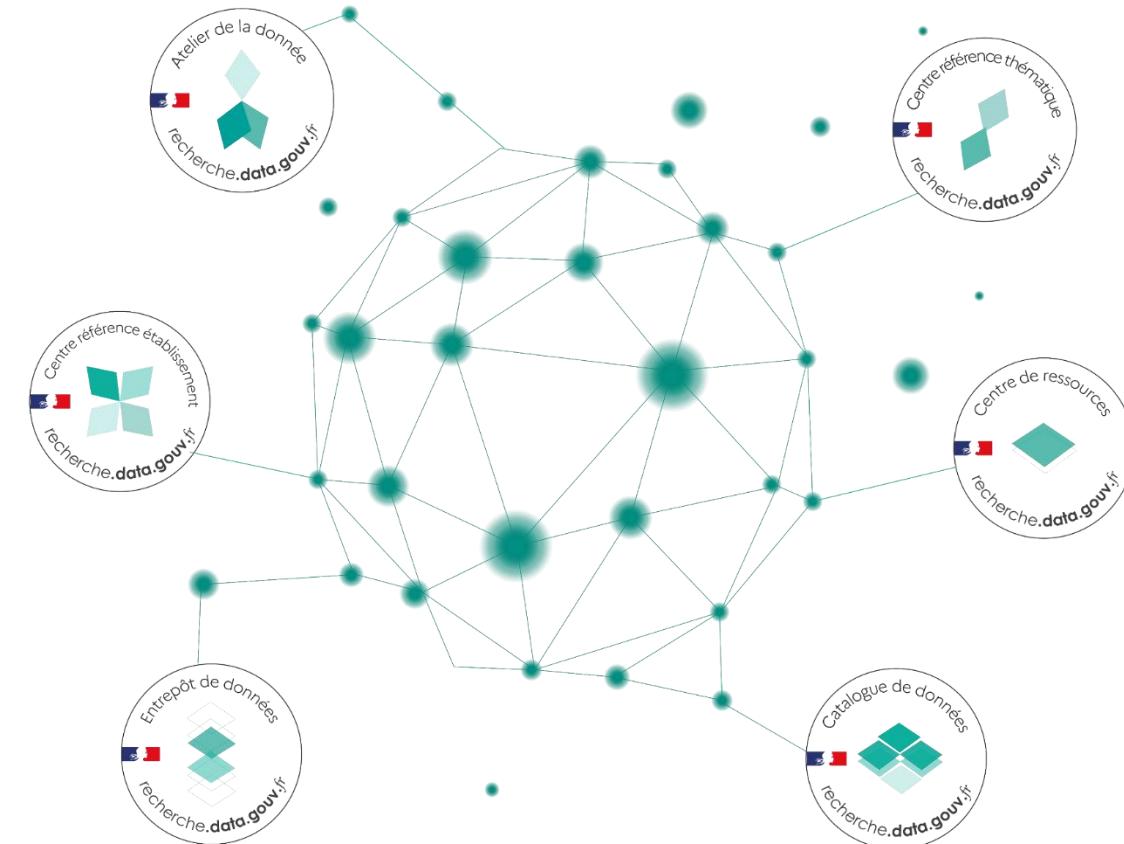
Promote
widespread
adoption of data
policies, to ensure
that they are
Findable,
Accessible,
Interoperable and
Reusable (FAIR)

"We will encourage practices
that favor **research data
reuse**."

Example of a measure: develop Recherche Data Gouv



- A national research data platform
- A network of general and thematic support centers



Path Three : Opening up and promoting source code produced by research

7

Recognize and support the dissemination under an open source license of software produced by publicly funded research programmes

8

Highlight the production of source code from higher education and research

9

Define and promote an open source software policy

"The opening of software source code is a major challenge for the reproducibility of scientific results."

Example of a measure: support to Software Heritage



Home Development Documentation Operational Login

Software Heritage Mission Archive Community Grants Support us About News **Donate** Q



Software is the key
to access information and a
fundamental part of human
heritage



Path Four : Transforming practices to make open science the default principle

10

Develop and value open science skills throughout the educational and career pathways of students and research staff

11

Value open science and the diversity of scientific productions in the assessment of researchers, of projects and of universities and research institutes

12

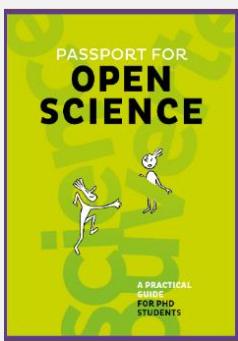
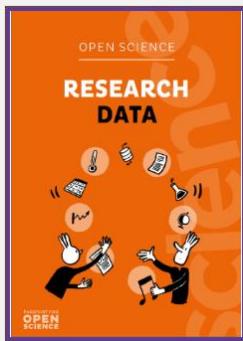
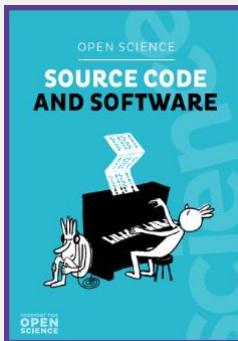
Triple the budget for open science through the National Fund for Open Science

"Transformation of the assessment system is required in order to **foster long-term open science practices.**"

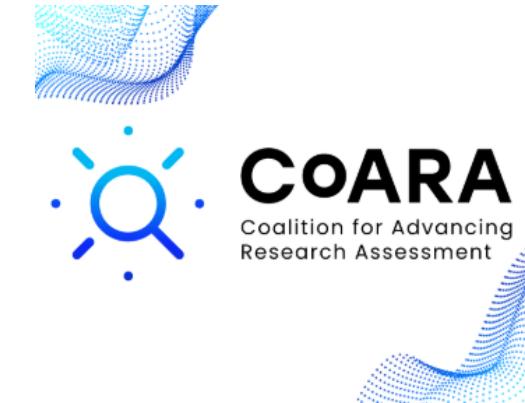
Examples of measures



Open science « Passports »



First Open Science Awards Ceremony for PhD Thesis



TOWARDS EVIDENCE-BASED OPEN SCIENCE POLICIES

An initiative to advance meta-research on Open Science



Assessment of the implemented policy



1. “Qualitative” assessment
2. Deliverables of the Committee for Open Science
3. Indicators of the French Open Science Monitor
4. Results of the survey on open science policies adopted by French Higher Education and Research Institutes

Assessment of the flagship measures



		Level of implementation
Path 1. Generalising open access to publications	Generalise the obligation to publish in open access	★★★★★
	Support the "diamond" open access publishing models	★★★★☆
	Encourage multilingualism and the circulation of scientific knowledge through translation	★★★★★
Path 2. Structuring, sharing and opening up research data	Implement the obligation to disseminate publicly funded research data	★★☆☆☆
	Create Recherche Data Gouv, the federated national platform for research data	★★★★★
	Promote data policies to ensure that research data are Findable, Accessible, Interoperable and Reusable (FAIR)	★★★★★
Path 3. Opening up and promoting source code produced by research	Recognize and support the dissemination under an open source license of software	★★★★☆
	Highlight the production of source code from higher education, research and innovation	★★☆☆☆
	Define and promote an open source software policy	★★★★★
Path 4. Transforming practices to make open science the default principle	Develop and value open science skills	★★★☆☆
	Value open science and the diversity of scientific productions in the assessment	★★☆☆☆
	Triple the budget for open science	★★☆☆☆

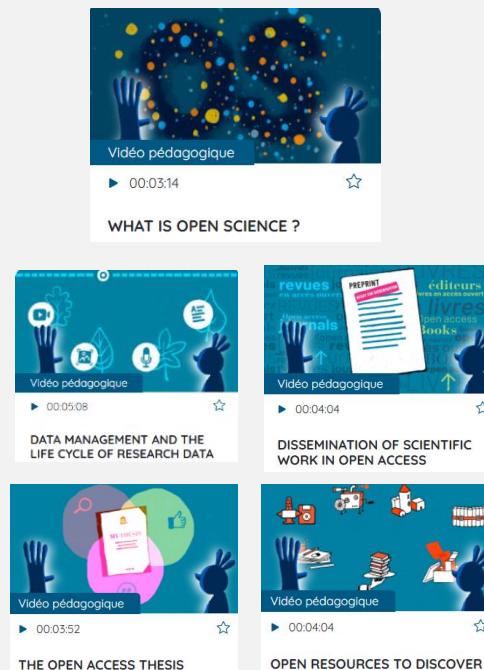
82 productions of the Committee for Open Science



4 Open Science Passports



5 introductory videos on open science



5 guides



68 studies, reports, and tools





OS Ouvrir
la science !

