



# Data management in European research - from a humanist's perspective



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# EOSC: from vision to reality.



Source: screenshot [from this YouTube video](#).

# EOSC: from vision to reality.



Source: screenshot [from this YouTube](#) video.

"As I see it, European success now lies in sharing as soon as possible, (...). The days of open science have arrived." Speech by Commissioner Carlos Moedas in "Presidency Conference Open Science", Amsterdam, April 4th, 2016

„Our scientists are already beginning to do this. We are creating the European Open Science Cloud. It is a trusted place for researchers to store data and access data from researchers from other disciplines. We are creating a web of information leading to a web of research inside." Ursula van der Leyen, World Economic Forum in Davos, 22 Jan. 2020.



Source: <https://www.eoscportal.eu>



**EUROPEAN OPEN  
SCIENCE CLOUD**

[About](#) [Services & Resources](#) [Policy](#) [EOSC in Practice](#) [Media](#) [For providers](#)



**NETWORKING**



**COMPUTE**



**STORAGE**



**SHARING & DISCOVERY**



**DATA MANAGEMENT**



**PROCESSING & ANALYSIS**



**SECURITY & OPERATIONS**



**TRAINING & SUPPORT**

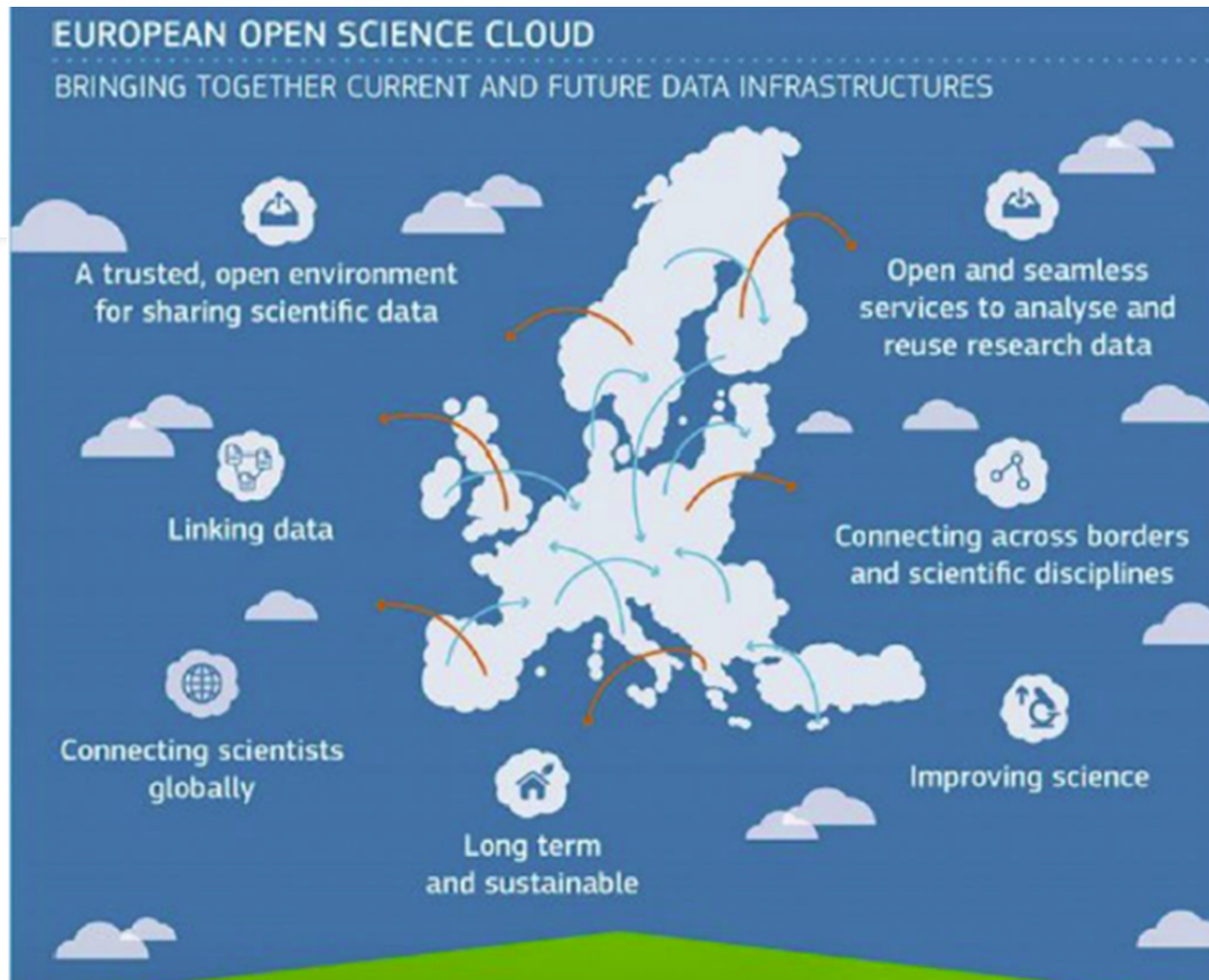




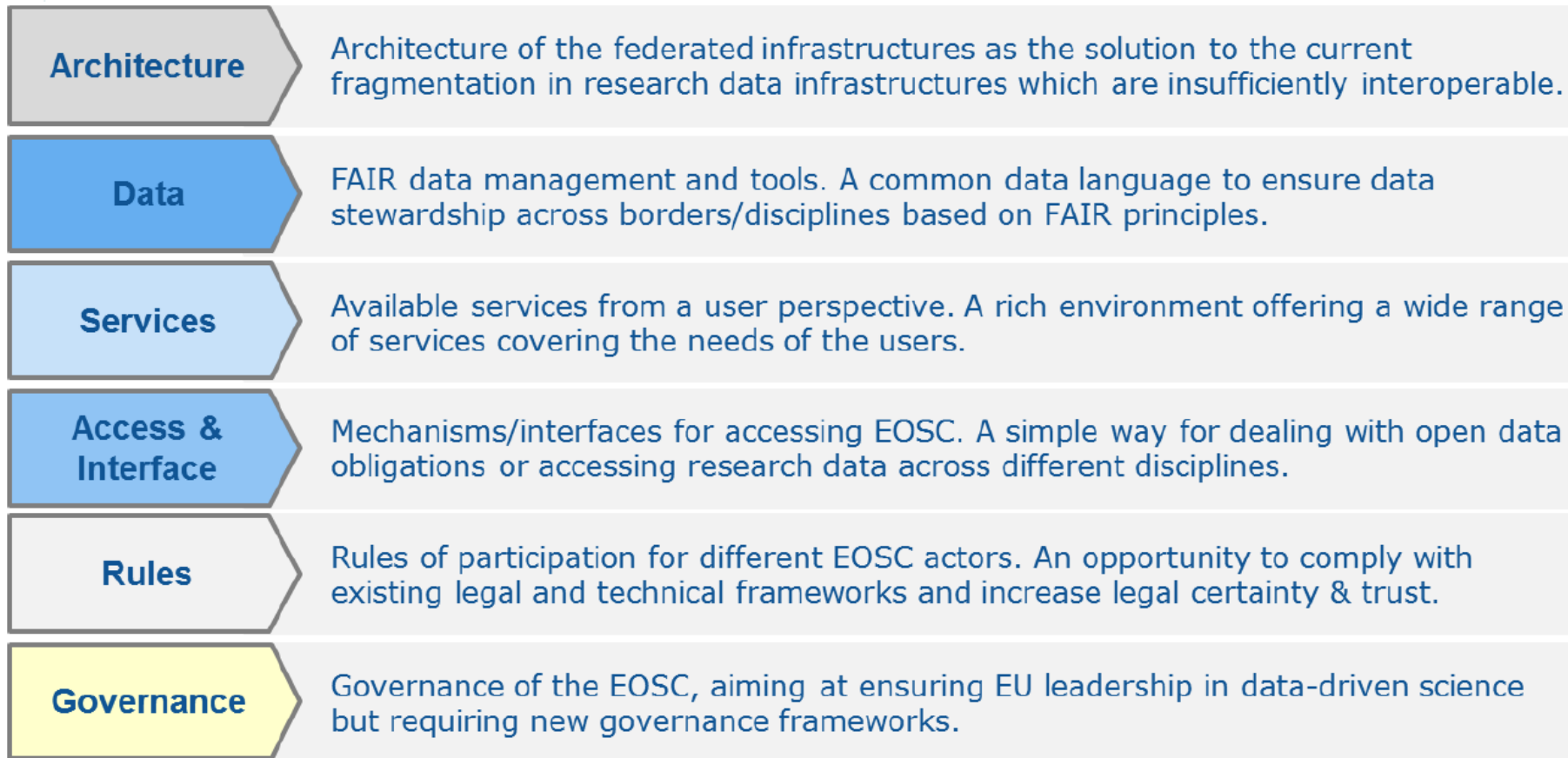
[eosc-portal.eu](https://eosc-portal.eu)

See also:  
[TOP 10 FAIR Data Things: EOSC](#)

[Intro. To the EOSC in the Open Science MOOC by J.C. Burgelman](#)



