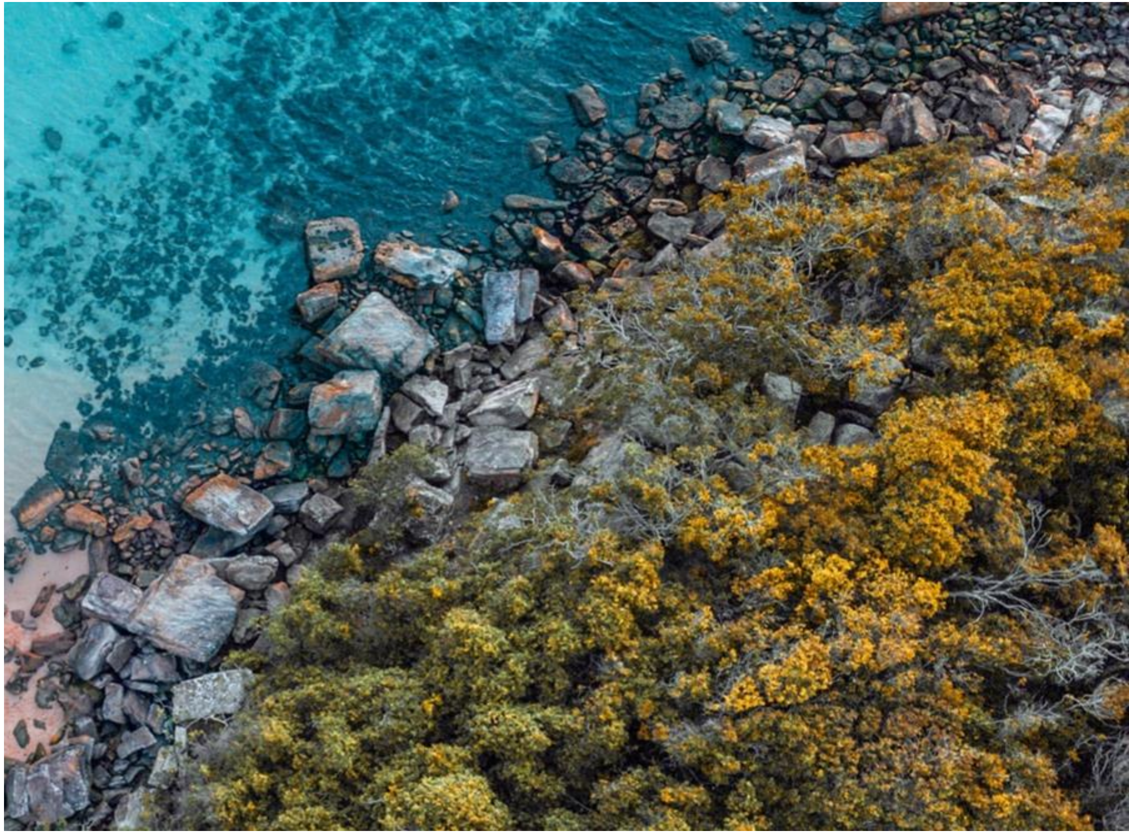
Co-designing an Institutional Research Data Management Framework for Australian Universities

Institutional Underpinnings

Australian Research Data Commons
NCRIS National Research Infrastructure for Australia
An Australian Government Initiative
ARDC is enabled by NCRIS

ACKNOWLEDGEMENT OF COUNTRY

We acknowledge and celebrate the First Australians on whose traditional lands we meet, and we pay our respect to their elders past, present and emerging.



Institutional Underpinnings

“Framework”

- A conceptual framework to structure our approaches to institutional RDM development and for us to build upon as a sector
- ***Not*** a regulatory framework that prescribes or constrains how an institution should provide RDM

