ERESEARCH NEW ZEALAND 2022

CADRE PLATFORM PROJECT

LOOKING THROUGH THE FIVE SAFES LENS – SENSITIVE DATA SHARING ARRANGEMENTS AND RESEARCH WORKFLOWS

CADRE - COORDINATED ACCESS FOR DATA, RESEARCH AND ENVIRONMEN

www.cadre5safes.org.au

CADRE PLATFORM PROJECT

1. Project
   - Aims, partners and outcomes
   - Platform and phases
   - AU & NZ/A social science
   - Five Safes framework (AU & NZ/A)
2. CADRE Five Safes framework
   - Quantitative and qualitative data access
   - Extensions to Five Safes
   - Key Safe intersections & alignments
3. Applying CADRE framework
   - Australian Data Archive
   - Accessing different sensitive data

www.cadre5safes.org.au/about/five-safes/

SAFETY FIRST

CADRE PROJECT

Coordinated Access for Data, Research and Environments – A Five Safes Implementation Framework for Sensitive Data. (May 2021-June 2023)

Five Safes Framework:

1. Safe People
2. Safe Data
3. Safe Settings
4. Safe Projects
5. Safe Outputs

Best Practice Guide to Applying Data Sharing Principles, 15 March 2019, Dept Prime Minister and Cabinet, Australian Government.

Core aims are to operationalise the Five Safes framework and establish a shared and distributed sensitive data access management platform for the social sciences and related disciplines.

www.cadre5safes.org.au/about/five-safes/

CADRE PARTNERSHIP

ADA
AUSTRALIAN DATA ARCHIVE

AUSTRALIAN ACCESS FEDERATION
AAF.EDU.AU

ResearchGraph

AURIN
aurin.org.au

UNSW SYDNEY

Australian Government
Australian Institute of Family Studies

Australian Government
Australian Institute of Health and Welfare

aarnet
Australia's Academic and Research Network

ARDC
Australian Research Data Commons

SWINBURNE
Social Data Analytics Lab

THE UNIVERSITY OF QUEENSLAND
AUSTRALIA

CADRE OUTCOMES

There are five project outcomes:

1. Shared conceptual framework
2. Information exchange protocols
3. Integrated data access management platform
4. Pilot and production platform integrations
5. Training and engagement

CADRE PLATFORM

A system to	By means of	In order to
Increase the speed at which social sciences and related disciplines get access to sensitive data Decrease the risk, time and costs associated with providing access to data (for data holders) and accessing data (for researchers)	The development of a shared and distributed sensitive data management platform using the Five Safes framework and common accreditation and information exchange protocols	Enable data owners and users to address the core concerns around governance, creation, management and sharing of sensitive data for research Share and move sensitive data safely between higher education, national research and government facilities a services

www.cadre5safes.org.au/about/

CADRE PHASES

There are three project phases

Moving from phase 1 to 2 in 2022

1. Conceptualisation – framework and protocols

2. Development – platform and four integration pilots

3. Operations – move into production and more pilots

CADRE PLATFORM – STAGE 1

Dashboard and alerts	Information architecture	Scholarly graph
Assistance around the provision of sensitive data (decision-support system)	Improving information and interoperability between platform and connected systems e.g., Augment API (Research Graph)	Visibility and traceability of outputs (footprint) – using public scholarly information (PIDs)

AU & NZ/A SOCIAL SCIENCE RESEARCH NETWORKS

Trans-Tasman peer network connections:

A/Prof Barry Milne (COMPASS) UAUCK (IAB)

Statistics New Zealand (Five Safes)

UQ ISSR (Centre Social Data Analytics) & AUT

Indigenous data sovereignty (IDN & TMR)

Longitudinal studies: Elections & Valu

FIVE SAFES FRAMEWORK – ONDC (AU)

https://www.datacommissioner.gov.au/resources/sharing-data-safety-guide

The Data Sharing Principles provide a common operating model within the public service to help with consistent and shared practices for data management.

Safe people – the user has the appropriate authority to access the data.

Safe projects – data is shared for an appropriate purpose that delivers a public benefit.

