# From Open Access to Open Science, the way forward

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National and European initiatives



### LIBER at a glance



# **Europe's Research Library Network**

#### Founded in 1971

Research libraries working together for nearly 50 years.

#### **451 Libraries**

National and university libraries, plus special libraries, consortia, and individuals.

#### **40 Countries**

A third of LIBER libraries are located in Southern and Eastern Europe.









Powering
Sustainable
Knowledge
in the
Digital Age



# Vision: The Research Landscape in 2022

#### **Open Access**

Is the main form of publishing

#### Research Infrastructure

Is participatory, tailored and scaled to the needs of diverse disciplines

#### **Research Data**

Is Findable, Accessible, Interoperable and Reusable (FAIR)

#### **Cultural Heritage**

Of tomorrow is built on today's digital information

#### **Digital Skills**

Underpin a more open, transparent research life cycle





### Liber Open Science roadmap



# What is the challenge for Europe?



### LIBER priorities regarding Open Science

ENCOURAGE the development of Open Science and Open Access policies and strategies in universities or research performing organisations.

**ENGAGE** in the development of national and **European legislation and policies which impact on Open Science.** 

STRIVE to make everyone in various communities, from students and researchers to staff and partners, an Open Science advocate.

**SUPPORT, promote and participate in international Open Science initiatives.** 

DEVELOP training programmes and guidelines which support the entire Open Science ecosystem and cover key concepts such as Open Access, FAIR Data, metadata and data management and Citizen Science.

ADOPT technology and provide services which support Open Science.

internationally to develop best practices which support Open Science, and to ensure that solutions are appropriately scaled to support the international research community.



#### 7 focus areas for LIBER roadmap

Scholarly publishing

FAIR data

Research infrastructure and the EOSC

Metrics and rewards

Open science skills

Research integrity

Citizen science

https://zenodo.org/record/1303002



#### Scholarly publishing (recommendations and actions)

- Ensure an Open Science policy or
   Open Access mandate is in place in institutions
- Directly champion Open Science by embracing a new role as a direct publisher of information

Commit to LIBER's licensing

- principles for Open Access
  negotiations when negotiating with
  publishers.
  https://libereurope.eu/article/openaccess-five-principles-for-negotiationswith-publishers/ Licensing and Open
  Access go Hand-in-Hand / No Price
  Increase / No Non-Disclosure / Keep
  Access Sustainable / Usage Reports
- Examine new models for journal delivery such as mega journals, a format popular with research funders

**Should Include Open Access** 

- Set up an Open Access Working Group providing libraries with practical guidance for implementing Open Access
- Produce report and workshop on OA monographs across Europe.
   https://libereurope.eu/article/oa-monographs-in-europes-research-libraries-best-practices-opportunities-challenges/4.
   Inform and provide guidelines for our network
- Act as an Open Access publisher for the research library community –LIBER Quarterly journal
- Support critical Open Access
   infrastructure, sitting on the SCOSS Board

Relevant initiatives LIBER is part of

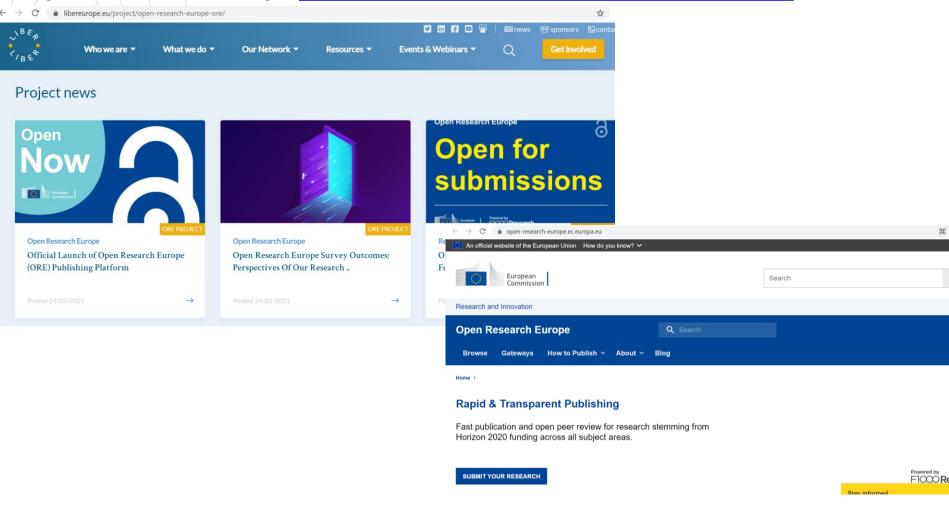
Introducing the European Commission's dedicated open access publishing platform.

