



# Shared or open research data policy Open Source Software policy

Isabelle Blanc, national chief data and software officer

isabelle.blanc@recherche.gouv.fr https://www.linkedin.com/in/isabelleblanccatala/ @AMDAC\_MESR







### Ambition to open up research

Law in a Digital Republic (2016) brought to mind by open science

# Open all research products and methods

- Publications
- Research data
- Source codes and software

For a science fully transparent and accessible to everyone

For a more cumulative, robust and reproducible science

# **Commitments**

Second National Open Science Plan Data policy, algorithms and source codes

Support the structuring, preservation, sharing, and openness of research data discovery

Promote data management practices that are both control and ecologically responsible

Support the opening up and the promotion source code produced by research

Encourage practices for reusing research data and source code

Organize local and thematic initiatives









# Natively design reusable data

#### Scientists work to produce FAIR data, need to describe:

- The origins and transformations of data
- Codification guides
- Models and detailed description of collection, cleaning, analysis methods
- The code specific to an instrument
- Software designed for domain-specific applications

The longer the reuse is from the origin point, in terms of time, research issues, or themes, the more difficult it is to retrieve and interpret data

# Natively design reusable data

#### Scientists work to produce FAIR data, need to describe:

- The origins and transformations of data
- Codification guides
- Models and detailed description of collection, cleaning, analysis methods
- The code specific to an instrument
- Software designed for domain-specific applications

The longer the reuse is from the origin point, in terms of time, research issues, or themes, the more difficult it is to retrieve and interpret data

The person who produced well-described data is the first to benefit from it! Publishing with shared data has a citation rate of + 25% to + 75% Shared data is recognized as a product of research



# Structuring, sharing and opening up research data

4

Implement the obligation to disseminate publicly funded research data

5

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

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

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



# Research data: guides, actions...





https://www.ouvrirlascience.fr/comment-partager-les-donnees-liees-a-vos-publications-scientifiques-un-guide-vous-accompagne/



https://barometredelascienceouverte.esr.gouv.fr/donnees-de-la-recherche/general/

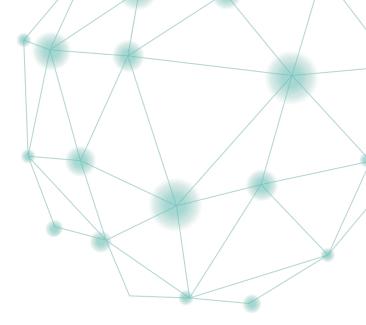


https://www.ouvrirlascience.fr/wpcontent/uploads/2024/03/24-02-22-Donnees-FR-WEB.pdf

# Strategy and objectives

#### **Support**

 Train, support and raise the awareness of research teams throughout the data life cycle



#### A sovereign solution for depositing, publishing and reporting data

- A federated national research data platform: data repositry and data registry
- A complement to thematic repositories
- Ambition to become an integral part of EOSC services, offering access to shared and open research data to support reuse

# An ecosystem for sharing and opening research data

# 4 NATIONAL HIGHER EDUCATION AND RESEARCH ESTABLISHMENTS

Specific support to establishment research orientations

#### 1 DATA REPOSITORY

A mutualised repository for all institutions to deposit and publish data

#### **15+ DATA MANAGEMENT CLUSTERS**

Generalist expertise which is geographically close to the research teams it supports on all data issues

#### **6+ THEMATIC REFERENCE CENTRES**

Expertise in a given scientific field

#### **4 RESOURCE CENTRES**

These support the data management clusters and capitalise on their practices

#### **1 DATA REGISTRY**

These find and harvest data from from external repositories \_\_\_\_







@RechercheDataGv



#### Data management clusters

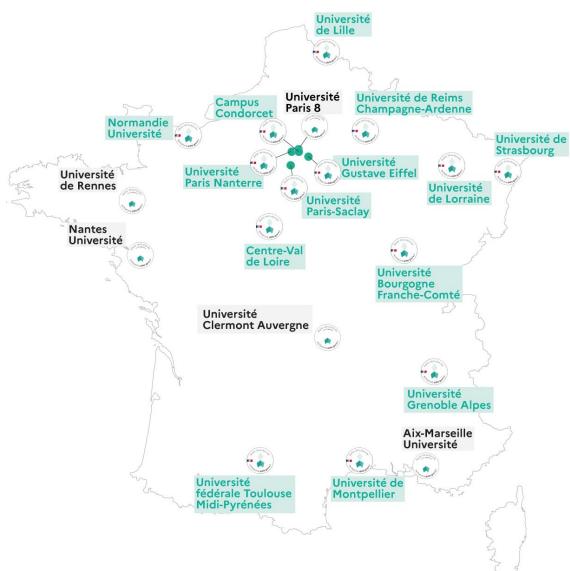


# Generalist expertise which is geographically close to the research teams it supports on all data issues

Shared services and skills for organisations from a given territory

These clusters are progressively developed

- As they are designed by the universities involved
- Following successive calls for expressions of interest





