



Data Management Plans for Research at the University of Malta

What is a data management plan?

A Data Management Plan (DMP), is a brief document that explicitly describes the data that will be used for a particular research project.

How do DMPs help research?

DMPs can help the research process in several ways. From an ethical standpoint, DMPs can be used to help ensure that data collected adheres to the FAIR (findable, accessible, interoperable and reusable) data principles.¹ From a GDPR (General Data Protection Regulation) perspective, DMPs help to ensure that data is being collected and managed securely and in line with legal requirements.

It is also increasingly common for funding agencies (e.g., European Research Council) to ask for: a) data to be shared; b) data to adhere to FAIR (findable, accessible, interoperable and reusable) principles. Providing a DMP outlining the management of the data is an effective way to show how the project can fulfil these and other REDP (research ethics and data protection) requirements.

What does a DMP typically consist of?

It explicitly and transparently describes the following information (see examples below in the Q&A section):

- 1) The nature of the data that will be collected,

¹<https://www.force11.org/group/fairgroup/fairprinciples>

- 2) The metadata that will be created and any related documentation
- 3) The expected size of the data
- 4) The way in which data will be stored
- 5) The way in which data will be processed
- 6) The costs associated with processing, storing and management of the data
- 7) The plan for data backup
- 8) The security considerations (both technical and organisational measures) for the data
- 9) The timeframe for data storage
- 10) License conditions for re-use of data (if applicable)
- 11) Intellectual property issues
- 12) Considerations for data reuse
- 13) Considerations/issues regarding data dissemination

Useful Q&A relevant for making a DMP

Question	Illustrative answers
WHAT IS THE NATURE OF THE DATA?	
What kind of data will be collected?	e.g. numeric, text, images
What is the expected size of the data set?	e.g. 30 variables, 1000 observations
What tools or software are required to read or view the data?	e.g. Excel
How will data be anonymised (if applicable)?	e.g. Participants will be assigned a number
What are the (secondary) sources of datasets (if any)?	e.g. NSO
Who holds intellectual property rights for the data?	e.g. The PI, NSO, The Funder
HOW WILL DATA BE MANAGED?	
Who is responsible for managing the data?	e.g. The PI, student, IT, or Funder
What metadata will be created to make data understandable?	e.g. data source, time, definitions
How will the data be stored, archived?	e.g. On UM server, OAR
What is the backup for data storage?	e.g. Personal Copy at PI
Does this data require secure storage?	e.g. technical/organisational arrangements
For how long will the data be stored?	e.g. 3, 5, 10 years or forever
SHARING THE DATA	
Will all or part of the data be available for sharing?	e.g. all the data
How will the data be available for sharing?	e.g. Written permission from PI
Will there be any embargoes on data sharing?	e.g. Yes 3 years from collection date
Will commercial use be allowed?	e.g. No
If sharing the data raises privacy, ethical, confidentiality concerns, or patent/licensing issues how will you address these?	e.g. Limited release of data

Additional resources, examples and templates

The links below provide further information on data management and in particular, provide access to a range of examples and templates that may assist in writing your own DMP.

https://en.wikipedia.org/wiki/Data_management_plan

<https://dmponline.dcc.ac.uk>

https://dmponline.dcc.ac.uk/public_plans

https://ec.europa.eu/research/participants/docs/h2020-funding-guide/cross-cutting-issues/open-access-data-management/data-management_en.htm

<https://www.lse.ac.uk/library/research-support/research-data-management/what-is-a-data-management-plan-and-how-do-i-write-one>

<https://www.usgs.gov/products/data-and-tools/data-management/data-management-plans>

<https://libraries.mit.edu/data-management/plan/write/>

<https://www.icpsr.umich.edu/web/pages/datamanagement/dmp/index.html>

<https://www.lib.umn.edu/datamanagement/dmp-examples-umn-researchers>