Data Management Plan

Example of an adapted template for humanities research project where data from cultural heritage collections is managed

Data management and the Data Management Plan

The purpose of this template is to serve as an example. The example is based on an adaptation of the more general DMP template[1] from the Swedish Research Council. The adaptation was made for the specific purpose of being used in humanities research project grant for Digitisation and accessibility of cultural heritage collections[2] at the Swedish Research Council.

The questions in the template are meant to serve as inspiration for any necessary adjustments and developments. They can be used and re-used in local or discipline-specific adaptations, for example they can be added in existing templates or tools, where appropriate and applicable.

Introduction

Data management plans provide support for secure and correct management of research data. By drawing up a data management plan, researchers can obtain better insight into their needs for support and resources. The plan shall describe how data collected and/or created will be managed during the research, and how they will be dealt with afterwards.

For research funding bodies, it is a way of promoting good data management that can contribute to open access and reuse. The Swedish Research Council recommends that data management plans drawn up shall include the six sections described in the template for data management plans produced by the Swedish Research Council and the Association of Swedish Higher Education Institutions (SUHF). A data management plan can include several parts, but these six parts are the most fundamental. Template can be further adapted to include more aspects for local or discipline-specific adaptations.

Why is this important?

Good research data management is important to ensure research data can be easy to find and understand, make available openly on the internet, use, quality

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[1] The Swedish Research Council website: Data management plan template - Swedish Research Council

[2] The Swedish Research Council website: Research project grant for digitisation and accessibility of cultural heritage collections - Swedish Research Council

assess, and preserve. Planning data management is essential for researchers and research performing institutions to:

- Get better control of data.
- Get better picture of costs for data management and need for support.
- Achieve compliance with requirements, laws and regulations.
- Maintain good research practice.
- Enhance data quality and reusability, so data can be used further for new research.
- Fulfill the transition to open access - by considering if open access can be created already in the planning phase, and clarifying why open access cannot be created, when it is not possible.
- Support efficient use of public funds.

What do we mean with research data and FAIR?

Research data: Data collected or produced within the framework of publicly funded scientific research activities. In this context, data refer to information in a digital format.

Comment: Data can, for example, consist of digital texts, images, audio-visual materials, 3D scans, observation data, results from experiments and other types of digital objects. The concept of research data also includes the metadata that describe research data and are aimed at making research data findable.

Existing data from other actors (such as public agency data) used in research are not always considered to be research data. Such data become research data if they are analysed, processed, or otherwise refined in a way that makes them a part of the research data that have been produced during the research process. Existing data that are already administered and made accessible by another actor and have been used in their original form in research are not covered by this definition.

FAIR: an acronym referring to fifteen principles for making research data findable, accessible, interoperable, and reusable.

The Swedish Research Council's definition of FAIR is based on the criteria we have developed for FAIR research data (link).

More information about Data Management Plans: Producing a data management plan, Swedish Research Council: https://www.vr.se/soka-finansiering/krav-och-villkor/ta-fram-en-datahanteringsplan.html

Adapted template: questions

General information

- Project title:
- Project leader:
- Version:
- Date:

1 Description of data

How will data be collected, created and reused?

- Will existing data be collected? YES/NO
- If yes, who owns or is responsible for the management of this data (person, foundation, institution, authority, etc.)?
- Short description of existing data:
- Will existing analogue information, collected from different actors, be converted into data? YES/NO
- If yes, who will own and have management responsibilities for these data?
- Short description of analogue collections.
- Will new data be created during the research project time? YES/NO
- If yes, who will own and have long-term management responsibility for this new data?
- Short description of new data that will be created during the research project:
- Other/comment:

What types of data will be created and collected in terms of data format, amount and volume of data?

- Items, objects and works of art in number
  - digital records:
  - pictures:
  - file format:

- Printed material in number
  - digital records:
  - pictures:
  - file format:

- Photographs, map sheets and posters in number
  - digital records:
  - pictures:

  - file format:

- Moving images in number
  - digital records
  - minutes:
  - format:

- Audio recordings in number
  - digital records:
  - minutes:
  - file format:

- (Other) archival material in number
  - digital records:
  - pictures:
  - file format:

- Total amount of information and volumes, indicated in byte:
- If open and/or widely accepted formats are not used, please explain why.

2. Documentation and data quality

How will the material, including metadata, be documented and described?

