

Data Management Plan (DMP): From Theory to Practice

DMP Templates, Best Practices & Guidelines

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ETH ZURICH

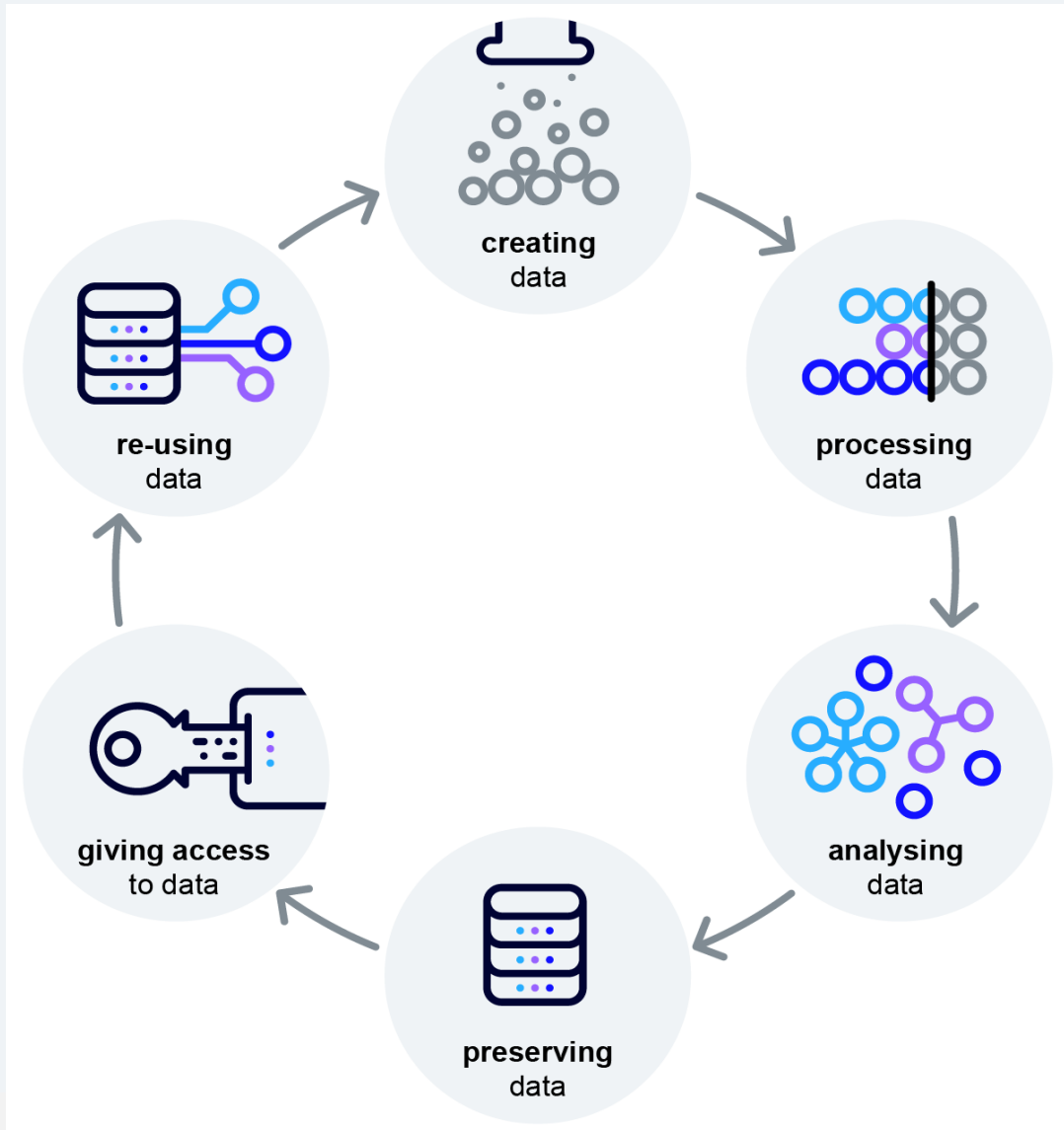


DLCLM

swissuniversities



Welcome



Why are we here today?