# The EOSC Implementation Roadmap



# Key pillars of promoting the sharing culture across Europe



**Policy**



**Infrastructure**



**Training, advocacy and guidance**

# Policy



**Catriona M@ccallum** @catmacOA · Feb 13

From 2021, the EC will likely mandate borne OA and Open Data by default - Research Data Management will also be part of grant evaluations. How #openscience gets evaluated will also be evaluated itself Kostas Glinos on yet more progressive measures by @EU\_Commission #whefevents

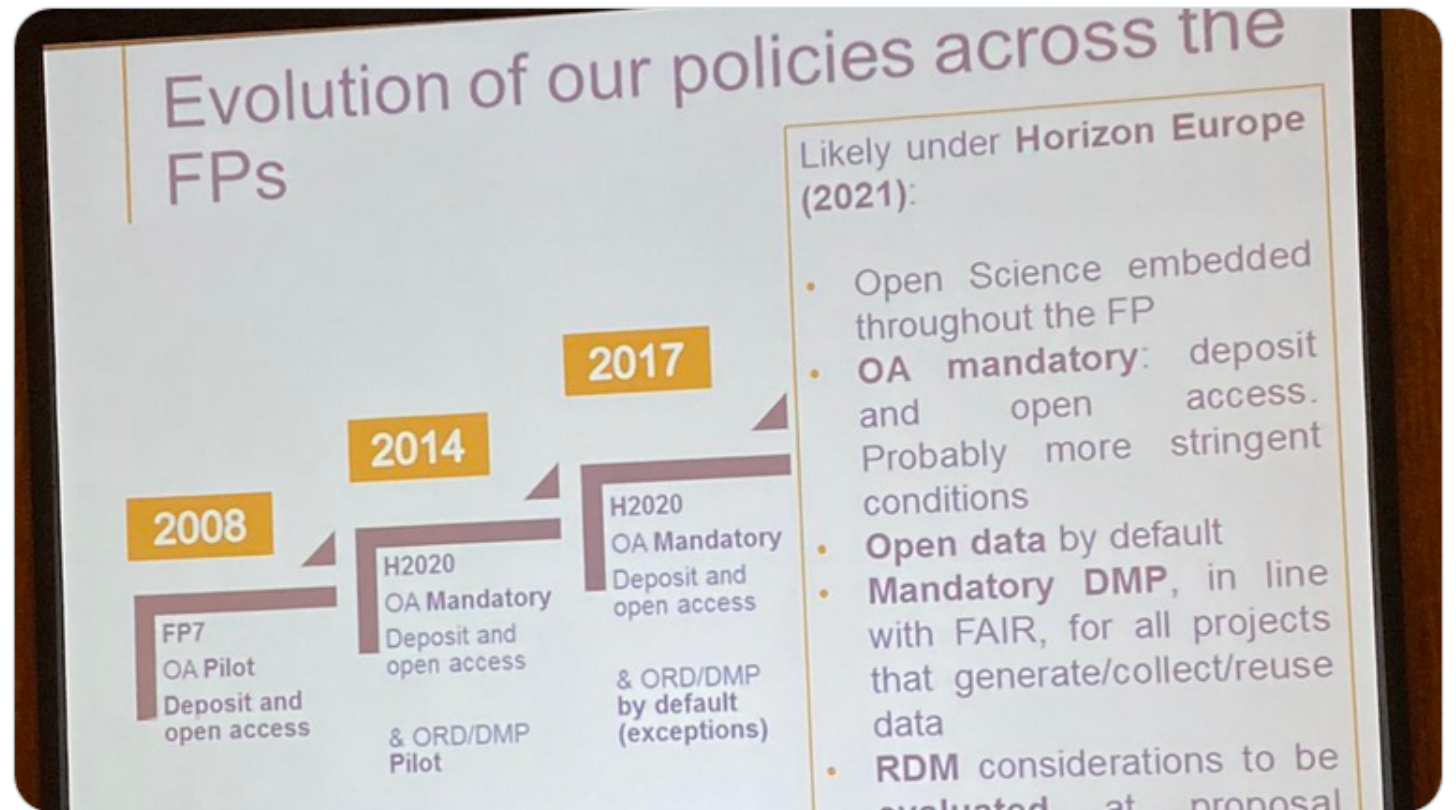


Image source: screenshot of [this tweet](#).



