Lund University: LU standard template for data management plans

1. Data description

1.1 What method of data collection will you be using?

- using existing data (archival data, data from previous project – your own or other researchers')
- collecting material or generate/produce data (e.g. interviews, measurement data)

Guidance:

Will your project include a data collection phase or will your research be based on one or several existing datasets?

1.2 Describe how data will be collected, created or reused.

Guidance:

Briefly describe how your data will be collected or created. If existing data will be used, state what data it is and if possible, also write the permanent identifiers, e.g. DOI, to the used datasets in the comments field.

- What methods will you be using for data collection?

1.3 What type of material (physical or digital) will you use (e.g. text, images, measurement data)? In which file formats will you save your data?

Guidance:

Explain why you have chosen certain digital file formats. Choosing standardized and open formats ensures the long-term usability of data. Open formats are recommended for sharing and archiving.

Read more about file formats: https://snd.gu.se/en/data-management/guider/file-formats

1.4. According to your estimation, how large is the maximum storage capacity will you need throughout the project (primary data and revisions of processed data)?

- >1 TB
- 100 GB - 1 TB
- <100 GB

Guidance:

Consider the storage volume of both primary data and processed data. Consult with your IT-support if you need help.

- Do you need to include additional costs?
- Will the scale of the data will pose challenges when sharing or transferring data between sites; if so, how will you address these challenges?

2. Documentation and data quality

2.1 How will your data/your material be documented and described with metadata, take collection method, content, structure, standards and formats in consideration; in order for you

and other researchers or computer software to read and be able to interpret the data correctly?

Guidance:

This kind of information that is used to describe data is often called *metadata*, since it is data on data. Please discuss questions on how to describe data and choice of metadata standards (if any) with your library.

2.2 How will the quality of the research data be ensured and documented (for example by repeated measurements, data entry validation etc.)?

Guidance:

Explain what measure are in place to verify the quality of data collection making sure it is controlled and documented.

3. Storage and backup

3.1 How will you ensure integrity of storage and backup of data and metadata during the research process?

Guidance:

Which type of storage and backup will you need?

- What requirements for speed and accessibility do you have?
- How often will you need to backup your data? How many copies should be kept?
- Do you need version control implemented?

If you are unable to answer, please contact your IT organization!

3.2 How is information security and access to data controlled, for example in reference to sensitive data and personal data?

Guidance:

- What are the data security risks and how will these be managed?
- Do you have directives from the Swedish Ethical Review Authority that you have to comply with?
- How will you control access to keep the data secure?
- How will you ensure that collaborators can access your data securely?
- If creating or collecting data in the field how will you ensure its safe transfer to your primary and secure data storage?

4. Legal and ethical requirements

4.1 Will the project be processing personal data?

- Yes – in that case you must report this in Pulu
  (https://pulu.adm.lu.se)
- No

Guidance:

What is the meaning of "processing", according to GDPR?

"any operation or set of operations which is performed on personal data or on sets of personal data, whether or not by automated means, such as collection, recording, organization, structuring, storage, adaptation or alteration, retrieval, consultation, use, disclosure by transmission, dissemination or otherwise making available, alignment or combination, restriction, erasure or destruction (GDPR, artikel 4.2).

Read more about personal records and data protection on the Staff Pages. You will also find research specific information there.

4.2. How will you ensure that data is processed according to the regulations concerning for example personal record handling, confidentiality and intellectual property rights?

Guidance:

- Will special security measures be necessary in regards to technical solutions?
- Will consent be necessary to be obtained and if so, how will the consent forms be kept?
- Will data be anonymized/psedonymized? How will you be handling and storing the code key?

Read more about personal data and data protection, confidentiality and copyright on the Staff Pages.

4.3. In what way will you ensure that data is handled correctly from an ethical standpoint?

Guidance:

Has the project passed an ethical review? Remember that decisions from the Swedish Ethical Review Authority must be registered in the document registration system W3D3!

Read more about ethics on the Staff Pages.

4.4. Collaborative research projects involving external parties, may require an agreement between participants/principals of the study regarding processing, storage, ownership and aspects of intellectual property rights. Is this the case in your study?

- No, LU is the sole party
- Yes, it does involve external parties

Guidance:

Read more about agreements on the Staff Pages.

5. Data sharing and long-term preservation

5.1 Will research data and/or information on data (metadata) be made publicly available?

- Yes, both data and metadata
- Yes, but only metadata
- No, restrictions do exist

Guidance:

Note that some research funding entities and some journals demand that you make your data

publicly available.

Remember you always shall keep a copy of your data at LU.

5.2 If so, how, when and where will data and/or metadata be made available? Are there any limitations (legal and/or ethical) that prevents sharing or reuse of it?

Guidance:

Consider where, how and to whom data with ensured long-term value should be made available.

- Are you aware of any restrictions regarding the sharing of your data? Are these possible to work around?
- How will potential users find out about the availability of your data?
  With whom will you share the data, and under what conditions?
- Will you share data via a repository, handle requests directly or use other means?
  When will you make the data available?
- Will you try to obtain a persistent identifier (PID) for your data?
  Science Europe has published criteria for the selection of repositories.

5.3 If you plan to make data/metadata publicly available, will you use a unique and persistent identifier (PID) such as a DOI?

Guidance:

A persistent identifier (PID) is a unique and persistent digital reference which makes it possible to find and reuse digital material. PID:s are used for referring to digital objects as documents, web pages, files and more. If you share data/metadata via a repository, they will usually provide a PID.

Digital Object Identifiers (DOI) is a type of PID. It is often used for enabling correct citation of research data and for showing which version of the data set that was used.

5.4 If data has been created or collected, is there a reason for keeping these forever or may they be destroyed after 10-20 years? What would the reasons be for preservation?

- My current assessment is that data should be kept.
- My current assessment is that data probably may be destroyed.
- It is not possible to assess this at the present time.
- No data will neither be created nor collected.

Guidance:

Decision on disposal of documents (deletion) cannot be make unilaterally by the researcher! Read more about archiving and disposal of research material on the Staff Pages.

6. Responsibilities and resources

6.1 Who is responsible for the data management and assists with the data management during the project? Who is responsible for data management, keeping of records and long-term preservation, after the project finished?

Guidance:

Describe roles and responsibility for the project activities – data collection, creation of metadata, data quality, storage, backup, archiving and data sharing.

- Who is responsible for implementing the DMP, and ensuring it is reviewed and revised?
- Who will be responsible for each data management activity? Individuals should be named whenever possible.
- How will responsibilities be split across partner sites in collaborative research projects?
- Will data ownership and responsibilities for RDM be part of any consortium agreement or contract agreed between partners?

6.2 What resources (cost, labor and miscellaneous costs) will be allocated to data management (including storage, backup, data sharing and long-time preservation preparation) within the project?

Guidance:

Consider all resources necessary to complete the planned project.

- Is sharing planned in such a way that resources are needed continuously (storage, maintenance of web pages etc.)
- Do skills outside the project need to be hired? (programming, encryption etc.)
- Do you need access to special equipment? (research infrastructure, safe etc.)