

RESEARCH DATA MANAGEMENT PROCEDURES 2015

Issued by: Deputy Vice Chancellor (Research)

Date: 1 December 2014

Last amended: 13 June 2018 (administrative amendments only)

1 December 2020

Signature:

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1 Purpose and application

- (1) These procedures are to give effect to the [Research Data Management Policy 2014](#) (“the Policy”).
- (2) These procedures apply to University staff, research students and affiliates.

2 Commencement

These procedures commence on 5 January 2015.

3 Interpretation

Words and phrases used in these procedures and not otherwise defined in this document have the meanings they have in the Policy.

Note: See clause 6 of the [Research Data Management Policy 2014](#).

Cloudstor	is the name of a secure data transfer and cloud storage service, located in Australia, operated by Australia’s Academic and Research Network (AARNet, http://www.aarnet.edu.au) and supported by University ICT. https://cloudstor.aarnet.edu.au/
CloudStor FileSender	is the name of a secure large file transfer service, located in Australia, operated by AARnet
data documentation	means digital or physical documents (e.g. data dictionaries, experiment protocols) that provide context for research data, and enable research data to be discovered, interpreted and understood by other researchers.

Dean	means the Dean of a faculty or the Head of School and Dean of a University school.
discipline repository	means an online digital archive for collecting, preserving and disseminating scholarly outputs from a particular subject area. Discipline repositories accept submissions of content from researchers from across multiple institutions.
eNotebook	means Electronic Lab Notebook. The University's licensed eNotebook is LabArchives.
Faculty	means a faculty or a University school.
Academic Liaison Librarian	means a specialist information librarian who is assigned to a faculty, school or department to support and facilitate the research and teaching needs of that unit.
institutional repository	means an online digital archive for collecting, preserving and disseminating the scholarly output of an institution.
IT Manager	means a specialist ICT manager who is assigned to a portfolio of faculties, centres and professional services units, to provide ICT services and support.
legacy research data	means those research data retained by the University that are the work of a researcher who has left the University, and which are at risk of becoming unusable due to inadequate documentation, management or preservation.
open access	means permanent and free online access to a research output, including research data sets.
RDS	means Research Data Store, which is the University's primary research data storage service. The Research Data Store is a centralised, secure digital research data storage service that is managed by University ICT.
Research Data Australia	is the name of a national registry of research data metadata. See https://ardc.edu.au/services/research-data-australia/
Sydney eScholarship Repository	means the University's online digital registry for collecting, curating and advertising descriptive and administrative information about the research datasets it holds.
Sydney Informatics Hub	means the core research facility in the Research Portfolio that provides specialised research data services, including consulting and support services to researchers
University-licensed platforms	means the software tools, cloud and hardware platforms that the University licenses for management, sharing and storage of digital research data. These include: <ul style="list-style-type: none"> • eNotebook; • the RDS; • survey tools (e.g. REDCap); and • cloud services used to store and share files (e.g. OneDrive, CloudStor, Dropbox).

4 Local provisions

These procedures should be read in conjunction with the applicable local provisions.

5 Research data management plans (RDMPs)

- (1) The Office of the Deputy Vice Chancellor (Research) will establish and maintain a register of RDMPs.
- (2) **Chief investigators undertaking externally funded research** with funds from a government, not-for-profit or commercial entity must create and register an RDMP following the announcement of the success of the grant.
- (3) **Chief investigators undertaking University funded research** must create and register an RDMP as specified in the conditions and guidelines for the award.
- (4) **Chief investigators undertaking research** using University facilities must create and register an RDMP.
- (5) **Research students, in consultation with their research supervisor(s)**, must create and register an RDMP.
- (6) RDMPs must be created and registered on forms specified by the Office of the Deputy Vice Chancellor (Research).

Note: See also clause 9 of the [Research Data Management Policy 2014](#), [Higher Degree by Research Supervision Policy 2020](#), and [Progress, Planning and Review for Higher Degree by Research Students Policy 2020](#). The RDMP form is accessed with the [DashR](#) tool

6 Storage of research data and primary materials

- (1) Researchers should:
 - (a) store digital research data, associated records and documentation securely on appropriate University licensed platforms;
 - (b) digitise physical research data, records and primary materials wherever possible, and store them securely on appropriate University licensed platforms; and
 - (c) store physical data, primary materials and research records securely in their laboratory or office, or in shared storage spaces within the Faculty or School.

7 Transfer of data and primary materials

- (1) To transfer digital research data or records, researchers should:
 - (a) use University licensed file transfer and cloud services to transfer collections of data files (projects) up to 1 TB in size;

Note: see Sydney Informatics Hub's [platform comparison guide](#) for more information.

