

Open science policy in France

Towards a research more transparent, more accessible and more reproducible

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Paris

13/09/2023



Launched on 6 July 2021

I : Generalising open access to publications

II : Structuring, sharing and opening up research data

III : Opening up and promoting source code produced by research

IV : Transforming practices to make open science the default principle

+ **Disciplinary and thematic variations:** open science policies must be adapted to disciplinary specificities

The French Open Science Committee

Open science steering committee

Chaired by Director General for Research and Innovation

Ministry of Higher Education and Research (MESR), big Research performing organisations, Universities, National Research Agency (ANR), Couperin consortium, High Council for Evaluation of Research and Higher Education (HCERES)

Decides and funds

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

Executive board of Open Science

Chaired by National Coordinator for Open Science

MESR, main research performing organisations, Universities, ANR, Couperin consortium, HCERES, ADBU, EPRIST, + Colleges copilots

Coordinates

Prepares decisions, proposes guidelines, monitors work

Colleges and Project groups

Chaired by experts in open science

1. Colleges : 100 members from 50 institutions. Publications, Research Data, Software and Code, Skills and Training, Europe and International
2. Project groups : about dozen of topics, 100 people

Provides expertise

Investigate issues, propose guidelines, initiate and manage projects



The Council for National Open Science Coordination (CoNOSC)

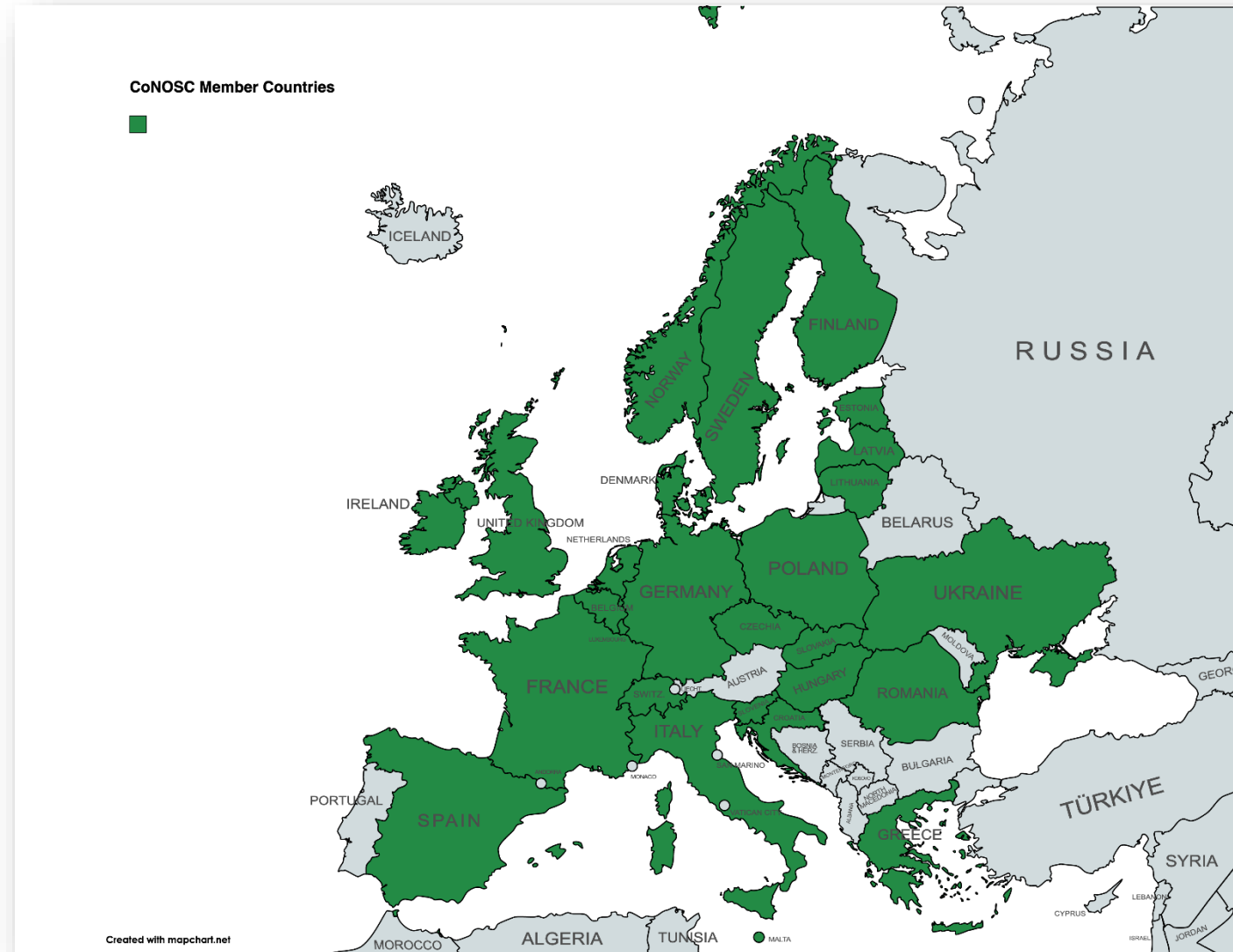


A network of national Open Science coordinators, created by France, Finland and Netherland

The first objective is to have an open science coordinator for each country !