# Infrastructure

Data repository solutions that are inclusive with all disciplines:

(Source: [EUDAT B2SHARE: EUDAT's repository service](#))

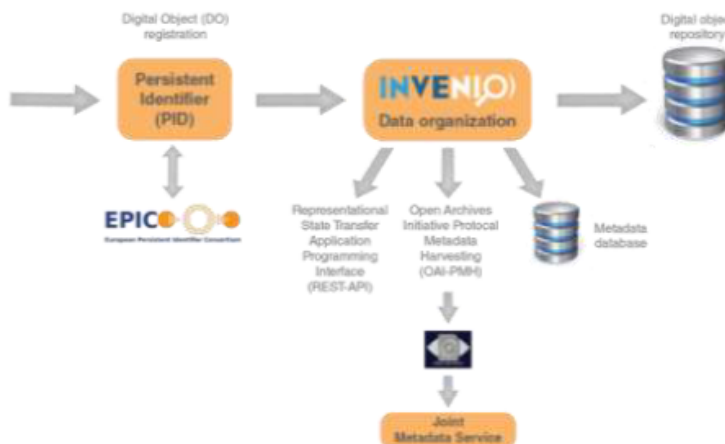
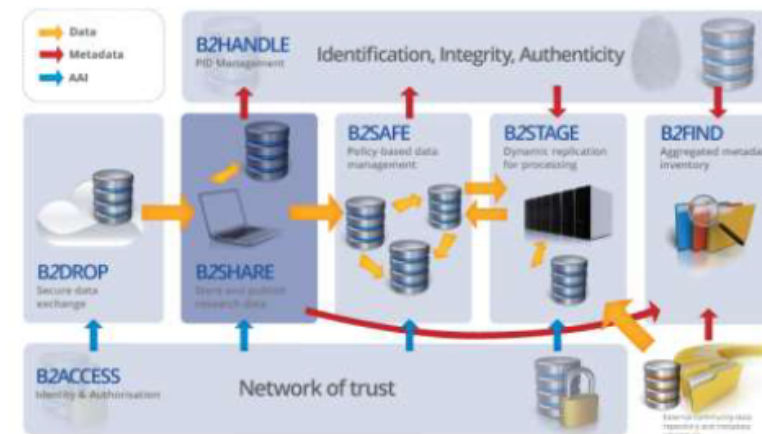


## What is B2SHARE?



A winning solution for **researchers, scientists and communities** to: [b2share.eudat.eu](http://b2share.eudat.eu)

- ◆ **Store data safely** at a trusted and certified data centre
- ◆ **Register data** to guarantee long-term persistence
- ◆ **Publish data** with metadata annotation
- ◆ **Control access** and **share data** with colleagues and the world



## Features

- ◆ Metadata management
- ◆ Persistent identifiers
- ◆ Open Access support

# From language data to insight: the CLARIN use case

The video player displays a slide with a blue background on the left and a white background on the right. The blue section contains three white text blocks: 'PROVIDING EASY ACCESS' (on a yellow background), 'BRIDGING GAPS BETWEEN RESEARCHERS & DATASETS', and 'SUPPLYING POWERFUL PROCESSING TOOLS'. The white section shows a screenshot of the 'EUROPEAN OPEN SCIENCE CLOUD' login page. The page has a header with the logo and text 'EUROPEAN OPEN SCIENCE CLOUD'. Below it is the heading 'CHOOSE YOUR ACADEMIC/SOCIAL ACCOUNT' followed by a grid of login buttons for Ina, DARIAH, eduTEAMS, Check-in, R2ACCESS, Google, IGTF, and ORCID. Below the buttons is a search bar with the text 'Search...' and a list of institutions: A. T. Still University, AAF Virtual Home, AAU@EduHr Single Sign-On Service, Aalborg University, Aalto University, and Aarhus School of Marine and Technical Engineering. At the bottom of the screenshot is a footer with the logo, 'Copyright 2018 - All rights reserved', and 'Privacy Policy'. Below the screenshot, the text 'FEDERATED LOGIN CAN BE USED' is written in blue. At the bottom of the video player, the title 'From language data to insight: the CLARIN use case' is shown, along with '369 views • Nov 23, 2018' and interaction icons for likes (1), comments (0), share, save, and a menu icon.

**PROVIDING EASY ACCESS**

**BRIDGING GAPS BETWEEN RESEARCHERS & DATASETS**

**SUPPLYING POWERFUL PROCESSING TOOLS**

**EUROPEAN OPEN SCIENCE CLOUD**

**CHOOSE YOUR ACADEMIC/SOCIAL ACCOUNT**

ina DARIAH eduTEAMS Check-in  
R2ACCESS Google IGTF ORCID

or

Search...