#### **Open Research Europe**

https://libereurope.eu/article/liber-wins-role-in-open-access-publishing-platform/



#### Open Research Europe <a href="https://open-research-europe.ec.europa.eu/">https://open-research-europe.ec.europa.eu/</a>





#### FAIR data (recommendations and actions)

- Invest in staff with good data skills and train personnel to promote FAIR principles
- Work to make the use of FAIRcompliant Output and Data
   Management Plans mandatory
- Develop and provide certified repositories and intelligent tools for researchers to support FAIR data management
- Automate as much as possible the metadata production and data management during the data lifecycle
- Advocate for copyright legislation which supports FAIR data and encourages techniques dependent on it, such as text and data mining.
- Share best practices and case studies

- Set up a Research Data Management
  Working Group to help libraries secure a
  critical role in the 21st century scholarly
  information infrastructure and to recognize
  research data as valuable academic
  resources
- Set up RDM and FAIR data bootcamps
   https://libereurope.eu/mec-events/train-the-trainer-rdm-bootcamp-day-2/ and webinars
   https://www.youtube.com/watch?v=kuu7MR
   8-eCA
- Publish guidelines like Implementing FAIR
   Data Principles: The Role of Libraries.
   https://libereurope.eu/wp-content/uploads/2017/12/LIBER-FAIR-Data.pdf

Relevant initiatives LIBER was part of



https://libereurope.eu/project/aarc2-increasing-theuptake-of-federated-access/





defines the key AAI components

Policy Development Kit

templates, guidelines & learning content

experiences from research collaborations



### Research infrastructure and the EOSC (recommendations and actions)

- o Link institution's strategies and policies to the EOSC in order to maintain the highest possible standard of data infrastructures offered at the institutional level.
- Promote the EOSC to students, researchers and other staff members as both a source of information and a place to publish research outputs, in addition to institutional and national repositories.
- Advocate for institution to embed infrastructure training into the curricula of students and doctoral students.
- Contribute to the ongoing Relevant development of the EOSC by offering feedback, either directly or through LIBER, and by sharing best practices which support Open Science.

- join the EOSC Executive Board on behalf of LIBER with Observer status and prepare the new 2021 governance
- Set up a Data Science in Libraries working group to explore and promote library engagement in applying data science and analytical methods in libraries.
- Produce guidelines, best practices and tools for opening library data.
- Set up webinar series and workshops Skills for Supporting RDM, RDM In Libraries and Libraries & RDM: What Works?
- Publish 11 RDM Case Studies.
- Publish a Factsheet on Libraries & Research
   Data: Towards a new leadership role

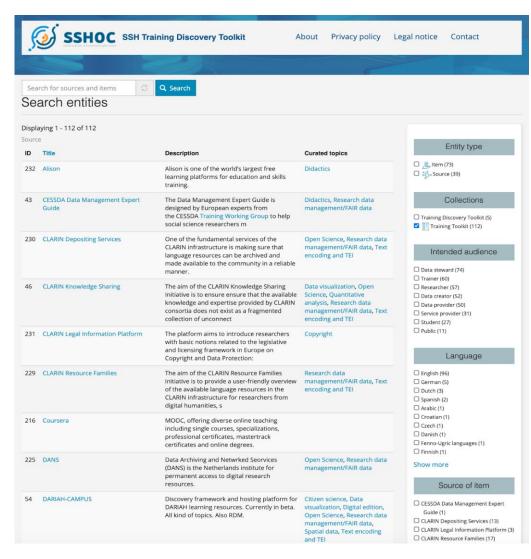
Relevant initiatives LIBER is part of



https://libereurope.eu/mec-events/sshoc-open-scienceand-research-data-management-train-the-trainerbootcamp-iassist-pre-conference-workshop/