LA SCIENCE OUVERTE

NOS ACTIONS

RESSOURCES

ACTUALITES

QUI SOMMES NOUS ?

FR - EN



Agir pour une recherche scientifique ouverte et partagée

Le Comité pour la science ouverte assure la mise en œuvre de la politique nationale de science ouverte.

- Découvrir le Plan national pour la science ouverte
- Voir les projets du Comité



OS Ouvrir
la science !

OPEN SCIENCE

OUR ACTIONS

RESOURCES

NEWS

WHO ARE WE ?

FR - EN



Acting in favour of open and shared scientific research

The French Committee for Open Science ensures the implementation of the National Open Science Policy.

- Discover the French Plan for Open Science
- Read about the Committee's projects



What is Open Science?

Guides, recommendations and a glossary to help you learn about Open Science

Les productions

Comité pour la science ouverte



Bienvenue sur la collection du comité pour la science ouverte !

La collection du comité pour la science ouverte permet une diffusion et un archivage pérenne des rapports produits par les collèges et groupes de travail du comité.

Le comité pour la science ouverte assure la mise en œuvre de la politique nationale pour la science ouverte.

DOCUMENTS EN LIGNE

56

Les travaux par collège

Collège
Publications

Collège
Données de la
recherche

Collège
Europe &
International

Collège
Compétences
& formation

Collège
Codes &
logiciels

<https://hal-lara.archives-ouvertes.fr/OUVRIR-LA-SCIENCE>

HAL

- 56 online reports
- 34 911 downloads

Ouvrirlascience.fr

- 364 blog posts
- 42 newsletters, 1 500 subscribers
- 90 500 visits per year on average

MESR official website

<https://www.enseignementsup-recherche.gouv.fr/fr/science-ouverte-50360>

- 50 news on open science

Social networks



About 4 000 followers

Welcome to
the French Open Science Monitor



Measure the evolution of open science in France using reliable, open and controlled data.

See the last communication →

<https://frenchopensciencemonitor.esr.gouv.fr/>

The French Open Science Monitor (data published in January 2025)



67% of publications
are open access



An increase of
+29 points in all
disciplines

72% of doctoral
theses are open
access



An year after
the defence

44% clinical trial
results shared
within 3 years



8 Points reduction
in one year.
Academic lead
sponsors : 21%.
Industrial lead
sponsors : 69%

25% of publications
shared their data

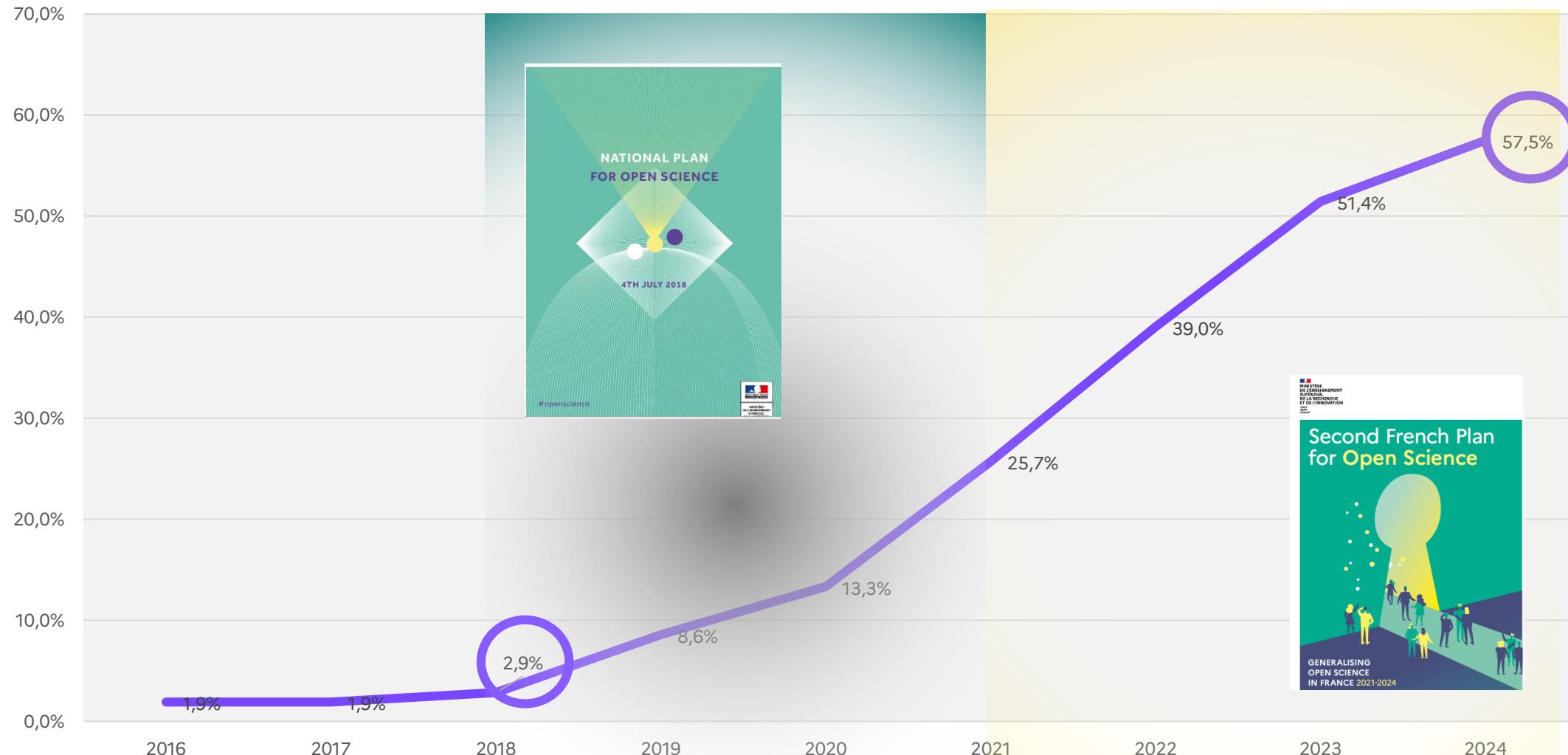


19% shared their
codes or
software

Source: <https://barometredelascienceouverte.esr.gouv.fr/>

70 institutes have set up their open science monitors

Number of Higher education and research institutes with an open science policy



Source: [10.52949/80](https://doi.org/10.52949/80)

21



Où en sommes-nous dans la mise en œuvre de la politique de science ouverte?
Résultats de l'enquête auprès des établissements d'enseignement supérieur et de recherche

Décembre 2024 (mis à jour en janvier 2025)

How far have we got in implementing our open science policy? Results of the survey among higher education and research institutes

