Swiss National
Science Foundation

SNSF OPEN RESEARCH DATA POLICY

OVERVIEW AND FIRST EXPERIENCES

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12 July 2022

UZH Open Science Summer School

SNSF Open Research Data policy

Implementation of the ORD policy in October 2017

Policy statement

The SNSF values research data sharing as a fundamental contribution to the impact, transparency and reproducibility of scientific research. In addition to being carefully curated and stored, the SNSF believes research data should be shared as openly as possible.

Funding Regulations Article 47b

«data collected with the aid of an SNSF grant must be made available to other researchers and integrated into recognized scientific data pools»

SNSF Open Research Data policy

The SNSF ORD policy is essentially based on three main pillars:

- A data management plan (DMP) that requires researchers to describe how data will be generated or collected, stored and shared.
- Requirements for data repositories that must comply with the FAIR data principles. The SNSF grants a maximum budget of CHF 10'000 (or more if justified) for the costs related to data preparation and data archiving in data repositories that comply with FAIR data and are not commercial.
- Data needs to be shared no later than the time of the corresponding publication, as long as there are no legal, ethical, copyright or other clauses that prevent this ("as open as possible, as closed as necessary")

Data Management Plan (DMP)

- The submission of a DMP is a formal requirement
- DMPs are not part of the review process (no access for external reviewers).
- At project submission, DMPs are considered as drafts but a “plausible” DMP is a condition for the release of funds.
- DMPs are editable (at any time during the funding period) and the final version has to be submitted at the end of the project grant.

Data Management Plan (DMP)

Data collection and documentation

- ☑ 1.1 What data will you collect, observe, generate or reuse?
- ☑ 1.2 How will the data be collected, observed or generated?
- ☑ 1.3 What documentation and metadata will you provide with the data?

Ethics, legal and security issues

- ☑ 2.1 How will ethical issues be addressed and handled?
- ☑ 2.2 How will data access and security be managed?
- ☑ 2.3 How will you handle copyright and Intellectual Property Rights issues?

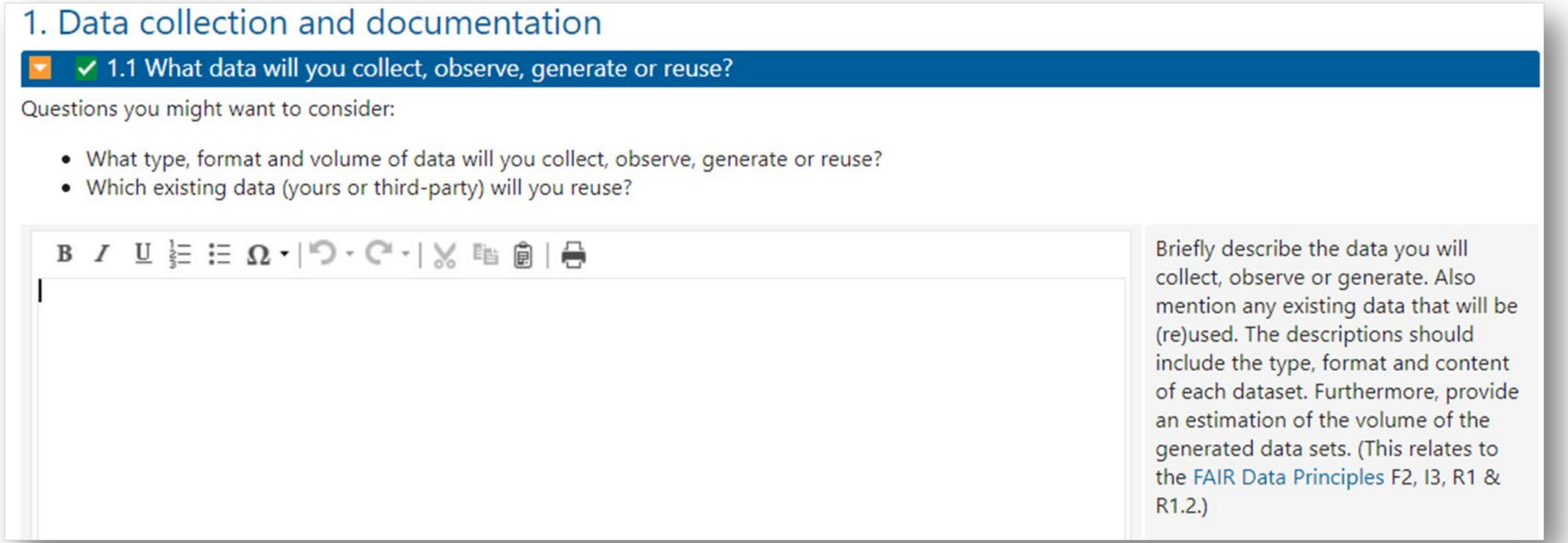
Data storage and preservation

- ☑ 3.1 How will your data be stored and backed-up during the research?
- ☑ 3.2 What is your data preservation plan?

Data sharing and reuse

- ☑ 4.1 How and where will the data be shared?
- ☑ 4.2 Are there any necessary limitations to protect sensitive data?
- ☑ 4.3 All digital repositories I will choose are conform to the FAIR Data Principles.
- ☑ 4.4 I will choose digital repositories maintained by a non-profit organisation.

Data Management Plan (DMP)