#### Metrics and rewards (recommendations and actions)

- Endorse the San Francisco
   Declaration on Research Assessment
   (DORA) and the Leiden Manifesto.
- Collaborate with stakeholders to develop next-generation metrics which focus on evidence-based quantitative and qualitative indicators for Open Science.
- Work with funding bodies and institutional HR departments to develop new methods of assessing and rewarding researchers in their careers, in a way which supports Open Science.
- Retain high standards, both ethical and technical, when reporting metrics and indicators for individual researchers.

- Set up an Innovative Metrics working group.
- Produce guidelines, best practices and tools for opening library data.
- Set up webinar series
- Publish a report called Why Do Measures
   Fluctuate? to address challenges of metrics in
   relation to research with senior management.
   https://zenodo.org/record/3902348#.YHRwUOfg
   qUm
- Publish **guidelines** on how to use qualitative approaches in altmetrics.

  <a href="https://libereurope.eu/wp-content/uploads/2020/12/Guidelines-on-how-to-use-qualitative-approaches-in-altmetrics-1.pdf">https://libereurope.eu/wp-content/uploads/2020/12/Guidelines-on-how-to-use-qualitative-approaches-in-altmetrics-1.pdf</a>

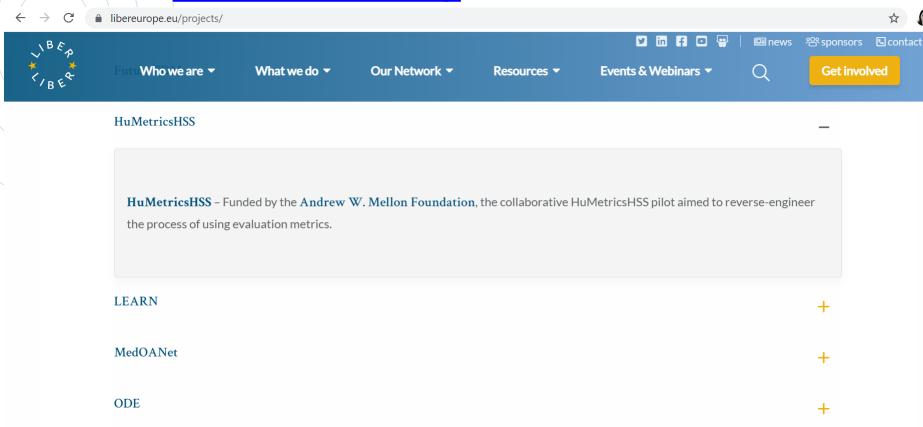
Relevant initiatives LIBER was part of



https://libereurope.eu/project/humetricshssdeveloping-a-value-based-metrics-framework-forthe-humanities-and-social-sciences/



#### HuMetricHSS <a href="https://humetricshss.org/">https://humetricshss.org/</a>





## Open Science skills (recommendations and actions)

- Coordinate with other partners to provide a multidisciplinary one-stop-shop for researchers to support them in Open Science workflows in every stage of the research process.
- Incorporate Open Science skills in the academic training programmes of students.
- Provide innovative digital training materials and courses to support (and monitor) skills development.
- Build on library's expertise in areas such as metadata catalogues, persistent identifiers and ontologies to organise relevant new skills, expertise and competencies