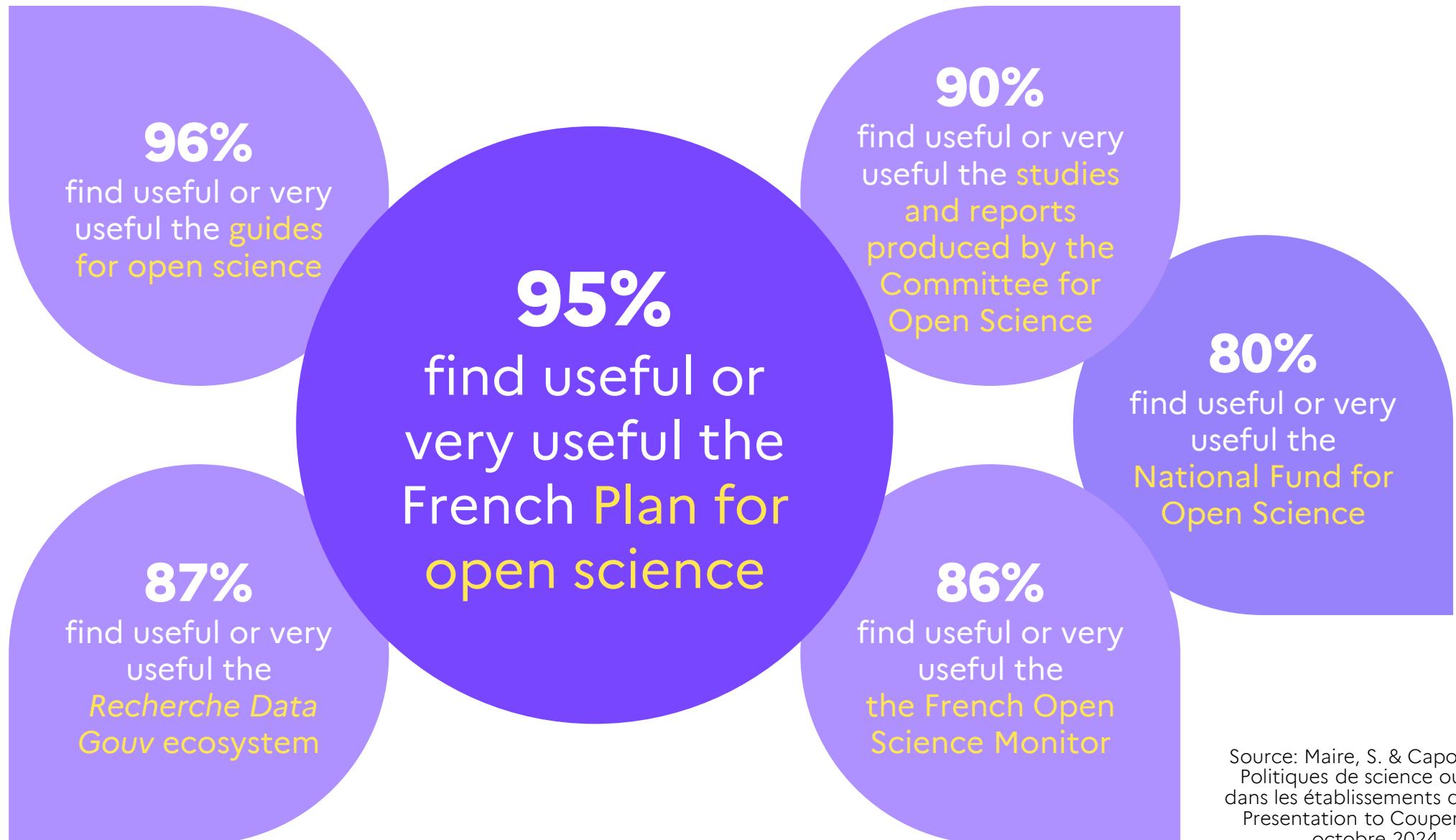
- Respondents : 105 Higher education and research institutes
- Report (in French), DOI : [10.52949/80](https://doi.org/10.52949/80)
- Dataset :
<https://doi.org/10.57745/PH7EIX>



Main results

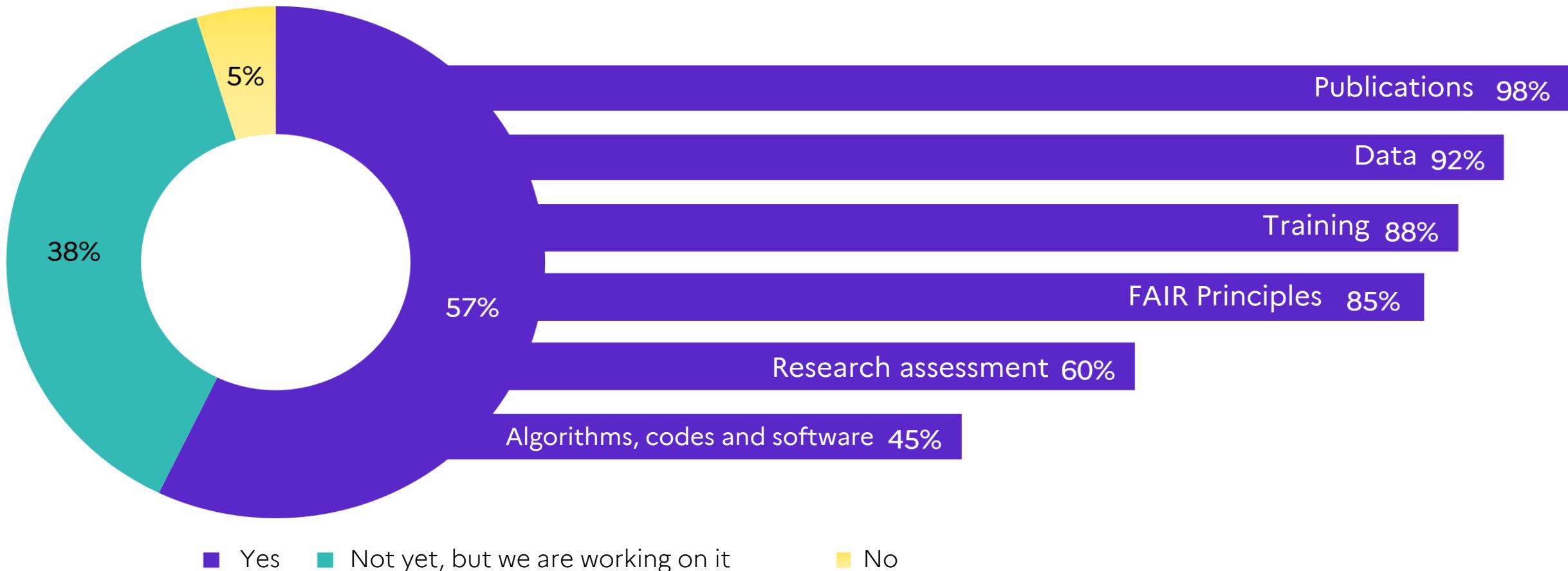
- National initiatives are very well received
- Open science policies adopted by French institutes are increasingly structured and aligned with the national policy
- More and more people are involved in open science
- Implementation of strategies in all aspects of open science (especially publications, data, and training, but also source code, software, and research assessment)
- Still challenges to overcome, such as differences between disciplinary practices

