Economic and Social Research Council (ESRC): ESRC Template

Assessment of existing data

Provide an explanation of the existing data sources that will be used by the research project, with references

Guidance:

Where research grant applicants plan to create new data as part of their ESRC-funded proposal, they must demonstrate that no suitable data are available for re-use. ESRC encourages the re-use of existing data and therefore encourages applicants and grant holders to consider the breadth of data available from various sources before committing to primary data collection.

When using existing data sources, consider copyright and IPR of those data and the conditions of their use, to decide whether resulting derived data can be shared.

Data sources that can be consulted are:

- Discover UK Data Service, with over 7000 collections of key economic, social and historical data spanning many disciplines and themes
- RCUK Gateway to Research of past and present research grants and their outputs

Provide an analysis of the gaps identified between the currently available and required data for the research

Information on new data

Provide information on the data that will be produced or accessed by the research project

Guidance:

For example, cover:

- data volume
- data type
- data quality, formats, standards documentation and metadata
- methodologies for data collection and/or processing
- source and trustworthiness of third party data

Using standardised and interchangeable data formats ensures the long-term usability of data. Clear and detailed data descriptions and annotation, together with user-friendly accompanying documentation on methods and contextual information, makes data easy to understand and interpret and therefore shareable and with long-lasting usability.

- Guidance on data formats
- Guidance on documenting data

Quality assurance of data

Describe the procedures for quality assurance that will be carried out on the data collected at the time of data collection, data entry, digitisation and data checking.

Guidance:

Quality control of data is an integral part of a research process. For example this may include:

- documenting the calibration of instruments
- taking duplicate samples or measurements
- standardised data capture, data entry or recording methods
- data entry validation techniques
- methods of transcription
- peer review of data

Guidance on data quality control

Backup and security of data

Describe the data security and backup procedures you will adopt to ensure the data and metadata are

securely stored during the lifetime of the project.

Guidance:

If your data is sensitive (e.g. detailed personal data) you should discuss appropriate security measures which you will be taking. You may need to discuss your institution's policy on backups.

- Guidance on storing, backup and security
- Guidance on version control

Management and curation of data

Outline your plans for preparing, organising and documenting data.

Guidance:

A crucial part of making data user-friendly, shareable and with long-lasting usability is to ensure they can be understood and interpreted by other users. This requires clear and detailed data description, annotation and contextual information, as well as good-structured and well-organised data files.

- Guidance on documenting data
- Guidance on transcribing qualitative data
- Guidance on organising data

Difficulties in data sharing and measures to overcome these

Identify any potential obstacles to sharing your data, explain which and the possible measures you can apply to overcome these.

Guidance:

State explicitly which data may be difficult to share and why. If ethical issues could cause difficulties in data sharing, explain your strategies for dealing with these issues in the relevant section of the Je-S form, e.g. discussing data sharing with interviewees as part of consent discussions or anonymising data.

The ESRC supports the position that most data can be curated and shared ethically provided researchers pay attention right from the planning stages of research to the following aspects:

- when gaining informed consent, include consent for data sharing
- where needed, protect participants' identities by anonymising data; and
- address access restrictions to data in the data management and sharing plan, before commencing research.

Guidance on consent and ethics

Guidance on legislation relating to research data, including the Data Protection Act and Freedom of Information Act.

Consent, anonymisation and strategies to enable further re-use of data

Make explicit mention of the planned procedures to handle consent for data sharing for data obtained from human participants, and/or how to anonymise data, to make sure that data can be made available and accessible for future scientific research.

Guidance:

If unsure how issues of confidentiality are to be addressed to facilitate data sharing, get in touch for advice.

Guidance on consent and ethics

Guidance on anonymising data

Copyright and intellectual property ownership

State who will own the copyright and IPR of any new data that you will generate.

Guidance:

Guidance on IPR

Responsibilities

Outline responsibilities for data management within research teams at all partner institutions

Guidance:

IIndicate 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. 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 explain the coordination of data management responsibilities across partners in your Data Management Plan.

- Guidance on data management roles and responsibilities
- Guidance on how to cost data management

Preparation of data for sharing and archiving

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 highquality contextual information and/or structured metadata for secondary users?

Guidance:

eg documenting the method of data collection, origin, circumstances, processing and analysis of data