

BBSRC Data Management Plan Guidance

Introduction

A maximum of one side of A4 (using a minimum font size of 11) is allowed for the Data Management Plan. The plan must clearly detail how you will comply with BBSRC's published Data Sharing Policy, including concise plans for data management and sharing, or provide explicit reasons why data sharing is not possible or appropriate. The policy, and detailed guidance notes <u>can be viewed here</u>. Comprehensive data sharing plans will be expected, in particular, in the 'data sharing areas' highlighted in the policy. More succinct plans may be appropriate for applications outside of these areas.

Plans should address the 8 areas listed below where relevant to the project proposal. These are specified by BBSRC at the above URL and on p. 7 of its Data Sharing Policy. You should use these as a guideline for formatting your plan and providing relevant information. While the format need not be followed exactly, it will be helpful to reviewers if the plan is structured, headed and ordered in sections corresponding to those identified by BBSRC.

Note that BBSRC does not permit the inclusion of URL links within your application, except in the list of references to relevant publications and online resources. Inclusion of URLs elsewhere within the application (including in the DMP) may result in the application being withdrawn for correction.

To assist you in completing a plan you can use a tool called <u>DMPonline</u>. Using DMPonline you can generate a BBSRC Data Management Plan template including 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, if you are unsure what information to provide. 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 directly to <u>researchdata@reading.ac.uk</u> 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 <u>Research Data Management website</u>. Contact the Research Data Manager if you require preliminary guidance on completing the plan.

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

Data areas and data types

Outline the volume, type and content of data that will be generated e.g. experimental measurements, models, records and images

Clearly identify and characterise each type of data. Quantify where possible, e.g. by number of experiments or data volume. Where volumes are substantial, you must give an estimate of the total volume of data you expect to collect/generate. This will be necessary to justify any costs you claim for data storage and archiving.

Standards and metadata

Outline the standards and methodologies that will be adopted for data collection and management, and why these have been selected

Include in this section information about proposed procedures/workflows for data collection, management and quality assurance. These might include, for example, adopting standard laboratory protocols for carrying out and documenting work, having senior oversight or sign-off of work undertaken by junior team members, conducting internal checks for accuracy and consistency, investigating unexpected results, and getting colleagues to review methods/experimental designs and replicate work to validate results.

You should use widely adopted standards wherever possible in your research methods, and data and metadata formats. Standards promote reproducibility of research, and understanding and re-use of data.

Address how relevant contextual and interpretive information will be recorded in metadata and documentation. If you will be using specific data formats or metadata standards to describe particular data types, e.g. to comply with data repository requirements, identify these and provide relevant information. For example, the European Nucleotide Archive <u>specifies data formats for submission</u>. Search for relevant standards at <u>FAIRsharing</u>. For more information about Metadata Standards, <u>see guidance from the Research Data Alliance</u>.

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 on the <u>Research Data Management Website</u>.

If you have computing-intensive requirements, custom specifications of CPU, memory, storage and GPU can be purchased from the University on a pro rata basis. Information is available in the <u>Academic Computing Team website</u>.

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.

Relationship to other data

State the relationship to other data available in public repositories

Consider the relationship between the data that you will capture and existing data available in public repositories or elsewhere. How will your data complement and integrate with existing data? This may be omitted if not relevant to your data.

Secondary Use

Outline the further intended and/or foreseeable research uses for the completed dataset(s)

It may be useful to cross-reference to application sections on impact and academic beneficiaries. Highlight foreseeable uses, with specific examples if relevant, and be explicit where data are novel or have possible long-term value.

Methods for data sharing

Outline the planned mechanisms for making these data available, e.g. through deposition in existing public databases or on request, including access mechanisms where appropriate

Primary data that support project findings should be shared using a data repository. Relevant disciplinary/community services such as EMBL-EBI databases should be used where possible: search for data services using <u>FAIRsharing</u>. All University members have the option of using the <u>University of Reading Research 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.

This section is about using suitable vehicles to make 'raw' primary data supporting project findings publicly accessible and usable, and should not be used to discuss the project's Open Access publication plans, results dissemination events, or the project's internal file sharing strategy.

If all relevant data will be made available solely as supporting information on publishers' websites alongside project publications and there will otherwise be no primary data that need to be separately shared via a data repository, this should be clearly stated and explained. In this case it would be relevant to highlight the Open Access publication strategy.

Proprietary data

Outline any restrictions on data sharing due to the need to protect proprietary or patentable data

Identify any expected difficulties in data sharing, and possible measures to overcome these. Restrictions to data sharing may result from participant confidentiality, consent agreements or IPR. Strategies to limit restrictions may include: anonymising or

aggregating data; gaining participant consent for data sharing; gaining copyright permissions; and agreeing a limited embargo period during commercialisation activities.

Timeframes

State the timescales for public release of data

The full primary dataset should be made publicly available as soon as possible after project completion and no later than publication of findings that rely on the data, except where legitimate restrictions apply.

Formats

State the format of the final dataset

Data should be deposited into data repositories in formats that enable re-use, 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. For more information visit our guide to file formats <u>here</u>.