

# A guide to preparing a data management plan for the AHRC





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#### Introduction:

Applicants who intend to manage and create data as part of their award must include a Data Management Plan in their application.

# Guidance and support:

The Research Data Manager can provide 1-1 advice/support on writing a data management plan. Data management plans should, where possible, be submitted at least 5 working days before the grant submission deadline. Draft plans can be sent directly to the Research Data Manager: Catharine Bailey: researchdata@brunel.ac.uk or created using DMPonline<sup>1</sup>

DMPonline allows you to generate and complete an AHRC 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 or with the Research Data Manager, for comment, and exported for incorporation into the grant application.

General guidance on data management planning is available on the University's Research Data Management website<sup>2</sup>. The AHRC also provides guidance<sup>3</sup> on writing an AHRC DMP.

<sup>&</sup>lt;sup>1</sup> https://dmponline.dcc.ac.uk/

<sup>&</sup>lt;sup>2</sup> https://www.brunel.ac.uk/life/library/ORR/Research-Data-Management

https://www.ukri.org/wp-content/uploads/2021/07/AHRC-230821-ResearchFundingGuideV5.5-2021.pdf

# What is required?

A plan along with any associated data management costs, is mandatory for all Leadership Fellows, Research Grants and Follow-on-funding applications (but is not required for Research Networking) and should be added to the Je-S form as an attachment.

An assessment of the DMP will be made by members of the Academic College as part of the general assessment of your application. Reviewers will be asked to consider whether the DMP seems feasible, sensible, appropriate and valid.

Data management plans should be a maximum of two sides of A4 (using a minimum font size of 11 in Arial or Times New Roman with normal 2cm margins) It should be entitled 'Data Management Plan' and saved as 'Surname\_DMP'.

The proposal should be in line with Brunel's data management policy<sup>4</sup> and relevant institutional data support staff should be consulted for advice. By submitting the proposal, the institution is confirming that relevant checks and approvals have been made. For the full list of confirmations. See the AHRC website<sup>5</sup>

The plan should use the following headings as specified by the AHRC:

# Data summary

**AHRC guidance**: Briefly introduce the types of data the research will create. Why did you decide to use these data types?

Additional guidance: Use this section to briefly introduce the types of data the project will create. Digital research data can be regarded as that created in a digital form (born digital) or converted to a digital form (digitized). Examples can include interview recordings, transcripts, videos, scans, photographs and databases. As part of your DMP you should state in which format(s) your data will be collected, analysed and stored (for example, Open Document Format, .CSV file or Excel spreadsheet). It is also useful in your DMP to try and estimate the size of the data you expect to generate. This can be difficult to do before a study begins; if necessary, use quantities generated in a similar previous study as the basis for your estimate.

#### **Examples:**

- o '30 one-hour interviews will be conducted with [describe participants] in order to [state purpose].' These will be stored as MP3 recordings of about 60MB per recording and transcribed into Microsoft Word (.docx) for analysis and preservation.
- We will record 6 performances in MP4 video format which will be optimised for YouTube. The videos will be between 5 and 30 minutes long, ranging from approximately 50 to 400 MB in size.

 $<sup>^4\</sup> https://students.brunel.ac.uk/documents/Policies/2019-20/Brunel-University-Research-Data-Management-Policy.pdf$ 

<sup>&</sup>lt;sup>5</sup> https://www.ukri.org/wp-content/uploads/2021/07/AHRC-230821-ResearchFundingGuideV5.5-2021.pdf

#### Data Collection

AHRC guidance: Give details on the proposed methodologies that will be used to create the data. Provide information on the technical expertise of anyone who will be part of project and where possible, identify the responsibilities of key individuals. You can also include details of how Brunel's professional services teams may support the project.

Additional guidance: Describe how the data you listed in the previous section will be gathered or created, and the methodologies you plan to use to do this. This should cover relevant standards or methods, quality assurance and data organisation. Indicate how the data will be organised during the project, mentioning, e.g., naming conventions, version control and folder structures. Consistent, well-ordered research data will be easier to find, understand and reuse. Explain how the consistency and quality of data collection will be controlled and documented for example, standardised data capture, data entry validation, representation with controlled vocabularies.

#### Examples:

- All interviews will be conducted and transcribed by the RA, who will be trained by the PI in interview and transcription techniques and use of equipment. An interview schedule consisting of a standard set of questions will be developed for use in all interviews, and transcription guidelines will be agreed by the PI.
- The PDRA will be responsible for ensuring the video recordings are transferred to Brunel's secure networked storage as soon as possible after they have been made.
- The PI will seek advice from Brunel's Open Research and Rights team on managing data throughout the research lifecycle.

