

ESRC Data Management Plan Guidance

Introduction

All applicants for ESRC funding planning to generate data as part of their award must include in their application a Data Management Plan. Plans should be completed with reference to the ESRC Research Data Policy. The Policy includes guidance on what a Data Management Plan is expected to include. A maximum of three sides of A4 (using a minimum font size of 11) is allowed for the plan.

The plan should be formatted in sections using the headings prescribed by ESRC, which can be found in:

- the Je-S handbook and
- the <u>ESRC Guidance for peer reviewers</u>. This document is useful as it provides detailed information on what the reviewers of your application will looking for in the Data Management Plan.

For more information about how to meet the requirements of the plan in terms of data management practicalities and effective use of resources and services, there is a wealth of valuable guidance on the UK Data Service website. Here you can find information about, among other things: obtaining consent from research participants and anonymising data for sharing; dealing with IPR in secondary data sources; storing and sharing data securely; how to organise and document data; and suitable file formats.

To assist you in completing a plan you can use a tool called <u>DMPonline</u>. Using this tool you can generate and complete an ESRC Data Management Plan template online. The template includes detailed prompts and guidance to help you complete each section of the plan. Even if you do not draft your plan using the tool, the guidance it includes is worth reading as a checklist of points to cover in your plan. Plans can be saved, shared with co-applicants, and exported for incorporation into the grant application.

All plans must be reviewed by the Research Data Manager prior to submission. Draft plans can be sent to the Research Data Manager directly or via your Research Development Manager and should be provided no later than 5 working days before the application deadline. General guidance on data management planning is available on the Research Data Management website. Contact the Research Data Manager if you require preliminary guidance on completing the plan.

Contact: Research Data Manager: researchdata@reading.ac.uk / 0118 378 6161

What is required?

Data Collection (Je-S form)

All applicants must complete the Data Collection section of the Je-S form. If the research will involve data collection or acquisition, you should indicate how existing datasets have been reviewed and state why currently available datasets are inadequate for the proposed research.

Data Management Plan (attachment)

A maximum of three sides of A4 (using a minimum font size of 11) is allowed for the plan. The plan should use the headings specified by ESRC, as follows. ESRC guidance is reproduced, followed by additional guidance in italics.

Assessment of existing data

If you will be creating new data as part of your project, explain why existing data sources cannot be re-used. If you envisage purchasing or re-using existing data sources please explain whether issues such as copyright and IPR have been addressed to ensure that the data can be shared, i.e. explain how you plan to deal with permissions to share any data derived from data which you do not own.

Clearly identify data sources you propose to use. It may be helpful to include relevant URLs or DOIs. You should indicate that you have investigated issues such as IPR, and that you are confident you can use the data in the way you propose, and will be able to share any derived data. The data sources you intend to use may be provided under licence or with terms of use, which may affect whether and how they or any data derived from them can be used and distributed. If you cannot find any terms of use or are unsure about what you will be permitted to do with the data, contact the provider to discuss what you propose to do. If you will need to secure permission to use the data, and this is likely to incur costs, you should indicate that you have planned for this, and include the costs in your budget.

Information on new data

Provide a brief description of new data which you envisage creating. This information should include how the data will be collected, i.e. proposed approach and the format (e.g. Open Document Format, tab-delimited format, MS Excel etc.) in which the data will be collected, analysed and stored, as well as an indication of how they will be documented.

Quality assurance of data

Quality control of data is an integral part of a research process. In support to the information about the planned research described in a Case for Support, briefly describe the procedures for quality assurance that will be carried out on the data collected. Quality control and assurance should be considered at the time of data collection, data entry, digitisation or data checking, to ensure accuracy and consistency of data. Procedures might include: documenting the calibration of instruments, the collection of duplicate samples, data entry methods, data entry validation techniques, methods of transcription.

Back-up and security of data

Describe the data back-up procedures that you will adopt to ensure the data and metadata are securely stored during the lifetime of the project. You may need to discuss your institution's policy on back-ups. If your data is sensitive (e.g. detailed personal data) in any way you should discuss appropriate security measures which you will be taking. Methods of version control (i.e. 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), should also be stated.

Indicate what the primary storage for data will be. Data collected/held at the University should be stored using University-managed infrastructure, which will provide data security, replication in separate data centres, automated backup and file recovery. For the different options available, and information about costs, please read the guidance here.

Storage costs should be based on the volume of data to be generated/collected in the project, and should be identified on the application as a Directly Incurred cost.

Expected difficulties in data sharing

If you expect any obstacles to sharing your newly generated data please explain their causes and possible measures you are going to apply to overcome those. If you consider that there will be ethical issues which may cause difficulties in data sharing please explain your strategies for dealing with these issues in the relevant section in Je-S form, e.g. where possible discussing archiving with interviewees, anonymising data. Please refer to the requirements of <u>ESRC Framework for Research Ethics</u>.

The default approach you should adopt with research participants is to request consent for the data they provide to you to be shared openly in an anonymised form. You should use your information sheet and consent form to obtain informed consent for this. The UK Data Service provides some <u>sample consent forms</u> including data sharing consent request formulae that could be adapted for this purpose.

Copyright/Intellectual Property Right

Please state who will own the copyright and IPR of any new data that you will generate. For further information please refer to a relevant part of the ESRC Research Data Policy.

In the absence of any contract stating otherwise, ownership of data created by employees of the University in the course of their employment will be vested in the University. It is standard in collaborations for each institution to own IPR in the data it has created. Where data are jointly created, IPR will be shared.

Where secondary sources will be used, you should indicate that existing IPR in these sources have been investigated and either they will not inhibit use of the data for the purposes of the project or there are plans in place to secure necessary permissions to use data and enable any derived outputs to be shared.

Responsibilities

Please indicate who within your research team will be responsible for data management, metadata production, dealing with quality issues and the final delivery of data for sharing or archiving. Please provide this information within the Staff Duties section in the Je-S form and where appropriate in the Justification of Resources. If several people will be responsible state their roles and responsibilities in the relevant section of the Je-S form. For collaborative projects you should explain the coordination of data management responsibilities across partners in your Data Management Plan.

Preparation of data for sharing and archiving

Outline your plans for preparing and documenting data for sharing and archiving. Identify any additional plans for data sharing.

ESRC requires grant-holders to formally deposit all data created or repurposed during the lifetime of the grant with a responsible data repository within three months of the end of the grant. Data may be submitted to either the UK Data Service or 'an appropriate responsible digital repository such as an institutional repository' (Research Data Policy, p. 8).

All University members have the option of using the <u>University of Reading Research</u> <u>Data Archive</u>, which will preserve and enable access to data in the long-term. Up to 20 GB of data per project can deposited at no charge. Deposits greater than 20 GB may be subject to a charge and must be agreed in advance. If you intend to deposit more than 20 GB of data in the Archive, contact <u>researchdata@reading.ac.uk</u> to discuss. Note that the Archive should be used to deposit a defined, curated, publicly-accessible dataset that supports published project findings. It is not a private post-project storage area for all digital materials.

Data and outputs should be deposited into data repositories in formats that enable reuse, e.g. by extraction, manipulation, visualisation, etc. Open formats or widely-used proprietary formats should be used, e.g. for tabular data, CSV or MS Excel. View additional guidance on file formats <u>here</u>.

Other issues

Indicate if there are there any other issues relating to data management or sharing.