- (b) use the Cloudstor FileSender data transfer service to securely transfer large files (>100 GB).
 - (i) For very large individual files that are slow or impossible to transfer via University-licensed cable or cloud networks, it may be necessary to transfer files by removable media (external hard drive), in which case advice from ICT helpdesk or Sydney Informatics Hub should be sought as both the file and the external device will need to be encrypted, and secure delivery arranged.
- (c) avoid using file syncing and transfer services that are not licensed by the University.

Note: Services such as GoogleDrive or personal Dropbox licences do not comply with the [Cyber Security Policy 2019](#) or the [Privacy Policy 2017](#).

- (2) Transfers of research data or records containing personal, confidential or commercially sensitive information may require, or may already be subject to, an appropriate protocol or contract (such as a material transfer agreement).

- (a) Chief investigators and research students (in consultation with their supervisors) should seek advice before transferring such materials into or out of the University.

Note: For advice about transferring confidential or commercially sensitive information, contact Commercial Development and Industry Partnerships (CDIP.) and see the [Research and Consultancy Agreements website](#). For advice about transferring participants' personal information, contact [Research Integrity](#).

- (3) Researchers and research students (in consultation with their supervisors) should encrypt files containing highly protected data before transfer (using encryption tools specified in the applicable University data handling standards).

Note: See [Cyber Security Technical Standards website](#).

8 Preferred formats

- (1) Wherever possible, chief investigators and research students should choose digital file formats that are:

- (a) widely used within their disciplines;
- (b) publicly documented, i.e. the complete file specification is publicly available;
- (c) open and non-proprietary;
- (d) endorsed and published by standards agencies such as the International Organisation for Standardization (ISO) (e.g. ISO 19005-1:2005 for PDF/A); and or
- (e) self-documenting i.e. the file itself can include useful metadata.

- (2) Wherever possible and appropriate, physical research data, primary materials and research records should be digitised in a preferred format, to minimise the risk of loss or damage, and minimise physical storage requirements.

Note: Examples of digitisation include scanning documentation, manuscripts or participant consent forms to PDF format; or photographing physical materials and storing them in TIFF format.

9 Data documentation and metadata

- (1) Metadata has the meaning given in clause 8 of the [Policy](#).
- (2) Data documentation and metadata requirements will differ depending on the discipline and the nature of the research.
- (3) Chief investigators and research students (in consultation with their supervisors) should consider:
 - (a) developing and documenting common folder and file-naming conventions, and communicating these to researchers in their group or to their research supervisor;
 - (b) depositing completed research datasets into a discipline or institutional repository at the end of the research project; and
 - (c) creating a record for their research project and associated research datasets in the Sydney eScholarship Repository at the end of the project.
- (4) Chief investigators and research students (in consultation with their supervisors) should contact the Library's [Digital Collections Manager](#) for advice on data documentation and metadata, and creating records in the Sydney eScholarship Repository.

10 Sharing research data and metadata

- (1) Chief investigators or research supervisors (with the consent of their research student(s) where required) should make completed research datasets openly available for re-use in accordance with the Policy and these procedures, unless this is prevented by the requirements of legislation or University policy, or ethical, contractual, or confidentiality obligations.
- (2) Sharing data does not necessarily mean open access. Options include:
 - (a) *Restricted access*: a record of the dataset is created in the Sydney eScholarship Repository. Public access is restricted to the research data metadata only;
 - (b) *Mediated access*: a record of the dataset is created in the Sydney eScholarship Repository. Public access is restricted to the research data metadata only. Access to the research data and materials is mediated by the chief investigator, and may be contingent on certain terms and conditions being met by the applicant (e.g. human research ethics clearance); or
 - (c) *Open access*: The dataset is uploaded to an open access discipline or institutional repository and made accessible to other researchers and to the public under an appropriate licence. A record may also be created in the Sydney eScholarship Repository.

Note: see also clause 11.
- (3) Chief investigators and research students (in consultation with their supervisors) should contact the Library's [Digital Collections Manager](#) for assistance with sharing research datasets at any stage during or following their research project.