# Short-term data storage

AHRC guidance: What backup will you have in the in-project period to ensure no data are lost?

Additional guidance: 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. This may vary if you are doing fieldwork or working across multiple sites, so explain how this will be managed. If your data are sensitive (e.g., personal or confidential data) you should outline the appropriate security measures you will be taking to ensure the data are kept securely. Identify who will be responsible for backup and how often this will be performed.

Where possible, data collected/held at the University should be stored using your Brunel University London networked drive or your University OneDrive account, which will provide data security, replication in separate data centres, automated backup, and file recovery.

For storage of small volumes of data and personal/sensitive data, you can use your personal H drive which provides you with 500MB of space, but additional space is available on request.

Your University OneDrive account allows you to store and share up to 1 TB of data. It is cloud based and allows for data sharing.

If you are working away from campus or in the field, data should be stored securely and backed up using password protected/encrypted local devices such as a laptop or external hard drive<sup>6</sup>. In the absence of an internet connection, data should be transferred at the earliest opportunity to your primary storage location.

For group access with space requirements that go beyond those satisfied by the normal H: and OneDrive spaces, Staff may use the University's Research Data Space. The maximum storage is in the order of several TB. Contact: Peter.Polkinghorne@brunel.ac.uk

#### **Examples:**

- Audio recordings of semi structured interviews will be captured and stored on secure portable devices and transferred at the earliest opportunity to Brunel's networked drive storage or one drive, which is password protected and backed up daily.
- O Data collected in the field will be stored on password protected mobile devices. The 3-2-1 rule for backup will be implemented to ensure data are not lost. Backups will be made daily to an external hard drive and where possible, uploaded to the University's One Drive secure cloud storage. To facilitate collaboration between partners, data can be shared securely within a 'project' space on https://brunel.figshare.com. Storing the outputs on this platform will also serve as an extra backup.
- Participants' consent forms and completed questionnaires will be stored in a locked filing cabinet in my office. Questionnaire data will be entered into the study database, to be stored in my personal drive on the University network.

# Long-term data storage

AHRC guidance: State where have you decided to store your data long-term and why is this appropriate? How long will it be stored for and why? Costs of storage — why are these appropriate? Costs related to long term storage will be permitted providing these are fully justified and relate to the project Full justification must be provided in Justification of Resources (JoR)

Additional guidance: Describe in this section where you plan to preserve your data once the project has finished, why you have chosen this storage option, and for how long the data will be stored. UKRI funders generally expect data with long-term value to be preserved and remain accessible, alongside the software and code needed to reproduce your findings for a minimum of 10 years. Consideration should be given to what data will be kept and what can/should be destroyed.

 $<sup>^6</sup>$  https://www.brunel.ac.uk/about/administration/governance-and-university-committees/cyber-security/Information-Asset-Management/backing-up-your-data

It is important to describe any costs associated with the long-term storage of your data and include these in the Justification for Resources. AHRC cannot cover data management costs incurred after the end of a grant, but they can be used for costs incurred within the lifetime of a project. Primary data that support project findings should be preserved using a data repository. All Academic staff have the option of using Brunel's data repository: https://brunel.figshare.com, which will preserve and enable access to data in the long-term, and for a minimum of 10 years. There is currently no charge to use Brunelfigshare. Users are assigned 50 GB of space, but more can be requested, if needed.

There are discipline specific repositories that maybe more suitable for the preservation of your data, such as the Archaeology Data Service (ADS) for archaeological data. You are encouraged to use these where they are appropriate. You should first check whether there is a cost to use the service (as there is in the case of the ADS, for example), and contact them to obtain an estimate of archiving charges, for inclusion in the project budget. It must be possible for any archiving charges to be met within the grant period.

#### **Examples:**

- O Datasets underpinning publications together with data of long-term value will be archived for a minimum of 10 years in Brunel's research data repository Brunelfigshare in standard and open formats to ensure maximum accessibility, reuse and long-term preservation of the data.
- There are no costs associated with archiving/publishing data in Brunelfigshare.

#### Data sharing

AHRC guidance: Outline how the data will be shared and of what value it will be to others. Advise when you will be releasing data. It's important to justify the reasons why you may not be able to release your data in line with AHRC guidelines of a minimum of three years. If the data will have value to different audiences, how these groups will be informed? Will the data need to be updated? Include future plans for updating if this is the case. Will the data be open, or will you charge for it? What are the reasons for charging to access these data?