Safe settings – the environment in which the data is shared minimises the risk of unauthorised use or disclosure.

Safe data – appropriate and proportionate protections are applied to the data.

Safe output - the output from the data sharing arrangement i
appropriately safeguarded before any further sharing or relea

FIVE SAFES FRAMEWORK – STATS NZ

Data is only provided if all the 'five safes' conditions are met.

Safe people – researchers are vetted and must commit to use data safely before they can access the data.

Safe projects – to gain access to integrated data, researchers must have project they can demonstrate is in the public interest.

Safe settings – a range of privacy and security arrangements keep data safe.

Safe data – identity is protected. Data has had identifying information removed, and researchers only get access to the data they need.

Safe output – all information is checked to ensure it does not conta identifying results.

https://www.stats.govt.nz/integrated-data/integrated-data-infrastructure/

December 2, 2021

Report Open Access

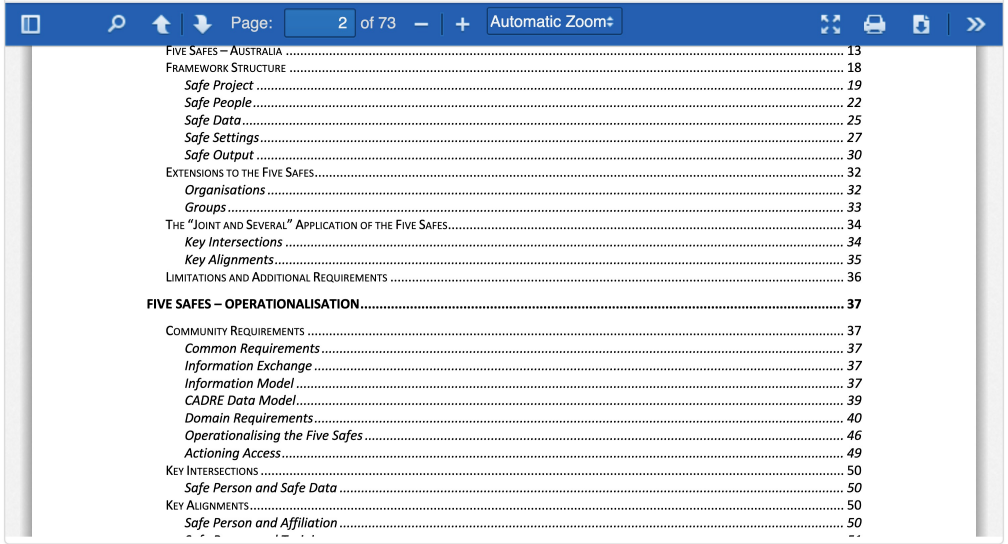
CADRE Five Safes Framework - Conceptualisation and Operationalisation of the Five Safes Framework

Steven McEachern

The CADRE Five Safes framework is an output of the CADRE (Coordinated Access for Researchers, Data and Environments) Platform project. The CADRE framework includes the conceptual underpinnings and the guardrails for sensitive data access management and the range of information associated with the Five Safes principles that can be operationalised in a decision-support system.

- In the **Introduction and Context** sections the CADRE Platform project and the social science research data management practices associated with sensitive quantitative and qualitative data are outlined.
- In the **Conceptualisation** section a full exploration is undertaken of: the uptake of Five Safes framework in Australia; the concepts from the Five Safes framework i.e., projects, people, data, settings and outputs; additional concepts i.e., organisations and groups; and key intersections and alignments of these concepts.
- In the **Operationalisation** section the information requirements associated with managing sensitive data access requests and provisioning research environment services for sensitive data analysis are evaluated and initial information and data models are proposed for the CADRE information exchange.
- In the **Appendices** the user requirements from project partners helping to develop the CADRE Platform are summarised and sensitive data categorisations are collated.

Preview



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Indexed in
OpenAIRE

Publication date:
December 2, 2021

DOI:
DOI 10.5281/zenodo.5748611

Keyword(s):
Data access Governance Five Safes Data use

Imprint:
Australian Data Archive, Australian National University, Canberra, Australia.