National initiatives

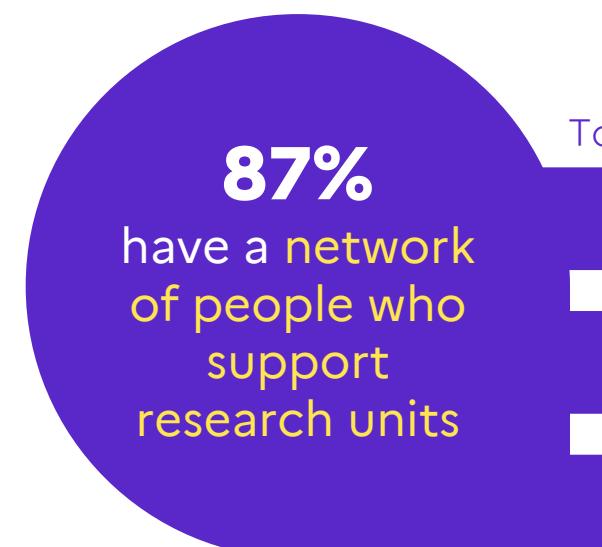
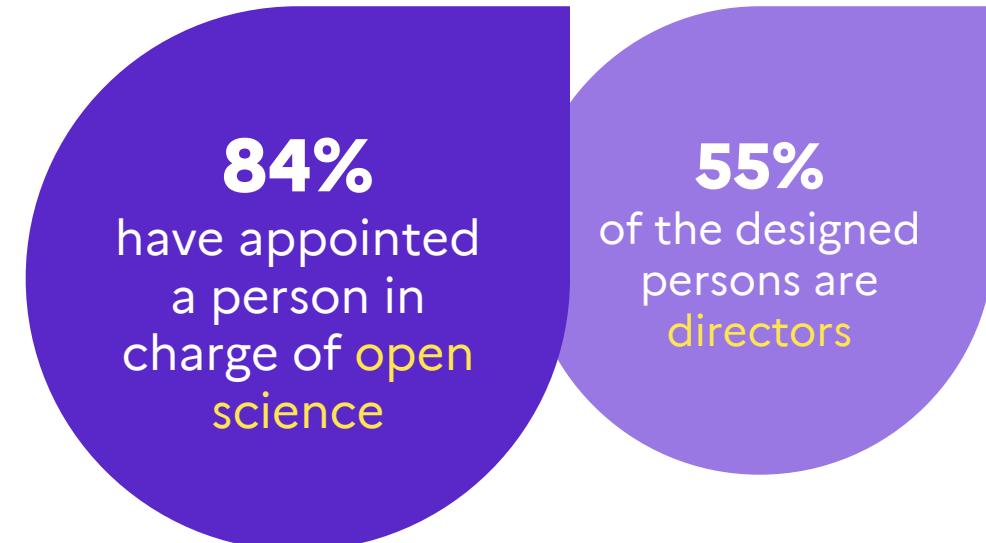
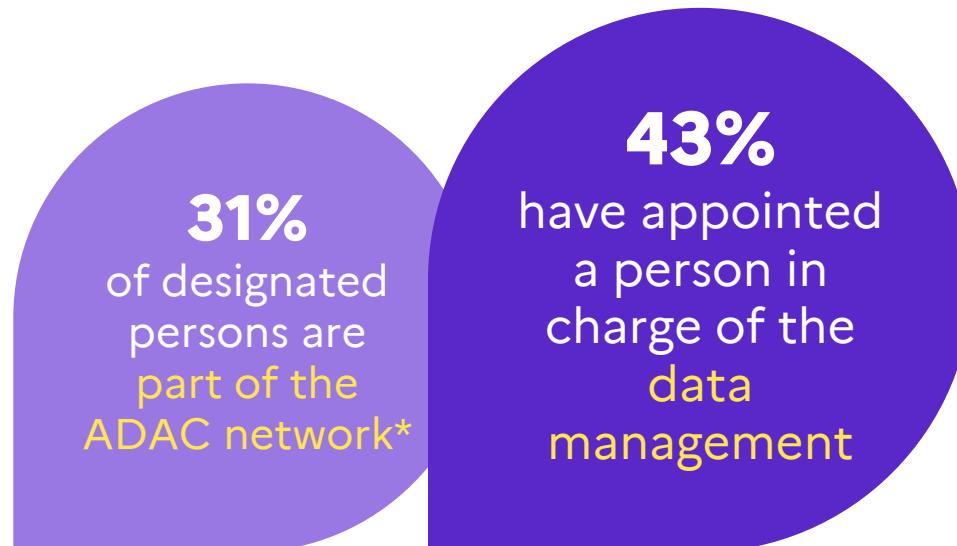


Source: Maire, S. & Caporali, A.,
Politiques de science ouverte
dans les établissements de l'ESR.
Presentation to Couperin, 15
octobre 2024

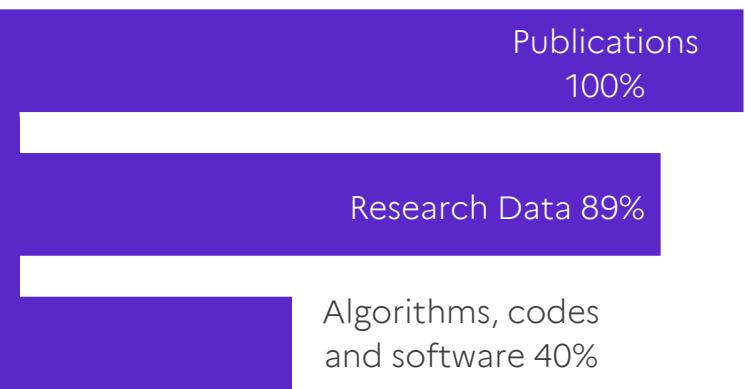
Adoption of a framework document and topics addressed in this document



People involved



Topics covered

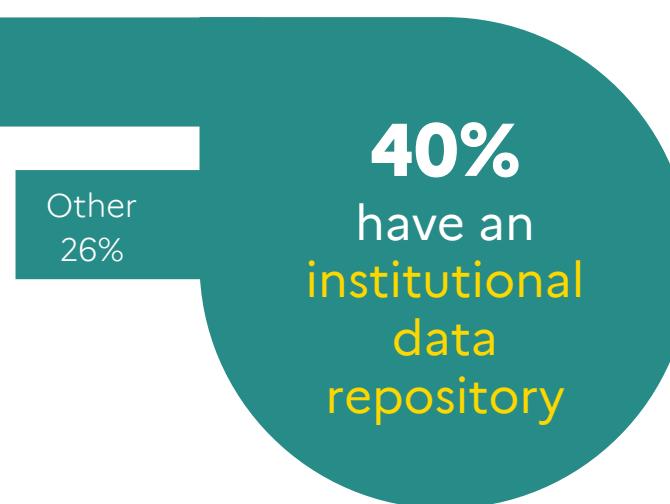


Source: Maire, S. & Caporali, A.,
Politiques de science ouverte
dans les établissements de l'ESR.
Présentation à Couperin, 15
octobre 2024

Publications

Research data

An institutional portal in
Recherche Data Gouv 74%



Source: Maire, S. & Caporali, A.,
Politiques de science ouverte
dans les établissements de l'ESR.
Presentation to Couperin, 15
octobre 2024