“We help countries create, update, and revise their open science policies to empower the research community to embrace and smoothly implement openness in their everyday practice”

At this time, it is a European initiative. It could be open to more continents, by one way or another



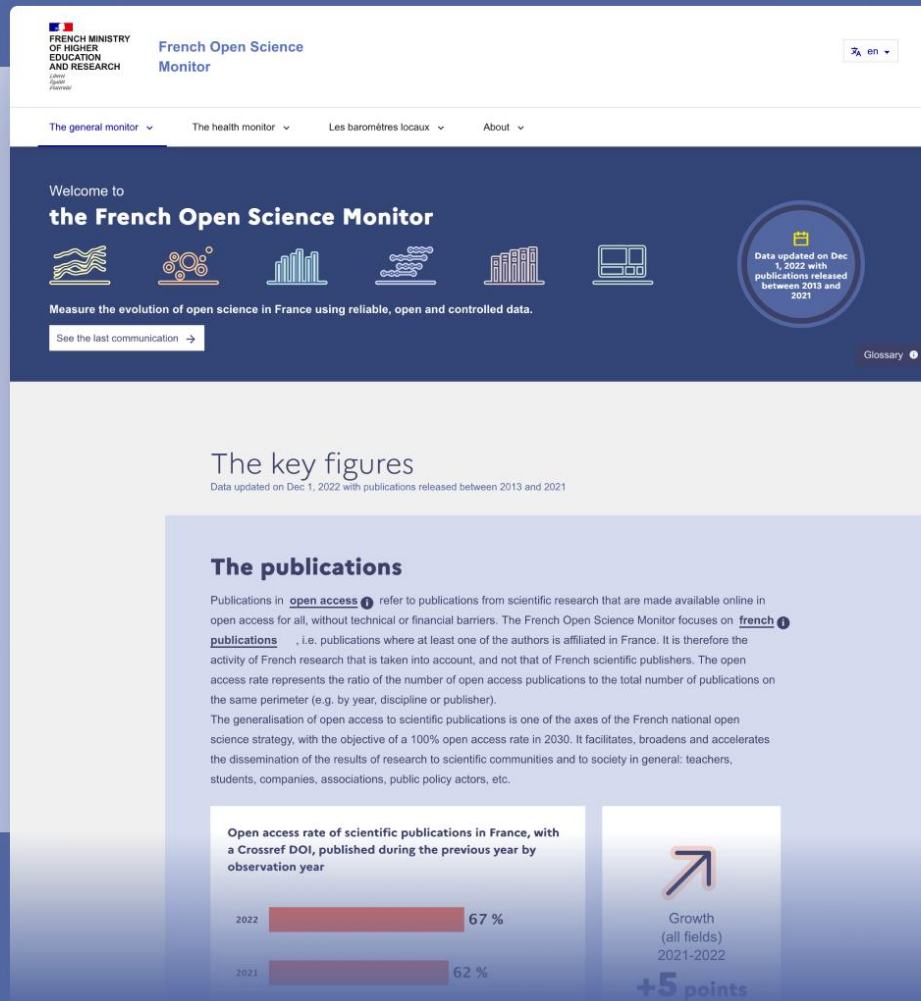
Where we are now

The open science monitoring shows the progress made...
...and the road ahead



frenchopensciencemonitor.esr.gouv.fr

The French Open Science Monitor




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DE L'ENSEIGNEMENT
SUPÉRIEUR
ET DE LA RECHERCHE**
*Liberté
Égalité
Fraternité*

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Our sources

What are our results based upon?

The French Ministry has decided **not to rely on proprietary bibliometric databases** as they conflict with the principles of open science.

It constitutes a novel endeavour to design an **independent and sovereign tool.**



To mitigate the lack of open metadata,
the monitor's team relies on R&D and machine learning.

Find out more on: frenchopensciencemonitor.esr.gouv.fr/about/methodology

Publications:

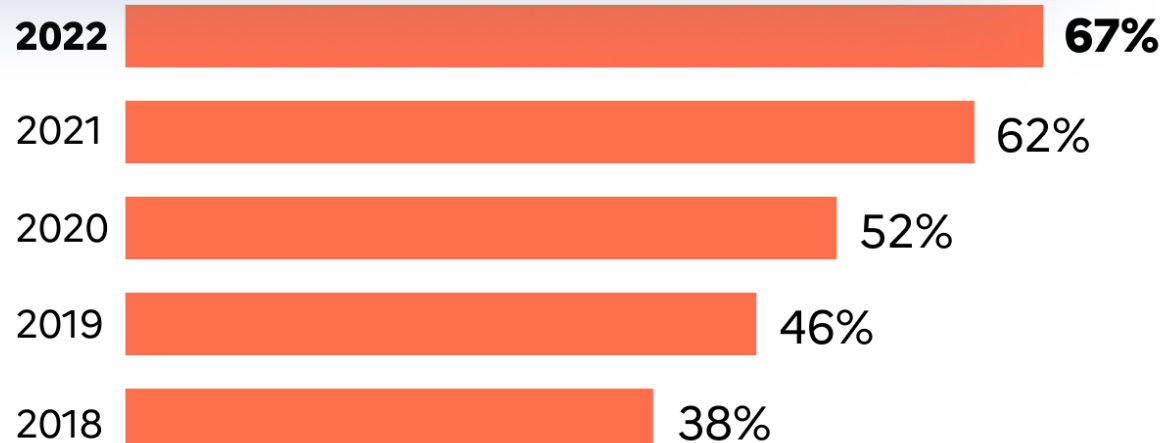
67%
in open access



Growth (all fields)
2018-2022

+29 points

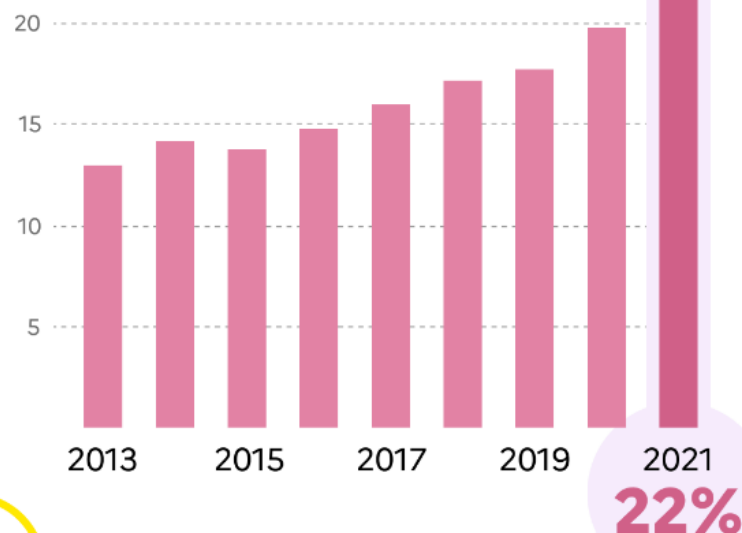
Open access rate of research publications in France,
with a Crossref DOI, published during the previous year
and by observation year



Find all indicators on: frenchopensciencemonitor.esr.gouv.fr

Proportion of publications that share:

25% -- A dataset



[beta]

Amongst French publications in 2021 mentioning the production of data, 22% are referring to sharing a dataset.

This indicator was created via artificial intelligence by the Ministry of Higher Education and Research.

Find all indicators on: frenchopensciencemonitor.esr.gouv.fr

- Current discussions with UNESCO for a global approach for monitoring open science
- We are open to cooperation with other countries



UNESCO and the French Open Science Monitor project

Concept Note

BACKGROUND

The principles of Open Science have been gaining momentum over the past few years, to make scientific research more accessible, transparent, and reproducible. Open Science promotes sharing of research data, algorithms, source codes, methods, and results, enabling greater collaboration, innovation, reproducibility and impact. However, the implementation of Open Science practices varies across different regions of the world, and there are still many challenges to overcome. To address these challenges and promote the adoption of Open Science practices globally, UNESCO, the French Open Science Monitor initiative are collaborating to develop a framework for Open Science monitoring that can be expanded worldwide. In order to achieve this goal, they plan to set up a consortium of key players in the field at worldwide level.

OBJECTIVES

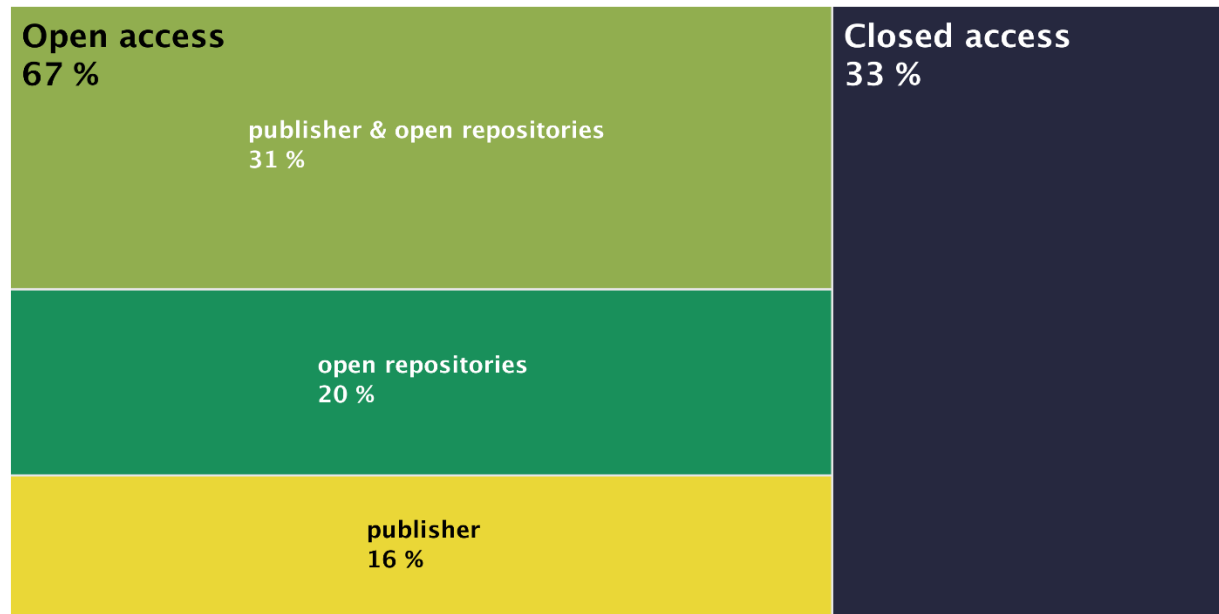
The main objectives of this collaboration are:

Open Access to publications

Some actions

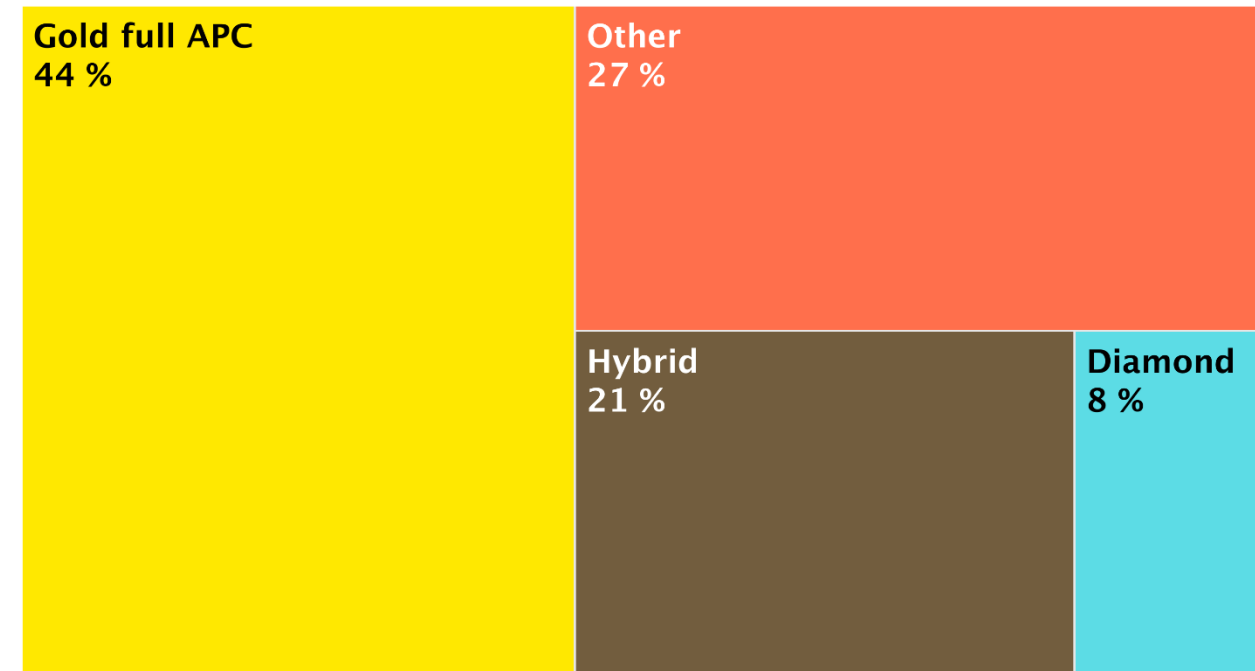
What is the proportion of diamond publications for French researchers ? (it's not about French publishers)

Distribution of scientific publications in France, with a Crossref DOI, published in 2021 by opening route (observed in 2022)



French Open Science Monitor, Sources : Unpaywall, HAL, MESR,

Distribution of business models for articles published in 2021 and distributed in open access by their publisher



