

# The role of research libraries in a national Open Science roadmap - the example of France

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# 1. Overview of the First French Plan for Open Science (2018-2021)

**Launch on 4 July 2018** by Frédérique Vidal, Minister for Higher Education, Research and Innovation

**NATIONAL PLAN  
FOR OPEN SCIENCE**

4TH JULY 2018

#openscience

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- **Generalise open access to publications**
- **Structure research data and make them available through open access**
- **Be part of sustainable european and international open science dynamics**



# Governance : The Open Science Committee

**Open science  
steering committee**

Makes strategic decisions

**Permanent secretariat  
for Open Science**

Prepares decisions, monitors the  
plan

**Libraries – universities,  
research bodies, French  
national association**

**Colleges**

*Publications, Research Data,  
Skills and Training, Europe and  
International*

Investigate issues, propose  
guidelines, initiates and  
manages projects

**Libraries at each level –  
steering and members**

# Main achievements – 1/4

- Creation of the **National Fund for Open Science** (11.6 M€ over 3 years), a dedicated fund, with **two calls for** projects for "open access publishing, open publication and its ecosystem"
  1. PEREN. University of Lille and partners. *Opening, making accessible : a new academic platform for journals, creating an editorial platform to facilitate the standardized digitalisation of open access journals.* **Lille university library is managing the development of the platform.**
  2. REPÈRES. University Lyon 3 in partnership with other stakeholders in Lyon. *Improving the nursery network of journals in social science in Lyon and making technical development.* **Lyon 3 library is managing the platform.**
- Support for the development of the national open repository **HAL**. **Advisory board and scientific board including librarians.**

## Main achievements – 2/4

- The **French National Research Agency (ANR)** and others enforce **the deposit of publications in an open access repository** and the **drafting of data management plans** for projects they fund.  
**Support of libraries in every university.**
- **ANR flash call for projects on open science** : €2.3M, 25 projects supported to help communities facing data management issues. **No library in a leading role.**
- Creation of the **position of chief data officer** at the Ministry for Higher Ed. And Research. Starting end of 2021, creation of a network of chief research data officers in universities to coordinate the research data governance – up to 10 people for the moment. **In Lille and Toulouse, a librarian is in charge. In other universities, librarians are closely connected.**

*“mediate a network of similar Chief Officers working in the executive team of the higher education and research institutions. Through their coordinated actions, the data, source code and algorithms from French public research will be preserved, referenced, described and promoted under open licenses”.*

# Main achievements – 3/4

- Creation of the **open science barometer** : measurement of the rate of French scientific publications in open access. **A local initiative closely connected and dispatched in 20 universities, the Lorraine open science barometer, managed by the library team.**
- <https://scienceouverte.univ-lorraine.fr/barometre-lorrain-de-la-science-ouverte/>
- Support to the development of **open science strategies within research bodies and universities**, creation of a network of open science points of contact. creation of the “open science points of contact” network, managed by the Rectors’ conference named “France Universités” - **Many librarians involved.**
- Participation in **the EOSC** : structuring of the EOSC France, French presence on the board and other EOSC governance bodies. **No librarians involved yet.**

## Main achievements – 4/4

- **Training actions targeted at PhD students** : *Passport for open science*, practical guide for PhD students.

An initiative developed by the university library of Lille and partners.

<https://www.ouvrirlascience.fr/passport-for-open-science-a-practical-guide-for-phd-students/>

- **Support to international open science infrastructures**: SCoSS labelled projects (DOAB, PKP, OpenCitations), RDA, Software Heritage...

A task force to evaluate the SCoSS proposal in the context of the French national strategy, steered by a librarian and involving others.





