

Open Research Data @SNSF

The SNSF policy on ORD Future Perspectives





The Impact of Open Research Data

- Accelerate scientific discovery
- Improve reproducibility
- Speed up innovation
- Improve citizen engagement in research
- More comparative and transnational research; access in developing countries



The SNSF Open Research Data Policy (1)



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.



For information: http://www.snf.ch/en/theSNSF/research-policies/open_research_data/



The SNSF Open Research Data Policy (2)

 Data Management Plans (DMP) are a formal requirement at project submission.

→ applicants need to give thought to management of their data

DMPs are shared on P3 (SNSF's public database) once the project has ended

→ Open DMPs at end of funding period: community exposure and control

• SNSF expects published data to be shared on public repositories: as soon as possible, but at the latest at the time of publication of the respective scientific output.

→ publicly funded data are open to public

Ethical, confidentiality, legal or technical issues can be mentioned in the DMP; the SNSF takes these comments into account



The SNSF Open Research Data Policy (3)



 Repositories need to be digital and conform to the FAIR data principles: data sets are Findable, Accessible, Interoperable and Reusable.

→ selection criteria for repositories

 SNSF contributes with CHF 10'000/grant to data preparation efforts/services and data uploading costs. Service or repository providers have to be non commercial entities.

→ SNSF always pays costs of data preparation

→ no other payments if the repository is commercial

SNSF values data sharing when assessing the scientific output of researchers (DORA)



The FAIR Data Principles



FAIR principles: data sets are prepared so that they are

Findable: _Attribution of Persistent Identifiers (e.g. DOI)

_Provide metadata

_Data set indexed in a searchable resource

Accessible: _Data access and location is clearly described and defined

_Metadata accessible even when data access is restricted

Interoperable: _Use of standard/controlled vocabularies

_Qualified references to other data present

Reusable: _Metadata is richly described

_Data usage license is defined

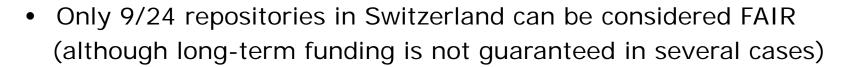
_Domain-specific community standards used?

non-exhaustive list; for more information see: FAIR Principles: Wilkinson et al., 2016. Scientific Data



What the DMPs submitted to Div I-III show already – a first glance

- Researchers plan to deposit their data in over 150 different repositories
- around 60 of the repositories fulfill the FAIR principles, most of which are also non-commercial repositories
- 24/153 repositories are located in Switzerland (inkl. CERN).



 Most FAIR repositories are located in the USA (21), UK (15), DE (5) or are international initiatives





ORD – open questions and challenges

- University-based, local repositories / national repositories / international bodies for repositories?
- "One type fits all" repositories or thematically oriented domain repositories?
- Coordination of repositories; European Open Science Cloud
- Long-term funding of these infrastructures
- Today's realities: significant increase of costs for building capacities and infrastructures (data stewardship, open lab books, data life cycle)

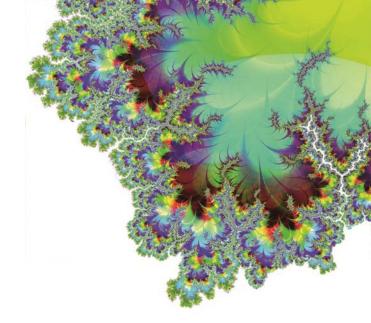


Next steps @SNSF

Introduce requirement of DMP in all instruments of the SNS^r

- First evaluation of DMPs of proposals funded in Div I-III
- Collaboration with Science Europe
- Collaboration with the EOSC initiative
- Collaboration with swissuniversities: concept for repositories in CH
- Multi-annual plan SNSF: concept on SNSF actions for fostering repositories





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Thank you for your attention