

Research Data Management Vice-Chancellor's Directive

Abstract

This Directive sets out the data management responsibilities of individuals undertaking research at UTS and of the faculties, centres and departments that support this research. The Directive defines the minimum requirements of a Research Data Management Plan for research projects and provides guidance on how to manage research data.

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Approved by	Council	
	Latest amendment: Council (see change history for details)	
Implementation Officer	Deputy Vice-Chancellor (Research)	
Relevant to	All researchers at UTS, including staff and students. Faculties, centres and departments supporting UTS research.	
Related documents	ARC Open Access Policy ARC's Funding Rules Australian Code for the Responsible Conduct of Research (the Code) National Principles of Intellectual Property Management for Publicly Funded Research NHMRC Revised Policy on the Dissemination of Research Findings Sustainable Research Excellence UTS documents Authorship Vice-Chancellor's Directive Intellectual Property Policy Open Access Policy Records Management Vice-Chancellor's Directive	

	<u>Research-Generated Intellectual Property and Commercialisation Vice-Chancellor's Directive</u> <u>Responsible Conduct of Research Policy</u>
Legislation	<u>Government Information (Public Access) Act 2009 (NSW)</u> <u>Health Records and Information Privacy Act 2002 (NSW)</u> <u>Privacy Act 1988 (Cwlth)</u> <u>Privacy and Personal Information Protection Act 1998 (NSW)</u> <u>State Records Act 1998 (NSW)</u>
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Superseded documents	Ethical Conduct of Research – Academic and Support Staff Policy

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1. Purpose

This Directive sets out the research data management responsibilities of individuals undertaking research at UTS and of the faculties, centres and departments that support this research. It defines the minimum requirements of a Research Data Management Plan for University research projects and provides guidance on how to manage research data.

2. Scope

This Directive applies to any person conducting research (funded and unfunded) under the auspices of the University of Technology, Sydney (UTS) whether that person be a staff member or student, a visiting, honorary or adjunct appointment or on a short-term contract.

3. Definitions

The following definitions define terms specific to this Directive. These are in addition to or an alternative to the terms defined in [Schedule 1, Student Rules](#).

Curatorial staff are University staff responsible for:

- assisting researchers with the organisation and management of research data
- assessing and enforcing appropriate data retention standards, based on the requirements imposed by funding bodies, legislation and University policy
- coordinating the analysis (in collaboration with researchers and technical support staff) of the appropriate research data and metadata to be gathered from, and applied to, the University's research data repository.

Custody means care, supervision and/or control of information. The University has custody of data where the data is either:

- stored on any of the University's IT facilities, or
- stored on any IT facilities leased or rented by the University, or by University research or support staff in the course of their duties

Executive Author, as defined in the [Australian Code for the Responsible Conduct of Research \(the Code\)](#), is the person whose responsibility it is to record authorship and to manage communication about the research output with the publisher. In short, it means the member of a research project team with responsibility for data management.

First-Named Chief Investigator is any person acting as the project leader on an Australian Research Council (ARC) research grant as defined by the [ARC's Funding Rules](#).

Jurisdiction refers to a national or international state, territory or province and the associated statutory framework including its laws.

Metadata means the information which describes and organises collections of information, which will facilitate later interpretation and re-use.

Research means original investigation to gain knowledge, understanding and insight, as defined in [the Code](#).

Research data means the outcome of any research activity conducted by a University researcher. Research data includes but is not limited to:

- experimental results and the contents of lab notebooks
- significant numerical or graphic results obtained as the result of analysis of experimental results
- significant numerical or graphic results obtained as the output of simulations, modelling or any other software
- images or visualisations
- responses to surveys or questionnaires
- any records of interviews in the form of notes, audio or video recordings
- any clinical records of treatments and test results
- any other source or primary materials, in particular where these may be necessary to validate research results
- any other recorded data that is of significance to research undertaken by the University's researchers.

