

HASS and Indigenous Research Data Commons Co-Design Framework

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Background

In collaboration with Indigenous Australians, the research community, industry and government, the Humanities, Arts and Social Sciences and Indigenous Research Data Commons (HASS and Indigenous RDC) is harnessing research data to enhance Australian social and cultural wellbeing, and help Australia understand and preserve our culture, history and heritage.

The HASS and Indigenous RDC is led by the Australian Research Data Commons (ARDC), which is enabled by the Australian Government's National Collaborative Research Infrastructure Strategy (NCRIS). The ARDC accelerates Australian research and innovation by driving excellence in the creation, analysis and retention of high-quality data assets.

New digital platforms and data directories will improve how researchers discover and access Australia's rich HASS and Indigenous data and innovative analysis tools. The HASS and Indigenous RDC is also upskilling researchers to use data-driven approaches to HASS and Indigenous research, ensuring Australian researchers gain a competitive advantage through data.

As an engine for research translation, the HASS and Indigenous RDC will enable researchers to develop and sustain cross-sectoral and multidisciplinary data collaborations at a national scale through federated models. It integrates the ARDC's services for compute, storage infrastructure, persistent identifiers and data discovery with analysis platforms and tools that are supported by expertise, standards and best practices.

Learn more about the [HASS and Indigenous RDC](#).

Our Investment Strategy

The ARDC is developing a suite of Thematic Research Data Commons (RDCs). A data commons can be defined as bringing together data with cloud computing infrastructure and commonly used software services, tools and applications for managing, analysing and sharing data to create an interoperable resource for a research community.

The ARDC Thematic Research Data Commons are developing national-scale data assets, digital tools and platforms within a thematic area to address Australia's science and research priorities. The Thematic RDCs are supported by existing ARDC underpinning infrastructure: cloud compute, data retention, expertise, and training and outreach activities. Sharing best practice across domains, the RDCs will result in significant optimisation, drive efficiency and provide maximum return on investment.

Investment in the HASS and Indigenous RDC will be made based on opportunities identified in partnership with stakeholders in the humanities, arts, social sciences and Indigenous research communities, and the broader groups who contribute to and benefit from that research. We will seek to develop infrastructure that creates the greatest impact for research and researchers by co-designing that infrastructure with the people who will benefit from it.

Who Will Be Involved

We seek to involve a wide range of stakeholders with different experience and expertise in the design of our infrastructure. These include people with:

1. experience of research practice (usually researchers and those they work with closely on research)
2. insights into patterns of research practice and need across the field, and the policies and strategic initiatives that impact that practice (usually gathered by meta-researchers, peak bodies)
3. experience in the provision of research infrastructure and understanding of current major infrastructure activities in the sector (national research infrastructure providers/builders, research institutions, public sector and industry organisations, etc.).

Bringing together these 3 forms of experience or knowledge will allow a consideration of specific researcher needs, balanced by relative needs and priorities, and what is practically possible to address.

Process for Co-Designing Infrastructure

Our consultation and co-design processes are based on established methods such as the [TACSI Co-Design Framework](#). Development of our co-investment activities will follow the steps of:

1. Problem Identification
2. Project Shaping
3. Project Planning
4. Endorsement.

The way that each step is implemented will vary depending on the scale, complexity and timeline of the activity.

1. Problem Identification

Purpose

- Identify which broad problems/needs we are aiming to address
- Identify the stakeholders who can help us to shape the solution
- Find partners who have the expertise and capability to help us to deliver the solution

Principles

- **Openness:** consider a wide range of possible options. Consult broadly across the sector, and aim to look beyond our assumptions.
- **Maximise benefit:** identify areas where our activity will have the largest possible impact, benefit many research projects, and meet the needs of multiple research groups and organisations.

- **Leverage opportunities:** identify existing initiatives and networks that can be built upon to maximise the benefit from our activities. Activities which engage a coherent community of researchers and/or build on existing research infrastructure are more likely to succeed.

Implementation

- Considerable broad-scale consultation and information-gathering has already taken place to identify the broad problems/areas of need that will be addressed by the HASS and Indigenous RDC. This includes the original scoping studies that led to the 2020 RIIP investment in HASS and Indigenous research infrastructure and the public consultations that were carried out to shape the infrastructure developed with those funds. Throughout the development of this infrastructure, ARDC has tracked emerging gaps and opportunities, and identified trends and developments in the sector that can be leveraged to deliver benefits for the HASS and Indigenous research community.
- As a result of this input, ARDC has identified 6 focus areas for its work in HASS and Indigenous:
 - Continuation of work in the following:
 - The Language Data Commons of Australia
 - Improving Indigenous Research Capabilities
 - The ARDC Community Data Lab
 - Establishment of new work in the areas of:
 - Social sciences
 - Media(ted) data (social and web data)
 - The creative arts
- ARDC is continuing to work through this phase by identifying stakeholders and partners who will be able to help shape these activities in the following phases.