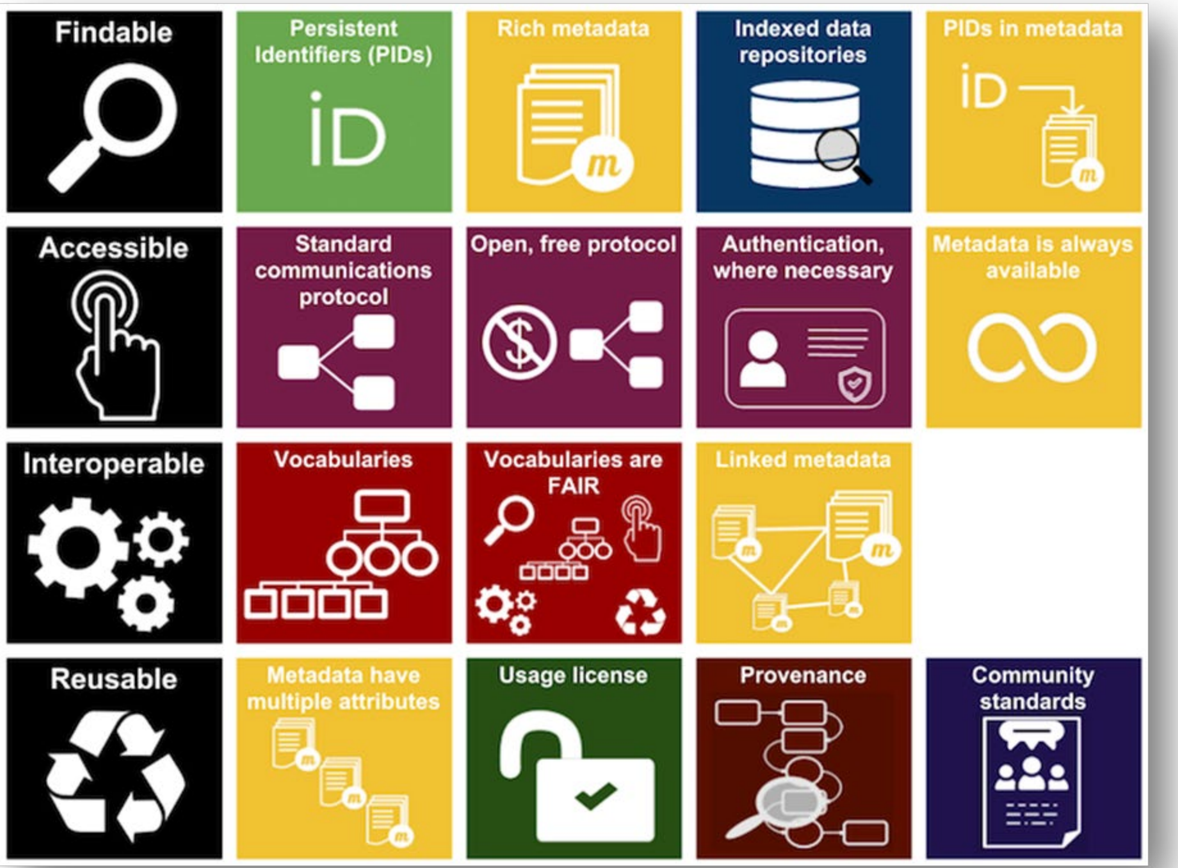
Data sharing - Principles

- SNSF expects data of a publication to be shared.
- Data needs to be shared as soon as possible on a data repository, but at the latest at the time of publication of the respective scientific output.
- Additional data can be shared if the researcher wishes to do so.
- Repositories need to be digital and conform to the FAIR data principles.

Cost contributions

- A maximal cost contribution of CHF 10'000 per grant is installed for:
  - data archiving costs (“data publishing charges”) and
  - related data preparation costs (prior to and for upload only)
- Data archiving costs are not paid if the data repository is commercial.
- The SNSF contributes to these archiving costs only on the basis of a one-time payment at the time of data upload on the repository. The SNSF does not cover any subsequent costs.
- Cost contribution can be exceeded, if justified.

FAIR Data Principles



Source: https://www.ands.org.au/working-with-data/fairdata/training

FAIR Data Principles – SNSF “light version”

- Globally unique and persistent identifiers for data (e.g. DOI, ARK, etc.)
- Upload of descriptive and project-specific metadata
- Data license (e.g. creative commons, open data commons, etc.)
- Metadata publicly accessible even in the case of datasets with restricted access
- Structured and machine-readable metadata
- Long-term preservation plan for data

SNSF Monitoring report

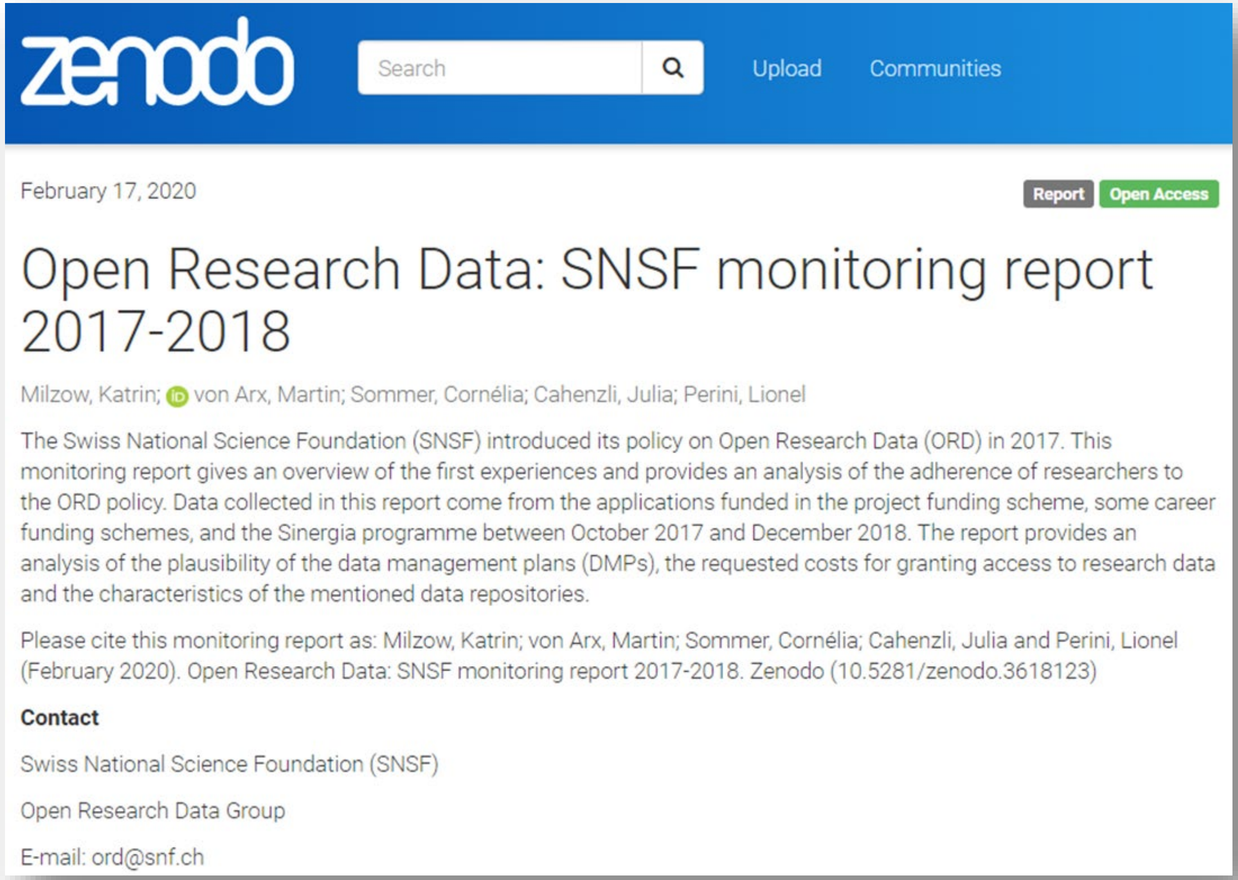
Report 2017-2018

Data collected (N=1’516) from funded applications:

- Project funding scheme (N=1’270)
- Career funding scheme (N=188)
- Sinergia (N=58)

Aims:

- DMP acceptance rates and reasons for rejection
- Repositories



February 17, 2020

Report Open Access

Open Research Data: SNSF monitoring report 2017-2018

Milzow, Katrin; von Arx, Martin; Sommer, Cornélia; Cahenzli, Julia; Perini, Lionel

The Swiss National Science Foundation (SNSF) introduced its policy on Open Research Data (ORD) in 2017. This monitoring report gives an overview of the first experiences and provides an analysis of the adherence of researchers to the ORD policy. Data collected in this report come from the applications funded in the project funding scheme, some career funding schemes, and the Sinergia programme between October 2017 and December 2018. The report provides an analysis of the plausibility of the data management plans (DMPs), the requested costs for granting access to research data and the characteristics of the mentioned data repositories.

Please cite this monitoring report as: Milzow, Katrin; von Arx, Martin; Sommer, Cornélia; Cahenzli, Julia and Perini, Lionel (February 2020). Open Research Data: SNSF monitoring report 2017-2018. Zenodo (10.5281/zenodo.3618123)

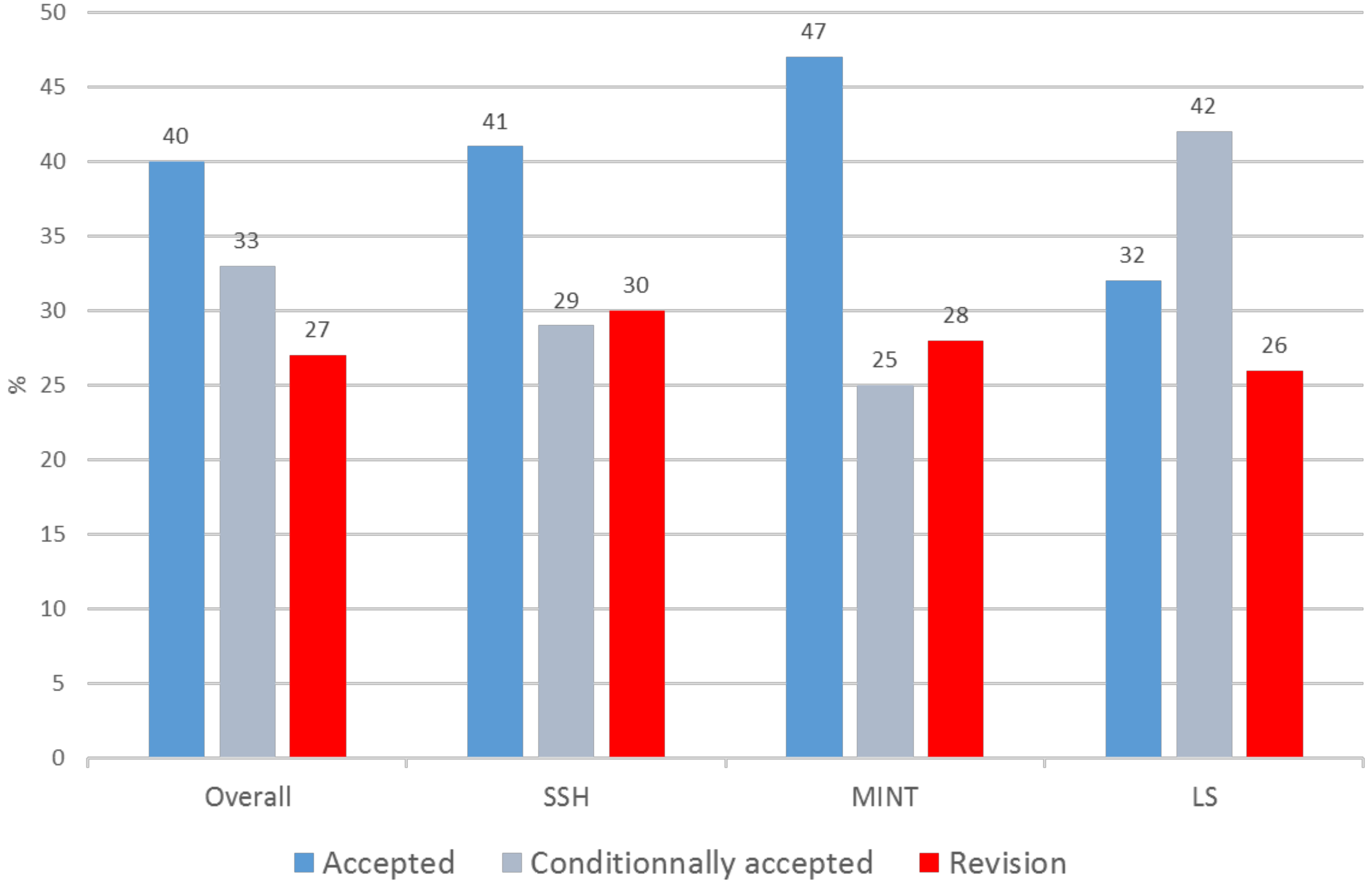
Contact

Swiss National Science Foundation (SNSF)

