

Data management plans

What, why and how?

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Today's session

- What a data management plan (DMP) is and why they are important
 - University and funder policy requirements
- Elements of a DMP and the issues to be addressed
- Sources of help and support available

Questions as we go, and at end.

What is a data
management plan?

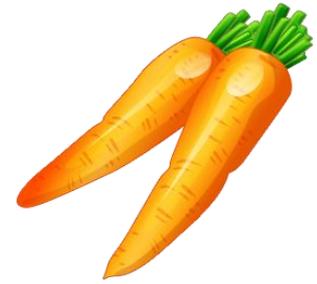
A data management plan is...

A formal document which outlines all aspects of your research data management (RDM), i.e. what you will do with your research data during and after your research project ends.

- It is created as part of a grant application or at the start of a project.
- A DMP is not a static document – it should be updated during the course of a project.

Why create a data
management plan?

Carrots and sticks



Carrots - the benefits

Sticks - requirements

- Good research practice
- Work efficiently and with minimum hassle

'Avoid panic and frustration'
(UKDA)
to avoid
problems in the future

- Make it easy to share your data

Carrots and sticks



Carrots - the benefits

Sticks - requirements

- University of York Research Data Management Policy
www.york.ac.uk/rdm-policy
- Funding body requirements
 - DMP (may be part of grant application)
 - Management and sharing
 - Always check the guidance

University RDM Policy and DMPs

“ **3.4** Clear arrangements for data management must be in place from the outset of the research project to address the requirements at 3.3.

3.4.1 Data management plans must be prepared according to funders’ requirements, or where required by the Department. Plans are considered good practice for all other projects.

3.4.2 Legal, ethical and commercial constraints on the release of research data must be considered at the initiation of the research process and throughout both the research and data life-cycles, and will normally be described in the data management plan.

”

University RDM Policy and DMPs

“4.5 Principal Investigators, University project leads and supervisors are responsible for:

4.5.3 producing and adhering to a data management plan to address the requirements at 3.4;”

“4.6 Departmental Research Committees are responsible for:

4.6.4 establishing local standards for data management for research irrespective of funding including requirements for producing data management plans;”

Funder requirements

Research Funders	Policy Coverage		Policy Stipulations					Support Provided			
	Published outputs	Data	Time limits	Data plan	Sharing/ access	Long-term curation	Monitoring	Guidance	Repository	Data centre	Costs
AHRC	●	●	●	●	●	◐	◐	●	○	◐	●
BBSRC	●	●	●	●	●	●	●	●	●	◐	●
EPSRC	●	●	●	◐	●	●	●	◐	○	○	●
ESRC	●	●	●	●	●	●	●	●	●	●	◐
MRC	●	●	●	●	●	●	○	◐	●	○	◐
NERC	●	●	●	●	●	●	●	●	●	●	◐
STFC	●	●	●	●	●	●	●	◐	●	◐	◐
Cancer Research	●	●	●	●	●	●	●	◐	●	○	●
European Commission	●	●	◐	●	◐	◐	◐	●	●	◐	●
Wellcome Trust	●	●	●	●	●	●	●	●	●	●	●

For success in data management ...

Plan for your data
management

Data management plans

Elements of a Data Management Plan (DMP)

Tools

Examples

DMP review trial

Include:

- Description of the data to be collected/created
- Standards/methodologies for data collection and management
- Ethics and Intellectual Property concerns or restrictions
- Plans for data sharing and access
- Strategy for long-term preservation

Data management plans

Elements of a Data Management Plan (DMP)

Tools

Examples

DMP review trial

York DMP template for postgraduate research projects
www.york.ac.uk/library/info-for/researchers/data/planning

DMPonline

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

An online tool, created by the Digital Curation Centre, which is designed to help you **create personalised data management plans** according to the requirements stipulated by the major UK funders.

Data management plans



Elements of a Data Management Plan (DMP)

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Data management plans

Elements of a Data
Management Plan
(DMP)

Tools

Examples

DMP review trial

University RDM webpages

www.york.ac.uk/rdm

Section on data management
planning links to example plans

Data management plans

Elements of a Data
Management Plan
(DMP)

Tools

Examples

DMP review trial

Trial to restart in May 2018.

