

**ACEAS Data Management Planning**

**User Guide and Template**

1. **Introduction**

A data management plan (DMP) is a formal document that outlines how data are to be handled both during a research project, and after the project is completed. The goal of a data management plan is to consider the many aspects of data management, metadata generation, data preservation, and data analysis before the project begins; this helps to ensure that data are well-managed in the present and prepared for preservation in the future.

ACEAS partner universities each have their own data management plan policies, procedures, and platforms. These should be followed as specified by the respective institutions. An ACEAS-specific plan must also be submitted so that ACEAS data managers and line managers are aware of every researcher’s data needs. **This Guide provides information to assist in the completion of an ACEAS Data Management Plan template**.

Data management plans are dynamic documents and should be revisited at regular intervals during the life of a research project as experimental and analytical approaches are refined; for example, opportunities may arise during the project to collect large amounts of additional data, or a new analytical process may be found that requires additional computing power. The ACEAS template provides space on the front page for tracking progressive versions of the DMP - remember to complete these details when updating the Plan and remember to alert your collaborators to any updates.

If you have any questions about completing a data management plan or about metadata storage in institutional repositories, or if you are ready to submit completed ACEAS data management plans or your latest DMP update, please contact the ACEAS data manager at:

[harko.werkman@utas.edu.au](https://universitytasmania-my.sharepoint.com/personal/harko_werkman_utas_edu_au/Documents/UTAS%20P%20Drive/2018%20desktop/Harko%27s%20stuff%20on%20Tammy%27s%20computer%20desktop/2024%20IMAS/ACEAS%20Data%20Management%20Planning/harko.werkman%40utas.edu.au)

If required, separate guidance can be provided for various institutional online data management planning platforms used by ACEAS partner institutions - contact the ACEAS data manager at the email address above.

1. **People**

**2.1. Names**

Names are generally **not** used as points of truth for identity as they are often expressed in a variety of forms, but it is nevertheless important to capture the form that will be used for authorship in research data records.

Use the format ‘Family Name, Given Name(s)’ or ‘Family name, Given Name Initial(s) for the primary name format at least; e.g., ‘Smith, Jane Alice’ or ‘Smith, Jane A.’ Some countries’ name formats may be confusing and be reversed by some editors during publication, so it is useful to note these as alternate formats – should this be necessary simply insert additional rows below the provided name fields in the template.

If you have any questions about naming conventions, please contact the ACEAS data manager.

**2.2 ORCiD**

ORCiDs are used by most Australian universities as the source of truth for researcher identity and they are strongly advised for use in publication of all research outputs, including for data records. If you do not have an ORCiD you can sign up at:

<https://orcid.org/signin>

**2.3 Affiliation(s)**

A research project affiliation is a formal association with a research organisation unit as either a professional researcher or as a higher degree research candidate. Up to two institutional affiliation names may be selected: if you have affiliations with more than two institutions, insert another affiliation field row below the current rows in the template and use a separate row for each affiliation.

1. **Project Details**

**3.1 Project title**

The project title for your DMP will generally be similar or identical to the title used for your funding application, your project plan, your grant, or similar documents. If you are creating a new title, for example because you need to have separate, specific plans for different parts of your project, it should be a clear and concise description of the project component, and also reflect the title of the broader project.

As an aside, note that when creating published data/metadata records from the project, it is useful to have differences between publication titles and dataset titles; this helps to avoid confusion between different research outputs. For example, a journal publication might have the title ‘DNA barcoding reveals high biodiversity and rapid colonization of plants and animals in newly exposed Antarctic island soils’ and the data record supporting the paper might be titled ‘DNA barcoding data of plant and animal species colonizing newly exposed soils on Antarctic islands.’ Discuss with your data manager if you require assistance.

**3.2 DMP ID number**

Both the Research Data Portal and the online DMPTool generate ID numbers for DMPs created within the platforms. If you have used one or both platforms to generate an online DMP, enter the number here. If you have used both platforms enter the RDP ID number first, separated by a comma from the DMPTool ID.

**3.3 Project start and end dates**

Start and end dates assist both the researchers and the repository managers to plan for data handling during the life of the project. The dates don’t need to be precise but should reflect reasonable spans for the project.