Open Research Data Group

E-mail: ord@snf.ch

DMP – Acceptance rate



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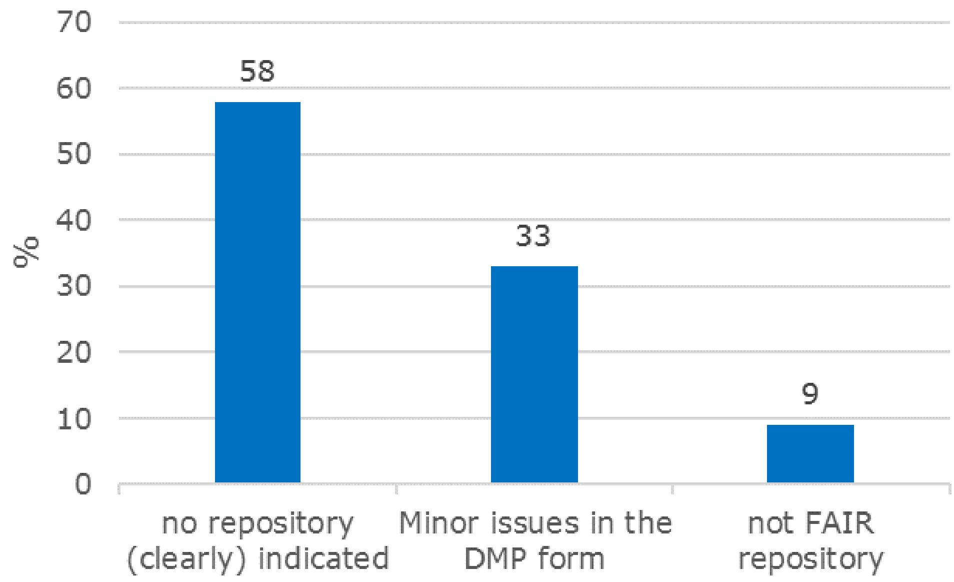
DMP – Reasons for comments

DMP conditionally accepted

- No repository clearly indicated
- Minor issues
- Data repository not FAIR

=> can be updated by the end of project



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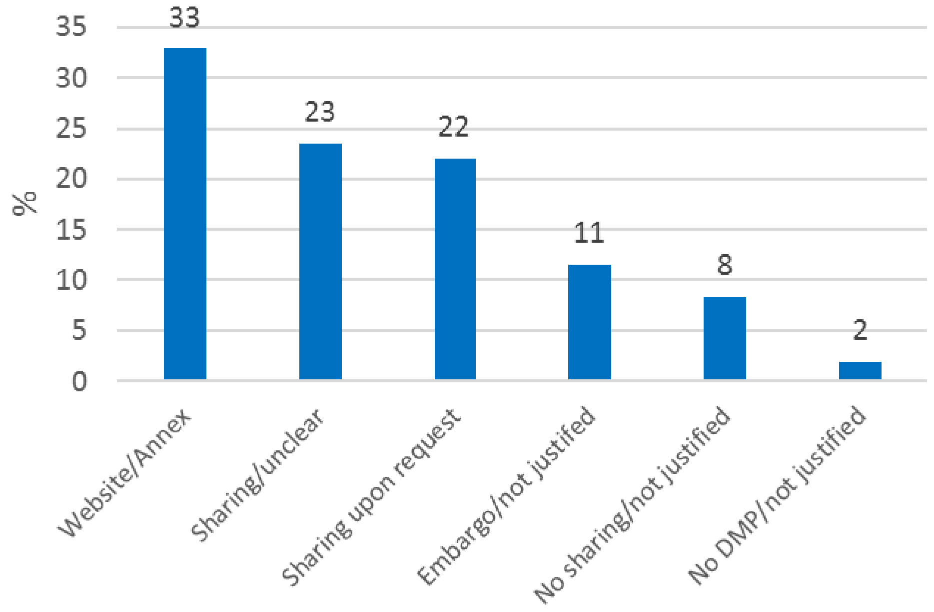
DMP – Reasons for comments

DMP revision

- Publish data on website/annex to publications
- Sharing but confounding information
- Sharing upon request (e.g by e-mail)
- Sharing with embargo without explanation
- No sharing without explanation
- No DMP submitted but project generates data

=> to be updated before start of project



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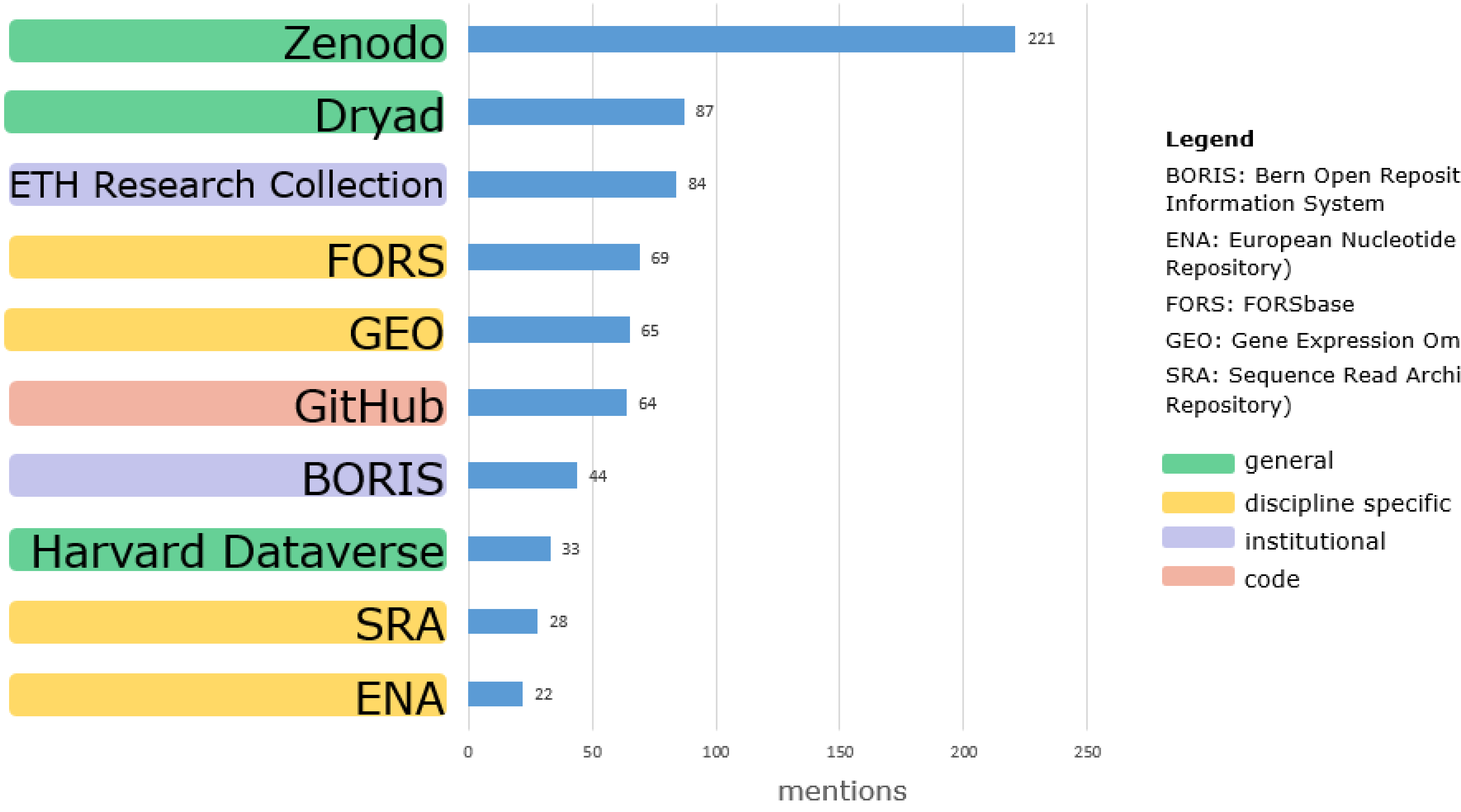
Repositories – Top 10 across disciplines