Communities:
CADRE - Coordinated Access for Data, Research and Environments

License (for files):
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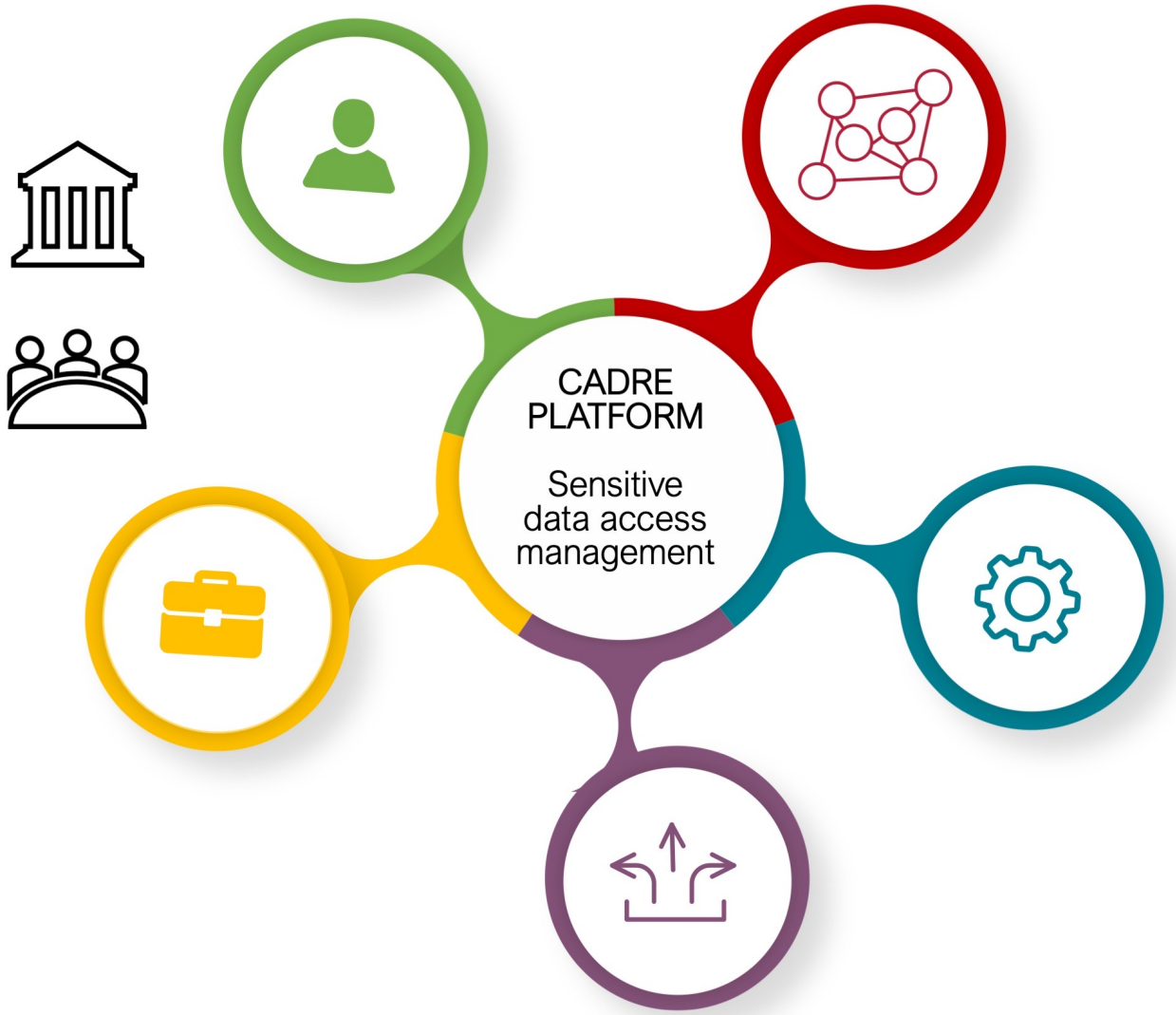
Versions

Version 1.0 Dec 2, 2021
10.5281/zenodo.5748611

Cite all versions? You can cite all versions by using the DOI 10.5281/zenodo.5748610. This DOI represents all versions, and will always resolve to the latest one. Read more.