**3.4 Field of Research (FoR) and Socioeconomic Objective (SEO) codes**

FoR codes are used for institutional/governmental reporting and planning purposes, and SEO codes are used for institutional reporting to the Bureau of Statistics. Enter at least one six-digit FoR and SEO code and up to three codes each, separated by commas. A full list of FoR/SEO codes and their descriptions can be found at:

[https://www.abs.gov.au/statistics/classifications/australian-and-new-zealand-standard-research-classification-anzsrc/latest-release#data-downloads](https://www.abs.gov.au/statistics/classifications/australian-and-new-zealand-standard-research-classification-anzsrc/latest-release%23data-downloads)

**3.5 Keywords**

Keywords are critical for reporting purposes and for making your data discoverable to third parties when the data are lodged in repositories and data records are created. Enter as many relevant keywords as you like, separated by commas. Consider including at least one keyword from the GCMD keyword viewer:

<https://gcmd.earthdata.nasa.gov/KeywordViewer/scheme/all?gtm_scheme=all>

**3.6 Project description**

Describe your project, including background, aims, and intended outputs. Documents such as a project plan, a publication plan, an analysis plan, or an authorship/collaboration agreement can be referred to/linked to here.

**3.7 Project methodologies**

Describe the methodologies/procedures for your project, including:

* data acquisition processes and instrumentation
* links or references to relevant published papers and standard operating procedures
* anticipated analysis procedures (if you have a formal analysis plan you should refer/link to it here)

You should also consider any best practice documentation that may relate to your project, and in particular provide references or links to any relevant methodological procedures described by the UNSECO Oceans Best Practice System (OBPS). The OBPS repository can be searched here:

<https://search.oceanbestpractices.org/>

1. **Data Storage Requirements and Restrictions**

**4.1 File information**

Note the expected total volume size of your data files, and the file types expected to be used. Consider whether your file types are resilient to future obsolescence. For example, .txt, .csv and PDF/A are robust formats, but .xpt, classic .cdf, and FITS formats may be problematic for modern software platforms. Various older scientific instruments, including certain types of mass spectrometer and chromatographs, used proprietary data formats that may not be supported by current software applications.

Discuss with your line manager or data managers if you have any concerns or would like advice on strategies to protect against file type obsolescence.

**4.2 Data storage services**

Document all the data storage services that you intend to use. These may include but not be restricted to physical media such as notebooks, and digital media such as OneDrive, Dropbox, desktop/laptop hard drives, USB drives, and/or cloud services amongst others. All ACEAS researchers should check that their institutions’ storage services are suitable for – and approved for – sharing data with external ACEAS collaborators.

There are several important considerations that should be addressed when documenting the storage services of choice:

* How often the data will be backed up and to which locations?
* How many copies will be made?
	+ Who is responsible for back-up and recovery?

**4.3 Collaborators’ access to data**

If your project includes collaborators from other institutions, describe how each will be able to securely access the data. If individual collaborators do not have access to the data storage services listed above, describe the methods of data provision and the precautionary processes that will be used to protect sensitive data.

**4.4 Personal or potentially identifiable content**

If your data identify individuals at any stage of the research, you will need to follow the relevant federal, state, and institutional privacy requirements. List the relevant requirements that you have identified for your jurisdiction(s), and how you intend to comply with them. If you require detailed information or assistance with privacy requirements, contact your institution’s Ethics office.

See Section 7 for links to further information relevant to privacy and identifiable content.

**4.5 Confidentiality and contractual obligations**

If your data are covered by commercial confidentiality or contractual obligations, state them and detail how you will address them.

**4.6 Other sensitive information**

If your data contain other sensitive information, for example the locations of threatened or endangered species or implications for Indigenous/cultural ownership and rights, include their details and describe how your storage selection will safeguard this information.

**4.7 Intellectual Property**

Note who owns the intellectual property rights to the data, and under which agreement(s) this has been determined. Links to Sharing Agreements should be included.

1. **Data Publishing**

**5.1 Anticipated Research Data Output(s)**

In addition to research publications, research projects should generate at least one and likely several research datasets. List the types of data output that are anticipated, and their provisional titles. These outputs may include:

* + Image, audiovisual, or sound files
	+ Datasets
	+ Data papers
	+ Online/interactive resources
	+ Models
	+ Software

**5.2 Location(s) of published data**

During the life of the project you may wish to archive or publish versions of your data. List the service(s) that you will use. These may include your home institution’s data repository, or national/international discipline-specific repositories such as GenBank, European Nucleotide Archive (ENA), PANGAEA, NOAA's National Centers for Environmental Information (NCEI), or the Ocean Biogeographic Information System (OBIS).

When creating a metadata record for deposited data it is important remember that the chosen repository should be ISO 19115 compliant, and that the repository’s records are harvested by the IMOS/AODN and/or the Australian Antarctic Data Centre facilities: these are recognised by the *ACEAS Data Management Strategy* the centralised aggregation point for all Australian Antarctic datasets described by metadata. Where a selected data repository is not ISO 19115 compliant, the IMAS Data Portal is available for use by all ACEAS staff.

Contact the ACEAS data manager if you have any questions about depositing data/metadata, and remember to notify the ACEAS data manager whenever you have deposited ACEAS data/metadata in a data repository.