Legend

BORIS: Bern Open Repository and Information System

ENA: European Nucleotide Archive (NCBI Repository)

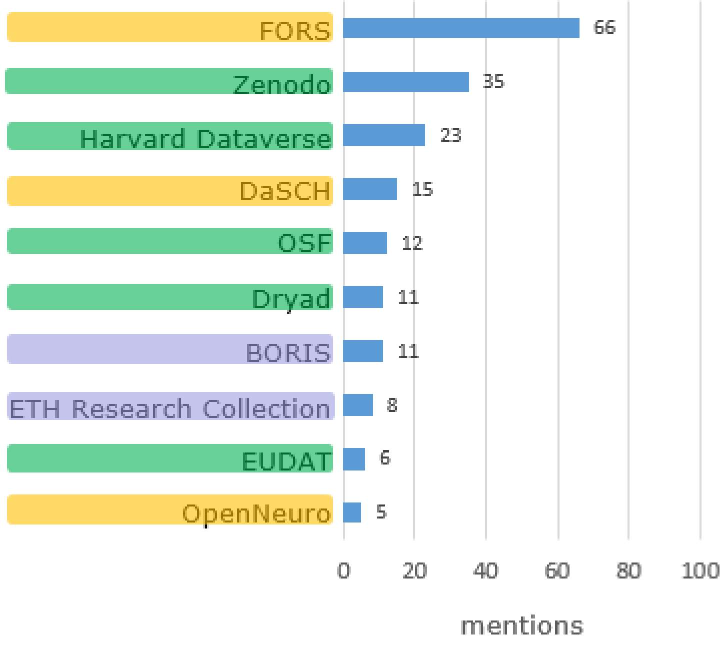
FORS: FORSbase

GEO: Gene Expression Omnibus

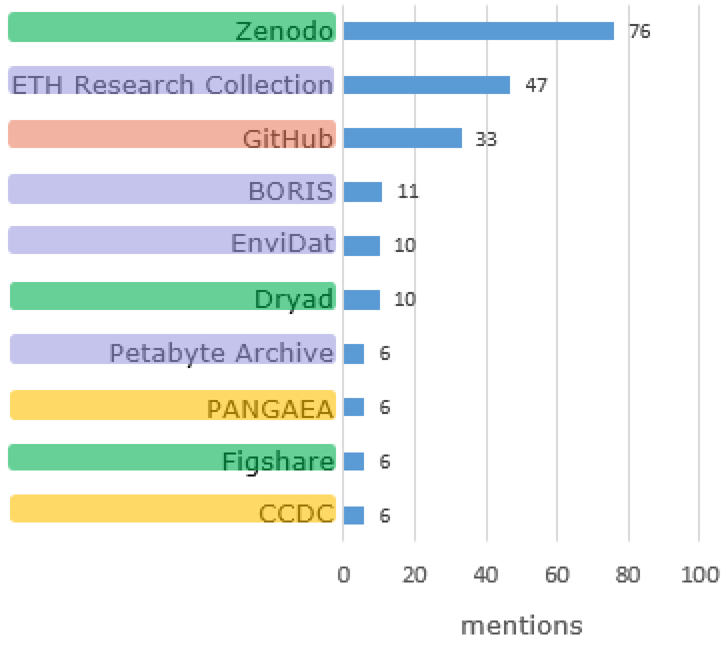
SRA: Sequence Read Archive (NCBI Repository)

Repositories – Top 10 – discipline-specific

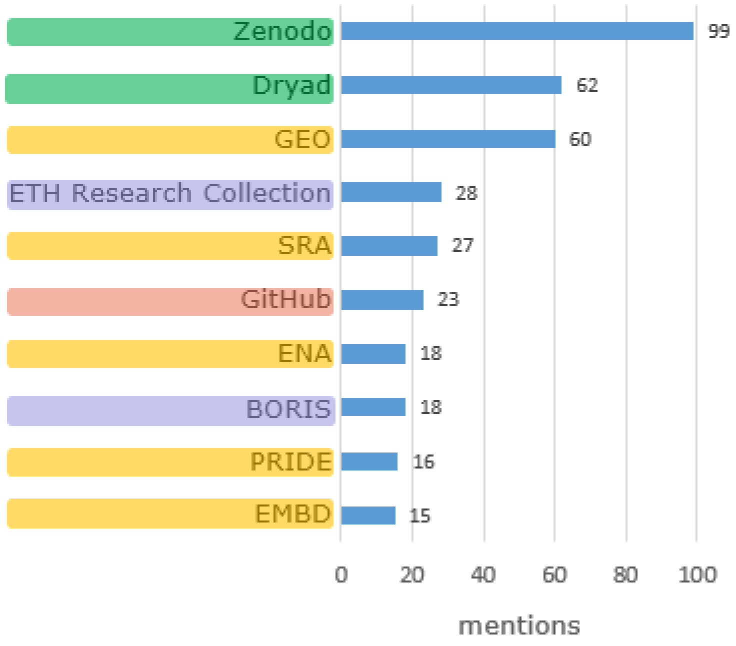
SSH



MINT



LS



general
disc.-specific
institutional
code

BORIS: Bern Open Repository and Information System
CCDC: Cambridge Crystallographic Data Centre
DaSCH: Data and Service Center for the Humanities
EMBD: Electron Microscopy Data Bank
ENA: European Nucleotide Archive
FORS: FORSbase
GEO: Gene Expression Omnibus (NCBI database)
OSF: Open Science Framework
OpenNeuro: formerly OpenfMRI
Petabyte Archive: Petabyte Archive Paul Scherrer Institute
PRIDE: PRoteomics IDEntifications Database
SRA: Sequence Read Archive (NCBI database)