2 weeks notice requested.

Data management plans



Home

Public DMPs

Funder requirements

Help

Welcome

DMPonline helps you to create, review, and share data management plans that meet institutional and funder requirements. It is provided by the Digital Curation Centre (DCC).

Join the growing international community that have adopted DMPonline:



17,622 Users



203 Organisations



23,083 Plans



89 Countries

Some funders mandate the use of DMPonline, while others point to it as a useful option. You can [download funder templates](#) without logging in, but the tool provides tailored guidance and example answers from the DCC and many research organisations. Why not sign up for an account and try it out?

Data management plans



For guidance on research data management, see the RDM web pages
For help with RDM, contact the Library's Research Support Team

Admin

My Dashboard

The table below lists the plans that you have created, and that have been shared with you by others. You can edit, share, download, make a copy, or remove these plans at any time.

Project Title	Template	Edited	Role	Test	Visibility	Shared	
A GIS analysis of the placement of Iron Age hillforts in the ...	AHRC Data Management Plan	11-04-2018	Owner	<input checked="" type="checkbox"/>	N/A	No	Actions
My plan (DCC Template)	DCC Template	11-04-2018	Owner	<input checked="" type="checkbox"/>	N/A	No	Actions
Geophysical survey at Shaftoe Crags, Northumberland	DCC Template	11-04-2018	Owner	<input checked="" type="checkbox"/>	N/A	No	Actions
Analysing the location of iron age hillforts in Hampshire	AHRC Template	11-04-2018	Owner	<input checked="" type="checkbox"/>	N/A	No	Actions

Create plan

Data management plans

3. How will the data be stored in the short term?

B *I*    

Save

AHRC DCC guidance U of York guidance

Guidance

You should consult with the institution's data support (e.g. library services, IT department).

By submitting the DMP you are confirming that:

- The institution is able to store the data appropriately during the lifecycle of the grant, the relevant people have been consulted and this has been considered and agreed
- The institution has considered all the risks, and storage will be in line with the institution's data management policy (provide a link to the policy if applicable)

AHRC

DCC guidance

U of York guidance



Storage & security

Questions to consider:

- What are the risks to data security and how will these be managed?
- Will you follow any formal standards?

Guidance:

If your data is sensitive (e.g. detailed

personal data information or discuss any a that you will b and how the any formal sta with e.g. ISO

See DCC Brief Security Man:

See UKDS gu

AHRC

DCC guidance

U of York guidance

Storage & security

The University's [Research Data Management Policy](#) requires active research data to be kept "Secure and safe with appropriate measures taken in handling sensitive, classified and confidential data". To meet this requirement and minimise the risk of data loss:

The University provides storage on the [filestore](#) or on the University's cloud storage option [Google Drive](#); either option should be used to store active research data unless there are good reasons to use another system.

Data management plans

Elements of a Data Management Plan (DMP)

Tools

Examples

University RDM webpages

www.york.ac.uk/rdm

Section on data management planning links to examples on DCC website

The screenshot shows the top of the DCC website. It features a red header with the DCC logo and the tagline "because good research needs good data". To the right is a search bar with a "Search" button. Below the header is a navigation menu with links for Home, Digital curation, About us, News, Events, Resources, Training, Projects, Community, and Tailored support. A "Contact us" link is also visible in the top right corner.

Home > Resources > Data Management Plans > Guidance Examples

In this section

Briefing Papers

How-to Guides & Checklists

Developing RDM Services

Curation Lifecycle Model

Curation Reference Manual

Policy and legal

Data Management Plans

Checklist

DMPonline

FAQ on DMPonline

FAQ on Data Management Plans

Funders' requirements

Guidance and examples

Tools

Case studies

Repository audit and assessment

Example DMPs and guidance

Lots of guidance and examples are available to help with data plans.

A summary of example plans organised by research funders is provided below. Some evaluation cribsheets, overseas examples and general guidelines are also referenced.