A. T. Still University  
AAF Virtual Home  
AAU@EduHr Single Sign-On Service  
Aalborg University  
Aalto University  
Aarhus School of Marine and Technical Engineering

**EUROPEAN OPEN SCIENCE CLOUD** Copyright 2018 - All rights reserved Privacy Policy

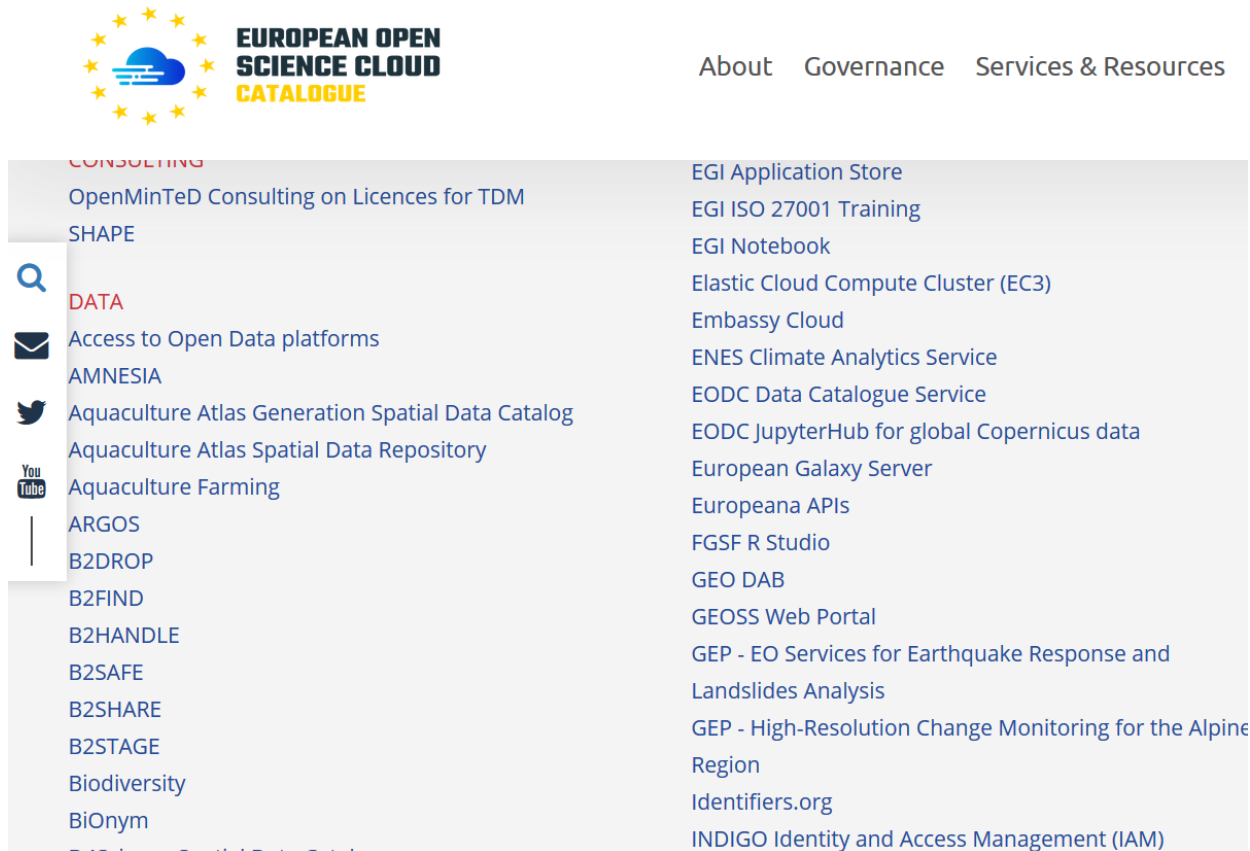
**FEDERATED LOGIN CAN BE USED**

From language data to insight: the CLARIN use case

369 views • Nov 23, 2018

1 0 SHARE SAVE ...

# Repository finder services



EUROPEAN OPEN SCIENCE CLOUD CATALOGUE

About Governance Services & Resources

CONSULTING

- OpenMinTeD Consulting on Licences for TDM

SHAPE

DATA

- Access to Open Data platforms
- AMNESIA
- Aquaculture Atlas Generation Spatial Data Catalog
- Aquaculture Atlas Spatial Data Repository
- Aquaculture Farming
- ARGOS
- B2DROP
- B2FIND
- B2HANDLE
- B2SAFE
- B2SHARE
- B2STAGE
- Biodiversity
- BiOonym
- D4Science Spatial Data Catalog