- How will data be structured during the research process (database formats, APIs or other available technical solutions, etc.)?
- Are there existing, open and/or widely accepted standards and formats for descriptive metadata in the research area and the domain referred to? YES/NO
- If yes, will these be used? YES/NO
- If no, please explain why:
- Which standards will be used?
- Are there existing open and/or widely accepted standards and/ formats applicable to metadata that will be made available on the Internet? YES/NO
- If yes, will these be used? YES/NO
- If no, please explain why:
- What standards will be used?
- Describe the collection methodology:

How will data quality be safeguarded and documented during the research project time (for example by repeated measurements, validation of data input, through documentation of how databases, APIs, formats, software and terminologies are structured, etc.)?

3. Storage and backup

How is storage and backup of data and metadata safeguarded during the research project time?

- Has contact been established with the data owner or the data manager concerning storage and backup? YES/NO
- If yes, has storage and backup of data and metadata been secured during the research process together with the data owner or the data manager?
- Will data be stored via (select option):
  - The institution's internal storage capacity.
  - An external service or infrastructure provided by, or otherwise approved by, the institution.
  - Other type of approved or certified data service or infrastructure, please specify:
  - Other/comment:

How is data security and controlled access to data safeguarded (for example in relation to handling of sensitive and personal data)?

- Has contact about these issues been established with the data owner/data manager? YES/NO
- If yes, is there an agreement with the data owner/data manager on responsibility and technical support regarding data security and controlled access to data? YES/NO
- Other/comment:

4. Legal and ethical aspects

How is data handling safeguarded according to legal requirements (for example in relation to handling of personal data, confidentiality and intellectual property rights)?

- Has contact with legal support been established concerning these legal requirements (e.g. a legal representative at the university or likewise)? YES/NO
- How is data management ensured in terms of method, responsibility and technical support, according to the legal frameworks that applies?
- Other/comment:

How is correct data handling safeguarded according to ethical aspects?

- Does the data contain information that requires application for ethical review? YES/NO
- Has contact about these issues been established with the data owner or the data manager for an evaluation of the material? YES/NO
- How are ethical aspects handled in terms of method, responsibility and technical support?
- Other/comment:

5. Accessibility and long-term storage

How, when and where will research data or metadata be made accessible? Are there any conditions, embargoes and limitations on the access to and reuse of data to be considered?

- Will data be made publicly available on the internet? YES/NO
- If yes:
  - When will data be made available on the Internet?
  - Out of the total data volume and sets, how much data will be made available, in byte?
  - Will both the descriptive metadata and the data be made available?
  - Under what rights statements or license will metadata and data be made available (PDM, CC0, the CC licenses or other)?
  - When will metadata and data be made available?
- If no:
  - Please explain why:
  - Will the data be made available in a different way, or with certain restrictions?
  - Will there be open access to data in the long run?
- Other/comment:

In what way is long-term storage safeguarded, and by whom? How will the selection of data for long-term storage be made?

- Has contact been established with the data owner/data manager concerning these issues? YES/NO
- If yes, is there an agreement with the data owner or the data manager on responsibility and technical support regarding long-term preservation and selection of data? YES/NO
- In case a division of responsibility for different data sets is required, please explain why:
- Will specific systems, software, source code or other types of services be necessary in order to understand, partake of, or use and analyse data in the long term? YES/NO
- If yes, will these be documented and available as open access? YES/NO
- If no, please explain why:

- Other information:
- How will the use of unique and persistent identifiers, such as a Digital Object Identifier (DOI), be safeguarded?
- Has contact been established with the data owner or the data manager concerning these issues? YES/NO
- Is an established system, service, method, and format used for designing PIDs? YES/NO
- If yes, which system, service, method, and format is used?
- If no, please explain why:

6. Responsibility and resources

Who is responsible for data management and supports the work during the research project time?

- Has contact been established with the data owner or the data manager concerning these issues? YES/NO
- If yes, is there an agreement with the data owner or the data manager on responsibility and technical support regarding data management during the research project? YES/NO
- Are there more actors supporting the work and if so, which (e.g., infrastructures, data services)?
- Other information:
- Who is responsible for data management, ongoing management and long-term storage after the research project time has ended?
- Has contact been established with the data owner or the data manager concerning these issues? YES/NO
- If yes, is there an agreement with the data owner or the data manager on responsibility and technical support regarding continued data management and long-term preservation after the research project time has ended? YES/NO
- Other/comment:

What resources, such as costs or labour input, will be required for data management including storage, backup, provision of access and processing for long-term storage?

- Is there an estimation of resources for data management in the project budget? YES/NO
- If yes, please provide a reference to relevant paragraph(s) in the application:
- If no, please explain why:
- Other comments:

What resources will be needed to ensure that data fulfill the FAIR principles?

- Will data created within the project fulfil the FAIR principles? YES/NO
- If no, what would be needed in order to fulfil the FAIR principles?