Presentation

Hva kjennetegner en god DMP? Eksempler på DMP med diskusjon og vurdering

Author(s):
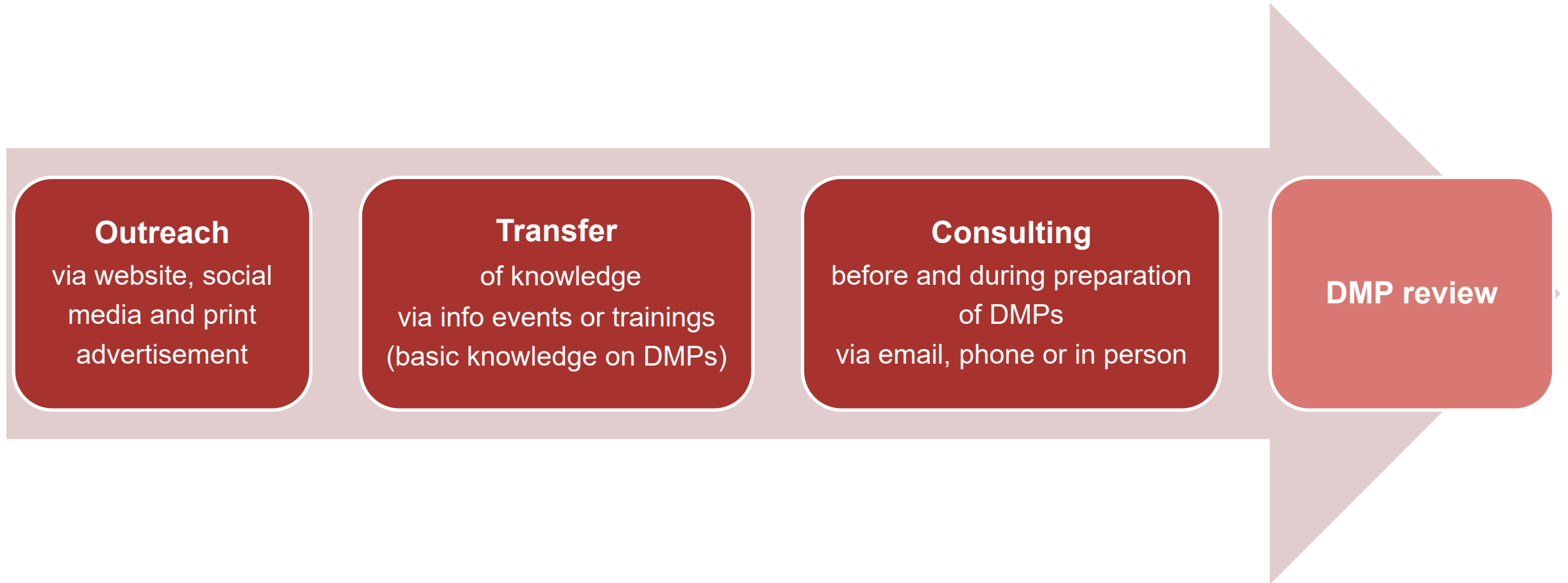Ziehmer, Malin Michelle

ETH Library

Hva kjennetegner en god DMP? Eksempler på DMP med diskusjon og vurdering

Examples from ETH Zürich

Dr. Malin Ziehmer, ETH Zurich, ETH Library, Research Data Management and Digital Curation
Data Management Planning and Teaching

From outreach to DMP reviews

Outreach
via website, social media and print advertisement

Transfer
of knowledge
via info events or trainings
(basic knowledge on DMPs)

Consulting
before and during preparation of DMPs
via email, phone or in person

DMP review

"Glitch art" by TORLEY / CC BY-SA 2.0

DMPs required by the Swiss National Science Foundation (SNSF)

Rules and regulations of the SNSF

Short Excursion:
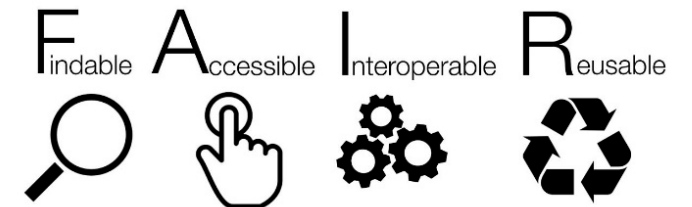# The Open Research Data Policy of the SNSF

