

Data Management Plan – content of the mySNF form

	Question	Help text
1 Data collection an	d documentation	
	 1.1 What data will you collect, observe, generate or reuse? 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 <i>FAIR Data Principles</i> 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. De- scribe how you plan to control and document the consistency and quality of the collected data: calibration processes, repeated meas- urements, data recording standards, usage of controlled vocabular- ies, data entry validation, data peer review, etc. Discuss how the data management will be handled during the project, mentioning for ex- ample naming conventions, version control and folder structures. (This relates to the <i>FAIR Data Principle</i> R1)
	 1.3 What documentation and metadata will you provide with the data? Questions you might want to consider: What information is required for users (computer or human) to read and interpret the data in the future? How will you generate this documentation? What community standards (if any) will be used to annotate the (meta)data? 	Describe all types of documentation (README files, metadata, etc.) you will provide to help secondary users to understand and reuse your data. Metadata should at least include basic details allowing other users (computer or human) to find the data. This includes at least a name and a persistent identifier for each file, the name of the person who collected or contributed to the data, the date of collection and the conditions to access the data. Furthermore, the documentation may include details on the methodology used, information about the per- formed processing and analytical steps, variable definitions, refer- ences to vocabularies used, as well as units of measurement. Wherever possible, the documentation should follow existing com- munity standards and guidelines. Explain how you will prepare and share this information. (This relates to the <i>FAIR Data Principles</i> 11,

2 Ethics, legal and	security	issues
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2.1 How will ethical	issues be	addressed	and	handled?

Questions you might want to consider:

- What is the relevant protection standard for your data? Are you bound by a confidentiality agreement?

- Do you have the necessary permission to obtain, process, preserve and share the data? Have the people whose data you are using been informed or did they give their consent?

- What methods will you use to ensure the protection of personal or other sensitive data? Ethical issues in research projects demand for an adaptation of research data management practices, e.g. how data is stored, who can access/reuse the data and how long the data is stored. Methods to manage ethical concerns may include: anonymization of data; gain approval by ethics committees; formal consent agreements. You should outline that all ethical issues in your project have been identified, including the corresponding measures in data management. (This relates to the *FAIR Data Principle* A1)

2.2 How will data access and security be managed?

Questions you might want to consider:

- What are the main concerns regarding data security, what are the levels of risk and what measures are in place to handle security risks?

- How will you regulate data access rights/permissions to ensure the security of the data?

- How will personal or other sensitive data be handled to ensure safe data storage and -transfer? If you work with personal or other sensitive data you should outline the security measures in order to protect the data. Please list formal standards which will be adopted in your study. An example is ISO 27001-Information security management. Furthermore, describe the main processes or facilities for storage and processing of personal or other sensitive data. (This relates to the *FAIR Data Principle* A1)

2.3 How will you handle copyright and Intellectual Prop-	Outline the owners of the copyright and Intellectual Property Right
erty Rights issues?	(IPR) of all data that will be collected and generated, including the
Questions you might want to consider:	licence(s). For consortia, an IPR ownership agreement might be nec-
- Who will be the owner of the data?	essary. You should comply with relevant funder, institutional, de-
- Which licenses will be applied to the data?	partmental or group policies on copyright or IPR. Furthermore,
- What restrictions apply to the reuse of third-party data?	clarify what permissions are required should third-party data be re-
	used. (This relates to the FAIR Data Principles I3 & R1.1)

3 Data storage and preservation

3.1 How will your data be stored and backed-up during	Please mention what the needs are in terms of data storage and
the research?	where the data will be stored. Please consider that data storage
Questions you might want to consider:	on laptops or hard drives, for example, is risky. Storage through
- What are your storage capacity and where will the data be	IT teams is safer. If external services are asked for, it is im-
stored?	portant that this does not conflict with the policy of each entity
- What are the back-up procedures?	involved in the project, especially concerning the issue of sensi-
	tive data. Please specify your back-up procedure (frequency of
	updates, responsibilities, automatic/manual process, security
	measures, etc.)
3.2 What is your data preservation plan?	Please specify which data will be retained, shared and archived
Questions you might want to consider:	after the completion of the project and the corresponding data
- What procedures would be used to select data to be pre-	selection procedure (e.g. long-term value, potential value for re-
served?	use, obligations to destroy some data, etc.). Please outline a
- What file formats will be used for preservation?	long-term preservation plan for the datasets beyond the lifetime
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	 4.1 How and where will the data be shared? Questions you might want to consider On which repository do you plan to share your data? How will potential users find out about your data? 	Consider how and on which repository the data will be made available. The methods applied to data sharing will depend on several factors such as the type, size, complexity and sensitivity of data. Please also consider how the reuse of your data will be valued and acknowledged by other researchers. (This relates to the <i>FAIR Data Principles</i> F1, F3, F4, A1, A1.1, A1.2 & A2)
	 4.2 Are there any necessary limitations to protect sensitive data? Questions you might want to consider: Under which conditions will the data be made available (timing of data release, reason for delay if applicable)? 	Data have to be shared as soon as possible, but at the latest at the time of publication of the respective scientific output. Re- strictions may be only due to legal, ethical, copyright, confiden- tiality or other clauses. Consider whether a non-disclosure agreement would give sufficient protection for confidential data. (This relates to the <i>FAIR Data Principles</i> A1 & R1.1)
	4.3 I will choose digital repositories that are conform to the FAIR Data Principles. [CHECK BOX]	The SNSF requires that repositories are conform to the FAIR Data Principles (Section 5 of the <u>guidelines for re-</u> <u>searchers</u> , SNSF's explanation of the <u>FAIR Data Principles</u>). If there are no repositories complying with these require- ments in your research field, please deposit a copy of your data on a generic platform (see <u>examples</u>). If no data can be shared, this is a statement of principles.
	 4.4 I will choose digital repositories maintained by a non-profit organisation. [RADIO BUTTON yes/no] → If the answer is no: "Explain why you cannot share your data on a non-commercial digital repository." 	The SNSF supports the use of non-commercial repositories for data sharing. Costs related to data upload are only covered for non-commercial repositories.

4. Data sharing and reuse