

RESEARCH DATA MANAGEMENT PROCEDURES 2015

Issued by: Deputy Vice Chancellor (Research)

Date: 1 December 2014

Last amended: 8 June 2017 (administrative amendments only)

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 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+ is the name of a secure file sharing and cloud storage service that is located in Australia and is operated by Australia's Academic and Research Network (AARnet, <http://www.aarnet.edu.au>).

<http://cloudstor.aarnet.edu.au/plus/>

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 (University School) 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.
ELN	means Electronic Lab Notebook.
Faculty	Means a faculty or a University school established in each case by its constitution.
Faculty Liaison Librarian	means a specialist information professional 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 central 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 http://researchdata.ands.org.au/
Research Data Registry	means the University's online digital registry for collecting, curating and advertising descriptive and administrative information about the research data sets held by it.

4 Local provisions

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

5 Research data management plans (RDMP)

- (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.

- (a) Research funds will not be released until an RDMP is registered.
- (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 should create and register an RDMP.
- (5) **Research students, in consultation with their research supervisor(s)**, should 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](#).

The RDMP form is available from the Research Data Management Guidelines website: <https://library.sydney.edu.au/research/data-management>

6 Storage of research data and primary materials

- (1) Researchers should:
 - (a) store digital research data, associated records and documentation on University managed research data storage infrastructure (e.g. the RDS, ELN);
 - (b) digitise physical research data, records and primary materials where possible, and store them on University managed research data storage infrastructure; and
 - (c) store physical data, primary materials and research records 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 the Cloudstor data transfer service to securely transfer large individual files;
 - (b) use Cloudstor+ to share multiple files or research data sets; and

Note: See the ICT website for more information http://staff.ask.sydney.edu.au/app/answers/detail/a_id/830/kw/cloudstor

 - (c) consider the risks before using online file transfer and sharing services (such as DropBox) to transfer research data or records containing personal, confidential or commercially sensitive information.

Note: While services such as DropBox are convenient, there are information security risks to be considered, especially when storing or transferring data containing participants' personal information, or other sensitive information. If data is stored overseas, it may be subject to local data surveillance laws.
- (2) Transfers of research data or records containing personal, confidential or commercially sensitive 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 regarding the transfer of confidential or commercially sensitive information, contact Commercial Development and Industry Partnerships (CDIP):
http://sydney.edu.au/sydnovate/staff/agreements/material_transfer.shtml

For advice regarding the transfer of participants' personal information, contact Research Integrity:
http://sydney.edu.au/research_support/integrity/

- (3) Researchers and research students (in consultation with their supervisors) should contact the relevant IT Manager for advice on the secure transfer of digital data.

Note: See the ICT website: <http://s1.sydney.edu.au/ict/contact/it-managers.shtml>

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 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 data sets 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 data sets in the University's Research Data Registry at the end of the project.

- (4) Chief investigators and research students (in consultation with their supervisors) should contact the Library's Research Data Manager for advice on data documentation and metadata, and creating records in the University's Research Data Registry.

Note: Contact the Library's Research Data Manager
<https://library.sydney.edu.au/research/data-management>

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 data sets 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 data set is created in the Research Data Registry. Public access is restricted to the research data metadata only;
 - (b) *Mediated access:* a record of the data set is created in the Research Data Registry. 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 data set 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 Research Data Registry.

Note: See also clause 11.

- (3) Chief investigators and research students (in consultation with their supervisors) should contact the Library's Research Data Manager for assistance with sharing research data sets at any stage during or following their research project.

Note: Contact the Library's Research Data Manager:
<https://library.sydney.edu.au/research/data-management>

11 Open access to research data sets

- (1) Open access research data sets must be shared under an appropriate licence.

