

## Data Management Plan

### *Template for doctoral research projects*

1. What data will you collect or create?

2. How will your data be documented and described?

3. How will you deal with any ethical and copyright issues?

4. How will your data be structured, stored, and backed up?

5. What are your plans for the long-term preservation of data supporting your research?

6. What are your plans for data sharing after submission of your thesis?

# Guidance notes

## 1. What data will be collected or created?

- What physical data will you study? (e.g. artefacts, samples, paper archives, etc.) And what digital data will be derived from these? (e.g. field-notes, images, measurements, spreadsheets, survey data, etc.)
- What data will be 'created' digitally? (e.g. images, some analytical and survey data, etc.)
- Describe the methods/standards for data creation. What quality assurance processes will you adopt (e.g. calibration, data entry validation, representation with controlled vocabularies)
- What file formats and software will you use? Do your chosen formats and software enable sharing and long-term sustainability of data, such as open standards and open source software?
- Consider how many individual files you expect to make, anticipated file sizes, and total storage volume.

## 2. How will your data be documented and described?

- Think about what contextual information is required to make the data understandable to others.
- What information on the data collection methods and context (documentation and 'metadata') will be recorded for each data type/set?
- Where will the metadata for each data type/set be located? (e.g. within the data file and/or as separate metadata text document, and/or in method chapter/appendices in the thesis)

## 3. How will you deal with any ethical and copyright issues?

- Do you need to gain written consent from respondents to preserve and share data beyond your research, e.g. confidential and sensitive information?
- Do you need to anonymise data during research or when preparing for sharing, and how will you do this?
- Have you established who owns the copyright in your data?
- If you are re-using someone else's data, are there any restrictions on their re-use?

## 4. How will your data be structured, stored and backed up?

- Has a file naming convention and directory structure been agreed? (e.g. date created/date amended/version no.)
- Do you know the backup procedures of the storage space?
- If keeping your own copy of the data
  - are there security considerations? (e.g. encrypted flash drive)
  - how will you know which is the master copy?

## 5. What are the plans for the long-term preservation of data supporting your research?

- Which data are of long-term value and should be preserved? What data is of long-term value and what data must be retained or destroyed for contractual, legal or other purposes?
- How long will you preserve your data for?
- Where will you preserve your data?
- How will you prepare and document the data for preservation?

## 6. What are your plans for data sharing after submission of your thesis?

- Who, if any, are the anticipated future users of any digital data/resources from the research? (e.g. yourself, project partners, future students, peer researchers, the public)
- Will any of the digital data supporting the thesis (e.g. organised project archive folders with images, drawings, spreadsheets, databases, etc.) be made available to others via a repository?
- With whom will you share your data and under what conditions? Should anybody be able to download the data, or is there a need for access restrictions (eg an embargo period, or making data available on request only)?
- Are there funding body/institutional requirements for the re-use of, or open-access to, the data?
- What are your supervisor's thoughts on sharing 'their' research data, if on a project team?