

## Data management plan: guidance for peer reviewers

What is a data management plan?.....	1
What do I need to check? .....	1
Assessment of existing data .....	2
Information on new data.....	2
Quality assurance of data.....	2
Backup and security of data.....	2
Expected difficulties in data sharing.....	3
Copyright/intellectual property right.....	3
Responsibilities .....	3
Preparation of data for sharing and archiving.....	4

### What is a data management plan?

A data management plan should incorporate data management into the research cycle to ensure that generated data can be made available and re-used to the maximum extent possible at the end of a grant, in line with the ESRC Research Data Policy (<http://www.esrc.ac.uk/about-esrc/information/data-policy.aspx>). A data management plan is mandatory in all applications planning to generate data, except for applicants applying for studentships.

Most data generated as a result of economic and social research can be successfully archived and shared. However, some research data are more sensitive than others. It is the grant holder's responsibility to consider all issues related to confidentiality, ethics, security and copyright before initiating the research. Any challenges to data sharing (eg copyright or data confidentiality) should have been critically considered in a plan, with possible solutions discussed to optimise data sharing.

### What do I need to check?

Please assess the quality of the proposed data management plan and comment on whether appropriate and realistic consideration has been given to data management requirements to maximise data sharing, and whether the requirements are justified according to the proposed research.

The data management plan is an integral part of the application and should be considered in the context of information presented in the Case for Support and Justification for Resources.

We have given suggestions below for each of the points included in a data management plan that may help you to evaluate whether the plan is fit for purpose.

For more guidance please refer to the UKDS data management guidance (<http://ukdataservice.ac.uk/manage-data.aspx>) and the UK Data Archive's *Managing and Sharing Data* guide (<http://www.data-archive.ac.uk/create-manage>).

Any suggestions for improvements to data management plans are welcome and will be fed back to applicants. If you do not feel competent to comment on data management, please select 'Unable to assess'.

## **Assessment of existing data**

You may want to consider the following questions:

- Is there evidence that secondary sources of data have been considered and evaluated?
- Is there evidence presented that the project is not creating new data when there are existing resources that could be re-used?
- If existing data are used, have issues such as copyright or IPR of such data been considered and possible copyright clearance obtained to be able to share data or data derived thereof?

## **Information on new data**

You may want to consider the following questions:

- Is the information on data to be produced adequate and realistic and according to the research and methodology proposed in the application?
- Is there evidence that the plan covers all data that is planned to be generated from the research?
- Is sufficient information given on how data will be collected and in which formats (eg Open Document Format, tab-delimited, Excel etc) data will be analysed and stored, as well as an indication of how they will be documented?

## **Quality assurance of data**

You may want to consider the following questions:

- Is information given on procedures for quality assurance that will be carried out on the data collected? (Please refer to the Case for Support for full information on quality control of the proposed research.)  
This could include methods for data validation or standards applied during data collection and data entry, codes of research practice adhered to, transcription templates used, etc.
- Are no quality assurance procedures mentioned when there is a clear need from the proposed research that there should be? Please note that quality issues are to be addressed at the time of data collection, data entry, digitisation or data checking.

## **Backup and security of data**

You may want to consider the following questions:

- Is the data back-up procedure described fit for purpose? eg considering back-up procedures for all institutions involved in research and considering back-up frequency
- Are multiple media and multiple copies considered for back-up?
- Are measures considered to check the usability of back-up copies?
- Is information given on an institutional and/or local centre back-up policy?
- If sensitive data (ie detailed personal data) are collected, is there evidence that appropriate security measures in line with the Data Protection Act are considered when handling and storing data? eg encrypting data, anonymising data, care when transmitting data
- Is there evidence presented that proposed measures reflect existing best practices?

- Are methods of version control described? (ie making sure that if the information in one file is altered, the related information in other files is also adopted, as well as keeping a track on a number of versions and their locations)

## **Expected difficulties in data sharing**

You may want to consider the following questions:

- Have all obstacles to sharing data been considered?
- Have strategies been considered for dealing with these issues? For example by:
  - discussing data sharing and re-use with interviewees and gaining specific consent from participants to share research data
  - anonymising data to remove personal and disclosive information
  - regulating access to data

If there are ethical issues which may cause difficulties in data sharing, strategies for dealing with these issues should be discussed in the relevant section in the Je-S form. In assessing this part of the application you may want to refer to the requirements of the ESRC Framework for Research Ethics ([www.esrc.ac.uk/researchethics](http://www.esrc.ac.uk/researchethics)).

If newly generated data cannot be shared, adequate justification should be given. It may be a case that parts of the data that are sensitive cannot be shared, but this should be considered critically and the plan should provide evidence that it has been assessed from all angles.

We regard a waiver of deposit as an exception, and reserve the right to refuse waivers where there is insufficient evidence that the applicant has fully explored all strategies to enable data sharing and archiving.

## **Copyright/intellectual property right**

You may want to consider the following questions:

- Is copyright of research data (both existing sources of data used or created) agreed or clarified, especially for collaborative research or if various sources of data are combined?
- Are plans in place for copyright clearance for data sharing (if possible)?

## **Responsibilities**

You may want to consider the following questions:

- Have data management responsibilities been allocated to named individuals?
- Is there evidence that data management will be followed throughout the course of the project?
- Has consideration been given to the variety of data management tasks that may be required for the research?
- For collaborative research, are data management responsibilities allocated at each partner organisation (if needed for the research) or has the coordination of data management responsibilities across partners been considered?

For further information please refer to the information provided within the Staff Duties section in the Je-S form and where appropriate in the Justification of Resources.

## **Preparation of data for sharing and archiving**

The following questions may be considered when assessing this section of the plan:

- Are the plans for preparing and documenting data for sharing and archiving with the UK Data Service appropriate?
- Is there evidence that data will be well documented during research to provide high-quality contextual information and/or structured metadata for secondary users? eg documenting the method of data collection, origin, circumstances, processing and analysis of data