Management of Research Data Procedure

UNDER REVIEW

<table>
<thead>
<tr>
<th>Related Policy</th>
<th>Responsible Conduct of Research Policy</th>
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<tr>
<td>Responsible Officer</td>
<td>Deputy Vice-Chancellor (Research)</td>
</tr>
<tr>
<td>Approved by</td>
<td>(as above)</td>
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<tr>
<td>Approved and commenced</td>
<td>August 2019</td>
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<td>Review by</td>
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<td>Responsible Organisational Unit</td>
<td>Office of Research Services</td>
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1 **Objective**

The objective of this Procedure is to provide instructions to facilitate the implementation of the Management of Research Data components of the Australian Code for the Responsible Conduct of Research (2018) ("the Code") and inter alia the University of Tasmania’s (the University) Responsible Conduct of Research Policy.

The Policy affirms the University’s commitment to comply with Institution Responsibility 8 and Researcher Responsibilities 21 and 22 of the Code, as well as the *Management of Data and Information in Research* better practice guide.

2 **Scope**

In all cases this procedure outlines minimum requirements for all research conducted under the auspices of the University (as defined by the University’s Responsible Conduct of Research Policy).

This document details overarching procedures and is designed to be underpinned by standard operating procedures (SOPs) developed and published by Organisational Units. SOPs will be consistent with the guidance given in these procedures. SOPs will provide specific advice tailored for location and discipline specific requirements.

3 **Procedure**

3.1 **Responsibilities**

3.3.1 The University is required to:

- identify ownership of research data and primary materials
- have processes in place for the retention of research data and primary materials which are consistent with practices in the discipline, relevant legislation, codes and guidelines
- provide facilities for the safe and secure storage of research data and primary materials and for maintaining records of where research data and primary materials are stored
- ensure backup, archival and monitoring strategies are in place to prevent loss of research data
- ensure procedures are in place for the secure and safe disposal of research data and primary materials
- maintain procedures on ownership and storage which cover a range of possible situations that arise in research, including when researchers move between institutions or employers and when data are held outside Australia
- provide facilities for the centralised storage of metadata and facilitate and support Organisational Units in implementing this procedure.
3.3.2 Delegated Heads of Organisational Units are required to:

- ensure access to suitable physical and electronic storage that meets security and confidentiality requirements for research data and primary materials
- facilitate processes within the Academic Unit for storage and retention of research data and primary materials
- authorise procedures adopted by researchers for the storage and destruction of research data and primary materials
- authorise the destruction of research data and primary materials on recommendation of the researcher
- ensure that researchers have planned for the ongoing custodial responsibilities for the research data and primary materials, in the event they leave the University
- evaluate authorisation for researchers who leave the University to take a copy of research data and primary materials for further use
- liaise with all internal stakeholders regarding the relocation of research data and primary materials within the University, as required (for example, where a student researcher transfers Academic Units, where multiple University researchers are involved in a research project etc)
- ensure that research data and primary materials are transferred from the Organisational Unit to a longer-term data repository or destroyed at the conclusion of the active phase of the research
- ensure that policies and procedures are disseminated to researchers and research trainees, including the specific provisions for research involving humans, and
- recommend contributions of metadata and data to appropriate metadata stores and data repositories.

3.3.3 Researchers are required to:

- keep clear and accurate records of their research methods and data sources, including any approvals granted, during and after the research process;
- manage research data and primary materials according to ethical approvals and legislative requirements
- ensure sufficient research data and primary materials are retained to justify research outcomes and to defend the findings of the research, if challenged
- ensure that research data and primary materials are kept in a safe and secure environment, and that research data is stored in a retrievable way
- maintain an index of research data in an accessible form to a standard that complies with the minimum metadata requirements, as set by the University
- ensure backup, archival and monitoring strategies are in place to prevent loss of research data
- plan for ongoing custodial responsibilities for the research data and primary materials at the conclusion of the research project or on departure from the University
- ensure appropriate procedures are undertaken in relation to the relocation of stored research data and primary materials within the University when required
- ensure that a written agreement covering the storage and ownership of research data and primary materials is developed at an early stage of a research project where it involves at least one external party, in accordance with the University’s Responsible Conduct of Research Policy
• maintain confidentiality of research data and primary material when given access to confidential information, and
• ensure research trainees are aware of their responsibilities in relation to the management of research data and primary materials.