Examples of data repositories

Generalist data repositories

Repository	Description	Re3data entry
Dryad	Generalist data repository	https://www.re3data.org/repository/r3d100000044
European Data Infrastructure (EUDAT)	Generalist data repository	https://www.re3data.org/repository/r3d100011395
Figshare*	Generalist data repository	https://www.re3data.org/repository/r3d100010066
GitHub**	Generalist code development platform	https://www.re3data.org/repository/r3d100010375
Open Science Framework (OSF)	Generalist data repository	https://www.re3data.org/repository/r3d100011137
Zenodo	Generalist data repository	https://www.re3data.org/repository/r3d100010468

* As Figshare is a commercial entity, the SNSF allows the researchers to archive their data on this data repository but does not cover the potential data archiving costs (see art. 2.13 of the General implementation regulations for the Funding Regulations).

** Github is a commercial platform that is well-suited to code development, but it is not a data archiving tool. Therefore, a copy of the code has to be archived in a data repository. For instance, you can set up a connection between Zenodo and Github to ensure a permanent record of your code and make it citable.

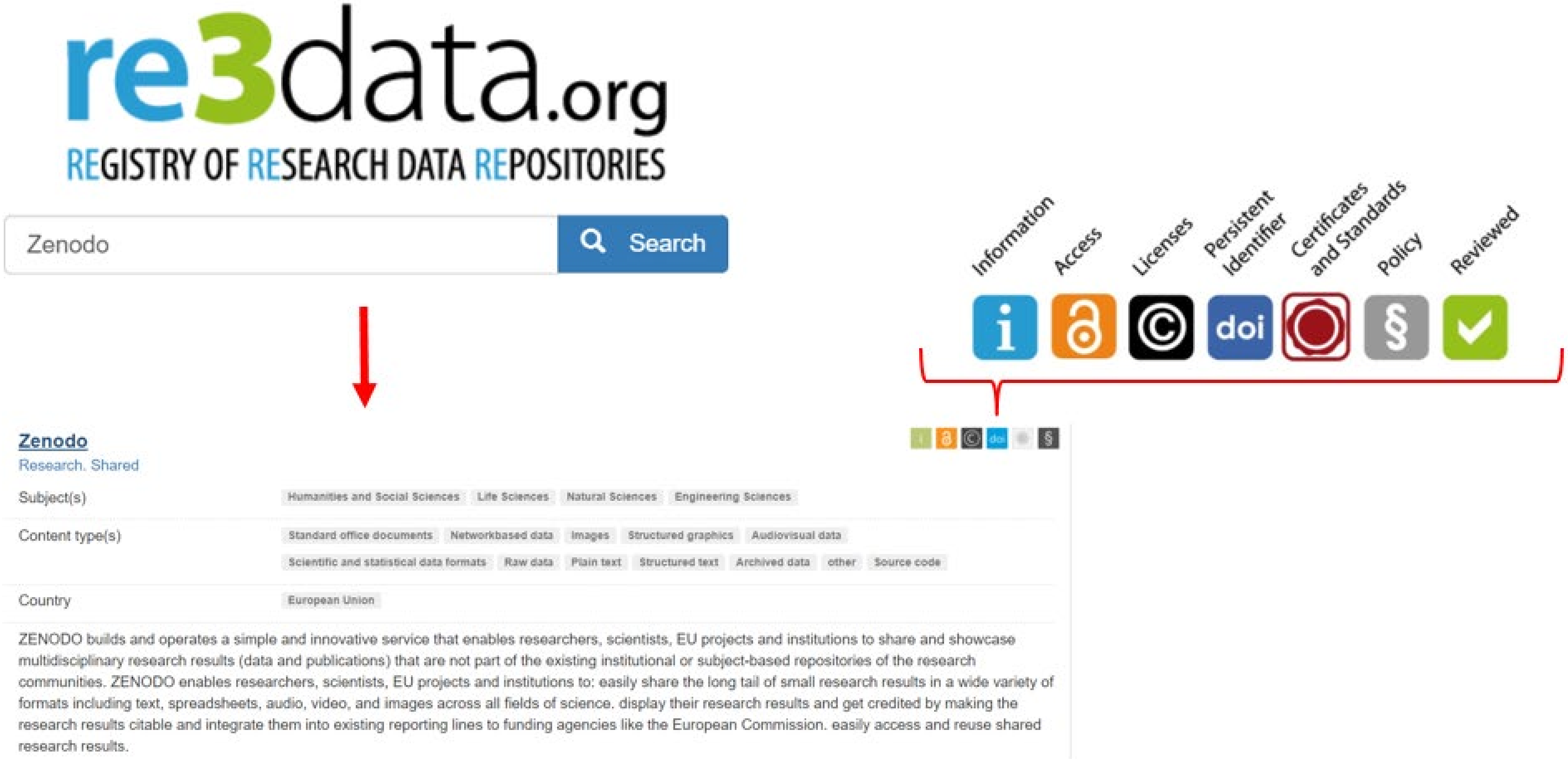
Discipline-specific data repositories

Repository	Description	Re3data entry
ArrayExpress	Discipline-specific (Life sciences [functional genomics])	https://www.re3data.org/repository/r3d100010222
Data and Service Center for the Humanities (DaSCH)	Discipline-specific (Humanities)	https://www.re3data.org/repository/r3d100012374
Electron Microscopy Data Bank (EMDB)	Discipline-specific (Life sciences [molecular structure])	https://www.re3data.org/repository/r3d100010562
European Nucleotide Archive (ENA)	Discipline-specific (Life sciences [sequencing data])	https://www.re3data.org/repository/r3d100010527