Goal of the SNSF:

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

FAIR image (4.9.2018) by Sangya Pundir / CC BY-SA 4.0

Article 47 of the Funding Regulations

(1 Jan 2016, http://www.snf.ch/SiteCollectionDocuments/allg_reglement_16_e.pdf):

"[…] the data collected with the aid of an SNSF grant must also be made available to other researchers for further research and integrated into recognised scientific data pools […]"

Short Excursion:
The Open Research Data Policy of the SNSF

DMP as tool to reach these goals

The SNSF therefore 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

  - research **data sharing** as a **fundamental contribution** to the impact, transparency and reproducibility of research data

  - research data should be shared **as openly as possible**

- to **deposit their data and metadata** onto existing **public repositories** in formats that anyone can find, access and reuse without restriction
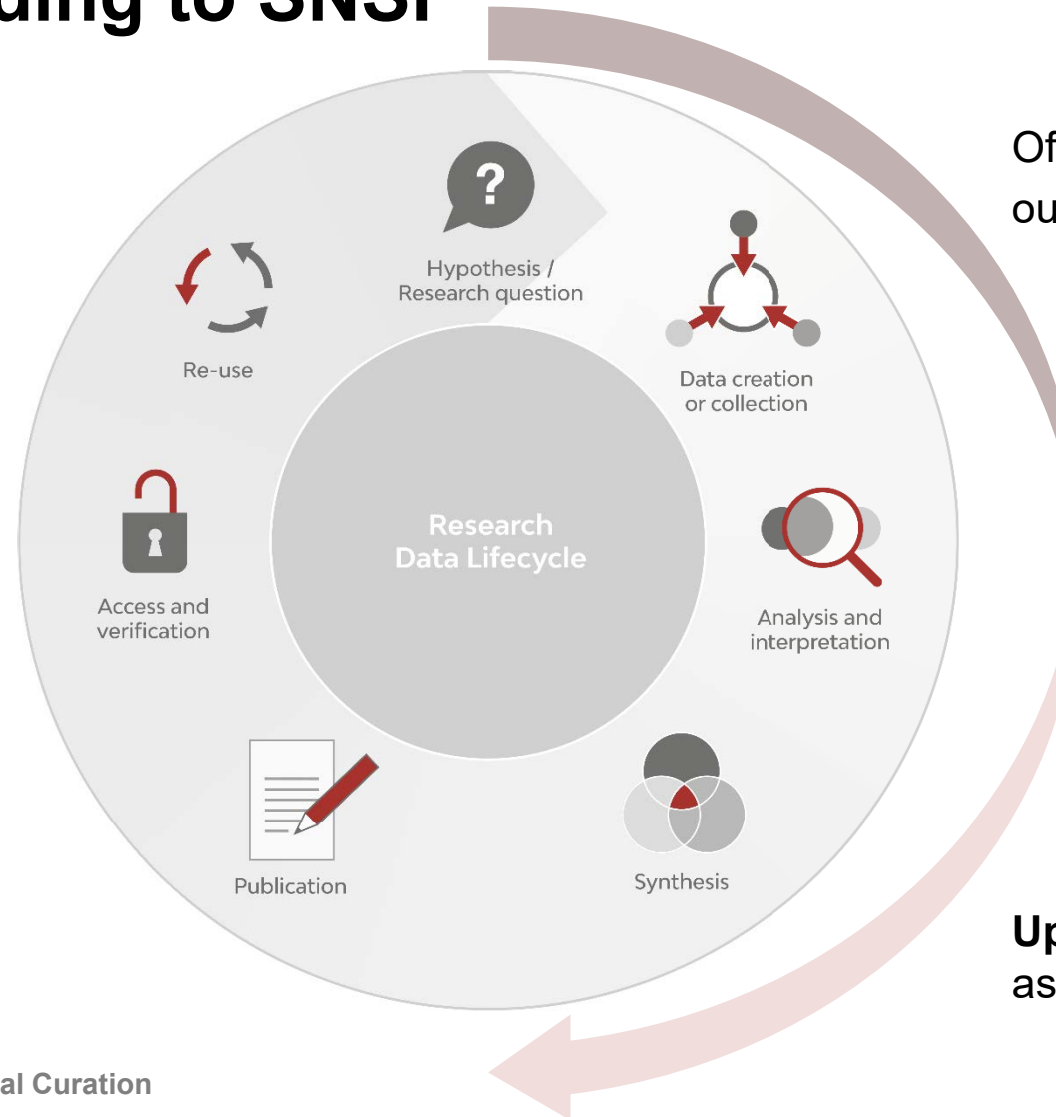
Short Excursion:
Aim of DMPs according to SNSF