76%
have implemented specific measures

Declaration in OpenAPC of publication fees 73%

"Read and publish" agreement 61%

Rights Retention Strategy 35%

Centralization of publication fees at the institution level 16%

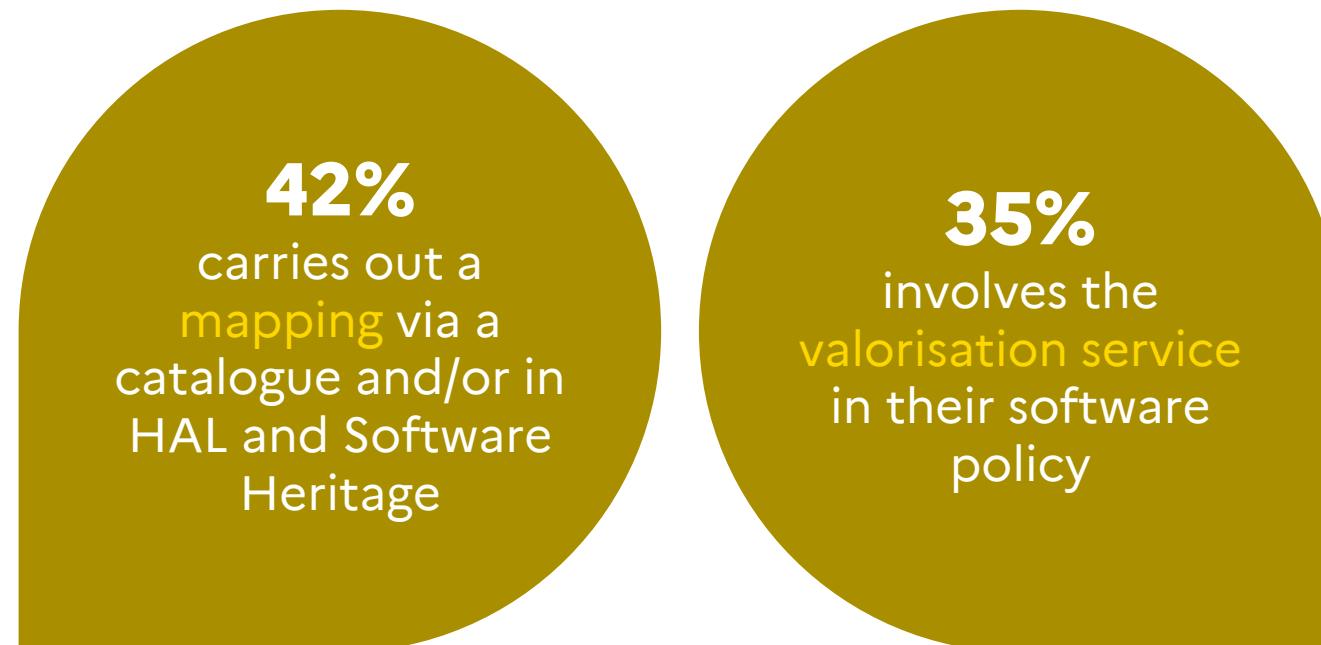
81%
have an open access publishing strategy

Green open access 95%

Diamond open access 76%

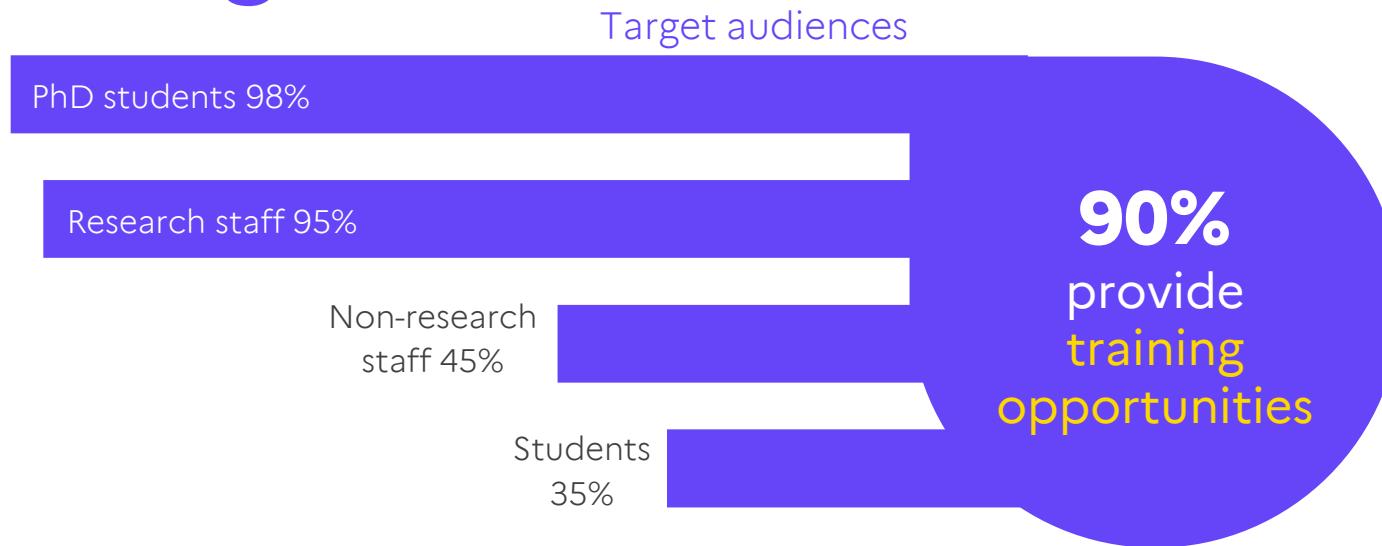
Gold open access 32%

Algorithms, codes and software



Source: Maire, S. & Caporali, A.,
Politiques de science ouverte
dans les établissements de l'ESR.
Presentation to Couperin, 15
octobre 2024