Practical guidance on writing DMPs is available in the DCC guide: [How to develop a data management and sharing plan](#)

If you have example DMPs to add to this list, please [fill in the form](#).

AHRC

[Religious studies technical plan](#)

A technical plan submitted from the University of Bristol, also including comments from the reviewers

[Language studies technical plan](#)

A technical plan from the University of Glasgow about developing the Scots

Research Data Registry & Discovery Service



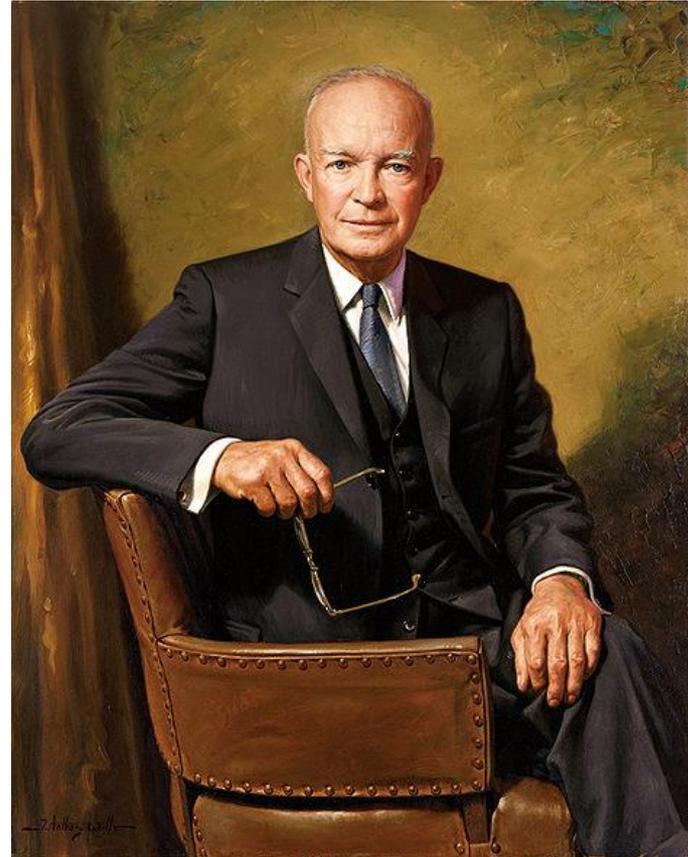
The DCC is working on a pilot project to develop a UK-wide registry, or catalogue, of data held in UK HEIs and established subject-focused data centres alongside the UK Data Archive and a small group of universities with working data repositories.

[Find out more](#)

Data management plans

‘In preparing for battle, I have always found that plans are useless but **planning is indispensable.**’

Dwight D. Eisenhower



Getting started

Describing your data

Data Management Plan

What data will you produce during the course of your project?

If pre-existing data is being used, where will it come from? How will it be used?

How much data do you expect to generate?

How will you collect or create the data? What methods/standards will you use for data creation?

Day-to-day data management

Storing your data (keeping your data safe)

Data Management Plan

Where will you store your data?

How will you back-up your data?

Who else has a right to see or use the data during the project?

Day-to-day data management

Organising your data (good file management)

Data Management Plan

How will you structure and name your folders?

How will you name your files?

How will you manage different versions of your files?

Day-to-day data management

Choosing the right file formats

Data Management Plan

What formats and what software will you use?

Day-to-day data management

Documentation & metadata

Data Management Plan

What additional information will be required to understand your data?

Can someone else use the data?

*"The single most useful thing you can do to ensure the long-term preservation of your data is to plan for it to be re-used. **Imagining it being reused by someone else who has never met you and who never will meet you**, will cause you to approach the creation and design of your data in a new light. In short, always plan for re-use"*

Professor Julian D. Richards, Director, Archaeology Data Service, University of York

A data management horror story

...or what happens
when you don't have a
data management plan

Video by NYU Health
Sciences Libraries

https://www.youtube.com/watch?v=66oNv_DJuPc



What will happen to research data at the end of your project?