- Set up a Digital Skills for Library Staff & Researchers Working Group
- Propose an analysis of Open Science skills of library staff members and researchers in Europe from selected cases. <a href="https://doi.org/10.5281/zenodo.3903141">https://doi.org/10.5281/zenodo.3903141</a>.
- Hold yearly workshops: in 2020, https://www.fairsfair.eu/articles- publications/integrating-fair-data-science-competences-higher-education-curricula-role
   with FAIRsFAIR and the EUA.
- Hold webinars on Digital skills for Open Science training.
- Participate in the EOSC WG on skills and training

Relevant initiatives LIBER was part of

https://libereurope.eu/project/foster-plus-supporting-the-practical-adoption-of-open-science/



#### Research integrity (recommendations and actions)

- O Participate in establishing Codes of Conduct for Research Integrity within institutions. These codes should align with core principles of Open Science, such as openness, transparency and accountability in all aspects of research.
- Train researchers about the legal and ethical aspects of scholarly communication, scholarly publishing, information competencies, copyright, data management and Open Science.
- Provide services to counter malpractice and questionable conduct of research, such as counter-plagiarism services and publication strategy tools.

- Have a joint OCLC-LIBER session on research integrity <a href="https://hangingtogether.org/?p=8660">https://hangingtogether.org/?p=8660</a>
- Organise and host workshops somehow related, such as Ethical Issues and Skills in the European Open Science Cloud https://eoscnilot.eu/news/eoscnilot
  - https://eoscpilot.eu/news/eoscpilotliber-webinar-ethical-issues-skillseuropean-open-science-cloud



#### Citizen science (recommendations and actions)

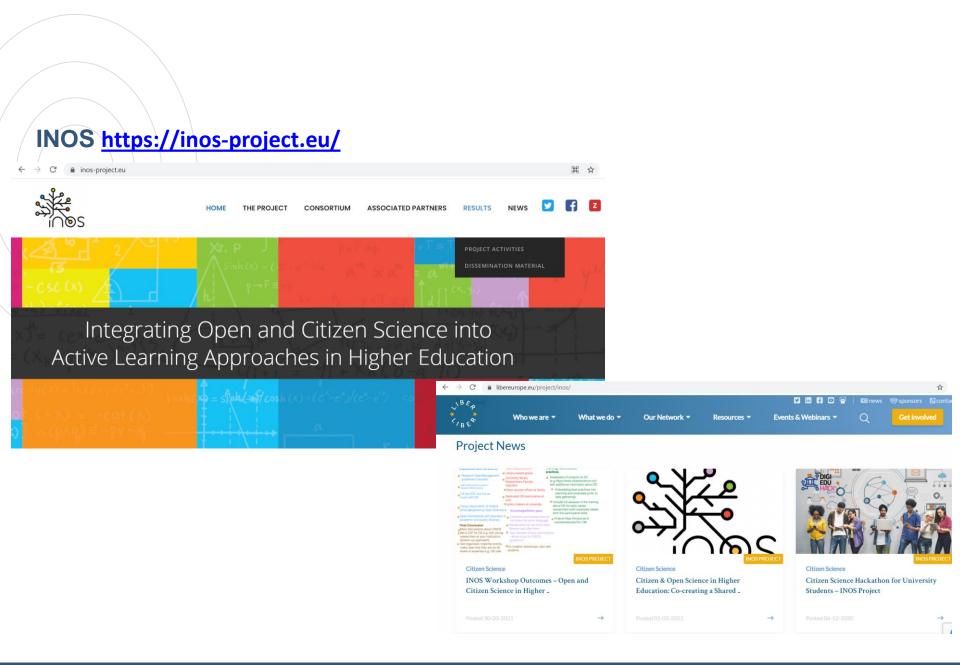
- Promote the library as an active partner in Citizen Science and develop the necessary infrastructure to effectively support public researchers in their work
- Use the library's role as an organising and managing body to ensure that responsible conduct and good scholarly practice are respected when participating in Citizen Science
- Develop a set of guidelines including methodologies and policies for Citizen Science activities involving the library
- Develop the necessary skills to be a strong and active partner in Citizen Science, including skills in the areas of scientific communication, information technologies and project management