Today's Agenda:

- Questions – 5'
- Resources – 5'
- Concrete Examples – 5'
- Group Work – 30'



Questions to Share your Experience

1. Do you know **who to approach** in your institution to learn more about:
Research Data Management (**RDM**), Data Management Plan (**DMP**), and the new General Data Protection Regulation (**GDPR**) implications to your research project?
2. Where do you see the need to **optimize RDM** in your lab?
3. How do you envision to translate your **DMP into reality**?
4. What is your current knowledge of the **FAIR data principles**?
5. Which **resources** do you use to guide you to **create a DMP & optimize RDM**?



RDM and DMP Support @ EPFL

Support service offered by the team of the **EPFL Library**:

- DMP & RDM support service for **researchers, labs, students & staff members**
- **DMP review** & tailored feedback in a timely manner for SNSF, ERC & more
- **RDM & DMP** personalized **training & workshops** throughout the year
- Advice & support regarding best practices for **file formats, long-term preservation, metadata, licences, tools, storage** and how to best answer the requirements from funding agencies in close collaboration with the Research Office, the Technological Transfer Office, the IT services as well as the newly appointed Data Protection Officer at EPFL
- Organization of **noon talks, conferences & additional events** on RDM, DMP & Open Science for the EPFL community with local, national and international keynote speakers such as during the Open Science Evening Talks: <https://library.epfl.ch/oset2017>

Contact information: researchdata@epfl.ch

Website: <https://researchdata.epfl.ch/>



RDM and DMP Support @ EPFL

Data Protection Officer: Eva Thélisson (eva.thelisson@epfl.ch)

Website: <https://cipd.epfl.ch>

EPFL Data Protection Policy:

<https://cipd.epfl.ch/declaration-sur-la-protection-des-donnees/>

GDPR Impact on Switzerland (French version):

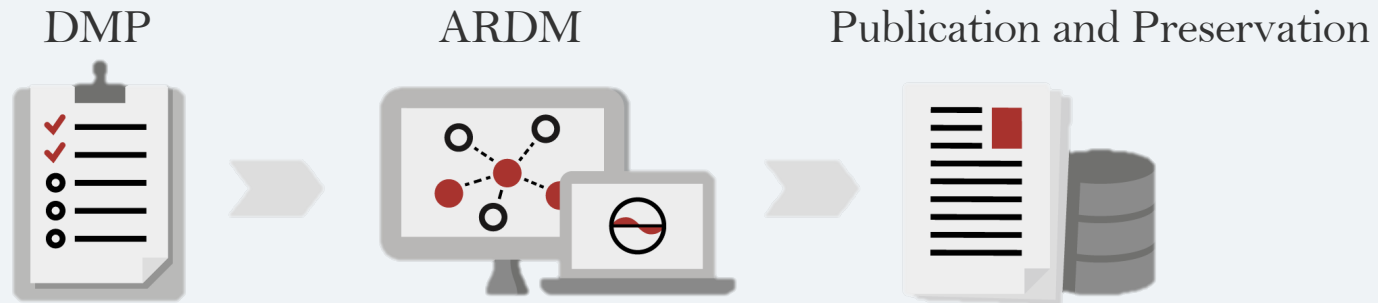
<https://www.edoeb.admin.ch/edoeb/fr/home/documentation/bases-legales/Datenschutz%20-%20International/DSGVO.html>

GDPR Impact on Switzerland (German version):

<https://www.edoeb.admin.ch/edoeb/de/home/dokumentation/rechtliche-grundlagen/Datenschutz%20-%20International/DSGVO.html>



RDM and DMP Support @ ETH



www.library.ethz.ch/Digital-Curation

<https://sis.id.ethz.ch/>



- Training courses on **RDM**, **ARDM** and **DMP** as well as publication and preservation are offered by the **ETH Library** and the **Scientific IT Services (ID-SIS)**, also in collaboration
- **Contact information:** researchdata@ethz.ch
- **Website:** www.ethz.ch/researchdata



RDM and DMP Support @ ETH



Digital Curation (ETH Library)

www.library.ethz.ch/Digital-Curation
data-archive@library.ethz.ch

Various forms of **RDM training**

- Info events
- Lectures
- Seminars
- Workshops
- Individual trainings

Consultation on RDM and DMP

Review of DMPs



Scientific IT Services

<https://sis.id.ethz.ch/>
sis.helpdesk@ethz.ch

since 2018:

mandate to provide ARDM services to all ETH
Data Management Service based on **openBIS**

- **basic offer**
 - install and maintain openBIS on ID infrastructure
 - initial openBIS training
 - user support
- **additional services on demand**
 - Database customization
 - Migration of existing databases
 - Instrument integration for direct data upload



Consulting

- advice on research data workflows
- advice on and review of DMPs for grant applications

RDM Training



RDM and DMP Support @ UZH



Upcoming **Data Service Center** at Hauptbibliothek University of Zurich:

DMP & RDM support and training

Website and contact information: <http://www.data.uzh.ch>

S3IT: technical advice regarding RDM and data security

<https://www.s3it.uzh.ch/>

Whats next?