3.2 Research Data Management Awareness

Heads of Academic Units and supervisors responsible for performance development must take all reasonable steps to ensure that all researchers are aware in advance of their obligations under the Code, this Procedure and the relevant guidelines provided on the University Research Data Management website.

Individual researchers are expected to be familiar with the Code, this procedure and related research policies and procedures in order to fully understand their compliance obligations and attend training/professional development opportunities provided by the University for information and training in data management.

All professional staff whose position includes supporting research projects must ensure they are informed on institutional data management responsibilities and the infrastructure available to University researchers for data management.

3.3 Research Data Planning

The University provides data planning checklists and examples of Data Management Plans (DMP) to assist in holistic planning.

Researchers will consider research data management issues as early as possible in the lifecycle of a research project. As a minimum, researchers will consider and document the following:

• ownership, copyright and intellectual property
• ethical requirements including:
  • privacy
    o confidentiality
    o cultural sensitivity
    o requirement to destroy original data or participant consent to retain or re-use data
    o participant consent to retain or re-use de-identified data
• length of time data must be kept, how and by whom it will be archived, disposed of or destroyed at the end of the retention period. Secure storage and controlled access
• possible changes of requirements for storage and security for different phases of the research
• metadata (description of the anticipated data to be generated), which will point to the original data, so the original data is discoverable accessible and, where appropriate, shareable beyond the end of the project
• exit planning as per clause 3.8 of these procedures.

Where data will result from human research, the data management plan must address the requirements of clause 3.1.45 of the National Statement on Ethical Conduct in Human Research.
Researchers must check the appropriate box on the Office of Research Services funding clearance form to indicate that a project will generate data.

Data planning documentation must be kept with other research project documentation or with the research data to enable future management of the research data.

Where researchers are in doubt about data management planning obligations, they must consult the guidelines provided within the Research Data Management website and/or seek appropriate technical advice.

Researchers will update the research data planning documentation as required.

3.4 Retention of Research Data and Primary Materials

The general principle is that data and/or primary material must be appraised, archived and retained for perpetuity unless there is a reason, such as the conditions of ethics approval, contractual obligations, or legislative requirements, that mandates that the data or materials must be destroyed at the end of the research project.

At a minimum, research data must be retained according to the periods specified in the matrix below and archives and records legislation, and retention plans must be documented during research data planning.

In general, the minimum retention period is five years post-publication: however, the specified period can vary depending upon the local jurisdiction, the discipline and type of research, other institutional policies, and the requirements of bodies such as funding agencies and commercial sponsors. For example:

<table>
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<tr>
<th>Project/situation</th>
<th>Minimum retention</th>
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<tr>
<td>Clinical trials</td>
<td>15 years</td>
</tr>
<tr>
<td>Other clinical research</td>
<td>12 years</td>
</tr>
<tr>
<td>Gene therapy/modification</td>
<td>Permanently</td>
</tr>
<tr>
<td>Implanted medical device</td>
<td>Permanently</td>
</tr>
<tr>
<td>Work is of community or heritage value (see below)</td>
<td>Permanently, preferably within a national collection</td>
</tr>
<tr>
<td>Findings are contentious</td>
<td>10 years</td>
</tr>
<tr>
<td>All other research</td>
<td>5 years</td>
</tr>
</tbody>
</table>

- If results from research are challenged, all relevant data and materials must be retained beyond the minimum retention period until the matter is resolved
- Research records that may be relevant to allegations of breaches of the Code must be kept according to the terms of the resolution of the matter.

The retention of the data and primary materials must be reviewed at:

- the completion of the data capturing phase of research
- the publication of the data or of any research flowing from the data
- the end of the minimum retention period
- at any other time considered necessary by the researcher or the university.

Where data is appraised and the decision is made that research data, or a portion of that data, is to be disposed, this must be done according to retention and disposal guidelines at clause 3.9.
Retaining data for longer periods than the minimum requirement or permanently may be required and is recommended. In some circumstances the retention of data for longer periods may be an important measure of respect. Any previous disposal recommendations and usage should be reviewed before data is destroyed.

Longer term and permanent retention of data is recommended where the outcomes of research may be of high public interest or contention, may substantially shift the paradigm for the field of enquiry or may have resulted in the identification, registration and use of intellectual property. The potential value of the material for further research should also be considered, particularly where the research would be difficult or impossible to repeat.

