ANDS Guide

ARC – Guide to filling in the data management section

Level: Awareness

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Web link: **www.ands.org.au/guides/arc-guide-to-filling-in-the-dm-section**

Australian Research Council (ARC) application forms (Discovery; Linkage) have a short section where you are required to provide an outline of your data management plan. The outline should describe your plans for the management of data produced as a result of the proposed research, including but not limited to storage, access and reuse arrangements. This text is not expected to be more than half a page.

"Researchers and institutions have an obligation to care for and maintain research data in accordance with the Australian Code for the Responsible Conduct of Research (2007). The ARC considers data management planning an important part of the responsible conduct of research and strongly encourages the depositing of data arising from a Project in an appropriate publicly accessible subject and/or institutional repository."

The benefits of outlining your research data management

The data management requirement in the ARC applications offers an opportunity for researchers to provide information to show how data management will enhance the research outcomes of their work and thus improve the competitiveness of their research proposal. This will not only contribute to how favourably the Research Environment criterion is considered, but also the Feasibility and Benefit criteria. Although the ARC is not mandating 'open data', it is sending a clear signal that it is committed to 1maximizing the benefits of research it funds by fostering a culture of increased access and sharing of research data, backed by sound data management.

Questions to be considered

1. Where will your research data be stored at completion of the project?

You should describe which datasets you expect to produce and where you intend to store these. To enhance your research outcomes through wider dissemination, consider depositing your research data in an appropriate publicly accessible:

- Institutional repository (either of your own university or of a research partner).
- Subject-specific repository (for example AODN for marine data, Open Context for Archaeology).
- National facility, such as Research Data Storage Infrastructure nodes.

Check your institution's storage options and consider your discipline's or research community's practice. A list of possible repositories can be found at: *Open*DOAR, or Registry of Research Data Repositories.

In addition to your research data, consider storing metadata, software and/or any documentation that can facilitate future discovery and reuse of your research data.

2. What access will you provide to the data set on completion of the project?

The ARC "strongly encourages" open data, but does not mandate it. Where it may not be appropriate for data to be disseminated or reused, you may provide your reasons for not doing so. Also consider making parts or summaries of your data available. Examples of issues that can limit access:

- defense/security
- ethics, privacy, confidentiality and cultural sensitivities
- commercial arrangements.

Potential time frames for access:

- after the completion of the project
- as soon as a research paper is published
- access to metadata and/or research data after an embargo.

3. How will you enable others to reuse your research data?

Reuse is facilitated through:

- well-managed, described and available research data (e.g. via internet search)
- standards and common data practices
- licensing arrangements, allowing prospective users to understand clearly what they can and cannot do with the data.

> Generic example
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> Dataset (name, characteristics, size, description for reuse) will be stored in the data repository (details), initially for (period). Access is planned to be (describe level of access, see paragraph 2). The data set will be licensed for reuse under (select Creative Commons license). (Include any other considerations regarding storage, access and reuse, e.g. institutional or disciplinary conditions).

> Specific example
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> The environmental science frost hazard project will result in two major datasets. The first is a time series of ground-based minimum temperature measurements in various orchards in SE Australia; the data series will be in an open formats. These data, their location and associated calibrations and transformations will be incorporated into the descriptive metadata and will be made available through the ANU Data Commons for at least five years after the project is completed. These cond data set comprises aircraft-borne thermal imagery, measured using a precision infra-red scanner, for selected days with particularly high frost risk. These data and their calibrations (including spatial rectification) will also be made available via ANU Data Commons in the standard NetCDF format, which can be ingested by most climate models and associated GIS packages. Both datasets will be licensed with a CC BY license and both will have a Digital Object Identifier (DOI) for reuse tracking

More information and support

- If you are a researcher, we advise you to contact your local Research Office as they are best informed on local arrangements.

ANDS would like to offer support for all those working on data management if they have any questions regarding this wording and the actual approach on data management. For further information, contact us at contact@ands.org.au.

Feedback?

We welcome your feedback on this guide. Please email contact@ands.org.au with any comments or questions.

About ANDS

The Australian National Data Service (ANDS) makes Australia's research data assets more valuable for researchers, research institutions and the nation.

ANDS is a partnership led by Monash University in collaboration with the Australian National University (ANU) and the Commonwealth Scientific and Industrial Research Organisation (CSIRO). It is funded by the Australian Government through the National Collaborative Research Infrastructure Strategy (NCRIS).

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