Training offer



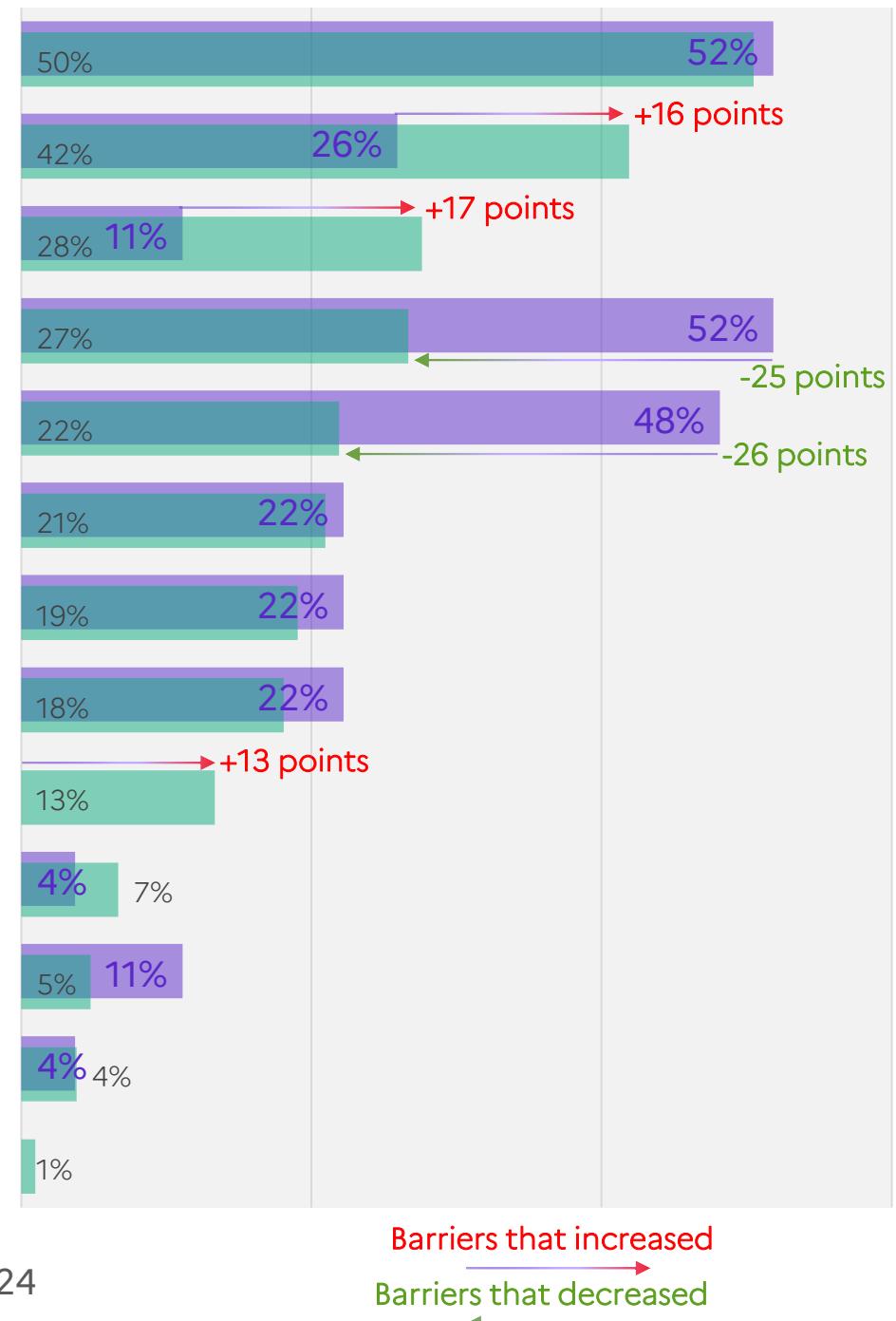
Research assessment



Source: Maire, S. & Caporali, A.,
Politiques de science ouverte
dans les établissements de l'ESR.
Presentation to Couperin, 15
octobre 2024

Barriers to the transition to open science

- Differences in disciplinary practices
- Resistance in the sharing and providing access to data
- Concerns due to the increase in costs
- Concerns due to the legal framework
- No incentives to promote open science practices
- Technical complexity
- Lack of awareness at the institutional level about the benefits of open science
- Lack of expertise and qualified staff at the institutional level to deal with all the aspects of open science
- Lack of structures and support at the institutional level to help researchers interested in open science practices
- Lack of training opportunities at the institutional level for students and researchers
- Lack of coordination among people involved in open science at the institutional level
- Lack of a framework document or a roadmap at the national level
- Misconception of open science at the level of the institutes' directors



Source: [10.52949/80](https://doi.org/10.52949/80)

■ EUA 2020 ■ MESR 2024

Barriers that increased
Barriers that decreased

GRIOS – Global Research Initiative on Open Science



TOWARDS EVIDENCE-BASED OPEN SCIENCE POLICIES

An initiative to advance meta-research on Open Science



<https://grios.org/>

Origines

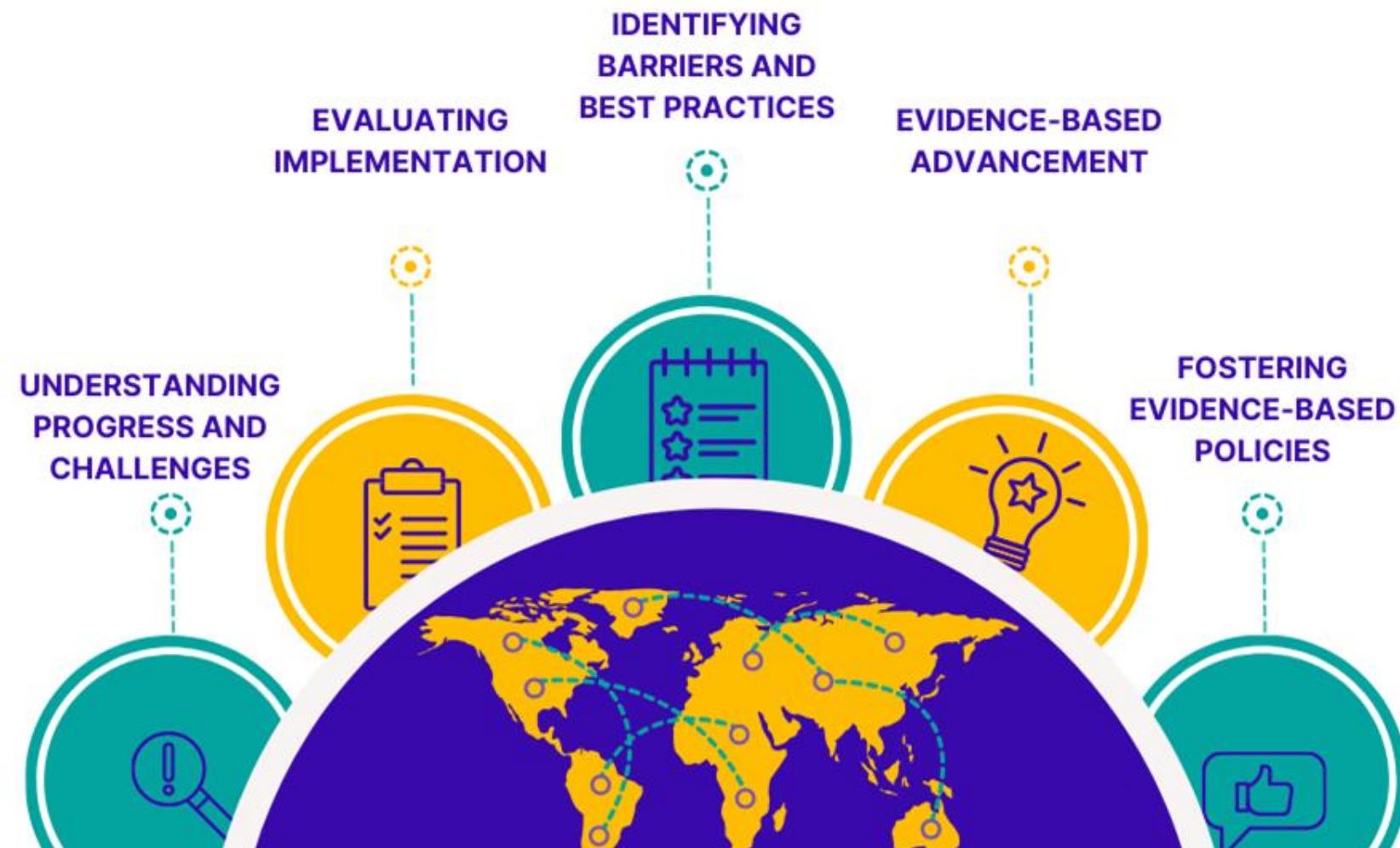


- Responding to [G7 Communiqué \(May 2023\)](#) which encourages research-on-research to promote effective open science policy making ([Annex 1](#))

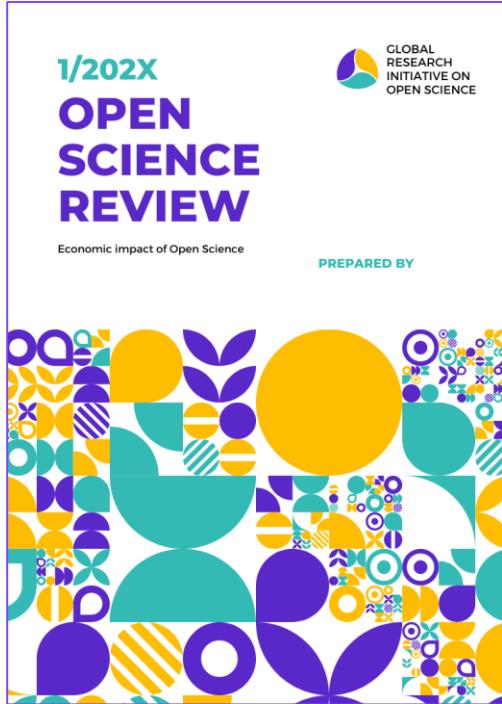
"v) mobilise research-on-research to promote effective open science policy making; vi) promote inclusivity and equity in practicing open science, among countries and communities; and vii) encourage a framework for monitoring the progress and obstacles of open science."



