

Filling the SNSF DMP: key elements

This document is based on the Swiss National Science Foundation (SNSF)¹ guide for completing the DMP. Its structure follows the 12 questions of the DMP. For each question, indications of answers and additional resources are given. Further information on this subject is also available on the *Research Data* website of the University of Geneva².

1. Data collection and documentation

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

You should describe the data *collected, researched, or generated*, as well as *existing data reused*, with a clear distinction between the two. The description should include the **type** (image, text, audio, etc.), **format** (.tiff, .txt, .mp3, etc.) and **content** (interview transcripts, temperature measurements, etc.) of each dataset. The total **volume** of data should also be estimated.

Useful resource:

→ Reuse data: <https://www.unige.ch/researchdata/en/collect-organise/reuse-data/>

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

- Detail the **data collection method, the instruments, tools or software used and the manipulations performed**: interviews with ..., surveys with ..., images captured with ..., data measured with ..., observations of ... etc.
- Inform about the **standards, methods or quality assurance mechanisms in place**: calibration process, repeated measurements, data recording standards, protocols, preparation techniques, use of controlled vocabulary, validation of data entry, peer review of data, comparison with literature, etc.
- Mention the **organization of files and folders**, as well as **the naming rules and the version management adopted**.

Useful resource:

→ Organization and naming of research data files:

https://www.unige.ch/researchdata/files/6416/2245/1735/2021_rdv_nommage_memo_en.pdf

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

Indicate here the documentation required for users (either computer or human) to be able to read, understand and interpret the data in the future. This includes:

- **Metadata**, which should contain the essential information for the data to be found (at least a name and permanent identifier, the name of the person who collected it, the date of collection, and the conditions for accessing it).
- Details about the **context** of the project, the **hypotheses**, the **methodology** used, the **processes** implemented, the **treatments** carried out on the data (automated or not), the

¹ Available here https://www.snf.ch/media/en/4i9AE5YEIf7tqhGz/DMP_content_mySNF-form_en.pdf

² See https://media.snf.ch/dGor2Pfk5E3uHjk/DMP_content_mySNF-form_fr.pdf

analysis made of it, the definition of *variables*, the *vocabularies* used, the units of measurement, etc.

- It is recommended to gather all this information in a **readme.txt** file, placed at the root of the directory.

Useful resources:

- On metadata: <https://www.unige.ch/researchdata/en/collect-organise/creating-metadata/>
- About the readme file: <https://www.unige.ch/researchdata/en/collect-organise/readme-files/>

2. Ethics, legal and security issues

2.1. How will ethical issues be addressed and handled?

- Ethical issues raised by the project must be mentioned: *research on human beings, clinical trials, animal experiments, results that could influence the environment, health, safety or have the potential for military use*, etc.
- If *personal and/or sensitive data* are used, indicate the standards and protection mechanisms adopted: *approval by an ethics commission, consent of participants, pseudonymization or anonymization, limited retention period*, etc.
- Detail the *authorizations* required to obtain, process, store and share data. In the case of *re-use* of personal data, indicate whether the *individuals concerned* have been informed and whether they have *consented* to such re-use.
- Indicate the existence of a *confidentiality clause*, if applicable.

Useful resources:

- Personal Data and Research Decision Tree: <https://dmlawtool.ccdigitallaw.ch/>
- On ethics and legal obligations: <https://www.unige.ch/researchdata/en/collect-organise/ethics-legal-obligations/>
- On anonymization and pseudonymization: <https://www.unige.ch/researchdata/en/share/anonymisation/>

2.2. How will data access and security be managed?

- Describe the *security risks to physical or digital data* (loss, theft, degradation, disclosure, etc.) and the measures in place to mitigate these risks.
- Define *data access rights and permissions*.
- Describe the procedures or devices in place for the secure *processing, transfer and storage of personal and/or sensitive data*: access management of physical and digital files, password protection, encryption, etc.

Useful resource:

- On personal/sensitive data and its storage: <https://www.unige.ch/researchdata/en/store/personal-or-sensitive/>

2.3 How will you handle copyright and Intellectual Property Rights issues?

- Indicate the **owner of the data**: research data produced by UNIGE collaborators in the course of their duties are the property of the institution (Law on the University, article 15). Please note that in the case of a collaborative research project involving researchers from several institutions, an agreement should be signed to regulate the ownership of the data.
- Indicate the possible conditions and restrictions in the case of the **re-use of data belonging to third parties**: request for authorization, respect of a contract or a license, etc.
- Indicate the **license** that will be applied when sharing the data.

Useful resource:

→ On copyright and licensing of data:

<https://www.unige.ch/researchdata/en/share/rights/>

3. Data storage and preservation

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

To be considered here:

- Required **storage capacities**.
- Data **storage locations**: UNIGE academic NAS, external hard drive, cloud services, etc.
- **Specific arrangements for personal and/or sensitive data**, if applicable.
- Backup procedures: frequency, person responsible, number of copies, automated or non-automated backups, etc.

Useful resources:

→ On good storage practices: <https://www.unige.ch/researchdata/en/store/storage-unige/>

→ On the tools available at the UNIGE:

<https://www.unige.ch/researchdata/en/store/storage-unige/>

3.2. What is your data preservation plan?

- Indicate which data will be **retained, shared, and archived after the research is completed** and what **selection criteria** justify this choice: long-term value of the data or for future reuse, data that are difficult to reproduce or costly to generate, legal obligation to retain/destroy, financial cost of long-term retention, etc.
- Mention the **data storage formats** (standard and open ideally).

Useful resources:

→ On data selection: <https://www.unige.ch/researchdata/en/preserve/choosing-what-keep/>

→ On preservation formats: <https://www.unige.ch/researchdata/en/preserve/file-formats/>

4. Data sharing and reuse

4.1. How and where will the data be shared?

- Indicate the **data repository** where the data will be archived and shared and the conditions of access.
- Indicate how users will be able to **find** and **use** the data: metadata, licenses, documentation, etc.

The SNSF requires that the data on which a publication is based be shared, at the latest at the time of publication, and in a FAIR repository. If these requirements cannot be met, please explain why here.

Useful resource:

→ To select a suitable repository: <https://www.unige.ch/researchdata/en/share/where/>

4.2. Are there any necessary limitations to protect sensitive data?

Indicate any **legal, ethical, copyright, confidentiality or other clauses** that may impose restrictions on data sharing.

- - Detail the **conditions for making sensitive data available**: delayed release date, reason for delay, special treatment such as anonymization, etc.
- - Indicate whether **a confidentiality agreement** would adequately protect data that must be kept confidential and detail the terms of that agreement.

Useful resource:

→ Personal Data and Research Decision Tree: <https://dmlawtool.ccdigitalallaw.ch/>

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

[CHECK BOX : yes]

Useful resource:

→ On the FAIR principles: <https://www.unige.ch/researchdata/en/share/fair/>

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

[RADIO BUTTON yes/no]

If no is chosen, explain why.

License

This document is available under the [CC-BY 4.0 license](https://creativecommons.org/licenses/by/4.0/)..