Note: IMAS-based ACEAS staff should **NOT** use the UTAS Research Data Portal for data publication.

**5.3 Data not publicly available**

If you do not intend to make your data, or parts thereof, publicly available for sensitivity/confidentiality reasons, provide a justifiable rationale for this. Note that open access to data is the mandated default for all ACEAS partner universities, and ACEAS researchers have a responsibility under Article III 1.c of the Antarctic Treaty to make their data publicly available.

**5.4 Data embargoed prior to publication**

If you have a need to embargo your final data, please note the end date for the duration of the embargo. Data deposited in repositories should be embargoed for no longer than 12 months.

**5.5 Creative Commons licence**

ACEAS strongly encourages the use of an Attribution 4.0 International (CC BY 4.0) licence and discourages the use of other types of Creative Commons licence. Note the form of Creative Commons (CC) licence that you intend to assign to your published data. Descriptions of CC licences can be found here:

<https://creativecommons.org/about/cclicenses/>

1. **Additional information**

If you wish to add information to your data management plan beyond that requested by the fields provided in the ACEAS template, feel free to add it at the end of the template in whichever form is most convenient.

1. **Additional useful links**

Research Data Alliance’s Discipline Specific Guidance for data management plans:

<https://santoshilam.github.io/Discipline_Specific_Guidance_for_DMPs/intro.html>

<https://santoshilam.github.io/Discipline_Specific_Guidance_for_DMPs/3_chapter/chapter3.html>

Australian Research Data Commons DMP policies and standards:

<https://ardc.edu.au/resource/ardc-persistent-identifiers-policy/>

<https://ardc.edu.au/resource/fair-data/>

<https://ardc.edu.au/resource/fair-data-self-assessment-tool/>

<https://ardc.edu.au/resource/research-data-management-framework-for-institutions/>

Antarctic Treaty:

<https://www.ats.aq/e/key-documents.html>

<https://documents.ats.aq/keydocs/vol_1/vol1_2_AT_Antarctic_Treaty_e.pdf>

ARC policies on responsibilities in the conduct of research:

<https://www.arc.gov.au/about-arc/program-policies/research-integrity/australian-code-responsible-conduct-research-2018>

<https://www.arc.gov.au/sites/default/files/2023-05/Management-of-Data-and-Information-in-Research.pdf>

Relevant Australian federal and state privacy links:

<https://www.oaic.gov.au/privacy/australian-privacy-principles>

<https://www.ag.gov.au/rights-and-protections/privacy>

<https://www.arc.gov.au/about-arc/program-policies/conflict-interest-and-confidentiality-policy>

<https://www.nhmrc.gov.au/sites/default/files/documents/attachments/Management-of-Data-and-Information-in-Research.pdf>

<https://www.nhmrc.gov.au/sites/default/files/documents/reports/australian-code-responsible-conduct-research.pdf>

<https://www.abs.gov.au/about/data-services/data-confidentiality-guide>

<https://www.ipc.nsw.gov.au/guide-privacy-laws-nsw>

<https://www.oic.qld.gov.au/about/privacy>

<https://ovic.vic.gov.au/privacy/resources-for-organisations/privacy-officer-toolkit/privacy-law-an-overview/>

<https://www.tas.gov.au/stds/pip.htm>

<https://www.oaic.gov.au/privacy/privacy-legislation/state-and-territory-privacy-legislation/state-and-territory-privacy-legislation>

Online DMP tools:

https://dmptool.org/

<https://rdp.utas.edu.au/#/DataManagementPlans> (UTAS-based staff only)



**ACEAS Data Management Plan**

DMP version Date modified Modified by

Draft (20230601) 01 June 2023 Jane Smith

v1 (20230602) 02 June 2023 Jane Smith & Bob Jones

v2 (20230723) 23 August 2023 Jane Smith

Save file versions following the format: ‘ACEAS Program 2 DMP – Smith, Jane - 20230927.docx’

Include version history using the example provided above.

Email completed DMP to: harko.werkman@utas.edu.au

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| --- | --- |
| Institution | Choose an item. |