Generally, the decision of whether to retain primary materials for the same duration as the associated data will depend upon (sub)discipline, methodological and project specific considerations. For example, for most social science projects it will not be necessary to retain the audio recording of an interview, once that recording has been transcribed/coded, but where a project involves an analysis of tone/intonation the recording may be at least as important as the transcription. A useful approach to this question is often “What would need to be provided to substantiate the finding of this research?”

If in doubt as to whether data should be retained, researchers are required to consult with their Delegated Head of Organisational Unit.

3.5 Research Data and Primary Materials, Record Keeping, Backup and Reuse

3.5.1 All those handling research data must:

- store data securely in a method appropriate for the format of the data and with appropriate metadata and/or documentation (especially where the data is personally identified sensitive information, there are risks associated with the information, it is commercial-in-confidence, there are intellectual property considerations, there are defence export control considerations),
- store master copies of digital data in an organisational unit storage, that is secured and backed up, such as the Research Data Storage Infrastructure (RDSI), or ensure that any arrangements for master copies of data stored externally are documented in writing at the commencement of the research and that external storage providers comply with University policies and procedures
- document how data will be created, stored and managed, and the provisions for access to data from creation to disposal or permanent preservation
- facilitate long term access and preservation by using durable formats to create and store digital and, where appropriate, non-digital data.

3.5.2 Standards and agreed processes for creating and maintaining metadata and documentation must be used to facilitate the identification, retrieval and re-use of research data over the time of its potential use.

3.5.3 Descriptive metadata will be lodged with the University research metadata repository within a reasonable time prior to the completion of the project and must be updated to reflect changes in location of storage, or custodians of the data.
3.5.4 At the appropriate phase of the research, the research data should be appraised and archived. The appraised retained data should be stored in a university approved archive for the purposes of validating the research and furthering knowledge where:

- a suitable archive is available
- the data meets the criteria for deposit
- the data can be made available in ways that do not infringe legal or ethical restrictions.

3.5.5 Where data is owned by a third party or has been obtained from a limited access database, researchers will retain written documentation identifying:

- the location of the original data
- or
- information about the limited access database from which the data was extracted.

Researchers will retain this documentation with other records from the relevant research project.

3.5.6 Plans for the storage of the data must be agreed at the outset of the project and consideration must be given to ensure that data is stored in the most appropriate facility depending on the stage of the research, amount of data captured, level of access required, and security considerations.

During the Active Research Phase:

- Delegated Heads of Organisational Units will ensure researchers within their Organisational Unit have access to suitable physical and electronic storage for storing research data and primary materials, and will facilitate appropriate processes within the Organisational Unit, or, if appropriate, the Research Data Storage Infrastructure (RDSI), for the storage of these data and materials.
- Researchers will be responsible for
  - the storage of research data and primary materials in a safe and secure environment within their Organisational Unit, as possible and appropriate
  - maintaining clear and accurate records of the research methods and data sources used, by way of notes, diaries, laboratory books etc.
  - maintaining an index of research data in an accessible form that complies with the minimum metadata standard set by the University
  - contributing descriptions of the dataset or data collection (ie metadata records) to the University research metadata repository and will do so as soon as practicable after the commencement of the capture of data.

After the active phase of research is completed, or when there is no need to retain the research data and/or primary materials within the Organisational Unit, data must be securely stored in long term storage and plans must be made for ongoing preservation and curatorship of that data.

Where there is a significant financial cost for ongoing preservation the Delegated Head of Organisational Unit, Executive Dean or Deputy Vice-Chancellor (Research) must be consulted.
Researchers will:

- decide which data and/or materials must be retained, taking into consideration any University, legal, funding agency or publisher requirements
- destroy research data and/or primary materials, that do not need to be retained as detailed in clause 3.4, in accordance with clause 3.9 of this procedure and the Responsible Conduct of Research Policy
- transfer research data and/or primary materials to be retained to longer term storage within the University or to an appropriate data repository
- obtain written authorisation from their Delegated Head of Organisational Unit prior to relocating research data and/or primary materials. The location of the longer-term storage facility and/or the details of the data repository should be recorded on the research data planning checklist (or equivalent documentation) and updated in the metadata
- deposit metadata in an appropriate metadata store.