2. Project Shaping

Purpose

- Work in collaboration with potential delivery partners and stakeholders to:
 - build an understanding of the current state of the activity area and opportunities for improvement
 - identify and select potential solution(s)
- Finalise the project team(s) who will deliver the solution(s).

Principles

- The project shaping stage should include input from stakeholders with each of the three areas of experience identified above

- Any interested parties should have the opportunity to nominate themselves as potential partners for the delivery of the project. Development of the project team is intended to be collaborative, but where membership is unclear ARDC will mediate this process and select the final team with a focus on:
 - Inclusion of partners who provide important skills and capabilities necessary for the project
 - Inclusion of partners with expertise and perspectives necessary for the success of the project
 - Inclusion of partners who are able to provide the necessary co-investment
 - Project team cohesion
 - Effective project leadership and project management skills to ensure successful and timely delivery of the project outputs.

Implementation

- ARDC will facilitate workshops with potential project partners and other stakeholders to shape the project and finalise the project team. The number and nature of these workshops will depend on the scope of the identified problem area, the stakeholders and communities involved, and the scale of the project(s)
- More than one project may be developed within a given problem area
- ARDC will document the project shaping process and its outcomes.

3. Project Planning

Purpose

- Develop an investable project plan including timeline, deliverables, co-investment, and resourcing
- Collect feedback on the plan from key stakeholders
- Finalise the project plan.

Principles

- The project plan should be clearly defined, with concrete deliverables and measurable outcomes
- Stakeholders outside of project team should give feedback on the plan to ensure that it reflects outcomes of initial consultation and meets broader needs beyond those of the project team
- The planned project should meet the ARDC expectations set out below.

Implementation

- ARDC will provide a template for the project plan, and will assist the project team in developing the plan (including identifying where ARDC services and expertise can be utilised)
- ARDC will assist in collecting feedback on the plan from stakeholders outside of the project team.

ARDC expectations for the conduct of co-investment projects

- Project partners will match ARDC co-investment at a 1:1 ratio. Cash co-investment is preferred but in-kind can be considered. All co-investment must be made in an auditable form
- Projects must be aligned with the [NCRIS 2023 Guidelines](#) and the Principles set out in the [NRI Roadmap](#) (pg 14 pdf, pg 21 doc)
- Projects must have a dedicated project manager with appropriate experience and capacity. Depending on project needs, ARDC may require the naming of a specific Technical Lead and Research Lead
- Projects must have a steering committee (including community members not directly involved in the delivery of the project) with defined Terms of Reference that meets at least quarterly. Depending on project needs, ARDC may require the formation of a user reference group and project management group.
- Projects are required to commit to monthly traffic light reporting and other reporting requirements specified at contracting
- Project plans must include the tracking of desired outcomes, including measuring the uptake of infrastructure by the research community
- Most outputs will require ongoing maintenance beyond the life of the project in order to realise the intended benefits. Project plans must include a statement of the minimum ongoing maintenance likely to be required (both duration and resources) and a plan for that maintenance (to be agreed between ARDC and the project partners)
 - See the work of the [Science Gateways Community Initiative](#) for sustainability planning advice
- Project plans should include user testing of ideas and prototype outputs early and often throughout project delivery
- Project teams are expected to collaborate across the HASS and Indigenous RDC and other ARDC supported projects
- Project teams are expected to attend and contribute to ARDC workshops and events
- Project teams are expected to engage in communication activities to raise awareness of their infrastructure and attract a growing user base within the HASS and Indigenous research community.

4. Endorsement

Purpose

Confirm ARDC investment in the project

Principles

- Endorsement will follow ARDC's governance procedures
- Endorsing parties will ensure that the planned project meets ARDC and NCRIS principles
- Where relevant, endorsing parties will ensure that activities are aligned across ARDC's strategic pillars

Implementation

- Project plan is reviewed by HASS and Indigenous RDC Advisory Panel, RDC Director, ARDC CEO and/or ARDC Board
- Decision is made to invest in project