French Open Science Monitor, Sources : Unpaywall, HAL, MESR,

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

2013-2020 The highest growth rate is due to Springer Nature, Wiley and MDPI

x 3

The total cost of APC has tripled between 2013 and 2020

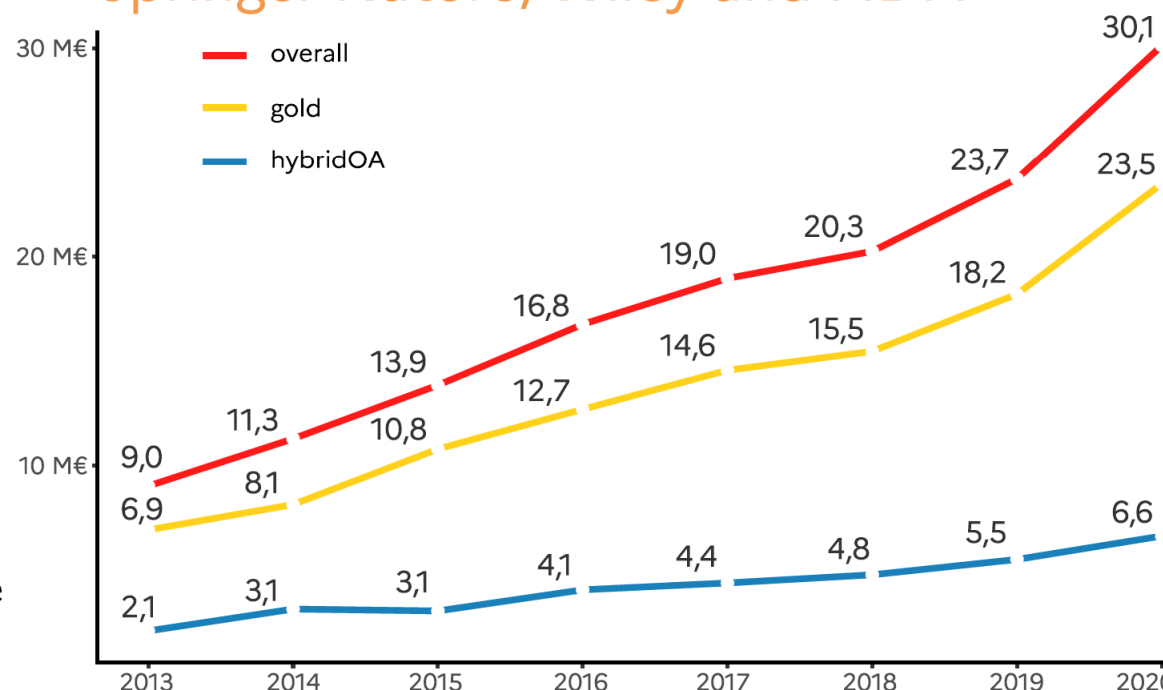
30 M€

is the estimated cost of APC for French institutions in 2020

25 %

of all articles published in France have paid APC in 2020

Data: 1 032 517 articles from BSO enriched with OpenAlex, Web of science, Couperin, QOAM



The methodology is based on known and trusted data sources, with extrapolation for missing data.

A recent international awareness-raising



Home > Blog > The Council of the European Union has called for transparent, equitable and open access to scholarly publications

The Council of the European Union has called for transparent, equitable and open access to scholarly publications



Conseil de
l'Union européenne

<https://www.ouvrirlascience.fr/le-conseil-de-lunion-europeenne-se-prononce-en-faveur-dun-acces-libre-transparent-et-equitable-a-ledition-scientifique/>

Let's do the maths...

IF ALL JOURNALS SWITCH FROM
SUBSCRIPTION TO APC :

- 8 million articles / year
- Publishing fee : 2 000€ / article
- 16 billions / year !

TRENDS :

- In ten years :
 - With annual increase of 1% a year: 17,5 billions
 - With annual increase of 2,5% : 20 billions
 - With annual increase of 5% : 25 billions
- And guess what : the prices are going up by 15%/year



***G20 discussions about open science
in India April 2023***

Shared or open research data policy Open Source Software policy

First step : create the position of Chief Data and Software Officer (Isabelle Blanc)

COVID-19 : where is the data ?



This finding indicates—contrary to what many have suggested—that a global pandemic is not sufficient to radically modify scientific practices

COVID-19: Where is the data?

Julien Larregue

Philippe Vincent-Lamarre

Frédéric Lebaron

Vincent Larivière

November 30th,
2020

1 comment | 34 shares

Estimated reading time: 7 minutes

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The FAIR data promise and the reality...






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Many researchers were not compliant with their published data sharing statement: mixed-methods study

[Mirko Gabelica](#)
[Ružica Bojčić](#)
[Livia Puljak](#)

Published: May 29, 2022 • DOI: <https://doi.org/10.1016/j.jclinepi.2022.05.019>

[Abstract](#)

This paper is only available as a PDF. To

Abstract

Objectives

To analyse researchers' compliance with their Data Availability Statement (DAS) in journals with the mandatory DAS.

Study Design and Setting

We analyzed all articles from 333 open-access journals published during January 2019 by BioMed Central. We categorized

[Keywords](#)

[Article Info](#)

[Related Articles](#)

"only 6.8% provided the requested data"

10.1016/j.jclinepi.2022.05.019

Funding mechanisms

The National Open Science Fund

- Call for projects – 2 to 3M€ each
- The call aims to:
 - Foster the conversion of existing editorial content towards an open access digital dissemination;
 - Reinforce and structure open access publishing resources, foster the trend towards editorial quality standards;
 - Foster financial models diversity of open access publishing and restore a balance in favour of the diamond OA model. Projects depending on transparent and reasonable publication fees can also be supported in the scope of this call;
 - Foster a continuum between publication, data and codes;
 - Foster reproducibility or traceability of the scientific method, integrity, and fight against publication bias by supporting the publication of negative results;
 - Support innovating editorial processes, e.g. in regards to peer reviewing, collaborative writing, etc.



MINISTÈRE DE L'ENSEIGNEMENT SUPÉRIEUR ET DE LA RECHERCHE

Ouvrir la science!

OPEN SCIENCE OUR ACTIONS RESOURCES NEWS

In progress

Call for projects Open scientific and scholarly publishing (3rd edition)

The scope of the Open scientific and scholarly publishing (3rd edition) call for projects covers publishing, open publication and its ecosystem.