Australian National University

BOND UNIVERSITY

CHARLES DARWIN UNIVERSITY

Curtin University

AUSTRALIA ECU EDITH COWAN UNIVERSITY

Federation UNIVERSITY • AUSTRALIA

Griffith UNIVERSITY Queensland, Australia

MACQUARIE University

MONASH University

QUT Queensland University of Technology

SWINBURNE SWINBURNE UNIVERSITY OF TECHNOLOGY

THE UNIVERSITY of ADELAIDE

UNIVERSITY OF CANBERRA

THE UNIVERSITY OF MELBOURNE

une University of New England

UNSW SYDNEY

THE UNIVERSITY OF QUEENSLAND AUSTRALIA

UNIVERSITY OF SOUTHERN QUEENSLAND

THE UNIVERSITY OF SYDNEY

UNIVERSITY of TASMANIA

UTS

THE UNIVERSITY OF WESTERN AUSTRALIA

UNIVERSITY OF WOLLONGONG AUSTRALIA

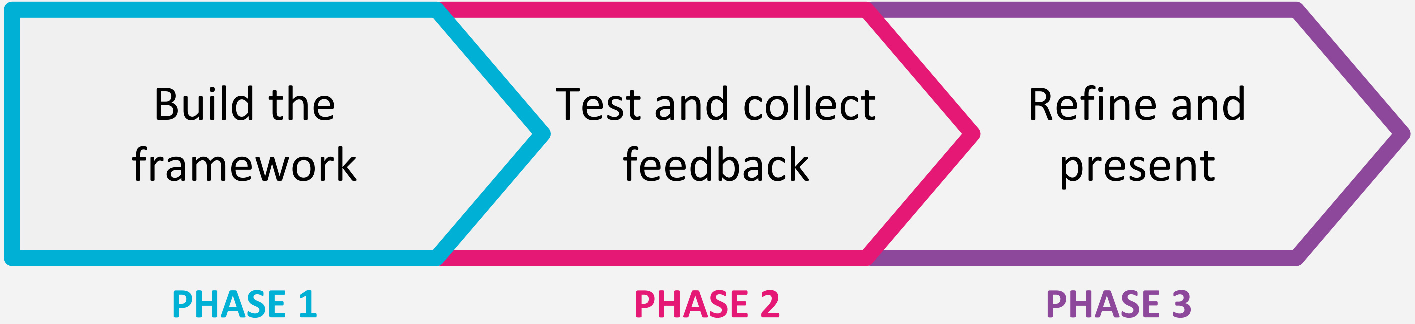
VICTORIA UNIVERSITY

WESTERN SYDNEY UNIVERSITY

EDITORIAL COMMITTEE

Adele Haythornthwaite (University of Sydney)
Anesh Nair (University of Canberra)
Belinda Weaver (Griffith University)
Francis Gacenga (University of Southern Queensland)
Roxanne Missingham (Australian National University)
Shawn Ross (Macquarie University)