- **Planning and documenting the life cycle** of data

- In the ideal case, you only need to **document** your current practice / **best practice** in your field

- **Making data FAIR**:
  - Findable
  - Accessible
  - Interoperable
  - Re-usable

Offering a **long-term perspective** by outlining how the data will be:

- Generated
- Collected
- Documented
- Shared / Published
- Preserved

Updating the plan
as the project progresses

Short Excursion:

How to create and submit a DMP for the SNSF

- Since **October 2017**, researchers have to **include a DMP** in their **funding application**

- A proposal can only be submitted if a DMP was created

- A DMP for SNSF **must be created online in mySNF**

- **Final version** of the DMP will be **moved to P³** grants database

- You cannot upload a DMP created outside of mySNF – except in Lead Agency process

https://www.mysnf.ch

Short Excursion:
Assessment of the DMP

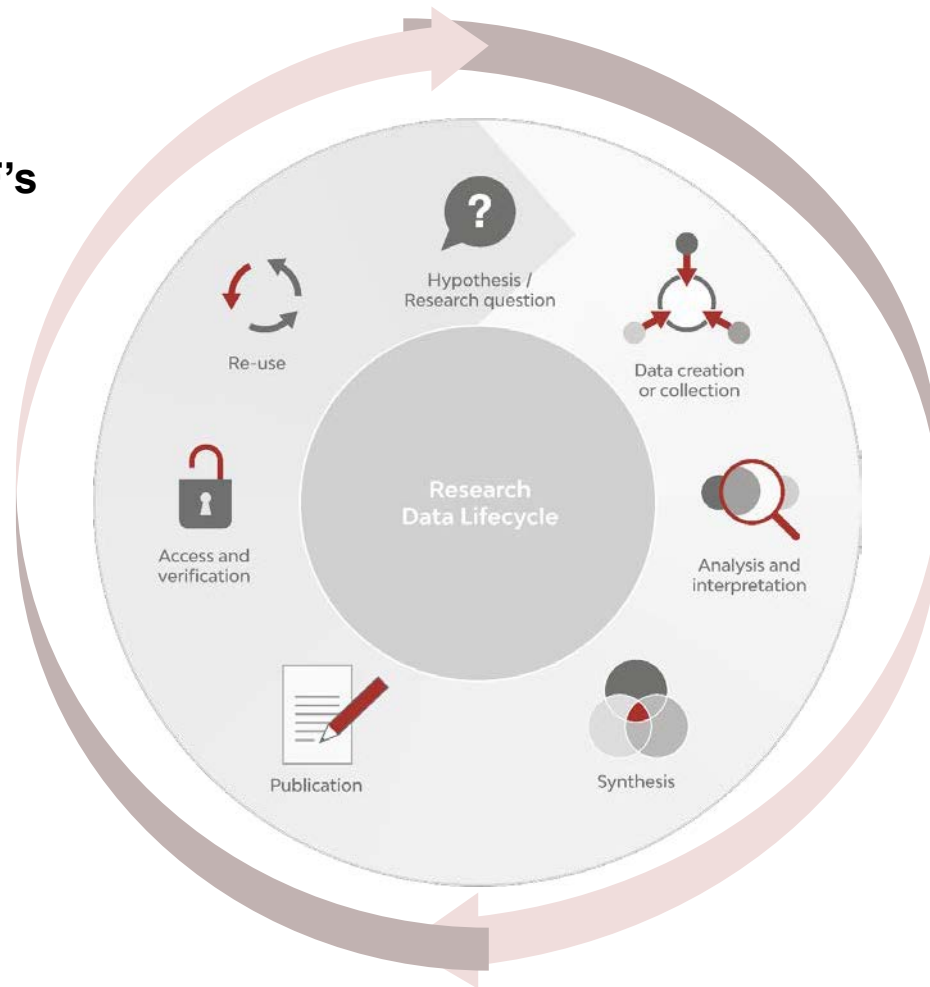- The DMP is assessed by SNSF staff **for plausibility** and **compliance** with its **Open Research Data policy**