Benefits

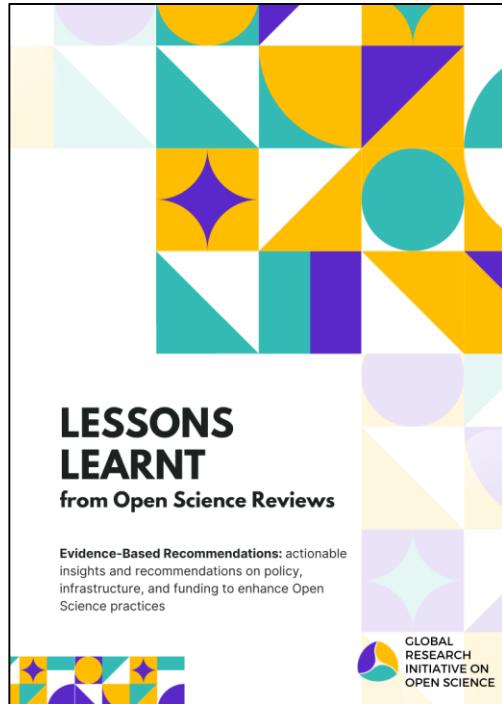
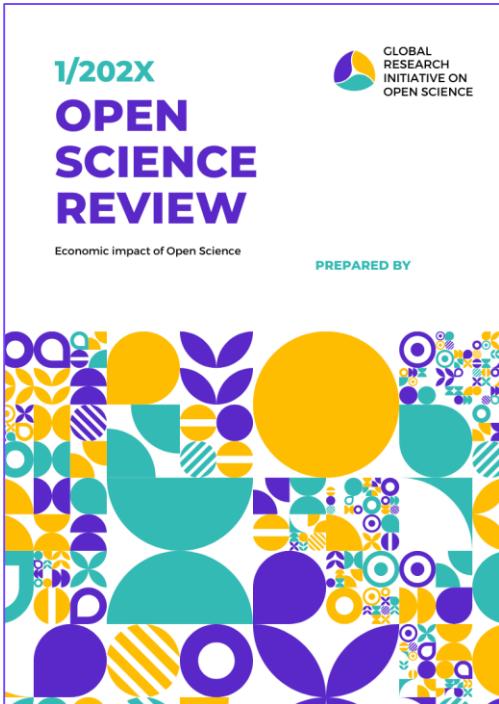


Objectives



1. Produce in-depth reviews of existing research on open science

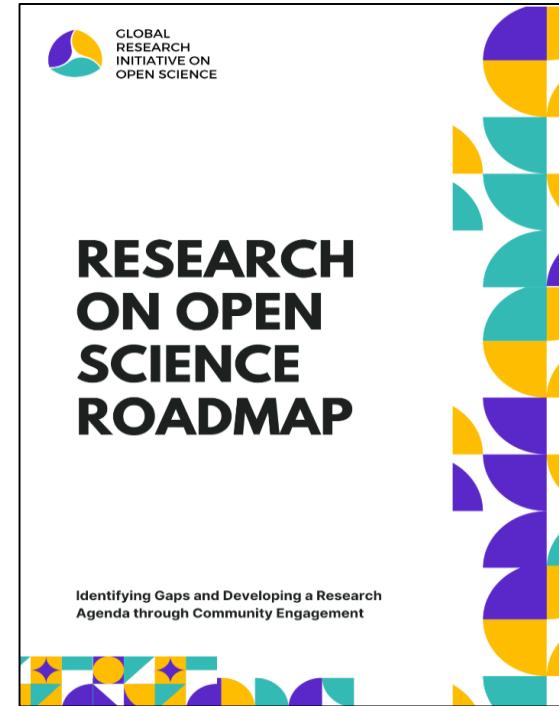
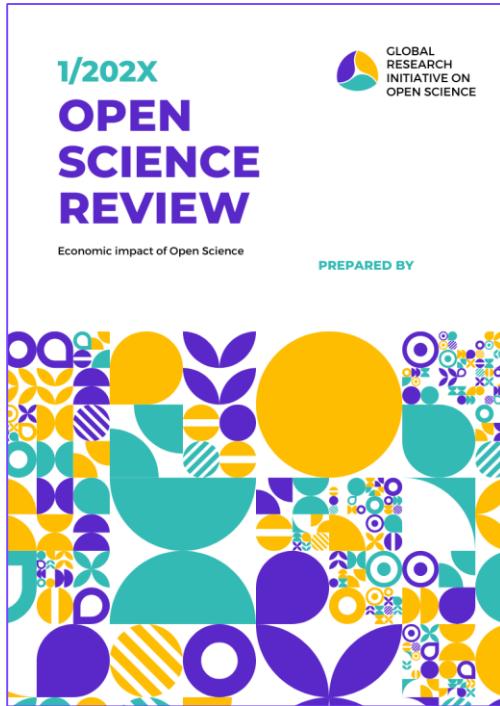
Objectives



1. Produce in-depth reviews of existing research on open science

2. Formulate recommendations based on the results highlighted by the reviews

Objectives

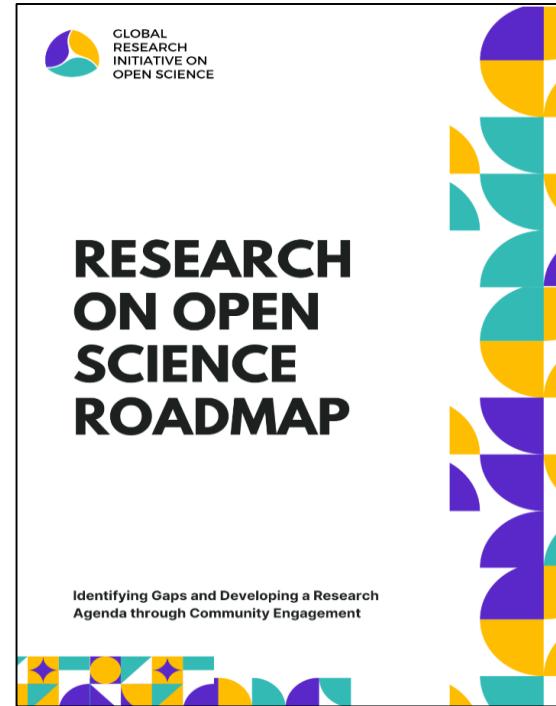
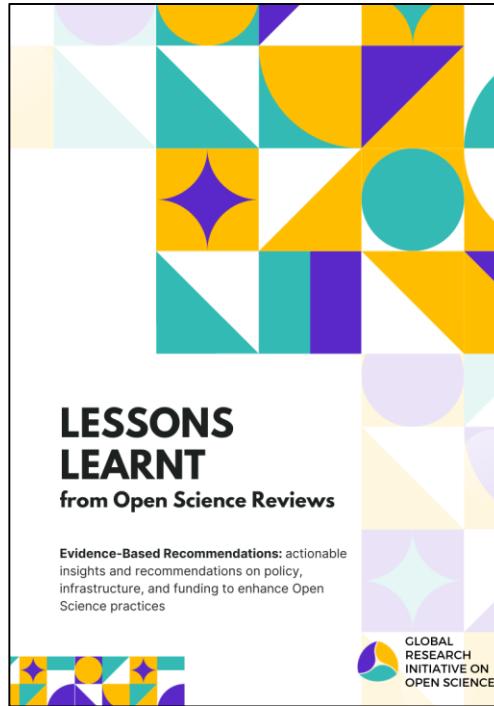
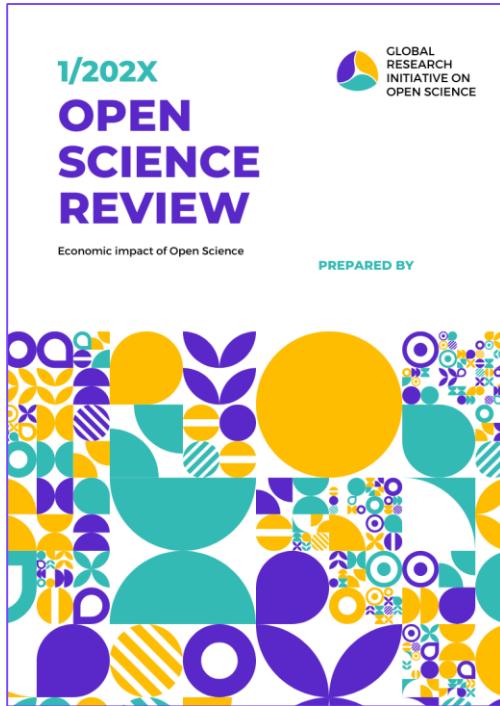


