The French Plan for Open Science

Open Education Leadership Summit

Paris, December 3-4, 2018
“Open science seeks to create an ecosystem in which scientific research is more cumulative, better supported by data and more transparent with faster and more universal access to results.”
Context: Amsterdam call for action on open science - 2016
Key principles

Knowledge that is kept locked up is sterile knowledge

Open science is not a fashion, it is not a discipline, it is a paradigm.

It thus involves new practices and new skills.
For publications...

We need more bibliodiversity

Move towards greater diversity and balance in the editorial landscape.
Strong support to...

Jussieu Call
for Open science and bibliodiversity

www.jussieucall.org
For data…

Data can serve as an educational tool, a scientific substrate and a catalyst for innovation.

Objective: structure and preserve the data, prior to making them freely available.

As open as possible…

…as closed as necessary
For science...

Making France an open science country means:
• transforming scientific practices so that they integrate and adopt open science on a routine basis
• contributing to the structuring of the international open science landscape.

Take into account disciplinary specificities
3 commitments:

1. generalize open access to publications

2. structure research data and make it available through open access

3. be part of sustainable European and international open science dynamics
First commitment: generalize open access to publications
Roadmap

1. Make open access **mandatory** when publishing articles and books resulting from government-funded calls for projects. Example: ANR.

2. Create an **Open Science fund**.

3. Support the **HAL** national open repository and simplify the publication filing procedures for researchers who publish through open access platforms around the world.
The Open Science Fund

• Initial budget by the Ministry of Research, then should be funded by savings on big deals.
• Investing in open publishing systems that remain under the control of the scientific community.
• In line with the Appel de Jussieu.
• CURIF (Conférence des universités de recherche intensive, cf LERU) has also announced the creation of such an Open Science Fund.
Implementation: ANR policy

Explicit reference to open access in the 2019 action plan (26 July 2018)

“ANR requires that the full text publications resulting from projects that it finances be deposited in open access either directly in HAL or via a local institutional archive”

http://www.agence-nationale-recherche.fr/PA2019
Strong support to:

• San Francisco Declaration on Research Assessment (DORA)
  • Since July 2018, the majority of French research organizations have decided to sign DORA: INSERM, CNRS, ANR, INRA, etc.

• The Leiden Manifesto for research metrics
• Initiative for Open Citations
• S plan
Second commitment: structure research data and make it available through open access

“Research data are the raw materials of knowledge. Sharing them means opening new scientific perspectives”
Roadmap

4. Make open access dissemination **mandatory** for research data resulting from government-funded projects.

5. Create the post of **Chief Data Officer** and the corresponding network within the relevant institutions.

6. Create the conditions for and promote the adoption of an **Open Data policy for articles** published by researchers.
Third commitment: be part of a sustainable European and international open science dynamic

“France is committed to making open science a normal, everyday practice for researchers”
Roadmap

7. Develop open science skills, especially in postgraduate schools.

8. Encourage universities and research performing organisations to adopt open science policies.

9. Actively contribute to structuring European data in the European Open Science Cloud (EOSC) and by participating in GO FAIR.
What needs to be done to make research more open?

- Open Science Committee
  - 4 groups, 200 experts:
    - Publications
    - Research Data
    - Skills
    - European and International coordination
  - Special interest groups:
    - Developing free and open source software in research
    - Developing bibliodiversity
    - etc...
A general perspective: links with other « open » initiatives
Links with other «open» initiatives

• **Paris OER declaration** (*open education resources*) 2012
  • OER designates “teaching, learning and research materials (...) that (...) have been released under an open license that permits no-cost access, use, adaptation and redistribution by others with no or limited restrictions.”

• **Open Government Partnership**
  • “...brings together government reformers and civil society leaders to create action plans that make governments more inclusive, responsive and accountable.”
  • [www.opengovpartnership.org](http://www.opengovpartnership.org)
Participate in ensuring transparency through the Open Government Partnership (OGP)

- Open research funding data by creating public datasets on
  - costs for electronic acquisition from university libraries and research institutions,
  - article and book publishing charges, and
  - research funding for calls for projects and their beneficiaries.
Underlying issues
1. Publications: a new right for authors

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

2. 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.
A huge potential market

DataSearch

Search for research data across domains and types, from many domain-specific, cross-domain and institutional data repositories.

Or Try: chip-seq drosophila

The New AWS Research Cloud Program: Accelerating Science and Innovation

on 12 DEC 2016 | In Education*, Government* | Permalink | Share

We want to simplify research in the cloud with easy-to-use tools for researchers and research-focused students. We created the AWS Research Cloud Program for researchers working in government and education institutions (as well as their commercial counterparts) in any of the 190 countries around the world where AWS offerings are available.

We’re launching the program first in Europe, with instrumental European institutions, like Jisc and GÉANT, because of its centrality in the world of science as well as to highlight the “research-obsessed” products and services created by many of our partners in that geography. Not only is Europe a hub for many of the world’s research collaborations, it’s also a source of computational tooling and techniques adopted globally. Many of these software tools can be found in the AWS Marketplace (which we extended to European vendors in July of this year), making a group of European science tech firms new global exporters. One example is Alces Flight, which has 1,150 science applications ready-to-run in an HPC cluster environment in minutes.

While research is often a compute-intensive activity, we recognize that most researchers are not IT experts. This is core to the way the AWS Research Cloud Program helps researchers focus on science, rather than servers.

Today is just the start, since the program will grow over time as more and more partner offerings become available and we come up with new services (like the recently previewed AWS Batch, or new EC2 instances) that we’ll want to share with this community.
Intelectual property is key

Will we lose our rights on our data as we have lost our rights on our journals?

Intellectual property for data is in the hands of funders. This is an opportunity.
Infrastructures dedicated to Open Science

- **Huma-Num**: Digital Humanities services. Recherche Isidore. 6000 sources.

- **Collex-Persée**: Open access legacy journals. 300 collections.

- **METOPES**: XML workflow for digital publishing.

- **OpenEdition**: Comprehensive platform for open access academic publishing in HSS: 500 journals, 6000 books, 2700 academic blogs, 40 000 events.

- **HAL**: Centralized, national and multidisciplinary archive. 500 000 documents.

- **Centre Mersenne**: Publishing infrastructure for Mathematics
Thank you!

alain.beretz@unistra.fr
marin.dacos@recherche.gouv.fr

Twitter:
- French: @marindacos
- English: @openmarin