## **2. Second French Plan for Open Science (2021-2024)**

# 1st strategic direction : 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 (the so-called “diamond” model)

3

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

*“Our goal is to reach **100% of open access publications**”*

*“ We will support **bibliodiversity** so that the scientific community can regain control over the publishing system.”*

# Generalising open access to publications – **the role of the libraries**

- No specific role for libraries up to now, emerging action

1

**Generalise the obligation to publish in open access**

- Manage Open Access repositories
- Sit on steering board of HAL
- Steer and are active members of relevant WG at a national level (publication college, legal affairs expert group, “open science points of contact”)

2

**Support open access economic publishing models**

- Develop and monitor platforms for journals
- Steer and sit on the open scientific publishing expert group
- Develop open access ebooks – see <https://www.couperin.org/site-content/261-a-la-une/1435-le-manuel-numerique-en-histoire-en-open-access-est-disponible>
- Monitor APCs (Lille, INRIA)
- encourage the use of findings from French research in the global collaborative Wikipedia encyclopaedia. Clermont-Ferrand university library hosting a wikimedian in residence.

3

**Encourage multilingualism**

## 2nd strategic direction :

# Structuring, sharing and opening up research data

4

Implement the obligation to disseminate publicly funded research data

« We will encourage practices that favor **research data reuse**. »

5

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

« We will create Recherche Data Gouv in order to **involve all research fields in active practices of open data**. »

6

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

# Structuring, sharing and opening up research data – **the role of the libraries**

1

**Implement the obligation to disseminate publicly funded research data**

- Support DMPs, at an national level (CNRS – CatOpidor / DMPOpidor) and at a local level
- Encourage the emergence of new knowledge through text and data mining (TDM) – experiment in Lille, university library

2

**Create Recherche Data Gouv**

- A national project monitored at a national level – libraries involved in the SC
- Set Open Data repositories in universities – libraries managing the repository, or partners

3

**Promote widespread adoption of data policies**

- Develop the network of chief data officers in universities – libraries coordinating or partnering
- Sustain the development of FAIR data - library portfolio in Lille

## 3rd strategic direction :

# 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, research and innovation

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. »

« Distribution of software products under **open source licence** will be preferred. »

# Opening up and promoting source code produced by research – **the role of the libraries**

1

**Recognize and support the dissemination under an open source license of software**

- **network of Chief Research Data Officers – libraries involved**

2

**Highlight the production of source code**

- Create an open source research software prize
- Provide greater recognition for software production in the career of researchers, research support staff and in the assessment of research organisations
- Monitor over time the production of code and software by French research teams

3

**open source software policy**

- Produce recommendations for funding bodies to best support software development.
- Support Software Heritage and recommend it for the archiving and referencing of source code – **a librarian in charge of the community management and engagement for Software heritage...**
- Adopt a policy of open source software associated with the articles
- Develop proper coordination between software forges, open publication archives, data repositories and the scientific publishing sector

## 4th strategic direction :

# 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 performing organizations

12

**Triple the budget for open science** through the National Fund for Open Science and the Investments for the Future Programme **and support adoption of Open Science policies**

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



# Transforming practices to make open science the default principle – **the role of the libraries**

1

## Develop and value open science skills

- Encourage the development of teaching units or training pathways in open science – **European Alliance 4EU+ - MOOC on Open Science by Sorbonne university library and Natural history museum library**
- Support the evolution in skills and career pathways for staff - **each year, 2 national courses regarding Open Science in libraries, one for head of units and the other one for library directors**
- Consider data literacy as a set of key skills – **role of libraries to develop tailored programmes in data science and engineering (Lille Open Science Factory)**

2

## Value open science and the diversity of scientific productions in the assessment

- Take open science into account in the assessment of researchers, projects and research institutions - **No libraries involved yet, action plan starting**
- Promote the use of narrative CVs to reduce the importance of quantitative assessments – **role of libraries during the preparation of the assessment process for research units**

3

## Triple the budget for open science and support adoption of OS policies

- Encourage universities to adopt an open science plan, which is made public and is closely supervised. **Open science roadmaps in many universities, prominent role of libraries (Saclay)** Encourage projects funded to request open-source publications, data and source code. **Role of libraries through DMPs and FAIR data management.**
- Encourage researchers to adopt the ORCID identifier – **supported by libraries**
- Support OS initiatives (in-kind or financial support) – **managed by libraries (Couperin)**



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