There can be compelling ethical reasons for the sharing/reuse of data and primary materials, these include (but are not limited to):

- risks/significant burdens associated with the data collection
- the potential participant pool is ‘over-researched’
- the situation is rare
- the costs associated with the collection/generation/access to the data or primary materials.

Researchers conducting human research are encouraged to seek extended or unspecified consent for the reuse/retesting of data/primary materials or at least consent to be contacted about future research.

Researchers will ensure that ownership of research data and/or primary materials is identified and documented at the outset of a research project and reviewed and updated whenever appropriate. The documentation should detail how ownership and storage of data and materials will be affected by situations in which researchers change institutions or withdraw from collaborative projects.

3.6 Ownership, Copyright and Intellectual Property (IP) of Research Data and Primary Materials

3.6.1 Copyright and use of third-party research data must be clearly agreed:

- Where researchers use third-party research data that is in the public domain, they must still seek agreement to reproduce any databases to which copyright attaches. Databases that are made publicly available may be protected by copyright
- Where researchers use third-party research data that is not in the public domain, they must seek advice from the Office of Research Services to ensure appropriate contractual agreements are in place
- Where researchers are in doubt about copyright obligations, they must consult the guidelines provided within the Copyright website and the Research Data Management website and/or seek advice from the University’s Copyright Officer, University Legal Services or the Data Management Coordinator.
3.6.2 Unless otherwise agreed in writing, the University will remain the custodian of all research data and primary materials.

- Researchers wishing to maintain a copy of the research data and primary materials for further use will obtain written authorisation from their Delegated Head of Organisational Unit.

Access to research data and primary materials must be controlled by appropriate security measures to prevent:

- unauthorised access
- misuse of data
- breaches of commercial and contractual agreements.

3.7.2 Researchers must consider and document ethical requirements relating to data management using the University’s Ethics procedures and guidelines, and with regards to:

- privacy:
  - comply with relevant Privacy Laws
  - consult the University’s Legal Services when in doubt about how to deal with data management and Privacy Laws

- confidentiality and consent:
  - respect any confidentiality agreement about stored data that has been made with participants and ensure documentation of same for the awareness of future users
  - establish consent processes that include information about the form in which the data will be stored (specifically about identifiability of subjects) and the purposes for which the data will be used and/or disclosed
  - retain records of confidentiality agreements and consents
  - secure data so that it is not available for uses to which subjects did not consent.

Where researchers are in doubt about confidentiality and consent, they must consult the National Statement on Ethical Conduct in Human Research, particularly Chapters 2.2 - General Requirements for Consent and 3.1 Element 4 – Collection, Use and Management of Data and Information, and seek advice from the University’s Research Integrity and Ethics Unit or the University’s Legal Services.

3.7.3 Research with Indigenous people

- Researchers must:
  - apply the AIATSIS Guidelines for Ethical Research in Indigenous Studies and Ethical conduct in research with Aboriginal and Torres Strait Islander Peoples and communities: guidelines for researchers and stakeholders or any equivalent guidelines in local jurisdictions when conducting research involving Indigenous people
  - consider indigenous intellectual and cultural property rights, in addition to other copyright and intellectual property requirements
  - act appropriately and respectfully regarding indigenous data sovereignty
Management of Research Data Procedure

3.7 Exit Planning

During data planning, researchers should establish and document the ownership of research data and primary materials and the agreed exit procedures.

Research data identified as owned by an individual may be removed from the University by the individual on leaving the University. The individual should advise their Delegated Head of Organisational Unit of their intention to take the data and agree to and document any ongoing access for the unit.

University data will remain the property of the University. Individuals leaving the University may negotiate to take copies of the data and will obtain written authorisation from their Delegated Head of Organisational Unit. Any arrangements made should be documented and the documentation should be stored with the data.

Processes for individuals or groups exiting from a project using third-party data must be established and documented at the commencement of the project. The documentation must be kept with other project documentation such as initial agreements on the use of the data.
3.8 Review and Destruction of Research Data and Primary Materials

Researchers will seek advice from their Delegated Head of Organisational Unit with regards to the decision as to whether it is in the public interest to retain the data.

When the specified period of retention has ended for research data and primary material that has not been transferred to a repository or archive (refer to clause 3.4 for minimum retention periods), researchers should review the data and/or materials that are scheduled to be destroyed to confirm that they are:

- not of archival value or in the public interest and do not need to be permanently retained
- no longer required to carry out the business of the Organisational Unit
- not subject to any outstanding legal or ethical requirements, challenges to research results, or allegations of breaches of the Code.