11 Open access to research datasets

- (1) Open access research datasets must be shared under an appropriate licence.
Note: Using a licence enables the party sharing the dataset and the party using the dataset to understand their rights and responsibilities and enables the protection of intellectual property and other rights.
- (2) Before enabling open access to research datasets, researchers and research students (in consultation with their research supervisors) should consider whether:
 - (a) the conditions of the research funding agreement, contract or human research ethics clearance protocol prevent or require the sharing of research data;
 - (b) the dataset contains research participants' private or confidential information that cannot be de-identified or shared;
 - (c) a record of invention has been created at any stage in the research project;
 - (d) the dataset has the potential to support a patent or other registered intellectual property rights such as plant breeders' rights, or a software licence;
 - (e) the dataset contains confidential or commercial-in-confidence information that cannot be shared; or
 - (f) the dataset contains information that is classified as highly protected, by applicable University data classification standards.
Note: See [Cyber Security Technical Standards website](#).
- (3) Researchers and research students (in consultation with their research supervisors) should seek advice from the Library's [Digital Collections Manager](#) in relation to sub-clause 11(2) above, to ensure they are able to make datasets available on open access.
 - (a) The Digital Collections Manager may refer the researcher or research student to other specialist advisory services within the University.
Note: See Schedule 1 of these Procedures for a list of contacts.
- (4) The University recommends the application of a Creative Commons Attribution Non-commercial Share Alike License 4.0 (CC BY-NC-SA)
Note: See <http://creativecommons.org/licenses/by-nc-sa/4.0/deed.en>
- (5) Alternative licences may be selected or developed to cover other data sharing requirements, in consultation with [Copyright & Information Policy Services](#).
- (6) There are established open access data sharing practices that underpin existing research and publication processes, including (but not limited to):
 - (a) sharing supplementary datasets to support research publications, as required by the publisher;
 - (b) routine deposit of completed datasets into institutional or discipline specific repositories (e.g. genome data sequences are commonly deposited in the repository operated by National Centre for Biotechnology Information and known as GenBank); and
 - (c) sharing datasets to comply with the requirements of research funding agreements.

- (7) Where open access data practices of the kinds referred to in sub-clause 11(6) are used and no licence is specified, licences of the kinds referred to in sub-clauses 11(4) and 11(5) should be applied.

Note: Contact [Copyright & Information Policy Services](#) for advice.

- (8) Chief investigators and research students (in consultation with their research supervisors) should note their intention to share research datasets in their RDMP.
- (9) Researchers should make a recommendation to their Head of School to share large-scale project, department or faculty-level research datasets, or legacy research datasets, in appropriate circumstances.
- (10) Chief investigators should note whether (or not) research datasets have been shared, the location and the licence under which they have been shared in the final report for any internal or external research grant.

Note: Contact [Research Grants and Contracts](#) for advice.

12 Reporting and review of research data management policy, procedures and local provisions

- (1) The University will provide research data management planning information to faculties, centres and other units, to assist infrastructure planning, service development, research reporting, and other University business as required from time to time, and in accordance with clause 13 of the Policy.
- (2) The Deans will establish research data management reference groups.
- (3) Research data management reference groups will include:
- the relevant Associate Dean(s) (Research) or nominee (Chair);
 - Faculty researchers with disciplinary expertise (as nominated by the Chair);
 - the relevant IT Manager(s) (or equivalent);
 - the relevant Faculty Academic Liaison Librarian(s);
 - the Faculty Research Manager(s) (or equivalent); and
 - other members as determined by the Chair.
- (4) Where the research data management reference group includes more than one Associate Dean (Research), the group will elect one of the Associate Deans (Research) to act as Chair.
- (5) The research data management reference group will develop local provisions.
- (6) The research data management reference group will meet at least annually to:
- report to the relevant Dean(s) and Deputy Vice Chancellor (Research) on the operation of the Policy, these procedures and local provisions;
 - review the Policy, these procedures and local provisions and make recommendations to:
 - the Deputy Vice Chancellor (Research), for amendments of the Policy and these procedures; and
 - the relevant Dean(s), for amendments to the local provisions.

- (7) In addition, the research data management reference group will convene as required to:
- (a) coordinate any faculty requests to the Office of the Deputy Vice Chancellor (Research) for reporting on research data management related matters for use by the Faculty (or Faculties);
 - (b) respond to requests from the Office of the Deputy Vice Chancellor (Research) for regular and *ad hoc* reporting; and
 - (c) advise the relevant Dean(s), Heads of Schools, researchers, research supervisors and research students on research data management related matters.