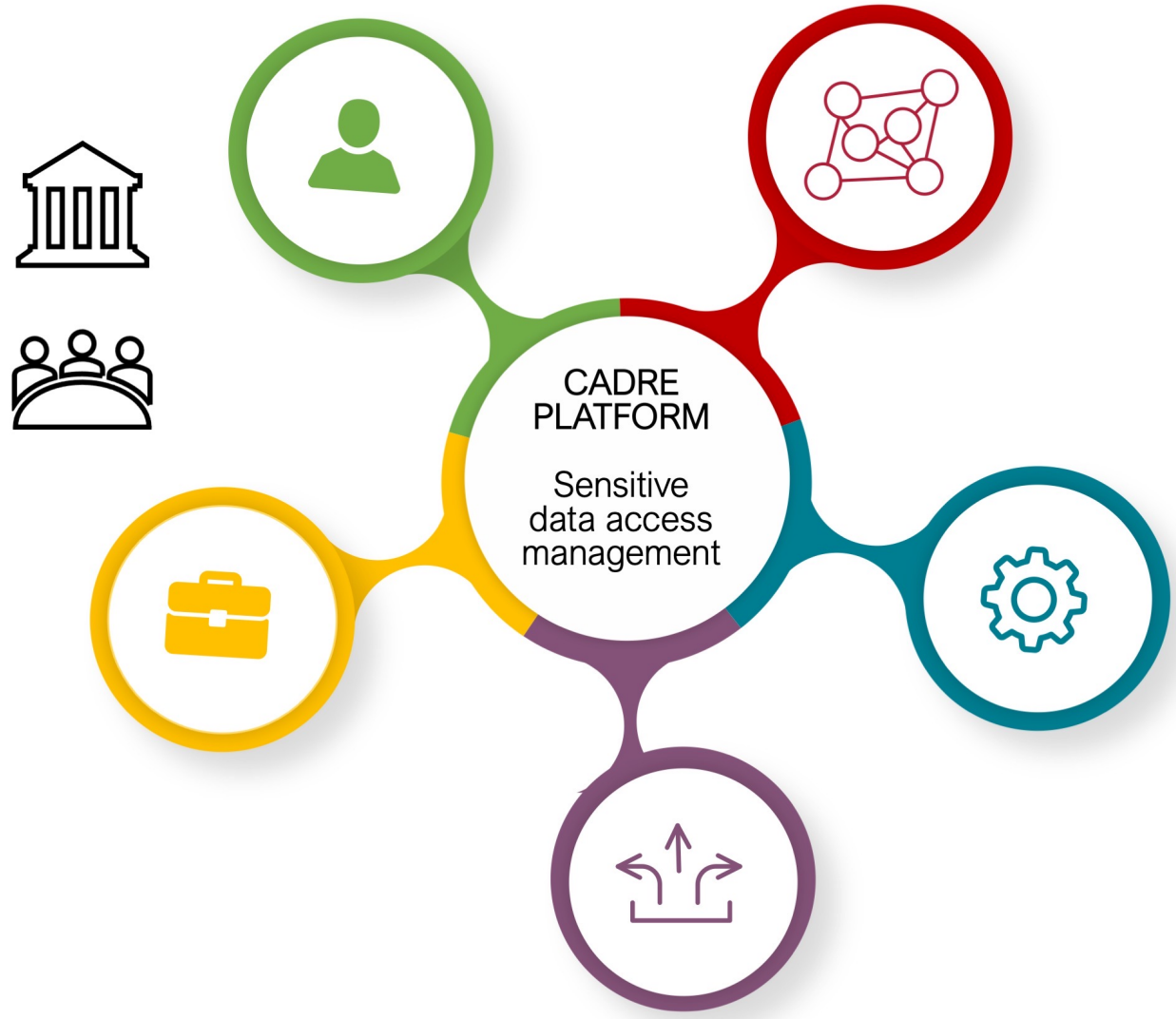
CADRE FIVE SAFES FRAMEWORK



CADRE FIVE SAFES FRAMEWORK

Extension

CADRE interpretation:
Safe organisations