Workshop on preparing data management plans for the SNSF on August 28, 2018. Postdocs and early career researchers are invited to register via [UZH Graduate Campus](#) (Registration open from July 2018)

More information: data@hbz.uzh.ch



Persons of contact regarding DMPs:

- **Silke Bellanger** and **Sonia Ackermann** (Vice-Rectorat Research)
- **Thierry Sengstag** (sciCORE) for the RDM network of the University Basel

As well as individual **infrastructure providers** across the university:

- Grants office
- Department of clinical trials
- Legal services

Services/Trainings:

- **Workshops:** ½ days up to 2 days in collaboration with the program coordinator of the interdisciplinary PhD program Transferable Skills/GRACE
- **Information events** with SNF
- **Workshops** by different departments **on demand**
- **Dept. of clinical trial/DH Lab:** more individual support

Website: researchdata.unibas.ch



RDM and DMP Support @ UNIGE



Support service offered by the **UNIGE library**:

1. **Help & support** service offered to researchers to answer their questions
2. **DMP review** service
3. **Training options** including
 - **workshops** on how to fill out a DMP from the SNSF
 - **noon talk** on RDM
 - workshop on software management

Website: <https://www.unige.ch/researchdata/>

The **e-Research team** (from the IT Service) provides support to researchers wishing to participate to the **pilot phase of the DLCM solution** to put their data in a **repository for long-term preservation**.

Contact information: eresearch@unige.ch



RDM and DMP Support @ HEG & HES SO

Support service offered by the **HEG & HES SO**:

1. **Help & support** service offered to all to answer their questions regarding RDM & DMP
2. **Courses for Master students** on how to collect, analyze, share and publish data & on RDM
3. **Training options** including
 - **workshop on research methodology enabling good governance of research data life cycle management on August 28, 2018** offered by Basma Makhlouf-Shabou and Geneviève Joullie Dardier
 - **workshop on how to explore and understand Data Management Plan (DMP) on September 6, 2018** offered by Basma Makhlouf-Shabou and Geneviève Joullie Dardier
 - For more information:
 - <https://devpro.hes-so.ch/fr/recherche-1811/didac-cours-3103-subtype-none-type-8.html>
 - <https://devpro.hes-so.ch/fr/recherche-1811/didac-cours-3102-subtype-none-type-8.html>

Website: <https://www.unige.ch/researchdata/>

Contact information: dlcm@hes-so.ch



RDM and DMP Support @ UNIL

Support service offered by the **UNIRIS** team:

1. **Help & support** service offered to researchers to answer their questions on RDM & DMP
2. **Information session & workshops on RDM, DMP & SNSF expectations**
3. **Training** including
 - **workshops** on how to fill out a DMP from the SNSF
 - **open data week events**
 - **outreach events & activities**

Website: www.unil.ch/openscience

Contact information: carmen.jambe@unil.ch



Key Resources

1) Data Management Checklist

<https://www.dlcm.ch/resources/dlcm-dmp>

2) SNF DMP Template v1 & 2

<https://www.dlcm.ch/resources/dlcm-dmp>

3) Research Data Management Policy

<https://www.dlcm.ch/resources/dlcm-policy>

4) Tailored trainings and workshops across Swiss institutions

- EPFL
- ETH Zurich,
- UNIBAS,
- UNIL, HEG & HES SO ...



1) Research Data Management Checklist



Data Management Checklist

Managing research data throughout its lifecycle ensures its long-term value and prevents data from falling into digital obsolescence. Proper data management is a key prerequisite for effective data sharing throughout the scientific community. This, in turn, increases the visibility of scholarly work and is likely to increase citation rates.

