Data Management Plan (DMP)

Data Management Plan is a document that specifies **what data will be created and how**, and outlines the **plans for sharing and preservation** of the data, both during and after the research project. DMP should be a ‘living’ document which is updated along the research process to reflect what actually happened with the data.

**Why should you create a DMP?**
- Check you have the necessary equipment and support in place
- Decreasing the risk of duplication, data loss or data security breach
- Ensuring that the data are complete, accurate and reliable
- Saving time and energy (e.g., when searching the data, writing up papers, etc.)
- Some funders require a DMP (e.g., Horizon 2020)

**What should be covered in a DMP?**

1. **Administrative data**
   - Provide basic information to identify and contextualise your plan
     - Basic information about your research, e.g., project title, your name, contact details, IDs etc.
     - A short summary of the research to explain the purpose for which the data are being collected
     - Policies and procedures related to data management, e.g., departmental guidelines (if applicable)

2. **Data collection**
   - Define what data you will collect and how
     - Are there any existing data that you can reuse?
     - What standards and methodology will you use to create the data?
     - Do your chosen formats and software enable sharing and long-term access?
     - How will you structure and name your folders and files?
     - Will you adopt any quality assurance processes?

3. **Documentation and metadata**
   - Provide information needed for the data to be read and interpreted in the future
     - What documentation and metadata will accompany the data?
     - How will the documentation be created?
     - What metadata standards will you use and why?

4. **Ethics and legal compliance**
   - Consider any ethical and legal issues, particularly in terms of restrictions they may place on data sharing
     - Have you gained consent for data sharing and preservation?
     - How will you protect the identity of participants if required?
     - Will you share the data, or will sharing be postponed or restricted?
     - Will you license the data?

5. **Storage and backup**
   - Consider where the data will be stored and any implications this has for backup, access and security
     - Do you have enough storage, or will you need to include charges for additional services?
     - Who will be responsible for backup and recovery?
     - What are the risks to data security and how will these be managed?
     - How will you ensure that collaborators can access your data securely?

6. **Selection and preservation**
   - Decide which data are of long-term value and should be preserved and decide how to preserve these
     - Which data must be retained or destroyed for contractual or legal purposes?
     - Which data should be preserved and potentially shared?
     - Have you costed in the time and effort required to prepare the data for sharing and preservation?

7. **Data sharing**
Consider which data you will share and how (methods of sharing may vary depending on several factors, e.g., type, size, complexity and sensitivity of data), and also how people may acknowledge the reuse of your data (e.g., via citation)

- With whom will you share the data and under what conditions?
- When will you make your data available?
- Are any restrictions on data sharing required?
- How will potential users find out about your data?

8. Responsibilities and resources

Assign roles and responsibilities for all data management activities and consider any resources needed to deliver your plan - these can usually be written into a grant application

- Who is responsible for implementing the DMP?
- How will responsibilities be split across partner sites in collaborative projects?
- Do you need additional expertise or equipment?
- What resources will you require to deliver your plan?

How to create a DMP?

To create a DMP, you can use a free web-based tool DMPonline which contains a general template as well as templates required by some European-based funders, e.g., Horizon 2020. You can find guidance and example DMPs on the DMPonline website.

The document Guidelines on FAIR Data Management in Horizon 2020 (version 3.0, published 26 July 2016) will help you create a plan that meets the H2020 requirements. See more on H2020: Open Research Data Pilot requirements here.

Useful Resources

Tool for creating data management plans: DMPonline

DCC: FAQ on Data Management Plans


European Commission. 2016. Guidelines on FAIR Data Management in Horizon 2020