Safe groups



Safe people

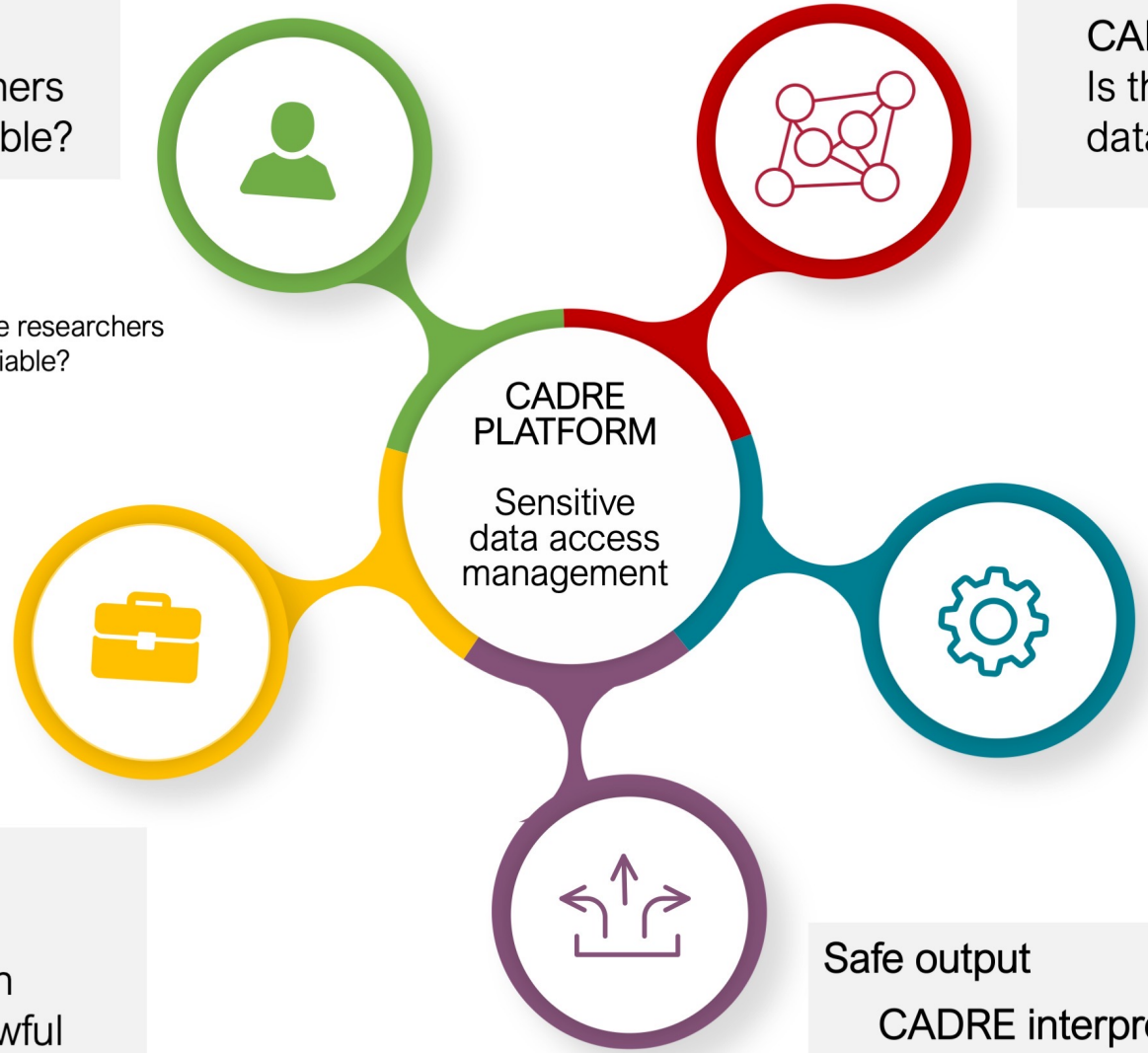
CADRE interpretation:
Are the identities of researchers and their track record verifiable?