Data Management Plan

What data should be kept or destroyed after the end of your project?

For how long should data be kept after the end of your project?

Where will the data you keep be stored at the end of the project?

When will you archive your data?

What data should or shouldn't be shared openly and why?

Who should have access to the final dataset(s) and under what conditions?

How will you share your final dataset(s)?

Keeping selected data

Data appraisal for your project

Why not keep everything?

PrePARE checklist

<http://find.jorum.ac.uk/resources/10949/17171>

Selecting what to keep and what to bin

Selectively disposing of files will help you to find up-to-date information and save on backup time and cost. Most of your research material - including data, some emails and reports - are classed as 'records' and may be covered by your funder's or department's records retention policy. If you do choose to delete material, make sure you dispose of it securely (e.g. by shredding paper records or by the appropriate destruction of electronic records).

Deciding what to keep

First decide what you are obliged to keep, what is of use to you now and what may be of use to you or others in future. If you answer Yes to any of these questions, you should probably keep it.

- Does the University or your funder stipulate a retention period for this material?
- Are there legal reasons to keep it, e.g. health & safety, financial regulation?
- Are you responsible for keeping the master copy (as its creator or owner)?
- Is the material fundamental to your project (e.g. scientific or historical value)?
- Does the material record one-off events that cannot be recreated?
- Does the record (e.g. email) provide evidence that you did something and why?
- Would the material be useful in further research (by you or others)?

Deciding what to bin

Once you have decided what you need to keep, review the rest of your material. Following are some key issues: if you answer Yes to any of these, you could consider deletion.

- Is someone else responsible for the master copy?
- Is it a duplicate of a master held elsewhere, e.g. an email attachment?
- Is the file a draft that was subsequently revised?
- Do restrictions on reuse of the material limit the justification for keeping it?
 - Does copyright prevent sharing or reuse of the material?
 - Are you prevented from archiving/reusing material identifying living individuals?
- Would it be easier / cheaper to recreate or replicate the material than to store it?

More information

This factsheet and links to other useful information can be found at <http://www.lib.cam.ac.uk/dataman/pages/selection.html>.



Keeping selected data

Data appraisal for
your project

Why not keep
everything?

“As open as possible, as
closed as necessary”

Before your project ends ...

- What data should you keep (and share)?
University Policy, funder and publisher requirements
- What data must not be kept (and shared)?
for ethical, legal or commercial reasons

www.york.ac.uk/library/info-for/researchers/data/sharing

Mechanisms for retaining (and sharing) research data

Deposit your selected data with an external service

Transfer your selected data to the University Research Data York service

- a funder data archive /repository
- a subject data archive / repository
- a publisher data archive /repository

+ Record the dataset in PURE
www.york.ac.uk/library/info-for/researchers/data/guidance/pure-datasets

Mechanisms for retaining (and sharing) research data

Deposit your selected data with an external service

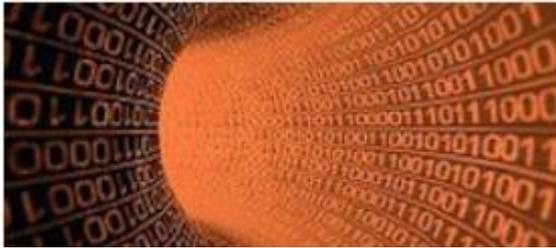
Transfer your selected data to the University *Research Data York* service

- We'll need some descriptive metadata (PURE)
- We will store and manage access to your data for a minimum of 10 years
 - a CC-BY licence is applied to open data
 - data with restricted access.

Depositing your data
www.york.ac.uk/library/info-for/researchers/data/sharing/#tab-4

Help

Further information and resources



Next event:
Open data in practice
17 May 2018

- RDM web pages
www.york.ac.uk/rdm
- RDM 101 (online tutorial)
[Complete the tutorial in the VLE](#)
- Research Support Team
lib-research-support@york.ac.uk
- IT Support Office
itsupport@york.ac.uk
- Archives RMIGO
dataprotection@york.ac.uk

Questions?