#### Thematic reference centres



#### Expertise in a given scientific field

Definition and dissemination of **best practices and international standards for data management, processing and dissemination** by scientific field

#### The first landscape put forward:

Research infrastructures that structure data management and dissemination for their scientific community















#### Resource centres





# Training and e-training resource centre

■ Recherche Data Gouv

Sharing and certification of **teaching tools** along with the development and provision of **generalist e-training** 



# Shared tools for the clusters resource centre

■ Recherche Data Gouv

Development and maintenance of **shared tools** for the data management clusters



#### Skills

resource centre

Recherche Data Gouv

A system aimed at increasing the skills of the data management clusters



# Repository-registry resource centre

■ Recherche Data Gouv

Development and maintenance of the repository-registory along with user support

Online help 🔻

#### An ecosystem for sharing and opening research data

FEDERATE, SUPPORT, SHARE, OPEN, REUSE

Find a dataset

Find data 🛂

Submit / Publish a dataset da

#### News



Comité de rédaction



Capsule vidéo



Clôture de l'AMI Ateliers de la donnée



# Recherche Data Gouv,

Sylvie Retailleau, Minister of Higher Education and Research, inaugurated, on July 8, 2022 at Paris Cité University, Recherche Data

seen by its ecosystem

Published on mardi 30 août 2022

Gouv, in the presence...

- From 17 octobre 2022
- To 18 octobre 2022

Open Access Month

by the university of Strasbourg

- From 24 octobre 2022
- To 30 octobre 2022

Open Access Week 2022

Open for Climate Justice

Cn 22 novembre 2022

L'Université de Lille engagée dans Recherche Data Gouv

Célébrons ensemble l'engagement de l'université de Lille dans Recherche Data Gouv

#### Le comité de rédaction de Recherche Data Gouv est lancé!

Une nouvelle marche vient d'être gravie : un comité de rédaction Recherche Data Gouv s'est réuni en cette rentrée 2022 en vue de faire vivre le portail...

Published on mardi 04 octobre 2022

#### Capsule Recherche Data Gouy, un projet collectif au service de la science ouverte

[only in french] Nicolas Fressengeas, chargé de mission Science ouverte, Université de Lorraine et Violaine Louvet, directrice de l'UAR GRICAD et...

Published on mardl 27 septembre 2022

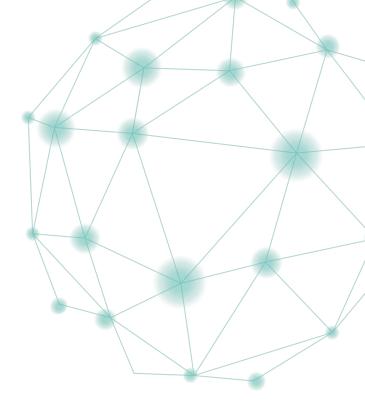
#### Last days to join the ecosystem

Clôture du 2ème appel à manifestation d'intérêt « Atelier de la donnée » de Recherche Data Gouy: nous attendons vos propositions. La...

Published on lundi 12 septembre 2022

### The data repository-registry

- Entrusted to the INRAE which will adapt and mutualise the solution
- 7 partner establishments will develop and maintain this















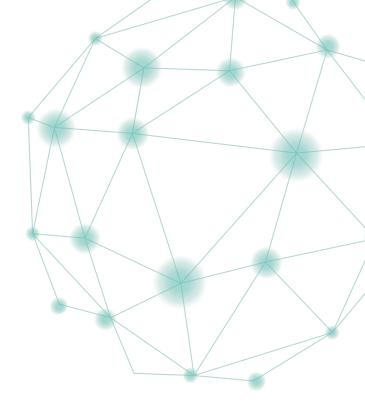














#### Create an institutional space

All higher education or research institutions can ask for an institutional space to be created where it can deposit and publish its research data.

Each institution is responsible for its own space and for curating dataset deposits.

http://recherche.data.gouv.fr/uploads/general/Documents/Demande creation espace institutionnel.pdf



#### Become a data management cluster

To support research teams in the management, structuring and dissemination of their data

https://recherche.data.gouv.fr/fr/actualite/recherche-data-gouv-lance-son-deuxieme-appel-amanifestation-dinteret-ateliers-de-la-donnee-presentez-vos-projets

An open ecosystem constructed by partner establisments for the whole research community



# 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 programs

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 **reproductibility** of scientific results. »

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



#### Define and promote an open source software policy

- Produce a National Charter for Open Source Software coming from higher education, research and innovation
- Develop the link between data and software through a network of Chief Data and software
   Officers in the various universities and research performing organisations
- Develop the economic models of open source software and make them known within commercialization services
- Support Software Heritage and recommend it for the archiving and referencing of source code

#### Build an ecosystem that connects code, data and publications

 Develop proper coordination between software forges, open publication archives, data repositories and the scientific publishing sector





# Thanks!