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| --- | --- | --- | --- |
| **People** |  |  |  |
| Researcher 1 | Researcher 2 |
| Name | Click or tap here to enter text. | Name | Click or tap here to enter text. |
| [ORCiD](https://orcid.org/signin) |  | [ORCiD](https://orcid.org/signin) |  |
| Email |  | Email |  |
| Affiliation 1 | Click or tap here to enter text. | Affiliation 1 | Click or tap here to enter text. |
| Affiliation 2 | Click or tap here to enter text. | Affiliation 2 | Click or tap here to enter text. |
| Position | Choose an item. | DMP creator | [ ]  | Position | Choose an item. | DMP creator | [ ]  |
| Researcher 3 | Researcher 4 |
| Name | Click or tap here to enter text. | Name | Click or tap here to enter text. |
| [ORCiD](https://orcid.org/signin) |  | [ORCiD](https://orcid.org/signin) |  |
| Email |  | Email |  |
| Affiliation 1 | Click or tap here to enter text. | Affiliation 1 | Click or tap here to enter text. |
| Affiliation 2 | Click or tap here to enter text. | Affiliation 2 | Click or tap here to enter text. |
| Position | Choose an item. | DMP creator | [ ]  | Position | Choose an item. | DMP creator | [ ]  |
| Researcher 5 | Researcher 6 |
| Name | Click or tap here to enter text. | Name | Click or tap here to enter text. |
| [ORCiD](https://orcid.org/signin) |  | [ORCiD](https://orcid.org/signin) |  |
| Email |  | Email |  |
| Affiliation 1 | Click or tap here to enter text. | Affiliation 1 | Click or tap here to enter text. |
| Affiliation 2 | Click or tap here to enter text. | Affiliation 2 | Click or tap here to enter text. |
| Position | Choose an item. | DMP creator | [ ]  | Position | Choose an item. | DMP creator | [ ]  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Project Details** |  |  |  |
| Project title | Click or tap here to enter text. |
| DMP ID number | Click or tap here to enter text. | Ethics ID number | Click or tap here to enter text. |
| Project start | Click or tap to enter a date. | Project end | Click or tap to enter a date. |
| [FOR code(s)](https://www.arc.gov.au/manage-your-grant/classification-codes-rfcd-seo-and-anzsic-codes) | Click or tap here to enter text. | [SEO code(s)](https://www.arc.gov.au/manage-your-grant/classification-codes-rfcd-seo-and-anzsic-codes) | Click or tap here to enter text. |
| Keywords | Click or tap here to enter text. |
| Project description | Click or tap here to enter text. |
| Project methods | Click or tap here to enter text. |

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| --- |
| **Data Storage Requirements and Restrictions** |
| File size | Choose an item. | File types | Click or tap here to enter text. |
| Data storage service(s) to be used | Click or tap here to enter text. |
| Collaborator access to data*If your project includes collaborators from other institutions, describe how each person will be able to access the data. If individual collaborators do not have access to the data storage services listed above, describe the method(s) of data provision and the precautionary process(es) that will be used to protect sensitive data.* | Click or tap here to enter text. |
| Personal or potentially identifiable content*If your data identify individuals at any stage of the research, you will need to follow the relevant federal, state, and institutional privacy requirements. Refer to the User Guide for additional information.* | Click or tap here to enter text. |
| Confidentiality and contractual obligations | Click or tap here to enter text. |
| Other sensitive information*If your data contain other sensitive information, e.g. locations of threatened/ endangered species, include their details here and describe how your storage selection will safeguard this information.* | Click or tap here to enter text. |
| Intellectual Property | Click or tap here to enter text. |

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| **Data Publishing** |
| Anticipated research data outputs*List the types of data output that you intend to produce (e.g. CSV, audiovisual, interactive online resource, software), and their provisional titles.* | Click or tap here to enter text. |
| Published/archived external to IMAS | Click or tap here to enter text. |
| Published/archived via [IMAS Portal](https://data.imas.utas.edu.au/static/landing.html) |[ ]  Note: IMAS datasets should NOT be published via RDP |
| Embargo prior to publication |[ ]  (Embargoes should be no longer than 12 months) |
| Not publicly available |[ ]  Click or tap here to enter text. |
| [Creative Commons licence](https://creativecommons.org/about/cclicenses/) | Choose an item. |
| **Physical sampling** |
| Sample Identification*If your project includes the collection of physical samples that are to be deposited into a collection, list the sample description metadata that you will use. These fields may include unique sample IDs, collection dates, GPS coordinates of collection sites, detailed descriptions of the sampling conditions (e.g., soil depth, temperature, moisture levels), the names of collectors, and any relevant field notes.* | Click or tap here to enter text. |
| Accessioning and Storage*Briefly outline the accessioning procedures that you will use. Note the metadata that you will collect, for example: date of accession, initial processing steps (e.g., drying, sieving), storage conditions (e.g., temperature, humidity), and storage locations (e.g., specific freezer or shelf.* | Click or tap here to enter text. |
| Cataloguing and Tracking*List the procedures and metadata that will be sued to maintain an ongoing record of all analyses conducted on each sample. Thes may include dates of analysis, types of analysis (e.g., DNA extraction, chemical assays), and the responsible staff. Include tracking of any subsamples taken, their purpose, and their current status (e.g., used, stored, or transferred).*  | Click or tap here to enter text. |