- A Citizen Science Working Group to establish new links between science and society and foster a scientific culture across society as a whole
- Sign partnerships with external organisations regarding Open Science
- Deliver a template (or a suite of templates) with accompanying advocacy for a "Single CS Contact Point" that could be implemented in research libraries
- Release a Librarian's Guide to Citizen Science

Relevant initiatives LIBER is part of



INOS Workshop – Open and Citizen Science in Higher Education : Co-Creating a Shared Vision – LIBER – March/April 2021







Towards a new LIBER 2023-2027 strategy



### #ZEROEMBARGO



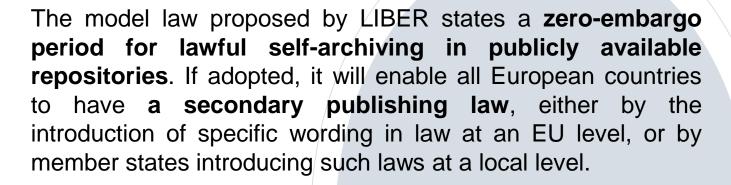
#### #ZeroEmbargo

- LIBER wants **#ZeroEmbargo** on Publicly-Funded Scientific Publications.
- We've drafted a <u>Model Law</u> for the Use of Publicly Funded Scholarly Publications.
- Read about the **Background** to our #ZeroEmbargo Campaign and the **Press** Release here.
- #ZeroEmbargo has been publicly supported by <u>cOAlition S</u> & <u>COAR</u>.





#### #ZeroEmbargo



The aim of this law is to provide a guaranteed "lowest common denominator" open access law across Europe to ensure, where articles are public or charity-funded, immediate access is lawful.

We are targetting our #ZeroEmbargo campaign at two levels – 1) **Member States and** 2) **the European Commission**. We are now at the very first stage of **informing our research library members and other relevant stakeholders** as well as identifying the best possible course for the campaign



### NATIONAL PLAN FOR OPEN SCIENCE

**4TH JULY 2018** 

#openscience





# Section 1 - strenghening Open Access

- 1. Make open access mandatory for projects publicly funded when publishing articles and books resulting from government-funded calls for projects. Example: ANR.
- 2. Create a National Open Science fund to support OA
- Support HAL, the French national open access repository
- 4. Support **OA valuable initiatives** 
  - Global Sustainability Coalition for Open Science Services (SCOSS) initiative for Directory of Open Access Books, Public Knowledge Project and OpenCitations half a million euros

# An important step ahead the National Plan

The Digital Republic Law - October 2016

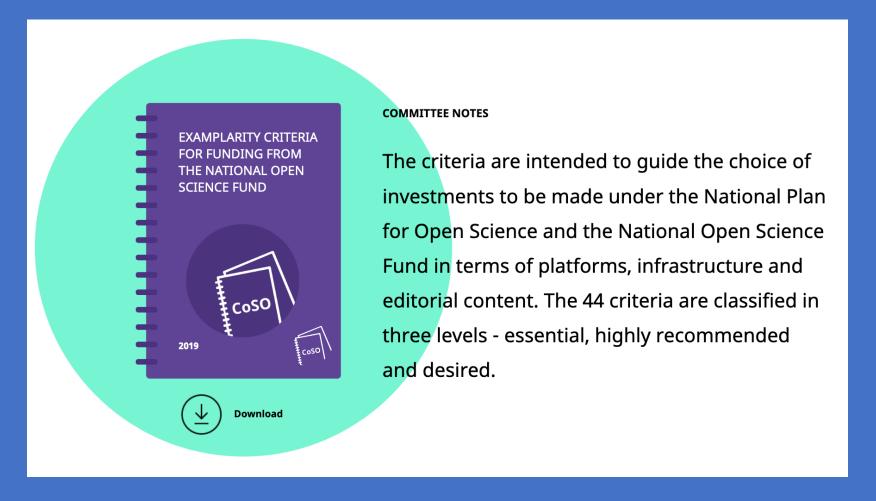
#### Publications : a new *right* for authors

Article 30: When a research is 50% publicly funded, the author retains the right to publish in open repositories 6 (STM) to 12 months (HSS) after publication.