PHASES OF THE PROGRAM



Build the framework

PHASE 1

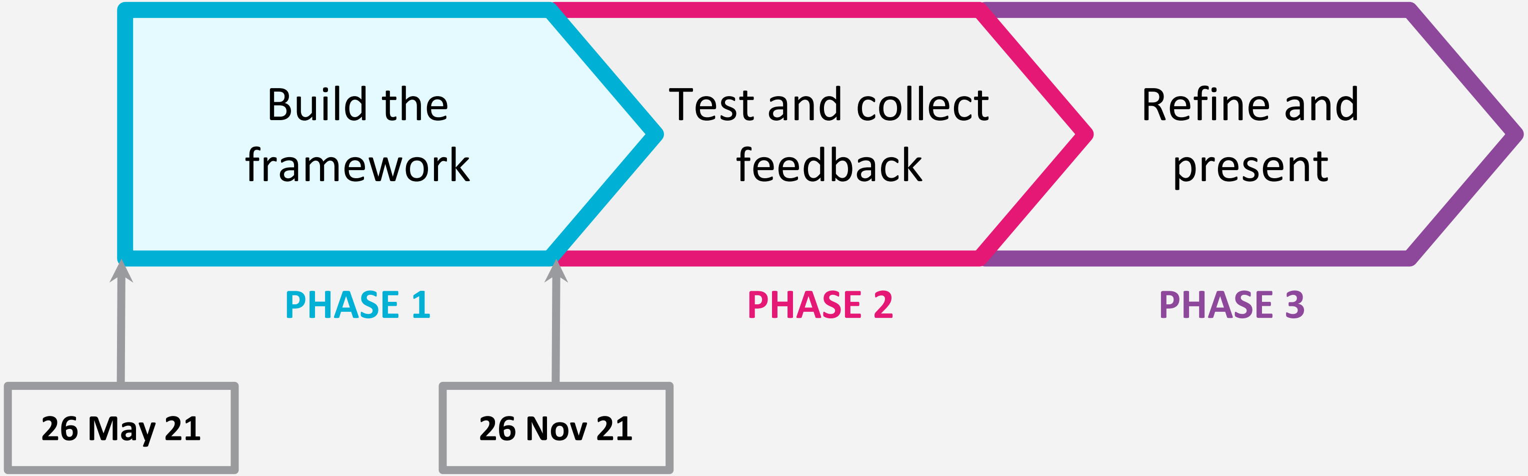
Test and collect feedback

PHASE 2

Refine and present

PHASE 3

PHASES OF THE PROGRAM



Build the framework

Test and collect feedback

Refine and present

PHASE 1

PHASE 2

PHASE 3

26 May 21

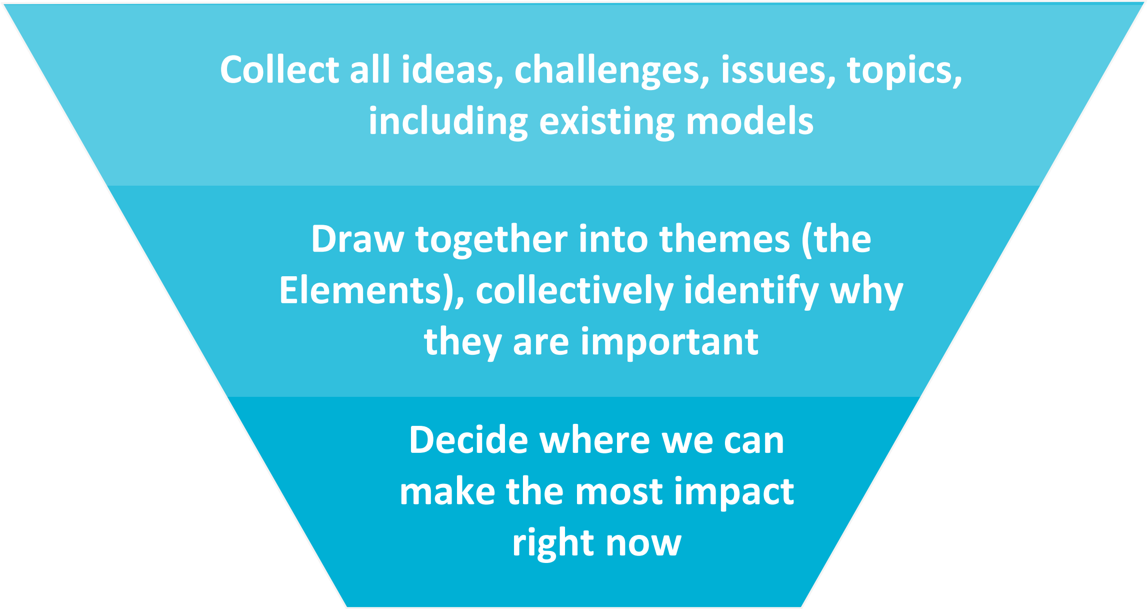
26 Nov 21

Models of RDM already exist…

- Focus on addressing current institutional needs
- Make the most of working together
- “Complete and perfect” is impossible - what is valuable?

Australian Research Data Commons
NCRIS National Research Infrastructure for Australia
An Australian Government Initiative
ARDC is enabled by NCRIS