- EGI Application Store
- EGI ISO 27001 Training
- EGI Notebook
- Elastic Cloud Compute Cluster (EC3)
- Embassy Cloud
- ENES Climate Analytics Service
- EODC Data Catalogue Service
- EODC JupyterHub for global Copernicus data
- European Galaxy Server
- Europeana APIs
- FGSF R Studio
- GEO DAB
- GEOSS Web Portal
- GEP - EO Services for Earthquake Response and Landslides Analysis
- GEP - High-Resolution Change Monitoring for the Alpine Region
- Identifiers.org
- INDIGO Identity and Access Management (IAM)



re3data.org  
REGISTRY OF RESEARCH DATA REPOSITORIES

political sciences Search

About this service Suggest

DARIAH-EU

## Data Deposit Recommendation Service

for humanities researchers

Find a suitable digital repository to deposit your research data or to include in your data management plan by answering the questions below

In which country are you based as a researcher?  
Select one ?

What is your disciplinary field?  
Select one ?

Clear selection

<https://catalogue.eosc-portal.eu/browseCategories>

<https://ddrs-dev.dariah.eu/ddrs/>

# EOSC for research domains: connecting Research Infrastructures to the EOSC



In addition to the national/geographical level of integration, the disciplinary angles are just as important. An example:





# SSHOC

social sciences & humanities open cloud



Horizon 2020  
European Union Funding  
for Research & Innovation

**Type of action & funding:**  
Research and Innovation action  
(INFRAEOSC-04-2018)

**Partners: 44**  
(19 beneficiaries + 25 LTPs)

SSH ESFRI Landmarks and Projects  
& international SSH data infrastructures

**Project budget:**  
€ 14,455,594.08

**Duration: 40 months**  
(January 2019 – 30 April 2022)

**Project website:**  
[www.SSHopencloud.eu](http://www.SSHopencloud.eu)



## Objectives:

- creating the social sciences and humanities (**SSH**) part of European Open Science Cloud (**EOSC**)
- maximising **re-use** through **Open Science** and **FAIR** principles (standards, common catalogue, access control, semantic techniques, training)
- interconnecting existing and new infrastructures (clustered cloud infrastructure)
- establishing appropriate **governance model** for SSH-EOSC

With thanks to Laure Barbot for this slide.

# Expected impact



The Social Sciences and Humanities are seamlessly integrated in the European Open Science Cloud



Availability of an EU-wide, easy-to-use SSH Open Marketplace, where tools and data are openly accessible



EU-wide availability of high quality "cloud ready" SSH tools and high quality SSH data



EU-wide availability of trusted and secure access mechanisms for SSH data, conforming to EU legal requirements



State of the art Research Infrastructure in several pilot domains advanced through dedicated SSH data pilots cluster projects



Maximising reuse through Open Science and FAIR principles (standards, common catalogue, access control, semantic techniques, training)

With thanks to Laure Barbot for this slide.



# Training and advocacy

# Training and advocacy

## Courses

Are you interested in proposing new courses? Get in touch with us at [elarning@fosteropenscience.eu](mailto:elarning@fosteropenscience.eu) and take a look at our course on "how to create a course".



### Introduction to Responsible Research and Innovation

This introductory course will help you to understand what Responsible Research & Innovation (RRI) means, where it has come from, and why it can introduce an important and beneficial shift in...



### Use Open Data in Teaching

In higher education and research, the topics of open science and research data management have gained interest. This module stimulates the use of open research data in teaching, thus f...



### Open Science basics for KU Leuven library staff

In this course for library staff at KU Leuven, participants will be introduced to the basics of Open Science.

After completion of the course, participants



### Assessing the FAIRness of Data

In this course you'll learn how to go about assessing the FAIRness of research data using freely accessible tools and resources. This course will:

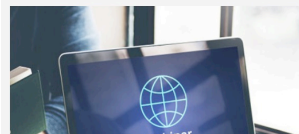
- introduce you ...



## Webinars

Home / Webinars

A series of webinars for information, training and support: free of cost and open to all



## Research data management training materials



Supporting and facilitating your research data management

Looking for training materials on research data management? Check out the [EUDAT training programme](#) and [Research data management open training materials collection](#) curated by Laura Molloy on Zenodo.

**EUDAT training programme:** The EUDAT collaborative data infrastructure is a European e-infrastructure of integrated data services and resources to support the full research data life cycle, covering both access and deposit, from informal data sharing to long-term archiving, and addressing identification, discoverability and computability of both long-tail and big data. The EUDAT training programme helps research communities, individual researchers and scientists, as well as system administrators, infrastructures and data centers, to fully exploit these services and understand how to benefit from them. The training includes [workshops](#) and online materials for self-study, which range from [slide decks](#) to [eTraining materials on GitHub](#). Webinars are another popular channel, and EUDAT is very pleased to continue the series of [joint OpenAIRE-EUDAT webinars](#) that we started last year. Interested in a EUDAT workshop for your research community? Contact [EUDAT@infodivision.eu](#)



GO FAIR at the Open Science FAIR

## "CO-OPERAS" Implementation Network wins best poster during the EOSC-hub Week 2019

POSTED ON 23 APRIL 2019

Congratulations to Elena Giglia, Head of the Open Access Office at the...