Research management staff are University staff responsible for:

- the management, application and execution of research grants
- negotiating industry partnerships and other commercialisation relationships and prospects
- reporting funding opportunities to the University's research community

- managing particular forms of intellectual property (IP) arising from research activity, such as patents and registered designs.

Research partner means any person, body or institution that engages or collaborates with UTS researchers as part of the research process.

Research project means research activity undertaken by University researchers, either individually or collaboratively, with a stated purpose and a definitive start and finish date.

Researcher means anyone who:

- conducts research in the course of undertaking the duties of their appointed position at the University, or
- conducts research as part of any of a University subject or course in which they are enrolled.

Technical support staff are University staff responsible for:

- the evaluation and implementation of IT infrastructure dedicated to research data
- the maintenance of dedicated IT infrastructure
- requirements analysis and forward planning for research infrastructure, tools and systems maintenance, including the support of Open Access-related research data solutions as needed
- metadata extraction, data transformation, data mining and analytics and any other specialised research IT services.

4. Directive principles

UTS promotes a strong research culture which is underpinned by the following principles, as outlined in [the Code](#):

- honesty and integrity
- respect for human research participants, animals and the environment
- good stewardship of public resources used to conduct research
- appropriate acknowledgement of the role of others in research
- sharing of research data, where appropriate, with the wider research community and with the public
- responsible communication of research results
- transparent costing and sustainability of research.

These principles also guide the statements and responsibilities outlined in this Directive.

5. Directive statements

5.1 Research Data Management Plans

Each UTS research project will require a Research Data Management Plan that describes:

- the nature of the research data that will be collected
- methods that will be used
- data ownership, and

- how the data will be stored, managed, made accessible and discoverable, and disposed of (including criteria to assess which research data should be kept).

5.1.1 Executive Author

At least one (but no more than two) researcher(s) involved in a project will be identified as the Executive Author. The Executive Author should be the primary researcher or lead researcher, and will be the First-Named Chief Investigator for ARC projects. Where the lead researcher is not the Executive Author an alternative researcher may be named along with a brief explanatory note.

On behalf of UTS, the Executive Author is responsible for ensuring that an appropriate Research Data Management Plan is in place for each project and/or each of the project's distinctive datasets as appropriate. Curatorial and technical support staff can provide assistance in the development of the Research Data Management Plan.

The Executive Author is responsible for the maintenance of research data records and outputs, and for managing communication about research data and outputs with the University.

Unless otherwise stated in the Research Data Management Plan, the Executive Author is responsible for ensuring that research data are retained and stored in accordance with UTS policies and directives, [the Code](#) and other relevant legislation, and in accordance with the requirements of the granting body funding the research.

In the case of student research projects, the Executive Author will be the student's supervisor. Where the student is jointly supervised, the Executive Author will be the primary supervisor or the UTS-based supervisor where a student also has an external supervisor. The student is responsible for developing an appropriate Research Data Management Plan in consultation with the supervisor, who has final approval authority for the plan.

5.1.2 Contents

As a minimum, a Research Data Management Plan will describe:

- project name
- Executive Author
- description of the project and the type of data to be collected/generated
- ownership
- data formats
- approximate storage size required (order of magnitude estimate)
- location of data
- data retention lifetime as defined and required in section 5.2.5 of this Directive
- backup and disaster recovery options
- any accessibility issues arising from commercialisation or licensing
- any accessibility issues arising from ethics approvals
- data disposal approach
- criteria and principles for determining which data will be stored and which disposed (this could include legislative requirements).

Where required, a project may have more than one Research Data Management Plan governing different data sets, or more than one entry for a particular section. A data set governed by one Research Data Management Plan is referred to as a 'collection'.

5.1.3 Default plans

Researchers can complete a Research Data Management Plan via the Research Data Management Plan Template or through completing all relevant data-related sections of the Online Project Notification (OPeN) module.