Note: Using a licence enables the party sharing the data set and the party using the data set to understand their rights and responsibilities, and enables the protection of intellectual property and other rights.
- (2) Before enabling open access to research data sets, 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 data set 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 data set has the potential to support a patent or other registered intellectual property rights such as plant breeders' rights, or a software licence; or
 - (e) the data set contains confidential or commercial-in-confidence information that cannot be shared.
- (3) Researchers and research students (in consultation with their research supervisors) should seek advice from the Library's Research Data Manager in relation to sub-clause 11(2) above, to ensure they are able to make data sets available on open access.
- Note:** Contact the Library's Research Data Manager:
<https://library.sydney.edu.au/research/data-management>
- (a) The Research Data 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 & Advisory Services.
- Note:** Contact Copyright and Intellectual Property Advisory Services:
<https://library.sydney.edu.au/help/copyright/>
- (6) There are established open access data sharing practices that underpin existing research and publication processes, including (but not limited to):
- (a) sharing supplementary data sets to support research publications, as required by the publisher;
 - (b) routine deposit of completed data sets into institutional or discipline specific repositories (e.g. genome data sequences are commonly deposited in the repository operated by National Center for Biotechnology Information and known as GenBank); and
 - (c) sharing data sets to comply with the requirements of research funding agreements.
- (7) Where open access data practices of the kinds referred to in sub-clause 10(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 and Intellectual Property Advisory Services for advice:
<https://library.sydney.edu.au/help/copyright/>
- (8) Chief investigators and research students (in consultation with their research supervisors) should note their intention to share research data sets in their RDMP.
- (9) Researchers should make a recommendation to their Head of School to share large-scale project, department or faculty-level research data sets, or legacy research data sets, in appropriate circumstances.
- (10) Chief investigators should note whether (or not) research data sets 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:
http://sydney.edu.au/research_support/funding/rgaf_contacts.shtml

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:
 - (a) the relevant Associate Dean(s) (Research) or nominee (Chair);
 - (b) Faculty researchers with disciplinary expertise (as nominated by the Chair);
 - (c) the relevant IT Manager(s) (or equivalent);
 - (d) the relevant Faculty Liaison Librarian(s);
 - (e) the Faculty Research Manager(s) (or equivalent); and
 - (f) 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:
 - (a) report to the relevant Dean(s) and Deputy Vice Chancellor (Research) on the operation of the Policy, these procedures and local provisions;
 - (b) review the Policy, these procedures and local provisions and make recommendations to:
 - (i) the Deputy Vice Chancellor (Research), for amendments of the Policy and these procedures; and
 - (ii) 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: 8 June 2017

Date registered:

Date commenced: 5 January 2015

Administrator: Manager, Research Strategy and Policy Framework

Review date: 29 November 2018

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)

State Records Act 1998 (NSW)

University of Sydney Act 1989

University of Sydney By-Law 1999 (NSW) (as amended)

UNIVERSITY LEGISLATION AND POLICIES

Affiliates Policy

Charter for Academic Freedom

External Interests Policy 2012

Information Security Policy 2010

Research Agreements Policy 2011

Research Code of Conduct 2013

Supervision of Research Higher Degree Students Policy 2013

University of Sydney Enterprise Agreement 2013-2017

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

Intellectual Property Policy 2016

University of Sydney (Policies Development and Review) Rule 2012

University Privacy Policy 2013

University Recordkeeping Policy

University Recordkeeping Manual

EXTERNAL DOCUMENTS

Australian Code for the Responsible Conduct of Research 2007 (NHMRC/ARC)

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

NHMRC National Statement on Ethical Conduct in Human Research 2007 (especially section 3.2: Databanks)

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 GDA23

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

SCHEDULE 1

CONTACTS FOR RESEARCH DATA MANAGEMENT TRAINING AND SUPPORT

Chief investigators and research students (having first consulted with their supervisors) are encouraged to contact the following for advice and assistance with research data management training and support.

Requirement	Key contact	Addresses and links
Advice on Research Data Storage services, especially regarding the storage of large-scale data sets.	IT Manager	See the ICT website: http://s1.sydney.edu.au/ict/contact/it-managers.shtml
Transferring data and materials into the University from another institution or out of the University to another institution.	Commercial Development and Industry Partnerships; Research Integrity	See the Commercial Development and Industry Partnerships website http://sydney.edu.au/cdip/ See the Research Integrity website http://sydney.edu.au/research_support/integrity/
Describing and documenting research data sets.	Research Data Manager; University Library	See the Research Data Management Guidelines website: https://library.sydney.edu.au/research/data-management/
Sharing research data sets, depositing completed digital data sets in the appropriate institutional or discipline repository; including appropriate access permissions or restrictions.	Research Data Manager, University Library	See the Research Data Management Guidelines website: https://library.sydney.edu.au/research/data-management/
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 data sets.	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 data sets.	Commercial Development and Industry Partnerships	See the Commercial Development and Industry Partnerships website http://sydney.edu.au/cdip/