- It is **not sent to external reviewers**

- **Applicants can be assigned «tasks»** for enhancing their DMP as part of the funding decision

- **DMP Guidelines for researchers**

  http://www.snf.ch/en/theSNSF/research-policies/open_research_data/Pages/data-management-plan-dmp-guidelines-for-researchers.aspx

Short Excursion:
DMP lifetime management

Final DMP version available on the **SNSF's P3 database**

(http://p3.snf.ch/)

Research Data Lifecycle: Hypothesis / Research question, Data creation or collection, Analysis and interpretation, Synthesis, Publication, Access and verification, Re-use

- The DMP is a **living document**

  - **Editable during the entire lifetime** of the grant

  - Its **contents can and should be adapted** as the project evolves

- Researchers will be **prompted to update their DMP** at the end of the grant, which will be assessed together with the final scientific report

Data Management Plan – content of the mySNF form

Question	Help text
1 Data collection and documentation	
1.1 What data will you collect, observe, generate or re-use? Questions you might want to consider: - What type, format and volume of data will you collect, observe, generate or reuse? - Which existing data (yours or third-party) will you reuse?	Briefly describe the data you will collect, observe or generate. Also mention any existing data that will be (re)used. The descriptions should include the type, format and content of each dataset. Furthermore, provide an estimation of the volume of the generated data sets. (This relates to the *FAIR Data Principles* F2, I3, R1 & R1.2)
1.2 How will the data be collected, observed or generated? Questions you might want to consider: - What standards, methodologies or quality assurance processes will you use? - How will you organize your files and handle versioning?	Explain how the data will be collected, observed or generated. Describe how you plan to control and document the consistency and quality of the collected data: calibration processes, repeated measurements, data recording standards, usage of controlled vocabularies, data entry validation, data peer review, etc. Discuss how the data management will be handled during the project, mentioning for example naming conventions, version control and folder structures. (This relates to the *FAIR Data Principle* R1)

DMP content of the mySNSF form

and examples how to fill in

Part I: Data collection and documentation

1.1 What data will you collect, observe, generate or reuse?

- Data origin, formats, estimated data volume

1.2 How will the data be collected, observed or generated?

- What standards, methodologies or quality assurance processes will you use

- How will you organise your files and handle versioning?

1.3 What **documentation** and **metadata** will you provide with the data?

- E.g. metadata standard, software version, etc.

Part II: 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?

- Consider e.g. if password protection is sufficient or if you need to encrypt data, especially on mobile devices

- Consider relevant regulatory frameworks (Swiss data protection law, EU GDPR)

2.3 How will you handle **copyright and intellectual property** rights issues?

- Consider under what licenses data will be made available and when

FNSNF
SWISS NATIONAL SCIENCE FOUNDATION

"Creative Commons" (4.9.2018)
by Michael Porter
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Part III: Data storage and preservation

3.1 How will your data be **stored and backed-up** during the research?

- Routine operation while the project is running and data is being worked on

3.2 What is your **data preservation plan**?

- Must be implemented as part of your project, but points far beyond its end

- Which data must be preserved – and for how long?

- How do you ensure that data remains accessible which is required to justify and reproduce your results?

Part IV: Data sharing and reuse

4.1 How and where will which data be shared?

4.2 Are there any necessary limitations to protect sensitive data?

4.3 I will choose digital repositories that are conform to the FAIR Data Principles

4.4 I will choose digital repositories maintained by a non-profit organisation

Meaning:

▪ You can opt out of data publication with a cause, but **you must give reasons**

▪ You choose a repository meeting the criteria. It can be subject specific, generic or an institutional one like **Research Collection** at ETH (www.research-collection.ethz.ch/)

DMP examples from 2018

or: The simplicity and difficulty of writing a DMP

Disclaimer

For the purpose of publishing these slides, DMP examples presented in the workshop have

been removed as these examples are unpublished draft versions.

So – what makes a good data management plan?

For researchers:

- Keep it as **simple**, **short** and **clear** as possible

- Mostly around 2-4 pages in a first draft

- A DMP has to be **understandable** for «outsiders»

- Try to solve **open questions** concerning IT and ethics issues before, **NOT** while writing your DMP

- The **more complete** the first draft, the **less work** you will have when updating your DMP during the lifetime of your project

- **There is no right and wrong yet!**

Regarding DMP support and review: rather do a bit more than needed and give helpful advice, but be careful not to pratronize the researchers!

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