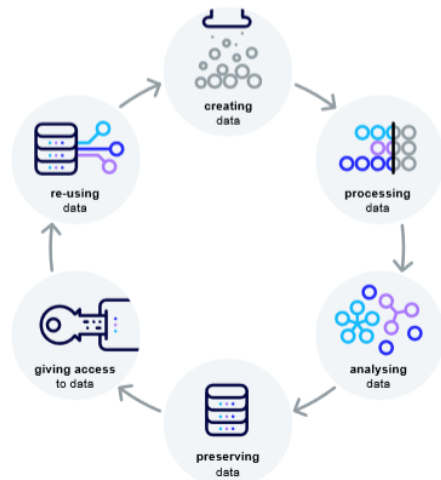
Many funding organizations prescribe the use of data management plans and insist on open access publication of the research results they funded.

Even if a funding body does not explicitly demand data management, following professional curation and preservation concepts has numerous advantages:

- It greatly facilitates the reuse of research data.
- As a result, this increases the impact of research results.
- It saves precious research funds and ultimately natural and human resources by avoiding unnecessary duplication of work.

Today, the availability of well-managed data is part of good scientific practice and ensures the reproducibility of research results, a key requirement at the core of the research process.

The following data management checklist is based on a generalised research data lifecycle, and is flexible enough to be applied to requirements from different funding organisations.



- generic checklist
- can be used for when one needs to think about data lifecycle in general
- adaptable to researchers' needs
- excellent starting point for graduate students at beginning of their PhD

available from

<https://documentation.library.ethz.ch/display/DD/Data+Management+Checklist>



2) SNF DMP Template

Main structure

- Questions and guidelines from the SNSF
- Recommendations from the library
- Examples of answers taken from actual DMPs (anonymised)
- Contact points for researchers at ETH Zurich and EPFL

available from

<https://documentation.library.ethz.ch/display/DD/Guidance+for+ETH+researchers+on+filling+out+SNSF+Data+Management+Plans>

The thumbnail shows the cover page of the 'DLCM template for the SNSF Data Management Plan'. At the top, there is a blue header with the DLCM logo and the text 'DLCM Research Data Management Hub'. Below the header, the title 'DLCM template for the SNSF Data Management Plan' is prominently displayed. Underneath the title, it says 'prepared by' followed by logos for 'ETH zürich' and 'ETH Library'. The EPFL logo is also present. A 'Please note' section explains that the document is intended to illustrate guidelines and information provided by the SNSF. It also mentions that the document was prepared jointly by teams from the libraries of EPFL and ETH Zurich. At the bottom right, there is a Creative Commons license icon (CC BY-SA) and the text 'Version ETH Zurich 2.0' and 'mandated by swissuniversities'.