Institutional data repositories

Repository	Description	Re3data entry
Bern Open Repository and Information System (BORIS)	Institutional data repository (University of Bern)	No entry
EnviDat	Institutional data repository (Swiss Federal Institute for Forest, Snow and Landscape Research - WSL)	https://www.re3data.org/repository/r3d100012587

re3data.org


re3data.org
REGISTRY OF RESEARCH DATA REPOSITORIES
Zenodo
Search
Information
Access
Licenses
Persistent Identifier
Certificates and Standards
Policy
Reviewed
Zenodo
Research. Shared
Subject(s)
Humanities and Social Sciences
Life Sciences
Natural Sciences
Engineering Sciences
Content type(s)
Standard office documents
Networkbased data
Images
Structured graphics
Audiovisual data
Scientific and statistical data formats
Raw data
Plain text
Structured text
Archived data
other
Source code
Country
European Union
ZENODO builds and operates a simple and innovative service that enables researchers, scientists, EU projects and institutions to share and showcase multidisciplinary research results (data and publications) that are not part of the existing institutional or subject-based repositories of the research communities. ZENODO enables researchers, scientists, EU projects and institutions to: easily share the long tail of small research results in a wide variety of formats including text, spreadsheets, audio, video, and images across all fields of science. display their research results and get credited by making the research results citable and integrate them into existing reporting lines to funding agencies like the European Commission. easily access and reuse shared research results.

ORD National Strategy

- The SNSF has contributed to the elaboration of the national Open Research Data strategy based on an agreement between SERI, swissuniversities, ETHS and the SNSF.
- The Swiss National ORD Strategy provides a framework for the development of practices built around sharing research data in Switzerland, and for governing the services and infrastructures that support researchers and enable ORD practices.
- The strategy and the corresponding action plan have been published last year

swissuniversities

swissuniversities
Effingerstrasse 15, Postfach
3001 Bern
www.swissuniversities.ch

Swiss National Open Research Data Strategy

Adopted by the Delegation Open Science on 23 April 2021
Supported by the plenary assembly of swissuniversities on 27 May 2021
Supported by the ETH Domain in June 2021
Supported by the board of directors and delegates of the Swiss Academies of Arts and Sciences on 22 June 2021
Supported by the presiding board of the National Research Council of the SNSF on 30 June 2021

swissuniversities

swissuniversities
Effingerstrasse 15, Postfach
3001 Bern
www.swissuniversities.ch

Swiss National Strategy Open Research Data
Version 1.0
Action Plan

Adopted by the Delegation Open Science on 17 November 2021

The following bodies have noted the Action Plan with approval:

The Board of swissuniversities on 2 December 2021
The ETH Domain on 14 December 2021
The Board of Directors of the Swiss Academies of Arts and Sciences on 2 December 2021
The Presiding Board of the National Research Council of the SNSF on 8 December 2021

At the international level

The SNSF is a member of the EOSC Association and plans to actively contribute to the planned working groups

The SNSF is a member of Science Europe and contributes to different working groups