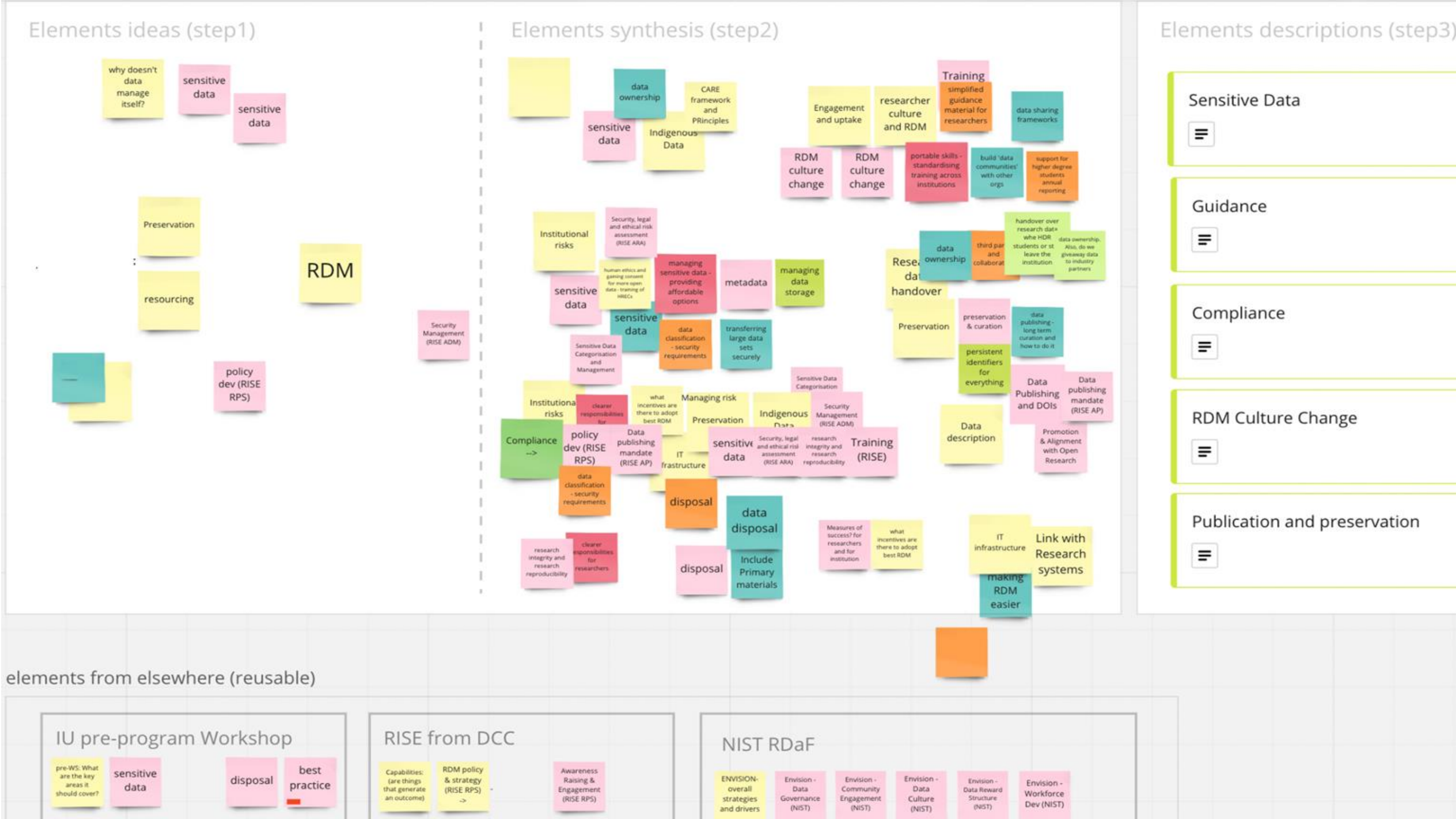
BUILDING THE FRAMEWORK



Collect all ideas, challenges, issues, topics, including existing models

Draw together into themes (the Elements), collectively identify why they are important