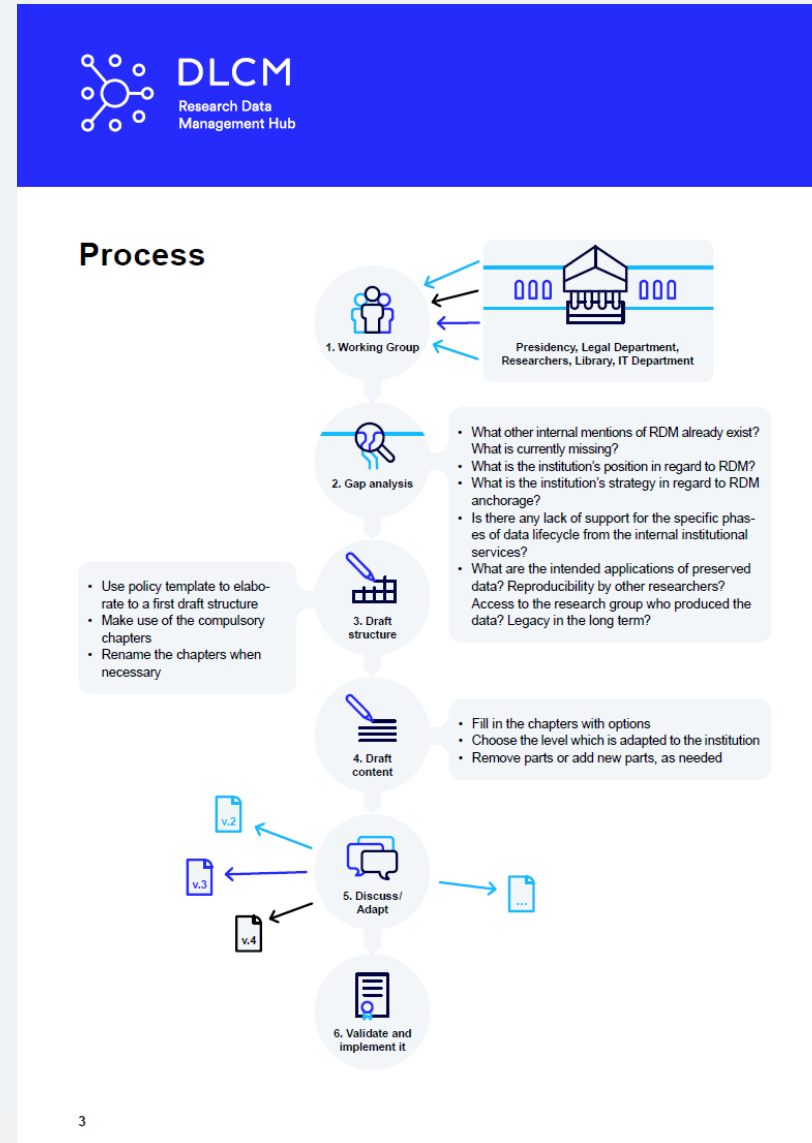


3) Research Data Management Policy

- Template to be customized by (Swiss) institutions
- Basis for discussion for working groups, institutional reflection and academic leaders

Available from

<https://www.dlcm.ch/resources/dlcm-policy>





4) DLCLM Data Management Training Formats 1



Interactive Workshop

- Usually 1.5 hours
- general overview of data management and SNSF DMPs
- Offered in English, German or French
- 2 x per year plus further lectures upon request

Tailored Training

- Comprehensive training on data management from half-day to whole-day
- 2 x per year plus further workshops upon request
- At ETH Zurich in collaboration with Scientific IT Services (ID-SIS)



4) DLCM Data Management Training Formats 2



Coffee Lectures

- 15 minutes lecture
- Discussion during coffee break

Webinar

- 30 minutes lecture
- 30 minutes Q&A

Personalized Trainings for research labs

- Discipline-specific
- Available upon request

One-in-one consulting

- Data management in general
- DMPs in particular



Training Topics



- RDM in general
- Active RDM (ARDM)
 - During one's research
 - Tools and software (e.g. ELN/LIMS, versioning, collaboration)
- Data Management Plans
 - For funders
- Long-term preservation
- Regulations, privacy and security issues
- Licences, metadata and format standards
- Data publishing and Open Science issues





Concrete Examples

Team work, leadership & support of the institution key

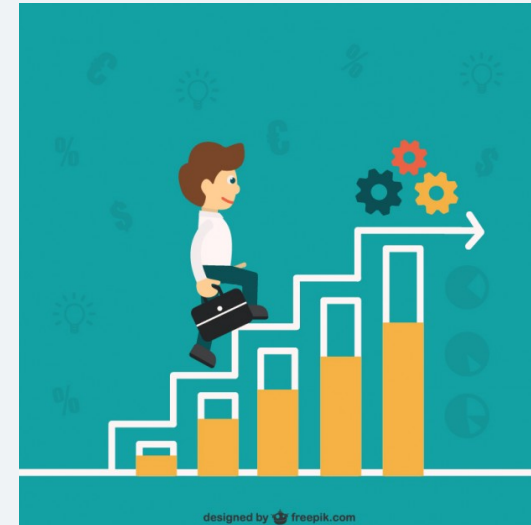
- role model of data champion,
- DMP model within the institution,
- opportunity for everyone to reflect on one's methodology and lessons learned so far

Scientific communities

- work in progress: consensus, need to clarify, chance to establish a basis in the community, chance to raise attention in the community on the topic
- example of C2SM

Everyday effort to organize data

- ETH Zurich Digital Curation Office team example





Group Work/Plenary & Discussion

1) Please take a look at the **DMP example** (first DMP example in biology):

<https://library.umassmed.edu/necdmc/dmp>

2) Please take a look at the **compliance rubric for Horizon 2020**:

<http://www.dcc.ac.uk/sites/default/files/documents/resource/DMP/H2020%20DMP%20compliance%20rubric.pdf>



Group Questions

1. What are your **first impressions**?
2. Are there any **open questions**?
3. What would you **do differently**?
4. What did you think was **well-done** and what could **be improved**?



Conclusion

- 1) What has been so far your strategy to foster RDM & DMP?
- 2) Now, which next steps do you wish to implement?
- 3) Which resources or tools would you recommend?
- 4) Do you have any relevant projects or initiatives planned or ongoing in your institution or organization?



Contact Information

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THANK YOU 