At the international level

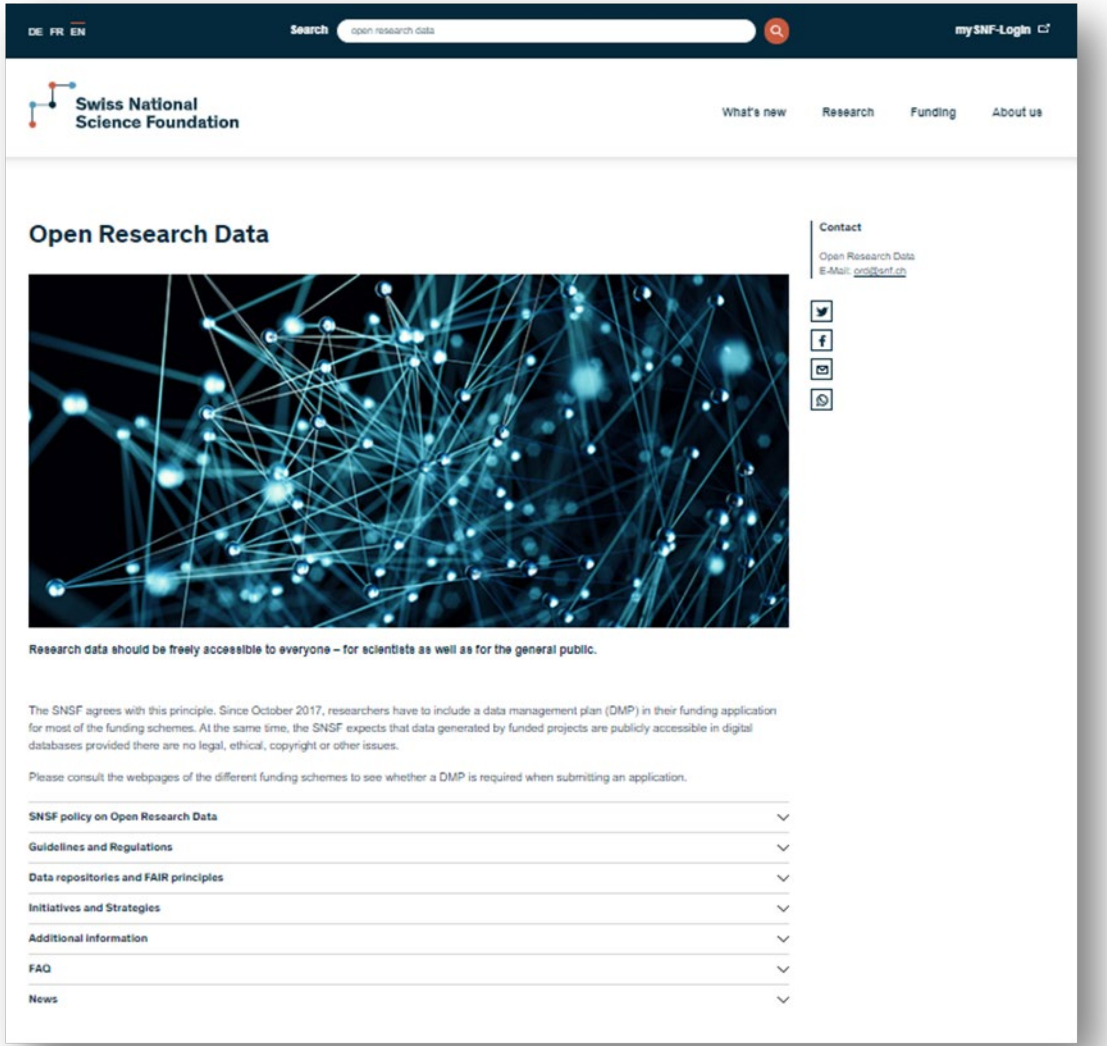
Science Europe documentation

At the international level

Science Europe documentation

		FIRST DMP REQUESTED				
Country	Organisation	With grant application	After grant approval	After start of project	DMP updates	Final DMP at end of project
AT	Austrian Science Fund (FWF)	N/A	✔	N/A	✔	✔
FR	French National Research Agency (ANR)	N/A	N/A	✔ within 6 months of project launch	✔ for projects longer than 30 months an update is requested halfway through the project	✔
FI	Academy of Finland (AKA)	✔	N/A	N/A	✔	✘
IE	Irish Health Research Board (HRB)	N/A	N/A	✔ within 6 months of the grant starting	✘	✔
NL	Dutch Research Council (NWO)	N/A	✔ within 4 months of grant approval	N/A	✘	✘
PL	Polish National Science Centre (NCN)	✔	N/A	N/A	✘	✔
SE	Swedish Research Council (VR)	N/A	✔ before research project starts	N/A	✔	✘
CH	Swiss National Science Foundation (SNSF)	✔	N/A	N/A	✔	✔

Open Research Data – SNSF Website



DE FR EN Search open research data mySNF-Login

Swiss National Science Foundation

What's new Research Funding About us

Open Research Data

Contact

Open Research Data
E-Mail: ord@snf.ch

Research data should be freely accessible to everyone – for scientists as well as for the general public.

The SNSF agrees with this principle. Since October 2017, researchers have to include a data management plan (DMP) in their funding application for most of the funding schemes. At the same time, the SNSF expects that data generated by funded projects are publicly accessible in digital databases provided there are no legal, ethical, copyright or other issues.

Please consult the webpages of the different funding schemes to see whether a DMP is required when submitting an application.

- **SNSF policy on Open Research Data**
- **Guidelines and Regulations**
- **Data repositories and FAIR principles**
- **Initiatives and Strategies**
- **Additional information**
- **FAQ**
- **News**

Swiss National Science Foundation

What's new

Data Management Plan (DMP) - Guidelines for researchers

1. Introduction

Managing and sharing research data as openly as possible is one of the principles of good scientific practice. The SNSF adheres to this principle, as stated in Article 47 of its **Funding Regulations (PDF)**: in stating that "*[…] grantees are obliged to make available to the public in an appropriate manner the research results obtained with the help of SNSF funding, […]*". The SNSF has set out the criteria it expects funded researchers to meet in its **Open Research Data Policy statement** For the implementation of these principles, the SNSF favours a bottom-up approach. It provides best practice guidelines and gives each scientific community sufficient flexibility in defining and applying its own standards. In particular, the best way of managing and sharing data depends on the research field.

The aim of a Data Management Plan (DMP) is to plan the life cycle of data. It offers a long-term perspective by outlining how data will be generated, collected, documented, shared and preserved. The SNSF provides a template to help researchers complete their data management plan. Each project's DMP will refer to discipline specific standards and practices and thus its content may be different.

The SNSF expects that researchers share at least the data underlying their publications, but only to the extent to make the published results reproducible. This data should be shared as soon as possible, but at the latest together with the relevant scientific publication. Data can be raw or processed, depending on the project and the discipline. Datasets must always be carefully documented with associated metadata, such that other researchers understand how the data was collected, as well as under which conditions and how it can be re-used. If specific tools are needed to re-use the data, this needs to be documented and, if possible, the tools made available. In any case, the provided data and documentation (metadata) must be sufficient to ensure their reusability. Researchers are asked to explain in their DMP wherever these requirements cannot be met.

Data sharing – best practices

To facilitate the discovery, access, re-use and citation of datasets, it is important that the publication of research data follows a set of clearly defined and broadly applicable best practices. The FAIR Data Principles define a range of qualities a published dataset should have in order to be Findable, Accessible, Interoperable and Reusable (see **Explanation of the FAIR Data Principles (PDF)**). The SNSF expects researchers to share their data according to the FAIR Data Principles on publicly accessible, digital repositories. It is important to note that the FAIR Data Principles do not require researchers to share all their data without any restrictions. Rather they advocate applying a standard procedure when sharing research data for reuse, so that humans and computer systems can easily find, interpret and use them under clearly defined conditions. The FAIR Data Principles are being adopted by a growing number of research funding organisations (e.g. **Horizon 2020**, **NIH**).

https://www.snf.ch/en/dMILj9t4LNk8NwyR/topic/open-research-data

SNSF Data Portal

Information

- https://data.snf.ch/
- Detailed information about the datasets for each project
- Link to the corresponding datasets (when applicable)
- More visibility for the data sets/publications compared to P3

Like Cases Alike or Asylum Lottery? Judicial Preference Variation on the Swiss Federal Administrative Court, 2007-2015

Judith Spirig

01.03.2015 – 31.07.2018

Summary | Scientific abstract

Three asylum law referenda in the last twenty years, several popular initiatives and numerous reports in the media - asylum policy has been one of the most culturally divisive political issues in Switzerland and many other immigration countries for the last decades. Two of the most controversially discussed aspects of asylum policy are the organization of the asylum procedure and the consistency of asylum adjudication. Seve...

Show more

Persons

Applicants

- Judith Spirig

Employees

- Judith Spirig

Datasets

Replication Data for: When Issue Salience Affects Adjudication: Evidence from Swiss Asylum Appeal Decisions

Publication date: 22.02.2021

Spirig, Judith

Repository: Harvard Dataverse

Overview

Grant number
159161

Funding scheme
Doc.CH (until 2020)

Call
Doc.CH 2014 (10.09.2014)

Approved amount
200,009 CHF

Status
Completed

Research institution
University of Zurich - ZH

Institute
Institut für Politikwissenschaft Universität Zürich

Output data

1 Scientific publications
1 Datasets
1 Collaboration
14 Academic events
1 Knowledge transfer events
2 Awards
1 Public communication

Next steps

- Maintaining and strengthening the learning process with the research communities
- Continuously updated information on SNSF ORD website
- SNSF Monitoring report based on actual data archiving practices

Questions?

Contact: ord@snf.ch