Energy Data Centre: Guidance Note 1



Access to energy information now and for the future

Data Management Checklist

Purpose: Summary of good data management practice

Audience: UKERC researchers who need to manage research data

Summary

Considering data management at the start of a project will assist in ensuring the data generated, collected or used supports the research aims and makes research data as re-useable as possible. Asking some basic questions around the topic is a straightforward starting point.

Research data should be as open as possible, as closed as necessary.

As a user of data created by others you should acknowledge and cite this data.

Introduction

Publicly funded research data are considered to be a public good and should be made openly available with as few restrictions as possible in a timely manner. FAIR data (Findable, Accessible, Interoperable and Reusable) principles are established with an increased emphasis on reproducibility and effective data management planning supports these.

For this data to be useful, both to yourself in the future, potential collaborators and re-users then it needs to be managed from the start of the project within any legal, ethical, and commercial requirements considered and following domain standards and expectations.

Data generated and managed by others should be acknowledged, cited and used under the terms and conditions prescribed.

Data Management questions to ask

The important part of data management planning is to ensure that you have considered what data is being generated, collected or used and what value it has. To aid in this process there are some questions one can ask to support completion of a data management plan.

Whv?

The data is being collected for a purpose; can you articulate what that is?

What?

- What types and volumes of data are you using/generating?
- Is there anything special about this?
- Is all the data collected of equal value?
- How much control do you have over the formats/location etc?
- What metadata and/or context is needed to understand the data collected?
 - O Does this differ for different types of data?

Who for?

- Who will be using the data?
- Are there any domain specific standards to follow?

© 2025 UK Research and Innovation This work is licensed under a <u>Creative Commons</u>

Attribution 4.0 International License. Authors: Catherine Jones & Sarah James, Aug 2021, revised Jan 2025.

Energy Data Centre: Guidance Note 1



Access to energy information now and for the future

 Does there need to be any access restrictions either during the active research phase or in a preservation phase?

When?

- When is it being collected?
- Does the method of collection alter the way that the data will be released?
- Should this data be kept for the long term?

Where?

- Where will the data be stored during the active research phase?
- Will the data be deposited in a data repository?
- Is there any guidance for engaging with that repository before deposit?

How?

- How will you decide what formats to use?
- Are there any domain standards or legal & ethical processes that need to be followed?
- How will you decide what data will be kept?
- How will you decide what data licence to use?
- How will you decide dataset naming conventions?

UKERC Data Management Plan

UKERC expects all projects to complete a Data Management Plan, following the structure outline below and the questions in the section above will aid completion:

- Project Information & Data Management Planning Contacts: information on the project & contacts.
- Description of the Data: overview of the types of data & volume
- Data Collection / Generation: how the data will be collected & verified
- Data Management, Documentation and Curation: management of the data through its lifecycle
- Data Security and Confidentiality of Potentially Disclosive Information: any restrictions for data sharing
- Data Sharing and Access: availability statement and how this will be enacted
- Resources: identification of additional support needed
- Responsibilities: who is responsible for data management activities in the project

The EDC team are available to support the completion of these forms.

Further Reading

- More EDC advice from our service website <u>About Data Management pages</u>. Including a link to the EDC Data Management Plan template.
- ESRC funded UK Data Service UK Data Service website
- UKRI data policies Making your research data open

© 2025 UK Research and Innovation This work is licensed under a <u>Creative Commons</u>

Attribution 4.0 International License. Authors: Catherine Jones & Sarah James, Aug 2021, revised Jan 2025.