[READ MORE](#)



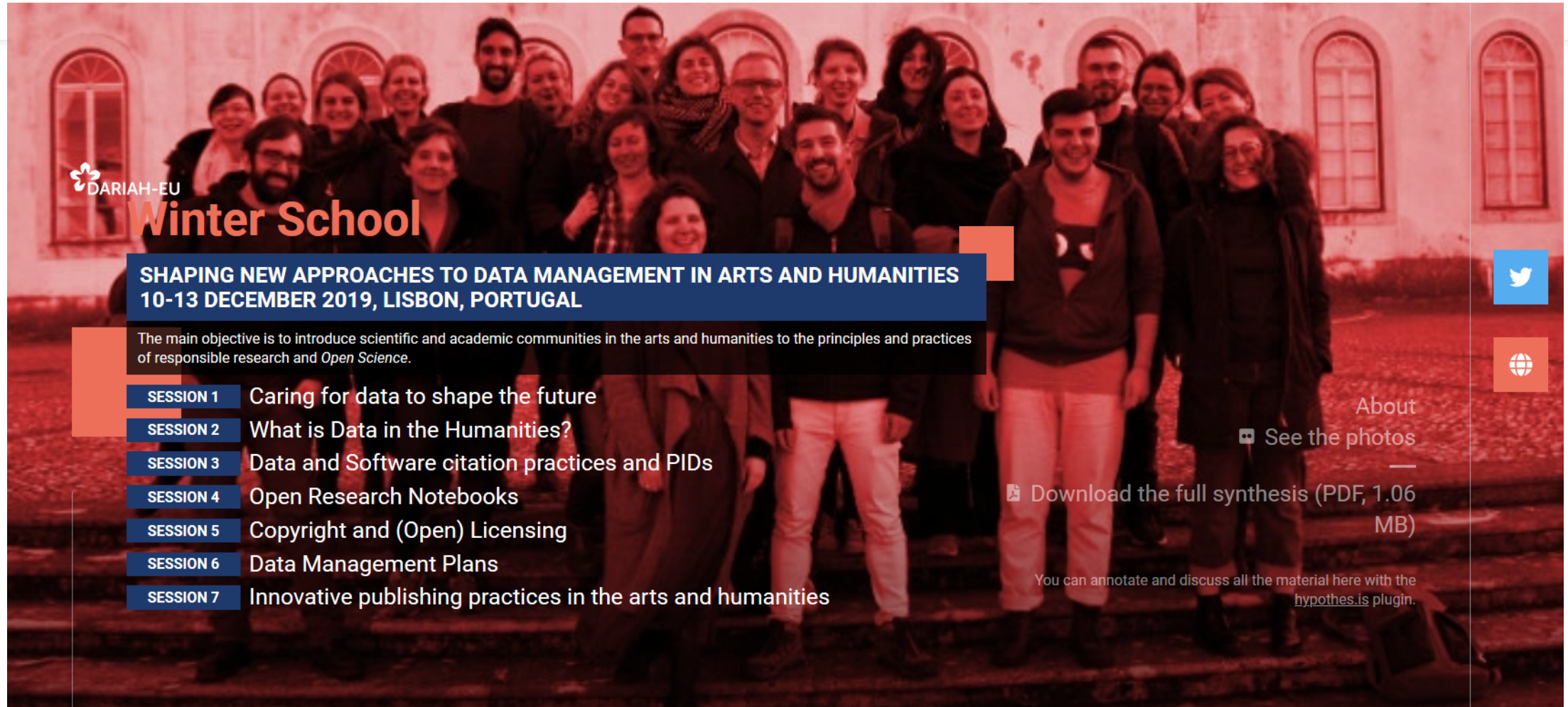
# Data management advocacy at DARIAH

- Beyond and above FAIR
- Addressing disciplinary needs
- Critical assesement of the landscape: what is missing?
- Being responsive to EU data policies
- The Heritage Data Reuse Charter
- DARIAH Research Data Management WG