Where the destruction of research data and/or primary materials is required, researchers will obtain written authorisation from their Delegated Head of Organisational Unit prior to destroying the research data and/or primary materials. This requirement is subject to contractual arrangements.

Following this authorisation (when required), researchers will arrange for the safe and secure destruction of the research data and/or primary materials, in accordance with the requirements of the University’s Records Management Policy, Records Management Guidelines and Records Retention and Disposal Schedule (DA 2398), and subject to relevant legislative requirements.

Researchers will retain documentation specifying the research data and/or primary materials that have been destroyed and the destruction process that was used and will update the relevant metadata store and research data checklist (or equivalent documentation) to include this information.

4 Definitions and Acronyms

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<tr>
<th>Term</th>
<th>Definition</th>
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<tr>
<td>Academic Unit</td>
<td>Means the secondary organisational unit in the academic structure of the University, reporting directly to the College Executive Deans, as per Ordinance 14 – Academic Structure.</td>
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<tr>
<td>Active Research Phase</td>
<td>The period in which the research is done.</td>
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<tr>
<td>Archive</td>
<td>A collection of data, material, records that have been appraised as having ongoing value that are under the care and preservation of a curator for the purpose of future use.</td>
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<tr>
<td>Appraisal and Archiving of data and primary materials</td>
<td>The process of making decisions as to what constitutes the core raw data, derived data and primary materials to be preserved for historical purposes and for possible re-use and re-purposing and the transfer of these to an archive.</td>
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<tr>
<td>College</td>
<td>Means:</td>
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<tr>
<td></td>
<td>• the primary organisational unit in the academic structure of the University, as per Ordinance 14 – Academic Structure</td>
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• the University College

Delegated Head of Organisational Unit

Head of organisational unit responsible for implementing this procedure. May include a Head of Academic Unit or an Executive Dean.

Executive Dean

Means:
• the Executive Dean of the relevant College, or
• in relation to the University College, the Chief Executive of the University College

Head of Academic Unit

Means the head of the relevant Academic Unit

Metadata

Information or facts about research data for the purpose of attribution, description, management and discovery.

Organisational Unit

College, Faculty, School, Centre, University Institute, other University Entity, Division, Section or University Business Enterprise.

Primary Materials

Physical objects acquired through a process of scholarly investigation from which Research Data may be derived. Includes, but is not limited to, ore, biological material, questionnaires or recordings, artwork and photographs.

Research Data

Facts, observations, measurements or experiences on which an argument, theory or test is based. Research Data may be numerical, descriptive or visual. Research Data may be raw or analysed, experimental or observational. Includes laboratory notebooks, field notebooks, primary Research Data, questionnaires, audiotapes, videotapes, models, photographs, films, test responses, and any other records that are necessary for the reconstruction and evaluation of the reported results of research.

Repository

A University approved physical storage facility or electronic storage facility.

RDSI

Research Data Storage Infrastructure.

University

Unless otherwise stated all references to the University mean the University of Tasmania.

5 Supporting Documentation

Supporting guidelines and information can be found on the Management of Research Data website.

• Australian Code for the Responsible Conduct of Research (National Health and Medical Research Council, Australian Research Council, Universities Australia, 2018)
• Managing Allegations of Research Misconduct Procedure
• National Statement on Ethical Conduct in Human Research (National Health and Medical Research Council, Australian Research Council, Australian Vice-Chancellors’ Committee, 2007, updated 2018)
• Ordinance 18 – Intellectual Property
• Records Management Policy
• Records Management Guidelines
• Records Retention and Disposal Schedule (DA 2398)
• Responsible Conduct of Research Policy
• Archives Act 1983 (Cwlth)
• Archives Act 1983 (Tas)
• Archives Regulations 2004 (Tas)
• Privacy Act 1988 (Cwlth)
• Personal Information Protection Act 2004 (Tas)
• Copyright Act 1968 (Cwlth)

6 Versioning

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<tr>
<td></td>
<td>Version 2 – Management of Research Data Procedure; approved July 2013, amended in December 2017 to reflect College structure and nomenclature.</td>
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<tr>
<td>Current Version</td>
<td>Version 3 – Management of Research Data Procedure; approved August 2019</td>
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