#### Focus on the National Open Science Fund

- Aim: support open access, develop bibliodiversity
- Leverage: help universities and research institutions
- Exemplariness: evaluation based on criteria
- Budget: starting at 3,6M€ in 2019
  - with 1M€ coming from Elsevier savings
  - and 500K€ from CNRS (savings from Springer).
- Call for projects published in December 2019, results in October 2020 "Generalising open access to publications"
- New call released January 2021 "Generalising open access to publications – part 2"
- New call to be released later in 2021 focus on data. To be published in the coming months.

#### Criteria for the 2019 call for platforms, infrastructure and editorial content



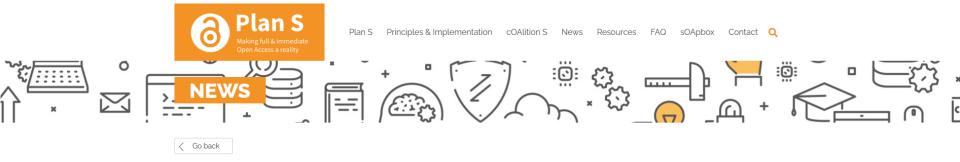
https://www.ouvrirlascience.fr/examplarity-criteria-for-funding-from-the-national-open-science-fund/

# Open Access: one size does not fits all

### France do support the co-existence of different roads....

- in an open repository that is permanent and recognized by the various scientific communities ("green mode")
- open access publishing based on fair, transparent, and sustainable business models
  - With publication fees ("gold APC mode")
  - Without publication fees ("diamond" mode)

... and Coalition S is currently moving in the right direction.



#### **Exploring collaborative non-commercial publishing models** for Open Access: tender results

cOAlition S received a total of 11 proposals for the tender for a study to explore collaborative non-commercial Open Access publishing models for Open Access (a.k.a Diamond OA) published in March 2020. We are pleased to announce that the tender was awarded to a consortium coordinated by OPERAS, including Sparc Europe, Utrecht University, DOAJ, UIT The Arctic University of Norway as partners, and LIBER, OASPA, ENRESSH, Redalyc-AmeliCA and CSI as associate partners.

The study will be delivered by the end of 2020, and regular public updates on progress are planned along the way. The study is financially supported by Science Europe.











# Report and recommendations published in March 2021

https://www.coalition-s.org/diamond-unearthed-shining-light-on-community-driven-open-access-publishing/

# Supporting researchers in retaining their rights and sharing their publications

France do also support the Coalition S Rights retention strategy - https://www.coalition-s.org/rights-retention-strategy/

The French National Funding Agency – ANR – is currently working on the implementation



RESEARCH PROJECTS'
ACTORS

PUBLIC AND PRIVATE INSTITUTIONS

JOURNALISTS







ANR's role in research

Calls for proposals

Funded projects and Impact

Investments for the Future

News

Contact

03/04/2021

### Open Science: ANR prepares for implementation of the Rights Retention Strategy initiated by cOAlition S



The French National Research Agency (ANR) is pursuing its policy of free access to publications through the adoption and imminent implementation of the Rights Retention Strategy "Rights Retention Strategy" established by coalition S, a European initiative of which it is a partner. This strategy represents a new step in the implementation of Plan S, which aims to ensure full and immediate access to scientific publications from publicly funded research. It must allow open access, without embargoes, to scientific publications through the use of the Creative Commons CC-BY license.



