

# Data Management Checklist

Use this checklist to guide you through the elements of data management to consider as you develop a research Data management Plan (DMP) for your research project. This document is intended as a starting point to help you structure your planning process, not all information will be relevant to your project, and it should be used alongside the university research data management policy and guide at: [Research policies](#).

## Data Types

A description of the data your project will capture, create or use. It is important to record this detail to help you and subsequent users understand why and how the data were created.

- » How will data be created (captured)?  
*e.g. interview data, questionnaires, imaging, experimental measurements etc.*
- » What data formats will be used?  
*e.g. file formats such as excel, word, open source etc. Consider choice of data formats such as: will the data formats meet certain specifications including international or national standards, widely used, is it accepted as best practice in this discipline, will it facilitate re-use?*
- » Will the data be reproducible?  
What would happen if it got lost or became unusable later?
- » How much data will there be and what will its growth rate be?  
How often will it change?
- » Will existing data be used? If so, from where, and what is the relationship to the existing data?
- » Are there special tools or software needed to create / process / visualise the data?

## Data Organisation, Documentation and Metadata

Organising, documenting and describing data is important in order to assure quality control and reproducibility of data.

- » What metadata standards will be used?
- » How will metadata be captured, created and managed? Is there a discipline-specific standard?

- » How will folders and files be structured and named?
- » How will different file versions be managed?
- » What data identifiers will be assigned?
- » What other documentation and contextual information will be available in order to help others understand the data?  
*e.g. data dictionaries, codebooks, questionnaires*

## Data Storage and Security

### Storage

- » Where and what media?  
Short-term, longer-term
- » Who will be responsible?

### Back-up

- » How will it be done and how often will it be done?
- » Who will be responsible?

### Security

- » How will data security be guaranteed  
*e.g. data encryption, password etc.*
- » How will the data be shared during the project?

## Long-Term Preservation

- » What data will be kept or destroyed after the end of the project?
- » How long will data be kept?  
*e.g. 3-5 years, 10-20 years, permanently?*
- » Where will the data be stored?  
*e.g. archive, data repository, network.*
- » What file formats will be used?  
Are they long-lived?
- » Who will manage the long term data?

- » What is needed to prepare the data for preservation or data sharing?
- » What related information will be deposited with the data?

### Ethics & Intellectual Property

- » Are there any ethical and privacy issues that may prohibit sharing of some or all of the data? If so, how will these be resolved?
- » Do your data contain confidential or sensitive information?  
If so have you discussed data sharing with the respondents from whom you collected the data?
- » Who owns the data arising from your research, and the intellectual property rights relating to them?

### Data Sharing and Re-Use

- » In addition to the owners of the data you generate, who else has a right to see or use this data? And who else should reasonably have access? Who will be the audience for your data?
- » Are there any limits to data sharing required
- » Are there any sharing requirements?  
*e.g. funder data sharing policy*
- » How will the data be discovered and shared?
- » What tools / software will be needed to work with the data?
- » Will there be embargo periods?

### Implementing Your Plan

- » Who will be responsible for ensuring your plan is followed?
- » How often will your plan be reviewed and updated?

## Further information

### Managing your Data

Increasingly funding organisations require that research data management is addressed in grant applications. Please refer to your local Head of Research for advice and to the guidelines outlined at:

[Data Management webpage](#)

### Data Storage, Backup and Security

Refer to your local Research IT support team to discuss the options available to you regarding data storage or any of your IT requirements. If you have no local team contact the university IT support at:

[servicedesk@uhi.ac.uk](mailto:servicedesk@uhi.ac.uk)

### Intellectual Property/Commercialisation

For queries regarding intellectual property and support for researchers interested in commercialization contact Joe Irvine, Head of Knowledge Exchange:

[Joe.irvine@uhi.ac.uk](mailto:Joe.irvine@uhi.ac.uk)

Further reading:

[IP webpage](#)

### Research Ethics

The Research Ethics team can help with advice and consultations to establish any ethics considerations surrounding your project. Full details available on the [Research Ethics webpage](#).

Further information from:

[fiona.leiper@uhi.ac.uk](mailto:fiona.leiper@uhi.ac.uk)

This guide has been adapted from a guide originally produced by University College Dublin