Decide where we can make the most impact right now


Elements ideas (step1)
why doesn't data manage itself?
sensitive data
sensitive data
Preservation
resourcing
RDM
Security Management (RISE ADM)
policy dev (RISE RPS)
Elements synthesis (step2)
data ownership
CARE framework and PRinciples
sensitive data
Indigenous Data
Engagement and uptake
researcher culture and RDM
Training
simplified guidance material for researchers
data sharing frameworks
RDM culture change
RDM culture change
portable skills - standardising training across institutions
build 'data communities' with other orgs
support for higher degree students annual reporting
Institutional risks
Security, legal and ethical risk assessment (RISE ARA)
human ethics and gaming consent for more open data - training of HRECs
managing sensitive data - providing affordable options
metadata
managing data storage
sensitive data
sensitive data
data classification - security requirements
transferring large data sets securely
Sensitive Data Categorisation and Management
Resea dat handover
data ownership
third par and collaborat
handover over research data whe HDR students or st leave the institution
data ownership. Also, do we giveaway data to industry partners
Preservation
preservation & curation
data publishing - long term curation and how to do it
persistent identifiers for everything
Sensitive Data Categorisation
Institutiona risks
clearer responsibilities for
what incentives are there to adopt best RDM
Managing risk
Preservation
Indigenous Data
Security Management (RISE ADM)
Compliance -->
policy dev (RISE RPS)
Data publishing mandate (RISE AP)
IT frastructure
sensitive data
Security, legal and ethical risk assessment (RISE ARA)
research integrity and research reproducibility
Training (RISE)
data classification - security requirements
disposal
data disposal
Data Publishing and DOIs
Data publishing mandate (RISE AP)
Data description
Promotion & Alignment with Open Research
research integrity and research reproducibility
clearer responsibilities for researchers
disposal
Include Primary materials
Measures of success? for researchers and for institution
what incentives are there to adopt best RDM
IT infrastructure
Link with Research systems
making RDM easier
Elements descriptions (step3)
Sensitive Data
Guidance
Compliance
RDM Culture Change
Publication and preservation
elements from elsewhere (reusable)
IU pre-program Workshop
pre-WS: What are the key areas it should cover?
sensitive data
disposal
best practice
RISE from DCC
Capabilities: (are things that generate an outcome)
RDM policy & strategy (RISE RPS) ->
Awareness Raising & Engagement (RISE RPS)
NIST RDaF
ENVISION- overall strategies and drivers
Envision - Data Governance (NIST)
Envision - Community Engagement (NIST)
Envision - Data Culture (NIST)
Envision - Data Reward Structure (NIST)
Envision - Workforce Dev (NIST)

Framework Elements

Culture Change	Data Ownership
Retention and Disposal	Identifiers and Metadata
Support, Training and Guidance	Funding and Sustainability
Research Data Management Planning	Standards and Guidelines
Sensitive Data	Cybersecurity
Active Research Data Management	Non-Digital Material
Open Research and Data Publication	Governance
Policy	Digital Preservation