The screenshot shows the DARIAH-CAMPUS website header with navigation links: Resources, Topics, Sources, Course Registry, About, and a Contact button. The main title is "DARIAH Pathfinder to Data Management Best Practices in the Humanities". It is written by Erzsébet Tóth-Czifra on May 03 2019, with a source of "DARIAH Pathfinders, DARIAH" and topics of "Data management". Below the title is a teal graphic with silhouettes of people and various data management icons. The first section is titled "1. Why research data management?" and begins with the text: "Systematically planning how you will collect, document, organize, manage, share and preserve your data has many benefits. It helps to build a common framework of understanding with your". To the right is a "TABLE OF CONTENTS" with the following items:

- 1. Why research data management?
- 2. Data in the Humanities
- 3. The devil is in the context: a processual view on data curation
- 4. Sharing your data
  - 4.1. Cite to be cited!
  - 4.2. Be aware of your licensing options
  - 4.3. A case study: different levels of being an open scholar
- 5. A recipe for your research project: the Data Management Plan
- 6. Data in publications and data as publications

# Shaping new approaches to data management in arts and humanities



**DARIAH-EU**  
**Winter School**



**SHAPING NEW APPROACHES TO DATA MANAGEMENT IN ARTS AND HUMANITIES**  
**10-13 DECEMBER 2019, LISBON, PORTUGAL**

The main objective is to introduce scientific and academic communities in the arts and humanities to the principles and practices of responsible research and *Open Science*.

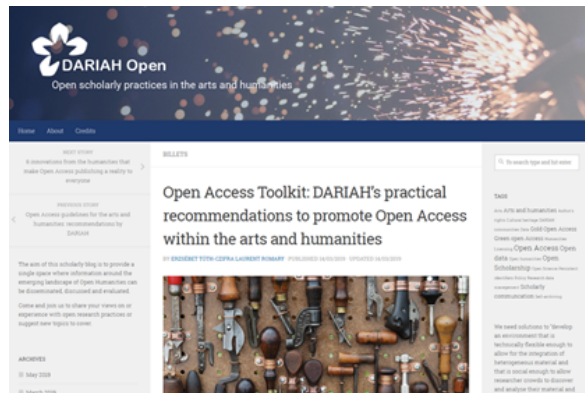
- SESSION 1** Caring for data to shape the future
- SESSION 2** What is Data in the Humanities?
- SESSION 3** Data and Software citation practices and PIDs
- SESSION 4** Open Research Notebooks
- SESSION 5** Copyright and (Open) Licensing
- SESSION 6** Data Management Plans
- SESSION 7** Innovative publishing practices in the arts and humanities

About  
See the photos  
Download the full synthesis (PDF, 1.06 MB)

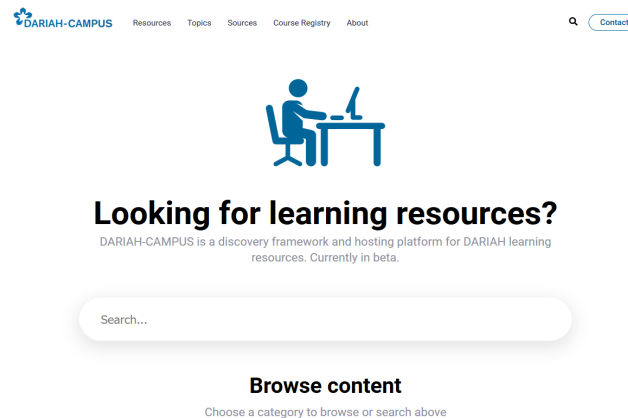
You can annotate and discuss all the material here with the [hypothes.is](#) plugin.

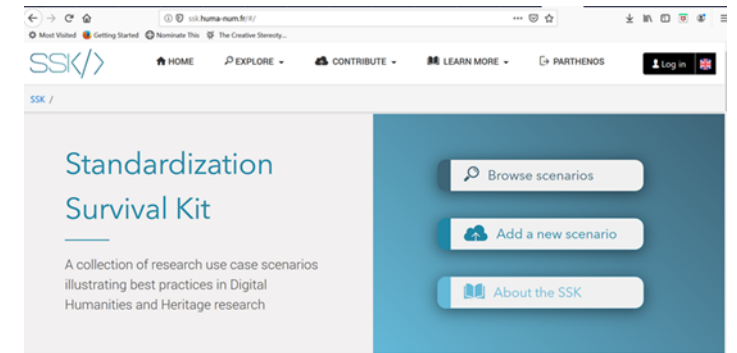
# Ready, set, explore, reuse!



DARIAH Open blog  
<https://openmethods.dariah.eu/>



DARIAH Campus  
<https://campus.dariah.eu/>



The Standardization Survival Kit  
<http://ssk.huma-num.fr/#/>