Safe organisations

CADRE interpretation:
Is the identity of the organisation, the researchers affiliation and their track record verifiable?

Safe groups

CADRE interpretation:
Is the identity of the group and the researchers membership verifiable?



Safe data

CADRE interpretation:
Is there a disclosure risk in the data itself?

Safe settings

CADRE interpretation:
Will the data be used in an appropriately safe and secure environment?

Safe projects

CADRE interpretation:
Will the data be used for an appropriate, ethical and lawful purpose that delivers a public benefit?

Safe output

CADRE interpretation:
Is the output verified as suitable for release?

CADRE FIVE SAFES FRAMEWORK

Key Intersections

CADRE interpretation:

People and projects
Projects and data
Data and settings
Settings and outputs
People and settings
People and outputs

CADRE FIVE SAFES FRAMEWORK

Key Alignments:

CADRE interpretation:
People and projects
Data, settings and outputs
People, data, settings and outputs

Links and overlaps between projects and groups

APPLYING THE FRAMEWORK

APPLYING THE FRAMEWORK

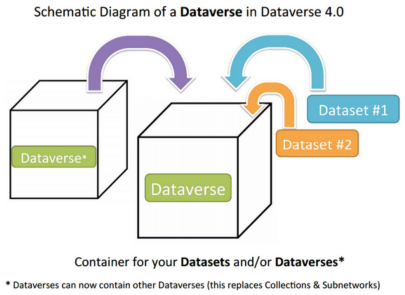
The safety assessment requires that all of the “Safes” are considered and the interactions between them.

Tension lies between the need for a case-by-case assessment and the capacity to streamline common use cases.

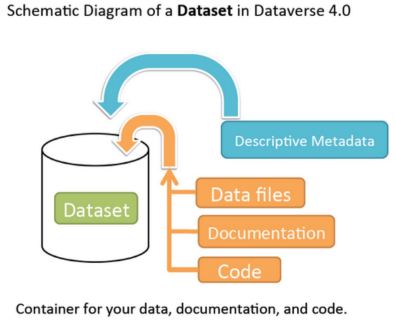
Accessing Data

The ADA Dataverse Collection...

The ADA collection is managed through the Dataverse platform developed by the Institute for Quantitative Social Science at Harvard University. Dataverse is the overarching archive, and is then organised into multiple sub-dataverses (Figure 1).



Each dataverse contains datasets, other documentation and associated metadata (Figure 2).



APPLYING THE FRAMEWORK

EXAMPLE DATASETS

Variations in:

- Safety checks needed
- Information exchanged
- Legal instruments

1. **Survey of the Bangladeshi People** (Asia Foundation)

2. **National Drug Strategy Household Survey** (AIHW)

3. **Ten to Men – Longitudinal Study on Male Health** (AIFS)

SURVEY OF BANGLADESHI PEOPLE

Safety process:

- ADA T&C
- Validating the person
- Project description

Asia Foundation

ADA
AUSTRALIAN
DATA ARCHIVE

NATIONAL DRUG STRATEGY HOUSEHOLD SURVEY

Safety process:

- ADA T&C
- Validating the person
- Project description
- Access agreement

Australian Government
Australian Institute of Health and Welfare

ADA
AUSTRALIAN DATA ARCHIVE

TEN TO MEN – LONGITUDINAL STUDY ON MALE HEALTH

Safety process:

- ADA T&C
- Validating the person
- Project description
- Detailed guidelines
- Access agreement

Australian Government
Australian Institute of Family Studies

www.cadre5safes.org.au

ADA
AUSTRALIAN DATA ARCHIVE

CADRE FIVE SAFES FRAMEWORK - FEEDBACK

DOI 10.5281/zenodo.5748611

The CADRE project received $1.9M investment (https://doi.org/10.47486/PL106) from the Australian Research Data Commons (ARDC). The ARDC is funded by the National Collaborative Research Infrastructure Strategy (NCRIS).

Australian Research Data Commons

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National Research
Infrastructure for A
An Australian Governme