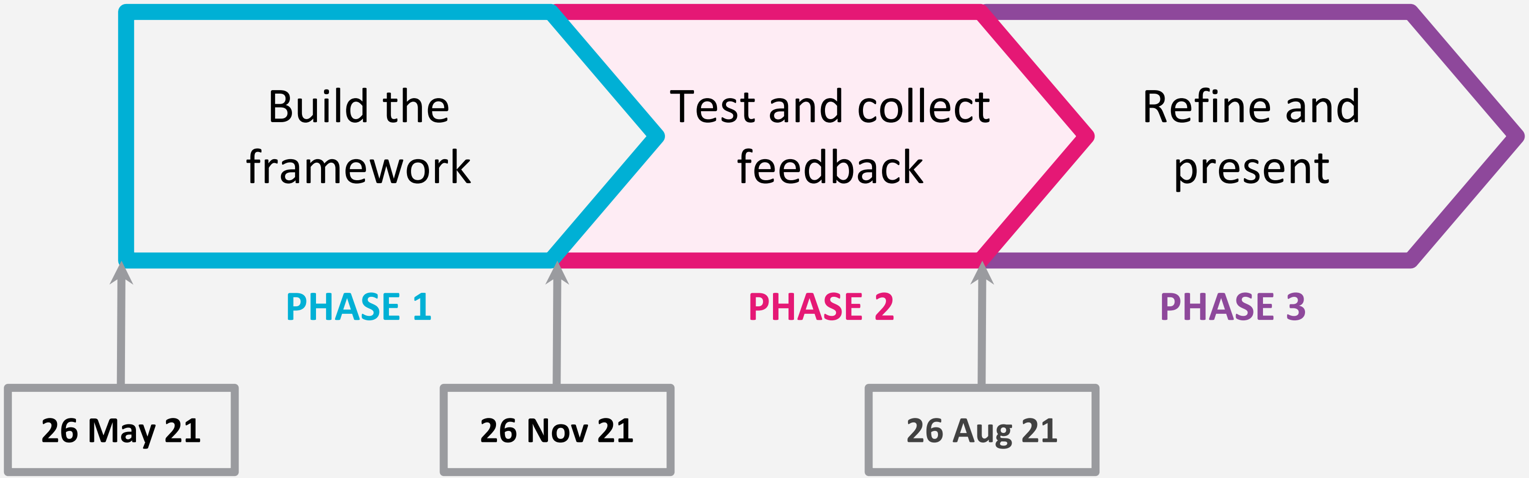
Framework Elements

- Culture Change
- Retention and Disposal
- Support, Training and Guidance
- Research Data Management Planning
- Sensitive Data
- Active Research Data Management
- Open Research and Data Publication
- Policy

Selected for development in Working Groups

- Commonalities and differences in need and approach
- Recommendations and advice
- Calls to action
- Case studies and other resources

PHASES OF THE PROGRAM


Build the framework

Test and collect feedback

Refine and present

PHASE 1

PHASE 2

PHASE 3

26 May 21

26 Nov 21

26 Aug 21

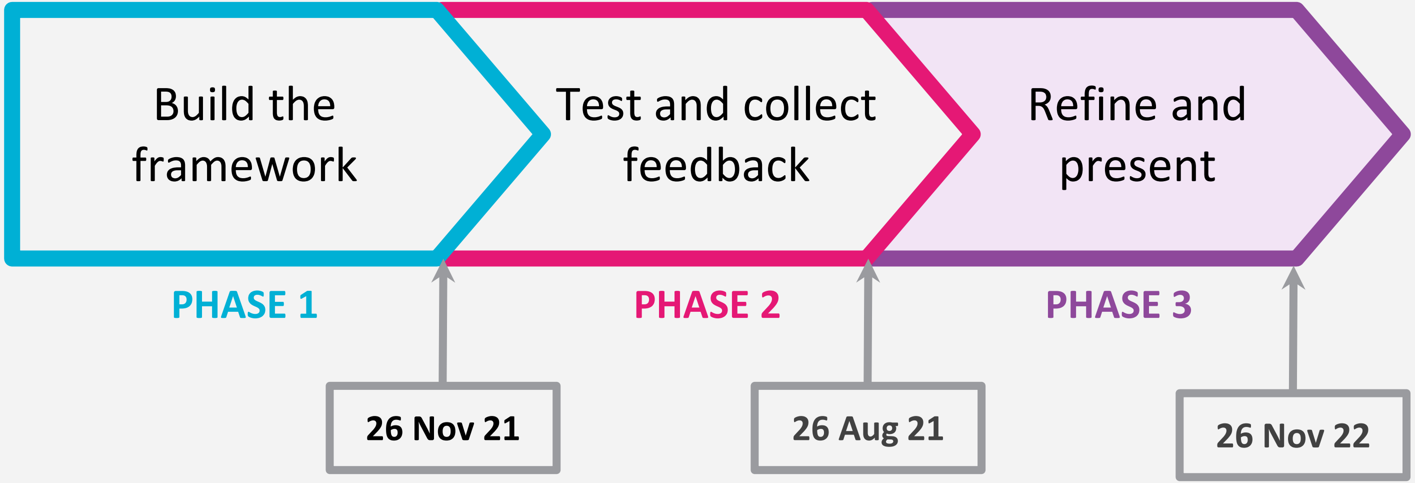
Local Implementation Projects

- 22 projects
- Framework feedback
- Reusable outputs

Sector Consultation

- Draft framework available for wider review
- Submissions from 2 non-participating unis, 6 non-uni organisations