Conférence « Training Workshop on translatability and Regulatory affairs for



AAPG 2021 : l'ANR reporte la date de clôture de l'appel au 26 avril 2021 à 17h



Appels ANR Flash et RA-Covid-19 : entretien avec Antoine Gessain, président



Pré-annonce : appel à projets « Action-Liban »

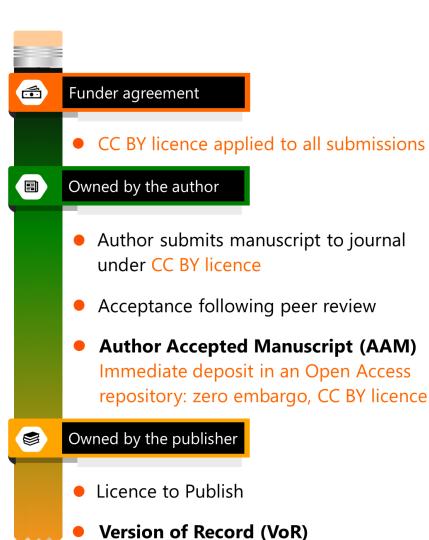
→ See all the news

## Plan S & Rights Retention

#RetainYourRights

www.coalition-s.org/rights-retention-strategy

Helping researchers retain their rights and share their work Open Access



#### **cOAlition S**

Hosted by the European Science Foundation info@coalition-s.org • www.coalition-s.org

## Section 2 - Research Data

- Create the position of National Chief Research Data Officer
- Create a network of Research Data Officers within the research institutions.
- DMPs have to become mandatory
  - http://dmp.opidor.fr
- Implement a certification process for data infrastructures
- Create a simple generic data hosting and dissemination service
- Support the Research Data Alliance (RDA) and fund the French chapter of the organisation (RDA France).
- Support Software Heritage, the source code library.

# An important step ahead the National Plan

The Digital Republic Law - October 2016 (again)

Data: a new *duty* for universities and research performing organizations

Article 6: open data should be the default for all publicly funded data, including research.

# Focus on the ANR Flash call for open science and research data (2019)

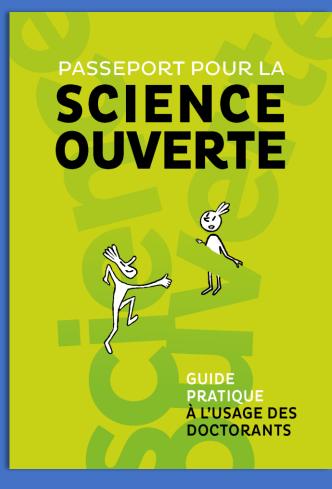
- 2,3M€
- 25 projects selected
- Keywords for funded projects access, interoperability, community engagement, curation, long term preservation, FAIR data.
- https://www.ouvrirlascience.fr/wpcontent/uploads/2019/11/Analyse-des-propositionssoumises-a%CC%80-IAAP-ANR-Flash-Science-ouvertepratiques-de-recherche-et-donne%CC%81es-ouvertes.pdf



## Section 3 – train and transform

- Promote training and online training
  - Research data : https://doranum.fr/
  - Reproducibility of research : https://www.funmooc.fr/courses/course-v1:inria+41016+self-paced/about
  - Training for research data in disciplines, for instance physics and chemistry https://www.datacc.org/
  - ...
- Support the release of open science plans in universities and research institutions
  - CNRS https://www.science-ouverte.cnrs.fr/
  - Paris Saclay University https://www.universite-parissaclay.fr/actualites/encourager-une-science-ouverte-autant-quepossible-ledition-13-juin-2020
  - ...
- And many other initiatives, like the Open Science Passport

# Focus on the open science passport





Préparer

l'après-thèse,

rejoindre le

mouvement

A hit in universities

Une bonne gestion des données est utile pour soi et pour les autres.

Elle permet de retrouver facilement ses données, de les rendre accessibles et réutilisables par d'autres. À l'issue du projet, elle facilite l'archivage et la diffusion des jeux de données.