NOTES

Research Data Management Procedures 2015

Date adopted:	1 December 2014
Date amended:	13 June 2018
	1 December 2020
Date commenced:	5 January 2015
Administrator:	Manager, Research Strategy and Policy Framework
Review date:	1 December 2025
Related documents:	

LEGISLATION

Copyright Act 1968 (Cth)

Electronic Transactions Act 1999 (Cth)

Privacy Act 1988 (Cth)

Therapeutic Goods Act 1989 (Cth)

Government Information (Public Access) Act 2009 (NSW)

Health Records and Information Privacy Act 2002 (NSW)

Human Tissue Act 1983 (NSW)

Privacy and Personal Information Protection Act 1998 (NSW)

Protection of the Environment Operations Act 1997(NSW)

Research Involving Human Embryos Act (2003) (NSW)

State Records Act 1998 (NSW)

UNIVERSITY LEGISLATION AND POLICIES

*University of Sydney (Higher Degree by Research) Rule 2011
(as amended)*

*University of Sydney (Policies Development and Review) Rule
2011*

Affiliates Policy

Charter of Freedom of Speech and Academic Freedom

Cyber Security Policy 2019 External Interests Policy 2010

Intellectual Property Policy 2016

Privacy Policy 2017

Recordkeeping Policy 2017

Research Agreements Policy 2011

Research Code of Conduct 2019

Higher Degree by Research Supervision Policy 2020

University of Sydney Enterprise Agreement 2018-2021

Recordkeeping Manual

EXTERNAL DOCUMENTS

ARC Open Access Policy

*Australian Code for the Responsible Conduct of Research 2019
(NHMRC/ARC)*

*Australian Code for the Responsible Conduct of Research:
Management of Data and Information in Research 2019
(NHMRC/ARC)*

*Excellence in Research Australia 2010 Submission Guidelines
(Australian Research Council)*

*NHMRC National Statement on Ethical Conduct in Human
Research 2018 (especially chapter 3, element 4 'Collection, use
and management of data and information')*

*NHMRC Revised Policy on the Dissemination of Research
Findings*

*NHMRC Statement on Consumer and Community Participation
in Health and Medical Research*

NSW General Retention and Disposal Authority GA28

*NSW General Retention and Disposal Authority Education:
Higher and further education records (GA47)*

OECD Principles and Guidelines for Access to Research Data From Public Funding

Values and Ethics: Guidelines for Ethical Conduct in Aboriginal and Torres Strait Islander Health Research (NHMRC 2003)

Wellcome Trust Joint Statement on Sharing Research Data to Improve Public Health

NSW General Retention and Disposal Authority Education: Higher and further education records (GA47)

OECD Principles and Guidelines for Access to Research Data From Public Funding

Values and Ethics: Guidelines for Ethical Conduct in Aboriginal and Torres Strait Islander Health Research (NHMRC 2003)

Wellcome Trust Joint Statement on Sharing Research Data to Improve Public Health

AMENDMENT HISTORY

Provision	Amendment	Commencing
Various	Updated hyperlinks and references to websites	12 July 2016
Notes	Updated references to <i>Enterprise Agreement</i> and <i>Intellectual Property Policy 2016</i>	12 July 2016
3	Amendments relating to organisational design changes	8 June 2017
Related documents	Replace <i>External Interests Policy 2012</i> with <i>External Interests Policy 2010</i>	13 June 2018
Related documents	Replace <i>Information Security Policy 2010</i> with <i>Information Security Policy</i>	13 June 2018
Related documents	Replace <i>Research Agreements Policy 2011</i> with <i>Research Agreements Policy</i>	13 June 2018
Related documents	Replace <i>University of Sydney Enterprise Agreement 2013-2017</i> with <i>University of Sydney Enterprise Agreement 2018-2021</i>	13 June 2018

Related documents	<i>Replace University of Sydney (Policies Development and Review) Rule 2012 with University of Sydney (Policies Development and Review) Rule 2011</i>	13 June 2018
Related documents	<i>Replace University Privacy Policy 2013 with Privacy Policy 2017</i>	13 June 2018
Related documents	<i>Replace University Recordkeeping Policy with University Recordkeeping Policy 2017</i>	13 June 2018
Related documents	<i>Replace University Recordkeeping Manual with Recordkeeping Manual</i>	13 June 2018
Related documents	<i>Replace NSW General Retention and Disposal Authority GDA23 with NSW General Retention and Disposal Authority Education: Higher and further education records (GA47)</i>	13 June 2018
3	Addition of 'and cloud storage' to definition of Cloudstor.	1 December 2020
3	Addition of 'is the name of a secure large file transfer service, located in Australia, operated by AARnet', to the definition of Cloudstor FileSender.	1 December 2020
3	Addition of 'The University's licensed eNotebook is LabArchives', to the definition of Notebook.	1 December 2020
3	Definition of 'Faculty Liaison Librarian' removed and replaced by 'Academic Liaison Librarian'. Remove 'professional' and replace with 'librarian'.	1 December 2020
3	Remove 'central' and replace with 'primary', to the definition of RDS.	1 December 2020
3	Research Data Australia definition updated with new link.	1 December 2020
3	Insert definitions of Sydney eScholarship Repository, Sydney Informatics Hub and University licenced platforms.	1 December 2020
5	Title amended to read RDMPs instead of RDMP.	1 December 2020
5(2)(a)	Deleted	1 December 2020
5(4); 5(5)	'should' replaced by 'must' in each sub-clause.	1 December 2020
5(6) Note	Links updated.	1 December 2020
6(a); 6(b)	Sub-clauses amended with the addition of 'securely', 'appropriately' and 'licenced plaforms'.	1 December 2020
6(c)	Sub-clause amended with 'securely' inserted.	1 December 2020