PHASES OF THE PROGRAM



Build the framework

Test and collect feedback

Refine and present

PHASE 1

PHASE 2

PHASE 3

26 Nov 21

26 Aug 21

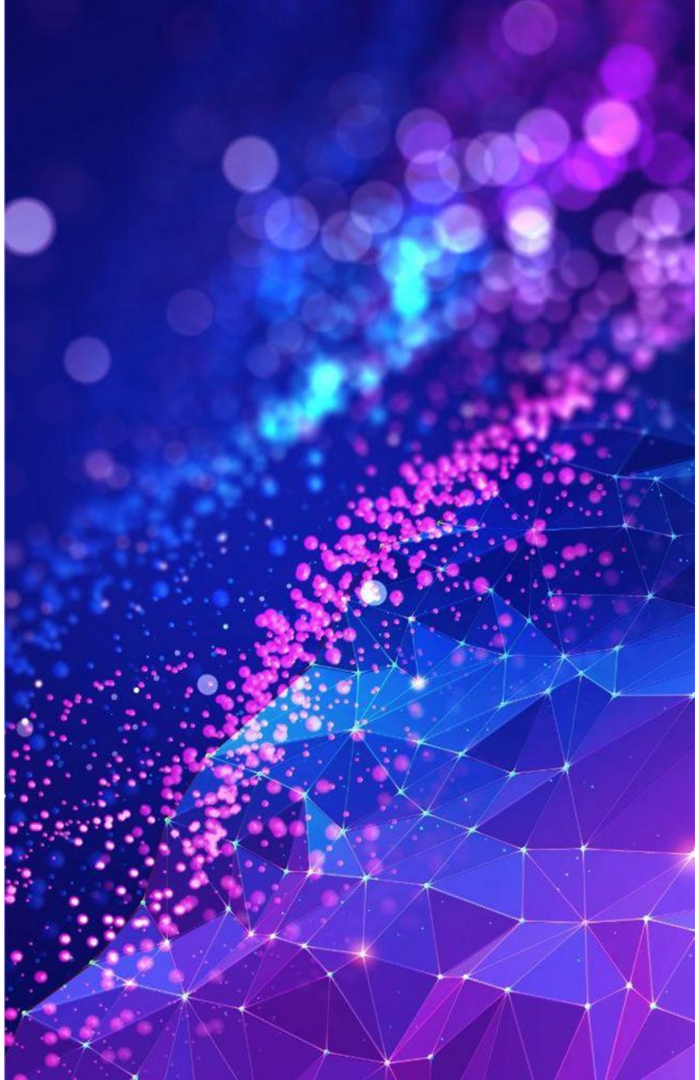
26 Nov 22

CHALLENGES

- Whole-institution representation
- Prioritising depth vs comprehensiveness
- Practical guidance in face of institutional variability

BENEFITS

- Valuable guidance and best practice from sector experts
- Reusable outputs from 22 projects
- Increased understanding of shared problems
- Increased openness and collaboration



IU Extension

December 22 - November 23

Two streams of work:

- Further develop the Framework
- Collaborative projects

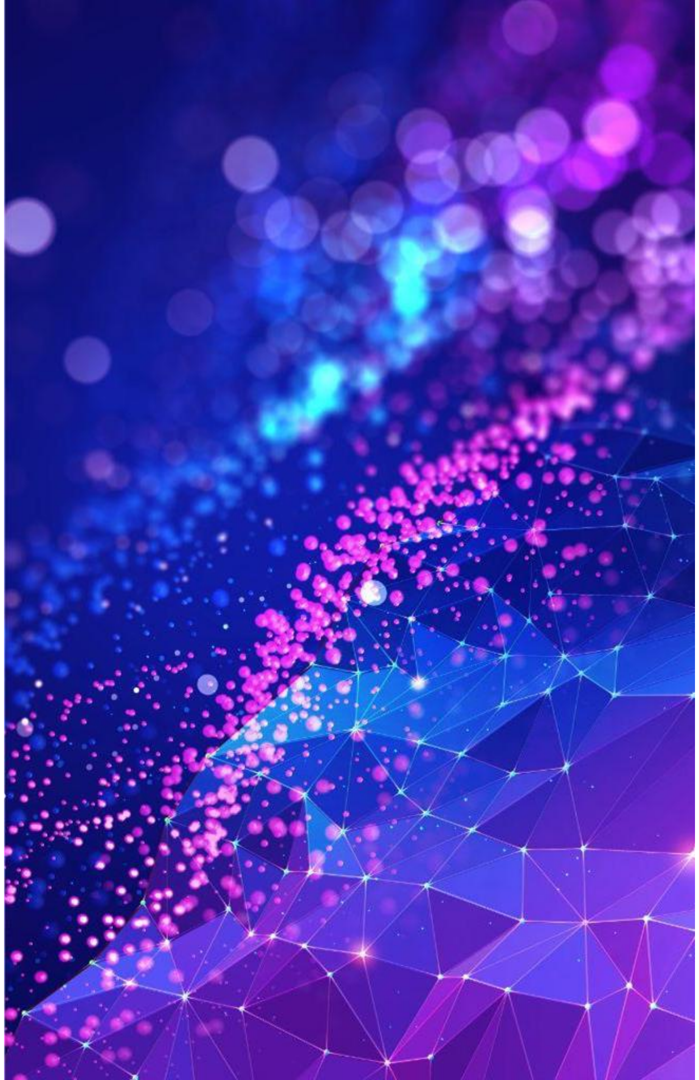
New Model

Institutional Underpinnings RDM Network

Group of universities that make decisions about the work done within the program - **all Aus universities eligible to join**.

Co-design projects with collective benefits

ARDC co-invests in these projects, conducted by smaller groups of unis from within the Network working collaboratively



Projects

Four 200k co-investment projects

- At least two collaborating unis to deliver

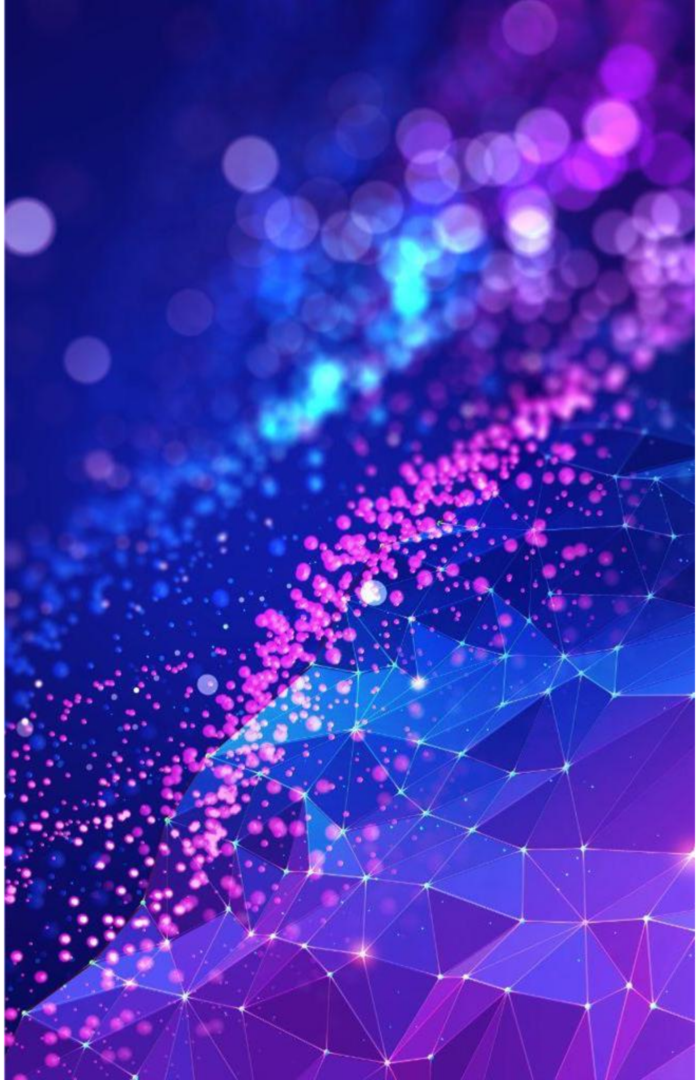
  +

- At least two “adopter” unis

ARDC Australian Research Data Commons

NCRIS National Research Infrastructure for Australia An Australian Government Initiative

ARDC is enabled by NCRIS



Framework

Develop remaining Elements and build on existing ones where needed

- Working groups where possible
- ARDC expertise with Network review and comment

HOW CAN THE **ARDC ACCELERATE YOUR RESEARCH?**

Visit us at

eResearch Australasia - Stand 14

Or our online stand

ARDC Australian Research Data Commons

NCRIS National Research Infrastructure for Australia An Australian Government Initiative

ARDC is enabled by NCRIS

2022 Data Driven Research Impact

Download at

bit.ly/ARDC-impact-2022 ▶

ACCELERATING RESEARCH AND INNOVATION THROUGH DATA