SNSF Open Research Data Policy

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SNSF policy on Open Research Data – Background and Aims

• September 2015 - the SNSF discussed the foundations of Open Research Data strategies during an international workshop

• 2016 – Discussions at the Presiding Board and administrative offices

• October 2017 - SNSF Open Research Data policy enters into force in the project funding scheme

• DMPs are now required in most of SNSF funding schemes

• New policy but data sharing requirements are not new (since 2001)
SNSF policy on Open Research Data – Background and Aims

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 policy on Open Research Data – Implementation

The SNSF expects all its funded researchers

• to store the research data they have worked on and produced during the course of their research work,

• to share these data with other researchers, unless they are bound by legal, ethical, copyright, confidentiality or other clauses, and

• to deposit their data and metadata onto existing public repositories in formats that anyone can find, access and reuse without restriction.
Data Management Plan – Part of project submission

• Researchers have to include a data management plan (DMP) in their funding application for most of the funding schemes → 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.

• Applicants can explain in the DMP if there are any issues linked to data sharing.
Data Management Plan – Structure

1 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?

2 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?

3 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?

4 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 – Life cycle

• A “plausible” DMP is a condition for the release of the funds.

• DMPs are editable. Researchers have the possibility to update the content of their DMP at any time during the funding period of the research project.

• Once SNSF funding has ended and the final scientific report has been approved, the DMP cannot be modified anymore.

• The DMP is shared on P3 (SNSF’s public database) at the end of a project (not yet implemented).
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.
Data sharing – Cost contributions

• A maximal cost contribution of CHF 10'000 per grant is installed for:
  – data uploading costs and
  – related data preparation costs (prior to and for upload only)

• Data uploading costs are not paid if the data repository is commercial.

• Cost contribution can be exceeded, if justified.
FAIR Data Principles

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
Bottom-up approach

The SNSF 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 Scientific Exchanges funding scheme also supports the organisation of events that allow research communities to exchange best practices on open research data/research data management.
First experiences

• Around ¾ of the DMPs do not conflict with the SNSF ORD requirements.

• Around ¼ of the DMPs are put in revision

• Main reasons for revision:
  o Data sharing upon request
  o Data sharing on a website
  o Sharing not well explained
  o No sharing: not well motivated
First experiences

• Increasing the visibility of data repositories is important

• Different types of data repositories
  o General (such as Zenodo or Dryad)
  o Discipline-specific (such as FORS, EnviDat, GEO)
  o Institutional (such as ETH Research Data Collection)

• Many of the most cited data repositories comply with the FAIR Data Principles
• Science Europe has published in November 2018 a “Practical Guide to the International Alignment of Research Data Management”

• The document presents core requirements for DMPs and criteria for the selection of trustworthy repositories
Open Research Data

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
FAIR Data Principles for Research Data Management
Next steps

• Maintaining and strengthening the learning process with the research communities

• Continuously updated information on SNSF ORD website

• The SNSF will publish a first monitoring report in 2020

• Reflections on a national Open Data strategy (with swissuniversities)
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