The funding challenge :
facing two main issues



The initial sin:
pay to publish

The issue for
open science
infrastructures:
the free rider

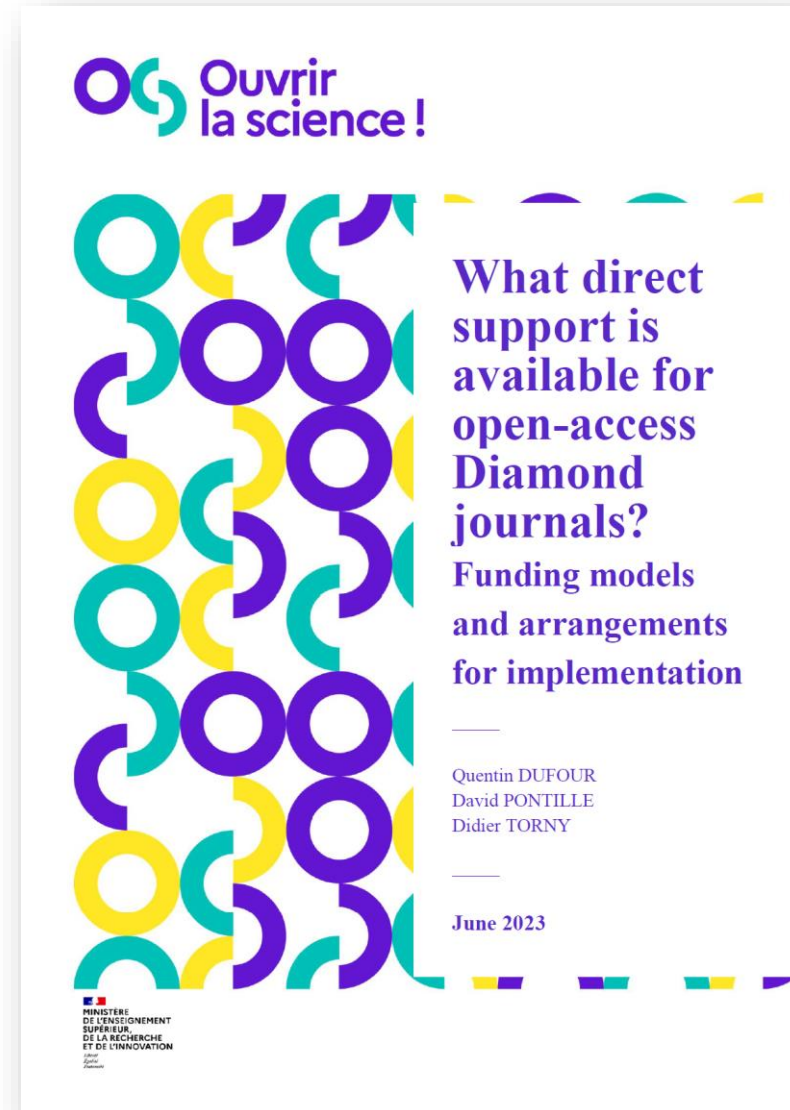
Next step : create a new funding mechanism for the publishing activity



The author-pays model for open-access journals is increasingly criticised because of the inequalities it generates and its unsustainability due to a lack of cost control. In this context, our study examines the funding models for academic journals which are published with no direct payment made by the readers (unlike the subscription model) nor by the authors (author pays model). The aim of this work is to test the feasibility, as well as the desirability of a direct or explicit funding model for Diamond journals, something which is almost non-existent at present. We have two objectives here: on one hand, to understand the current Diamond journal funding arrangements and constraints, and on the other hand to propose specific arrangements for funding Diamond journals by research funders.

DOI : [10.52949/35](https://doi.org/10.52949/35)

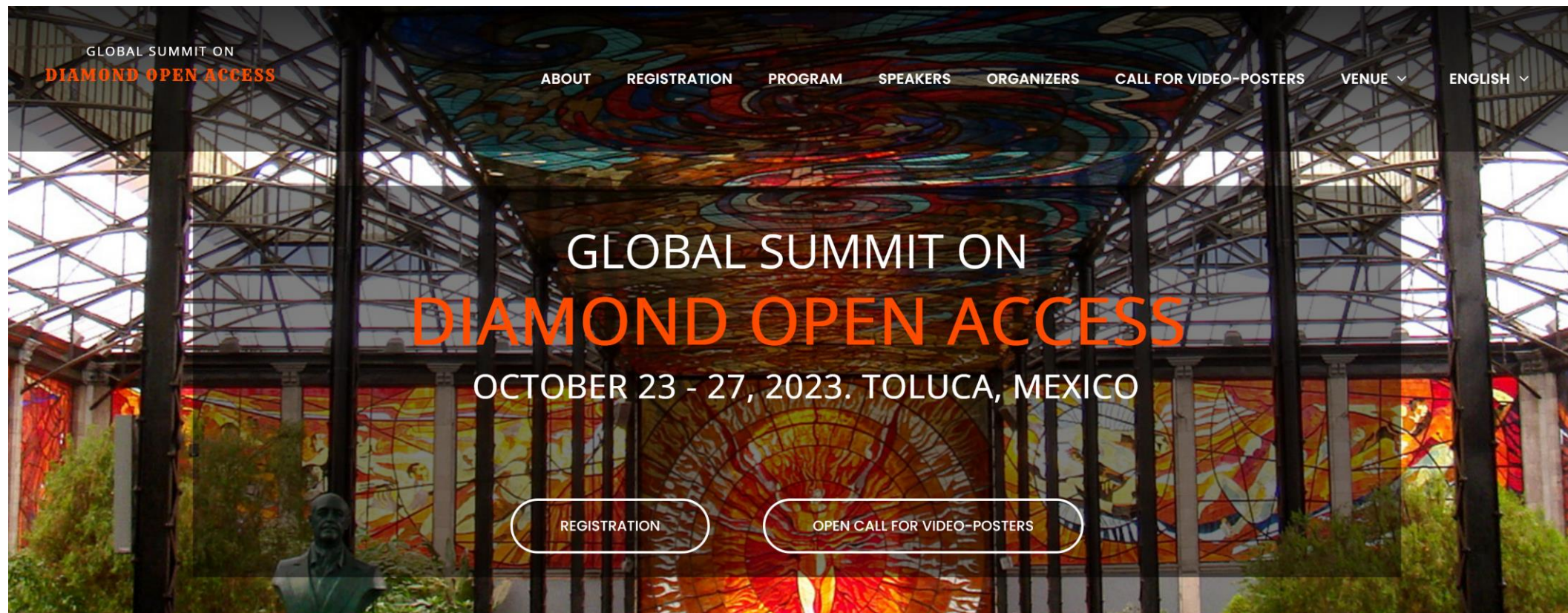
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Funding decisions from National Open Science Fund - 2023