1. Produce in-depth reviews of existing research on open science

2. Formulate recommendations based on the results highlighted by the reviews

3. Propose a research agenda to fill the gaps in current knowledge on open science

Objectives

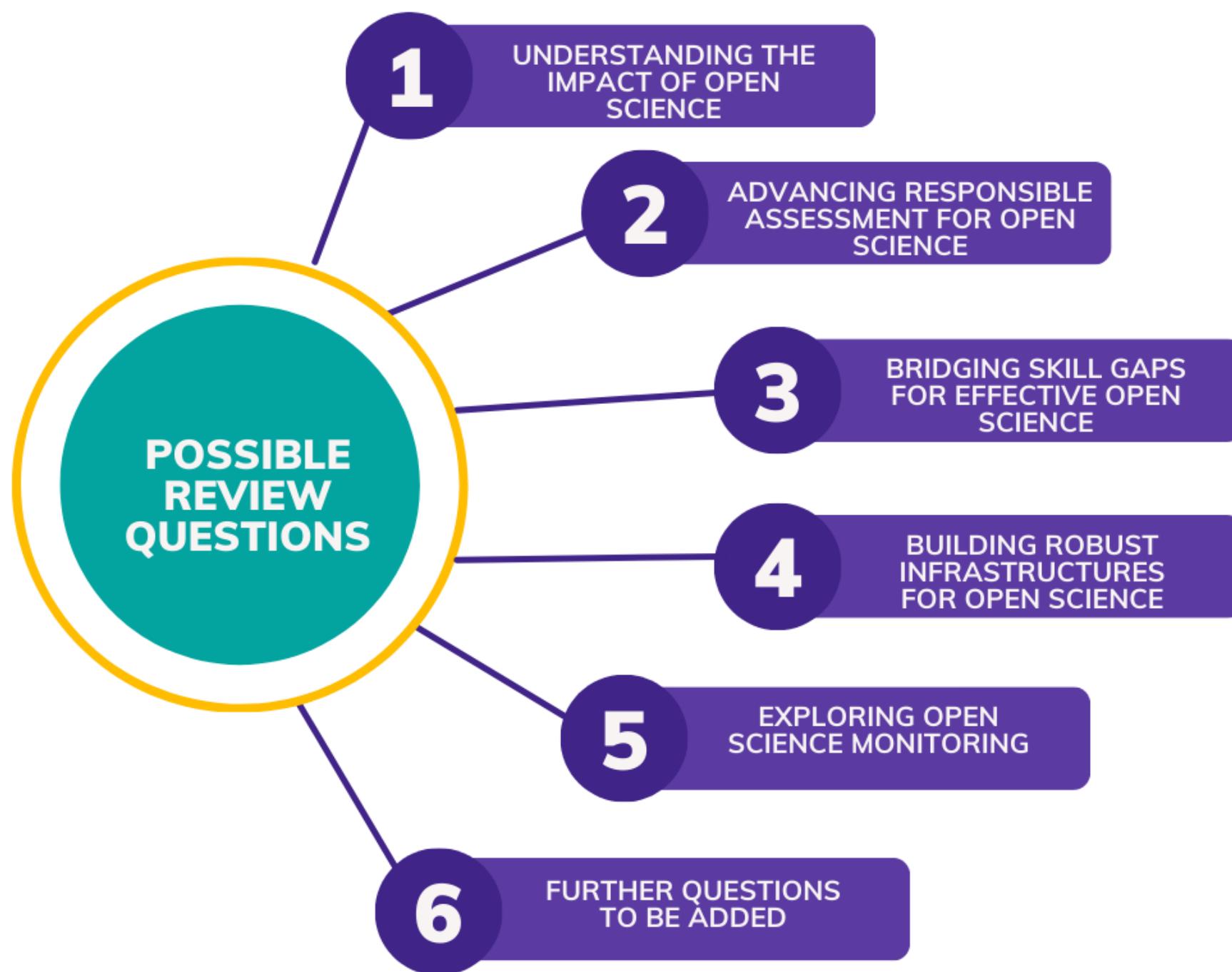


1. Produce in-depth reviews of existing research on open science

2. Formulate recommendations based on the results highlighted by the reviews

3. Propose a research agenda to fill the gaps in current knowledge on open science

4. Establish a global network of organisations and researchers committed to the development of open science



GRIOS welcomes partnerships with research organisations, funding bodies, and other stakeholders committed to advancing open science. Current partners include the French Ministry of Higher Education and Research, the French Committee for Open Science (Ouvrir la Science) and the French National Centre for Scientific Research (CNRS).



HOST ORGANISATION



OSMI – Open Science Monitoring Initiative



Origines



- Responding to [G7 Communiqué \(May 2023\)](#) which encourages a framework for monitoring the progress and obstacles of open science ([Annex 1](#))

"v) mobilise research-on-research to promote effective open science policy making; vi) promote inclusivity and equity in practicing open science, among countries and communities; and vii) encourage a framework for monitoring the progress and obstacles of open science."





Open Science Monitoring Initiative

<https://open-science-monitoring.org/>

Aims :

1. Define common principles for monitoring open science and promote their adoption worldwide
2. Provide recommendations on the technical specifications for their implementation
3. Support stakeholders on various levels in monitoring Open Science practices

Working groups

Accueil » Working groups

NEWS

OSMI Members represent 42 countries across all continents – Join us!

The Open Science Monitoring Initiative (OSMI) proudly announces its diverse and growing membership, with currently 166 representatives from 42 different...

OSMI WGs kickoff announcement

⌚ The Open Science Monitoring Initiative's first Working Groups are kicking off! More than 150 individuals from all around the...

Closing of the international consultation on the Principles of Open Science Monitoring

The Principles of Open Science



Image by Karolina Grabowska from Pixabay

If you wish and have the time to actively contribute to a working group, please [contact us](#).

If you'd just like to follow us, then please join the mailing list by registering on the [home page](#) of the OSMI website. You can also follow us on [LinkedIn](#) and [Mastodon](#).

First working groups

WG1. SCOPING THE NEEDS OF OPEN SCIENCE MONITORING →

WG2. UNDERSTANDING THE OPEN SCIENCE MONITORING LANDSCAPE →

WG3. OPEN SCIENCE MONITORING WITH SCHOLARLY CONTENT PROVIDERS →

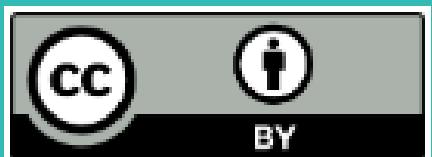
WG4. SHARED RESOURCES AND INFRASTRUCTURE TO ANALYZE SCHOLARLY OUTPUTS →

If you have any questions on the working groups, please do not hesitate to [contact us](#).

<https://open-science-monitoring.org/>

Thank you!

arianna.caporali@recherche.gouv.fr



Except for the logos

The graphs on slides 24 to 30 were prepared by Séverine Maire