These plans will meet the minimum standards of data management required for the University to comply with [the Code](#), relevant legislation and contractual obligations with funding bodies.

5.1.4 Storage

Research Data Management Plans are to be filed in accordance with the University's [Records Management Vice-Chancellor's Directive](#).

5.2 Research data

5.2.1 Ownership and custody

The ownership of research data is governed by the University's [Intellectual Property Policy](#) and the associated [Research-Generated Intellectual Property and Commercialisation Vice-Chancellor's Directive](#).

Research data is in the University's custody if it is stored on equipment and/or in facilities that are owned by, leased to or otherwise controlled by UTS.

Where research data in UTS custody are owned by, or licensed to, a third party, the Research Data Management Plan will detail this and provide a reference to the contracts under which ownership is to be transferred or licenced.

5.2.2 Storage with a third party

Where research data belonging to either the University or the researcher(s) are to be stored at a facility belonging to a third party, such as an industry partner or a collaborating institution or an external cloud storage provision, the Research Data Management Plan will give full details of where the research data is to be stored, including details of backup and disaster recovery options, if any.

5.2.3 Access

UTS has an [Open Access Policy](#). Researchers should endeavour to remove barriers to access wherever possible. This should be taken into consideration at various stages of the project, including during the ethics application process.

When granting access to research data, the University and researcher(s) will balance the following considerations:

- the ability of the project researchers to re-use their own data
- the ability for other researchers from UTS and the broader research community to access the data, whether for verification or further research
- the ownership of intellectual property (IP) in the data
- confidentiality and privacy restrictions arising from contractual arrangements and ethics approvals.

The Research Data Management Plan must give the following details regarding accessibility:

- privacy restrictions arising from ethics approvals
- confidentiality restrictions arising from any other considerations
- if there are embargo dates after which accessibility will be changed, the dates and a description of how accessibility will change

- where access is by request only, the contact details for the person(s) who can grant access to the data
- where data is to be made accessible after de-identification or anonymisation of personal details, details as to how and by whom this is to be carried out
- any other significant constraints or restrictions on accessibility.

5.2.4 Jurisdiction

Where the jurisdiction of any contract governing the ownership of research data is significant, it should be detailed in the Research Data Management Plan.

5.2.5 Storage, retention, disposal and life-cycle

For each data collection, the Research Data Management Plan will specify:

- where the data will be stored
- which data will be retained and the length of time that the data are to be retained
- the reason for the retention time (for example, ARC or NHMRC requirements)
- where research data has a finite lifetime, the details of this lifetime and its disposal, which must meet the University's existing standards for digital record-keeping.

Data retention may be delegated to services or institutions outside UTS. In cases where data storage is delegated to other institutions, the Executive Author must take reasonable steps to demonstrate that other institutions support the principals of the UTS data policy or local equivalent.

Data collections with long lifetimes will have a format review period. At each review, curatorial and/or technical staff will evaluate whether there is a need to convert the data for preservation and access purposes.

Further information and direction can be found in the [Records Management Vice-Chancellor's Directive](#).

5.2.6 Metadata

Each Research Data Management Plan will need to specify the details of any metadata that will be extracted from the associated data.

The definition of metadata should balance the following considerations:

- the researcher's ability to access and reuse their data
- the University's legal and data management responsibilities, including responsibilities towards research participants
- the University's support for making datasets discoverable via open standards
- the need for metadata to be consistent and simple.

A minimum standard metadata schema will be determined by the IT eResearch support group.

Where necessary, other forms of metadata can be developed by the Library and ITD research support staff in collaboration with the researcher(s).

6. Roles and responsibilities

Accountable Officers:

Deputy Vice-Chancellor (Research) is responsible for the contents of the Research Data Management Directive as well as its management, compliance and review as implemented by the Director, Research and Innovation Office.

Deputy Vice-Chancellor (Corporate Services) is responsible for infrastructure, storage and technical support services required to implement, coordinate and maintain the systems supporting this Directive as implemented by the Chief Information Officer, Information Technology Division (ITD).

