

# Data Management Plan Checklist

## Data collection

*a) What data will you collect or create?*

- Are there any existing data that you can re-use?
- What type, volume and format of data will you collect or create?
- Do your chosen formats and software enable sharing and long-term sustainability of data, such as non-proprietary software and software based on open standards?

*b) How will the data be collected or created?*

- Are you using standardized and consistent procedures to collect, process, transcribe, check, validate and verify data, such as standard protocols, templates or input forms? What quality assurance processes will you adopt?
- How will you organise data, records, and files (file naming, folder structures)?
- How will you handle versioning?

## Documentation and metadata

*a) What documentation and metadata will accompany the data?*

- What documentation and metadata explain what your data mean, so that it can be read and interpreted in the future? Is this sufficient for others to understand your data and use them properly?
- How will you capture / create this documentation and metadata?
- Which metadata standards will you use?

## Ethics and legal compliance

*a) How will you manage any ethical issues?*

- Do your data contain confidential or sensitive information? If so, are you gaining written consent from respondents to preserve and share data beyond your research?
- How will you protect the identity of participants if required? Do you need to anonymise data, for example by removing identifying information or personal data, during research or in preparation for sharing?
- How will sensitive data be handled to ensure it is stored and transferred securely?

*b) How will you manage copyright and Intellectual Property Rights issues?*

- Have you established who owns the copyright in your data? Might there be joint copyright?
- If you are purchasing or reusing someone else's data, are there any restrictions on their reuse? Have you considered how these data might be shareable, for example by negotiating a new license with the original supplier?
- Have you considered which kind of license is appropriate for sharing your data and what, if any, restrictions there might be on reuse?
- Will data sharing be postponed / restricted, for example to publish or to seek patents?

## **Storage and backup**

*a) How will the data be stored and backed up during the research?*

- Do you have sufficient storage?
- How will your files be backed up, and how regularly? Are your backups stored safely?
- How will the data be recovered in case of an incident?
- Who will be responsible for back-up and recovery?

*b) How will you manage access and security during the research?*

- What are the risks to data security and how will these be managed?
- Do you need to securely store personal or sensitive data? If so, are they properly protected?
- Do you need to transfer personal or sensitive data? If so, how will you ensure that they are transferred securely?
- If data are collected with mobile devices, how will you transfer the data into your main secured storage?
- Who has access to which data during and after research? How will you ensure that any collaborators can access your data securely?

## **Selection and preservation**

*a) Which data are of long-term value and should be preserved and/or shared?*

- What data must be retained or destroyed for contractual, legal or regulatory purposes?
- How will you select which other data to preserve and/or share and which data to destroy?
- What are the foreseeable research uses for the data?
- How long will you preserve your data for?

*b) What is the long-term preservation plan for the dataset?*

- How and where will you preserve your research data for the longer term? Does your repository of choice charge any costs?
- How will you prepare and document the data for preservation and sharing? Have you costed in time and effort to do this?

## **Data sharing**

*a) How will you share the data?*

- When will you make the data available?
- Will you share via a repository, handle requests directly, or use another mechanism?
- With whom will you share the data, and under what conditions? Is there a need for access restrictions?
- How will potential users find out about your data?

*b) Are any restrictions on data sharing required?*

- Will there be any difficulties in sharing data, and how will you overcome or minimize these?
- Would a data sharing agreement (or equivalent) be required?
- If applicable, for how long do you need exclusive use of the data and why?

## **Responsibilities and resources**

### *a) Who is responsible for data management?*

- Who will be responsible for implementing the DMP and ensuring that it is reviewed and revised?
- Who will be responsible for which activities?
- 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?

### *b) What resources will you require to deliver your plan?*

- Do you require any training, people, time, software, hardware, expertise? Are there any other costs, such as charges applied by data repositories?