Infrastructure	Object	Total amount of money asked	French Funding
Infrastructures of the 4th AMI SCOSS			
LA Referencia	Latin American Open Archives Network	268 K€	50 K€
ROR	Repository of identifiers for research organisations	987 K€	50 K€
Post SCOSS programme funding			
DOAB	Directory of open access books		20 K€ / year
Open Citations	Open bibliographic and citation data		75 K€ / year
		Total 2023	195 K€



The purpose of the **Global Summit on Diamond Open Access** is to bring the **Diamond OA community** together in a dialogue between journal editors, organizations, experts, and stakeholders from Global South and North, seeking to implement collective action in the spirit of the UNESCO and BOAI 20 years Recommendations on Open Science, where **Equity, Sustainability, Quality and Usability** are the pillars of our work.

For the first time, the global OA Diamond community will meet in the city of Toluca, Mexico, to exchange and coordinate actions for a better support of equity in scholarly communication practices.

<https://globaldiamantoa.org>

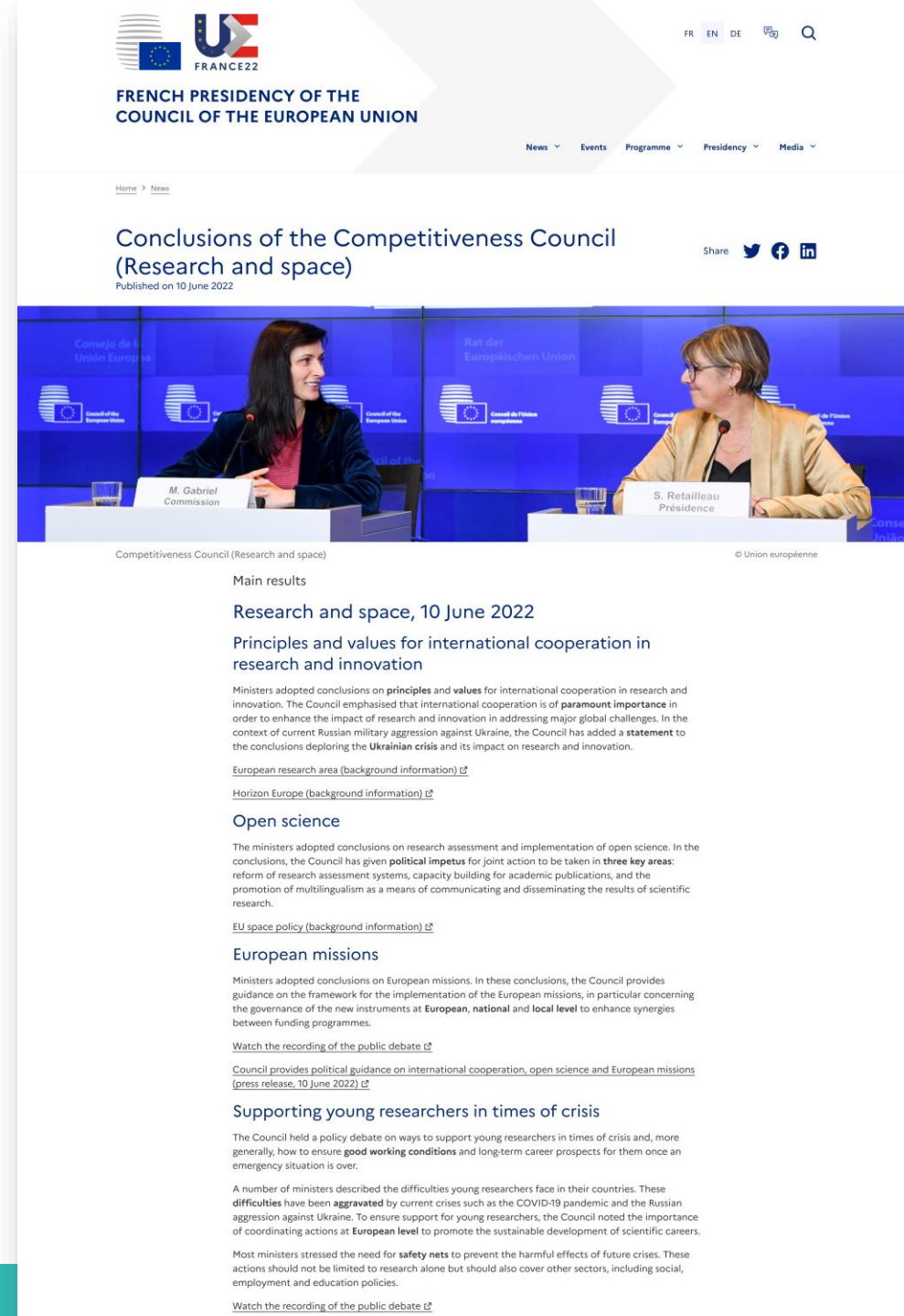
How to encourage and promote open science ?