Implementation Officers:

Associate Deans (Research) are responsible for:

- promoting awareness of UTS policies and procedures relating to data management and retention within faculties
- informing faculty researchers of the need to nominate an Executive Author for each research project
- ensuring that Research Data Management Plans within their faculties contain sufficient information about external ownership and custody of data
- ensuring research data security in non-digital formats are stored on University grounds and have appropriate access conditions, and
- disposal of research data within their faculties as required by Research Data Management Plans.

Director, Research and Innovation Office is responsible for:

- ensuring that Research Data Management Plans meet the University's obligations under [the Code](#) and the requirements of funding bodies
- ensuring that the Research Data Management Plan template and/or its online implementation through OPeN meets the University's obligations under [the Code](#)
- ensuring that Research Data Management Plans are collected at an appropriate stage in the life-cycle of a project, and that they are made available to ITD's Technical Services eResearch Support Group
- ensuring that Research Data Management Plans are filed in an approved digital recordkeeping system
- ensuring that research data is stored, maintained and made available in accordance with ethics or privacy considerations, IP issues such as patents or embargoes, open scholarship, Open Access concerns, data re-use and data commons
- ensuring that Research Data Management Plans indicating custody of data outside of UTS detail provisions in accordance with IP policy and relevant legislation
- ensuring that the jurisdiction in which data is to be stored is recorded in the Research Data Management Plan
- consulting with UTS Legal about the implications of data jurisdiction and formulating procedures and protocols to deal with this where necessary, and
- ensuring that Research Data Management Plan retention lifetimes are in accordance with the requirements of funding bodies and the obligations of the University.

Technical Services Manager is responsible for:

- providing technical support for researchers developing Research Data Management Plans
- ensuring the technical components of Research Data Management Plans are coordinated with ITD research infrastructure services
- ensuring that the required contents of all Research Data Management Plans are coordinated with ITD infrastructure services
- providing and maintaining the Research Data Management Plan template and/or its online implementation through OPeN
- providing adequate information so that researchers can determine what level of detail is required in their Research Data Management Plan to ensure that it is sufficient for their project
- technical data maintenance, backup and format roll-over
- the development and implementation of metadata collection and storage
- implementing the appropriate access restrictions to research data, where this is made available via metadata capture from the University's public data repositories, and
- making research data discoverable with metadata that meets the requirements of e-scholarship and public commons standards.

Manager, Information Technology Infrastructure is responsible for ensuring the security of research data stored on University IT infrastructure.

University Librarian is responsible for providing researchers with standards, training and resources relating to data management.

Researchers (staff researchers, student researchers and supervisors) are responsible for:

- ensuring that their research projects are covered by a Research Data Management Plan
- identifying an Executive Author for their research projects
- completing a Research Data Management Plan and submitting it to the Research and Innovation Office
- ensuring that their data is stored, maintained and disposed of in compliance with the Research Data Management Plan
- ensuring that any research data to be owned by, or held in the custody of, any parties other than themselves or the University, be accurately and fully identified and articulated in the Research Data Management Plan
- noting in their Research Data Management Plan if research data is to be stored in a jurisdiction other than Australia
- ensuring that their research data is stored in accordance with UTS IP policy and relevant legislation
- understanding access conditions that must be applied to their research data, and for indicating these in their Research Data Management Plan, and
- ensuring that the formats selected for data storage are in accordance with best practice for their discipline and that they are correctly described in their Research Data Management Plan.

7. Acknowledgements

[Australian Code for the Responsible Conduct of Research](#)

8. Version control and change history

Effective date	Version	Approved by, resolution no. (date)	Amendment
20/03/2014	1	Vice-Chancellor (16/01/2014)	New Directive
20/04/2016	1.2	Council, COU/14-5/106 (15/10/2014)	Consequential changes to align with changes to the Student Rules.