Additional guidance: You should explain how your data will be of value to others e.g., academics, policymakers and wider Society. How it will enhance your area of research and what potential uses it may have in the future. You should also outline when you plan to make your data available. The AHRC expect that data should be made available as soon as possible but accept there may be reasons why it cannot be accessible immediately, for example if you plan to publish research findings. Remember that it may not be necessary or possible to share all the data that is produced during a project, particularly if you will be collecting personal or confidential data. If you foresee any obstacles to sharing your data, explain their causes and possible measures to overcome those. If you consider that there will be ethical issues which may cause difficulties in data sharing, explain how you will deal with these issues for example, gaining consent from participants to archive anonymised data. Indicate whether external users will be bound by data sharing agreements,

licenses or end-user agreements. If so, set out the terms and key responsibilities to be followed. Note how access will be controlled, for example by the use of specialist services.

If data/content will be made available via a website, you should explain how you will ensure continued accessibility of the resource beyond the end of the project. You should aim to sustain the resource for a minimum of three years beyond the end of the project, but this may not be possible if the costs of ongoing support cannot be incurred before the end of the grant or absorbed by one or more of the institutions participating in the project. Where possible investigate what support is available from your Institution. For example, Brunel offers a free service to those who wish to create a project website. The webpages are hosted by Brunel: See <a href="https://brunel.ac.uk/research/projects">https://brunel.ac.uk/research/projects</a> - so you benefit from a Brunel URL and it is backed up. Contact Joanna.babukutty@brunel.ac.uk for more information.

# **Examples:**

- We do not foresee any delays in data sharing following publication of the main research findings.
- o Interviewees will be made aware of our data sharing procedures at the time of consent.
- In principle, the PI does not envisage any requirements to delay or restrict data sharing.
   However, given the multi- institutional/international nature of the project, we will seek advice from Brunel University's Research Office regarding the drawing up of a data sharing agreement.

# Ethical and legal considerations

AHRC guidance: Outline any legal and ethical considerations for collecting, storing and sharing the data.

Additional guidance: Make explicit mention of the planned procedures to store and process personal or confidential data and what techniques you will use to ensure the data can be archived and shared in line with the DPA 2018 and ethics approval.

Obtaining permission to publish data from human research participants is essential even if data are to be anonymised before publication. This is because some risk of de-identification may remain, even after anonymisation and participants should be made aware that others outside of the research project may be able to view these data. Use the DMP to explain any anonymisation procedures that will take places prior to data being archived or published. The UKDS provides guidance on anonymisation<sup>7</sup>. The University has guidance on using personal data in research.<sup>8</sup>

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

<sup>&</sup>lt;sup>7</sup> https://ukdataservice.ac.uk/learning-hub/research-data-management/anonymisation/anonymising-quantitative-data/

<sup>&</sup>lt;sup>8</sup> https://www.brunel.ac.uk/about/documents/pdf/persdatares.pdf

created, IPR will be shared. If you plan to work collaboratively with an external partner(s), copyright and IPR should be clarified in a consortium agreement. Copyright advice can be sought from The Open Research and Rights team<sup>9</sup> and guidance and support on IPR from RSDO.<sup>10</sup> 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.

Research participants providing qualitative data, such as spoken words in an interview, photographs or other works created by themselves, will hold copyright in these materials. In this case it is advisable to ask participants to transfer copyright in the materials to the University, or to grant the University a licence to use and publish the materials. The consent process can be used for this purpose. For practical purposes, it is preferable to obtain a transfer of copyright to the University, as this allows the materials to be published under an open licence. If the research participants do not

wish to transfer copyright in their materials, a licence grant to the University is acceptable.

### **Examples:**

- Researchers will code whether the person sitting in each seat is Black (coded B), Asian (Coded
  A) or White (coded W) and whether they are female (coded F) or male (coded M). No other
  information will be coded.
- o If any personal data are collected from interviews, these will be managed in accordance with requirements of the DPA 2018 and UK GDPR 2021, ethics approval and the University's cyber security and data protection policy and guidelines. Informed consent will be obtained for publishing and archiving anonymized data at the time of collection. The University's Ethics Committee will assess and advise to ensure the research is conducted in line with the ethical and legal requirements both in the UK and where personal data (if any) are collected overseas.
- Consent will be sought to transfer copyright in materials such as spoken words in an interview, photographs or other works created by the participants to Brunel University London, to allow for those materials (subject to legal and ethical considerations) to be published/reused under an open license. Each researcher will also retain copyright over their own fieldnotes and interview data.

This guide is adapted from resources written by the University of Bristol Research Data Service, Sheffield University Research Data Management Service and Reading Research Data Management Service.



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<sup>&</sup>lt;sup>9</sup> https://www.brunel.ac.uk/life/library/Copyright

<sup>&</sup>lt;sup>10</sup> https://www.brunel.ac.uk/business/Research-and-development/Research-Support-and-Development-Office