The assesement system. Part of the problem or part of the solution ?

European Council Conclusions on Open Science

”The ministers adopted conclusions on research assessment and implementation of open science. In the conclusions, the Council has given political impetus for joint action to be taken in three key areas:

- reform of research assessment systems,
- capacity building for academic publications,
- and the promotion of multilingualism as a means of communicating and disseminating the results of scientific research.”



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Conclusions of the Competitiveness Council (Research and space)

Published on 10 June 2022

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Competitiveness Council (Research and space) © Union européenne


Main results

Research and space, 10 June 2022

Principles and values for international cooperation in research and innovation


Ministers adopted conclusions on **principles** and **values** for international cooperation in research and innovation. The Council emphasised that international cooperation is of **paramount importance** in order to enhance the impact of research and innovation in addressing major global challenges. In the context of current Russian military aggression against Ukraine, the Council has added a **statement** to the conclusions deploring the **Ukrainian crisis** and its impact on research and innovation.

[European research area \(background information\)](#) 

[Horizon Europe \(background information\)](#) 


Open science


The ministers adopted conclusions on research assessment and implementation of open science. In the conclusions, the Council has given **political impetus** for joint action to be taken in **three key areas**: reform of research assessment systems, capacity building for academic publications, and the promotion of multilingualism as a means of communicating and disseminating the results of scientific research.

[EU space policy \(background information\)](#) 

European missions

Ministers adopted conclusions on European missions. In these conclusions, the Council provides guidance on the framework for the implementation of the European missions, in particular concerning the governance of the new instruments at **European, national and local level** to enhance synergies between funding programmes.

[Watch the recording of the public debate](#) 


[Council provides political guidance on international cooperation, open science and European missions \(press release, 10 June 2022\)](#) 


Supporting young researchers in times of crisis

The Council held a policy debate on ways to support young researchers in times of crisis and, more generally, how to ensure **good working conditions** and long-term career prospects for them once an emergency situation is over.

A number of ministers described the difficulties young researchers face in their countries. These **difficulties** have been **aggravated** by current crises such as the COVID-19 pandemic and the Russian aggression against Ukraine. To ensure support for young researchers, the Council noted the importance of coordinating actions at **European level** to promote the sustainable development of scientific careers.

Most ministers stressed the need for **safety nets** to prevent the harmful effects of future crises. These actions should not be limited to research alone but should also cover other sectors, including social, employment and education policies.

[Watch the recording of the public debate](#) 



science.fr

Coalition for Advancing Research Assessment

Our vision is that the assessment of research, researchers and research organisations recognises the diverse outputs, practices and activities that maximise the quality and impact of research. This requires basing assessment primarily on qualitative judgement, for which peer review is central, supported by responsible use of quantitative indicators.

<https://coara.eu/>

AGREEMENT ON REFORMING RESEARCH ASSESSMENT

20 July 2022

septembre 23

The Commitments

- ➡ 1. Recognise the diversity of contributions to, and careers in, research in accordance with the needs and nature of the research ✓
- ➡ 2. Base research assessment primarily on qualitative evaluation for which peer review is central, supported by responsible use of quantitative indicators ✓
- ➡ 3. Abandon inappropriate uses in research assessment of journal- and publication-based metrics, in particular inappropriate uses of Journal Impact Factor (JIF) and h-index ✓
- ➡ 4. Avoid the use of rankings of research organisations in research assessment ✓
- ➡ 5. Commit resources to reforming research assessment as is needed to achieve the organisational changes committed to ✓
6. Review and develop research assessment criteria, tools and processes ✓

AGREEMENT ON REFORMING RESEARCH ASSESSMENT

20 July 2022

organisational changes committed to

6. Review and develop research assessment criteria, tools and processes



7. Raise awareness of research assessment reform and provide transparent communication, guidance, and training on assessment criteria and processes as well as their use

8. Exchange practices and experiences to enable mutual learning within and beyond the Coalition

9. Communicate progress made on adherence to the Principles and implementation of the Commitments



10. Evaluate practices, criteria and tools based on solid evidence and the state-of-the-art in research on research, and make data openly available for evidence gathering and research

Recognize and reward open science practices

- Open Science Awards for Research Software
- Open Science Awards For Research Data
- Open Science Awards For Doctoral thesis



Thank you !



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