## Section 4 – building a community

- To embark research communities
- To support and coordinate the initiatives
- To monitor the National Plan fo Open Science
- To prepare guidelines and showcase best practices
- To propose recommandations and help setting directions
- To prepare and make decisions

# OUVRIR LA SCIENCE!

French Open Science Committee

https://www.ouvrirlascience.fr/open-science/

## French Open Science Committee

A - Open Science

Steering committee

B - Open science Executive board

C- Open Science working groups

D - Online Open Science Forum

80 people

300 people

# A few recent publicly accessible reports or initiatives....



#### STUDIES & REPORTS

The report presents a state of the art of translation technologies, best practices in their use and possible courses of action to take to optimise the translation process of scientific production. This would thus promote access in societies in non-English-speaking countries to knowledge resulting from research which is one of the fundamental principles of open science.



#### **COMMITTEE NOTES**

from research must take into account its specificities, linked to its hybrid nature: tool, result and object of study. The Free Software and Open Source Project Group proposes working axes and recommendations, including archiving and referencing, citation, contribution, long term preservation and metadata.



#### **COMMITTEE NOTES**

The Open Science Committee makes general and specific recommendations for each of the 10 points of Plan S to guide the French National Research Agency (ANR) in the implementation of the Plan.





#### **ETUDES & RAPPORTS**

Le document présente et évalue différents scénarios et niveaux d'ambition fonctionnels relatifs à la création d'un service générique d'accueil et de diffusion des données simples. Il propose différentes modalités d'implémentation qui sont présentées au travers de deux parcours utilisateurs : celui d'un producteur de données et celui d'un réutilisateur de données.





#### The French Open Science Monitor

#### An open monitor for open science

The French Open Science Monitor aims at measuring progress in open access to scientific resources: publications, code, data. Its implementation is part of the French National Plan for Open Science and the Action Plan for France as part of the Open Government Partnership (OGP). First published by the French Ministry of Higher Education, Research and Innovation in 2019, it focuses to date only on scientific publications.

Unlike the European Commission's Open Science Monitor, the French Open Science Monitor is built from open data (from Unpaywall, a global database of metadata on scientific publications that provides information on the openness status of publications) using an open methodology. Thus, the data underlying the French Open Science Monitor is made available under an open license, its code is open and its methodology is presented in detail in a publication itself in open access.

#### The French Open Science Monitor

https://bso.enseignementsup-recherche.gouv.fr https://ministeresuprecherche.github.io/bso/

#### Open Data and API

https://data.enseignementsup-recherche.gouv.fr/explore/dataset/open-access-monitor-france

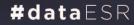
#### **Open Code**

https://github.com/MinistereSupRecherche/bso

#### Methodology

https://hal.archives-ouvertes.fr/hal-02141819v1

Contact: dataesr@recherche.gouv.fr



# ... and much more confidential ones, for internal decision making

... and a lot more

- Models of contracts for authors https://www.ouvrirlascience.fr/des-modeles-de-contrat-pourledition-publique/
- Recommendations to create and publish a scientific journal https://halshs.archives-ouvertes.fr/hal-01960919v2
- Recommendations to journals for a data policy -<u>https://www.ouvrirlascience.fr/politique-de-donnees-liees-aux-publications-recommandations-aux-revues/</u>
- Comments on the UNESCO draft regarding an Open Science recommendation https://www.ouvrirlascience.fr/commentaires-de-la-france-surlavant-projet-de-recommandation-de-lunesco-sur-la-scienceouverte/
- Call to strenghen the network of French experts regarding Open Science - <a href="https://www.ouvrirlascience.fr/ami-reseau-experts-internationaux-de-la-science-ouverte/">https://www.ouvrirlascience.fr/ami-reseau-experts-internationaux-de-la-science-ouverte/</a>

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Co-chair of the European and international college, French national Committee for Open Science. <a href="https://www.ouvrirlascience.fr">https://www.ouvrirlascience.fr</a>

LIBER Vice-president – Association of European research libraries. <a href="https://libereurope.eu/">https://libereurope.eu/</a>