7(1)(a); 7(1)(b) and 7(1)(c)	New subclauses and Note inserted.	1 December 2020.
7(2)	Insertion of 'information' after 'sensitive'.	1 December 2020
7(2)(a) Note	'regarding the transfer of' replaced by 'about transferring'; addition of 'and see the Research and Consultancy Agreements website'; link removed and 'for advice about transferring participants' personal information, contact Research Integrity' inserted.	1 December 2020
7(3)	New sub-clause and Note inserted.	1 December 2020
9(3)	'(in consultation with their supervisors)' inserted after 'research students'.	1 December 2020
9(3)(c)	'University's Research Data Registry' removed and replaced by 'Sydney eScholarship Repository'.	1 December 2020
9(4)	'Research Data' removed and replaced by 'Digital Collections Management'. 'University's Research Data Registry' removed and replaced by 'Sydney eScholarship Repository'; Note removed.	1 December 2020
10(3)	'Research Data' removed and replaced by 'Digital Collections Manager'; Note removed.	1 December 2020
11(1)	'responsibilities, and' removed and replaced by 'responsibilities and'	1 December 2020
11(2)(d); 11(2)(e)	'or' removed.	1 December 2020
11(2)(f)	New sub-clause and Note.	1 December 2020
11(3)	'Research Data' removed and replaced by 'Digital Collections Manager'; Note removed.	1 December 2020
11(3)(a)	'Research Data' removed and replaced by 'Digital Collections Manager'.	1 December 2020
11(4)	Insert Note.	1 December 2020
11(5)	'Copyright and Information Policy Services' removed as well as Note.	1 December 2020
11(7) Note	Note amended with new links.	1 December 2020
11(10) Note	Note amended.	1 December 2020
Schedule 1	Schedule 1 amended with new website links and contact details.	1 December 2020

SCHEDULE 1

CONTACTS FOR RESEARCH DATA MANAGEMENT TRAINING AND SUPPORT

Requirement	Key contact	Addresses and links
Advice on research data management (including storage) services, including storage of large-scale datasets.	Research Data Consultant, Sydney Informatics Hub (SIH)	See the SIH website: https://www.sydney.edu.au/research/facilities/sydney-informatics-hub/digital-research-infrastructure.html
Transferring data and materials into the University from another institution or out of the University to another institution.	Commercial Development and Industry Partnerships;	See the Commercial Development and Industry Partnerships website http://sydney.edu.au/cdip/
	Research Integrity	See the Research Integrity website http://sydney.edu.au/research_support/integrity/
Describing and documenting research datasets, using metadata.	Manager, Digital Collections, University Library	See the Library's Manage Research Data website: https://library.sydney.edu.au/research/manage-data.html
Sharing research datasets, depositing completed digital data sets in the appropriate institutional or discipline repository; including appropriate access permissions or restrictions.	Manager, Digital Collections, University Library	See the Library's Publish Information and Data website: https://library.sydney.edu.au/research/publish-data.html
Interpreting data ownership clauses in research grants, research collaboration agreements and contracts	Manager, Research Contracts, Research Portfolio	See the University Research Support Website, Research Grants & Contracts: http://sydney.edu.au/research_support/funding/rgaf_contacts.shtml
General advice on copyright and IP in research data; selecting an appropriate license for open access datasets.	Manager, Copyright & IP Advisory Services	See the Copyright website: https://library.sydney.edu.au/help/copyright/
Advice on material transfer agreements, patents and other registered IP rights; advice on selecting alternative licenses and/or terms of use for open access datasets.	Commercial Development and Industry Partnerships	See the Commercial Development and Industry Partnerships website http://sydney.edu.au/cdip/