

Case Study Template - RDA National PID Strategies Working Group

Title	Case Study: Australia
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Features of National PID Approach and/or Strategy

Lead organisation(s)

Australian Research Data Commons (ARDC). A National PID Strategy Taskforce has been established by the ARDC made up of senior stakeholders from the research and government sectors.

Scope

Define the scope of the PID approach and/or strategy (i.e. who it applies to)

The Australian National PID Strategy applies to the entire Australian research and innovation sector. Stakeholders include individuals and organisations in research, government and industry.

Drivers

Describe the drivers behind the PID approach and/or strategy development e.g. wanting to improve accuracy of research information, better track research impact, reduce administrative burden, etc.

The [2021 National Research Infrastructure Roadmap](#) found that *Exponential growth in data across all disciplines will be a critical challenge for NRI over coming years, highlighting the need*

for integration of computing and data infrastructure and the maintenance of a strong digital infrastructure ecosystem. Persistent Identifiers (PIDs) are a core component of a world class, global digital information ecosystem as they provide a universal, machine-readable method to uniquely identify and connect entities within the ecosystem.

Principle 1 within the NRI is that the *NRI maximises the capability of the research and innovation system to contribute to economic outcomes, national security, social wellbeing and environmental sustainability.* PIDs directly contribute to this by facilitating the development of a connected national information ecosystem across research, government, industry and community.

More specifically for research, PIDs can directly contribute to:

- Improving research efficiency, productivity and reduction in administrative burden
- Improving research reproducibility, provenance and attribution and hence research integrity
- Determining the value of, and return of investment in, research investments
- Understanding the relationship between the elements within the national research and innovation ecosystem with a view to optimising the system
- Tracking research engagement, translation and impact.

Each of the above points create national value, whether through increasing the quality and impact of the research ecosystem or improving efficiency. The September 2022 report commissioned by the ARDC and Australian Access Federation (AAF) called, [Incentives to invest in identifiers: a cost-benefit analysis of persistent identifiers in Australian research systems](#), found potential savings to the Australian research system of \$24 million and 38, 000 person days per year through use of persistent identifiers (PIDs). If these savings are re-applied back into research and development this would result in \$84 million annual economy-wide benefits for Australia ([CSIRO Working Paper](#)).

To realise these anticipated benefits will require a coordinated, comprehensive and collaborative approach to PIDs, bringing together the key stakeholders across the national research, innovation and impact ecosystem. Capturing the potential \$84 million of value will require a national conversation, culminating in a National PID Strategy and Roadmap by November 2023.

Strategy development

Describe the process and timeline through which the PID approach and/or strategy was developed e.g. Advisory Group was formed led by a government agency, there was a consultation period in which xx people and organisations were involved, the process by which agreement was achieved etc. Another e.g. ORCID OR DOI Consortium formed.

The ARDC operates national-scale PID services and these, combined with the Australian ORCID Consortium led by the Australian Access Federation, form a key part of the national research infrastructure. The 2022 PID cost-benefit report highlighted the need for a national

approach in order to maximise the benefits of PID investment in addressing common challenges. In collaboration with AAF, the ARDC's approach is therefore to convene a broad and open national discussion that will result in a widely understood national PID strategy and an accompanying roadmap.

The Strategy and Roadmap are not binding top-down policies. They are rather a stakeholder-driven vision of a future research system optimised through use of PIDs. They seek to provide a shared framework to inform co-investment and policy development by relevant organisations.

In February 2023, a National PID Strategy Taskforce was formed by ARDC chaired by Professor Keith Nugent, DVC-R at the Australian National University (ANU) and includes senior stakeholders from across the sector including the CEO of the Australian Research Council. The purpose of the Taskforce is to:

1. Provide strategic advice to the ARDC on the development of the National PID Strategy and a five year Roadmap
2. Advocate for the engagement and commitment of key stakeholders to the development and implementation of the Strategy and Roadmap
3. Provide advice on a suitable governance structure to oversee the implementation of the Strategy and Roadmap

Also in February 2023, ARDC held an all-day workshop open to anyone who wanted to attend to kick off the national strategy. The workshop initiated a vision for the strategy and resulted in an open call for working group topics and members to explore aspects of the national strategy and feed into the work of the Taskforce in overseeing strategy development.

An update on the Australian National PID Strategy from 4 May 2023 can be found on Zenodo at <https://doi.org/10.5281/zenodo.7897961>

Key features

Describe the key features of the PID approach and/or strategy

National PID Strategy components and timeline

- Kick-off workshop & call for Working Group topics & members (Feb 2023)
- Taskforce established (Feb 2023)
- Working Groups kick off (May 23) and conclude (June 2023)
- Individual, group and working group submissions open (May 2023)
- Taskforce release draft strategy & roadmap (June 2023) at second workshop Canberra/online
- [TBC July to November 2023]
 - Iterative strategy and roadmap development: release – gather feedback – adjust – release
 - Outreach and communications strategy
 - Final strategy and roadmap release (Nov 2023)

- Roadmap commences (January 2024)

Key infrastructure

List and describe the key infrastructure (platforms, systems, services) that will activate this national PID approach and/or strategy

To be decided, however the following lists the potential infrastructure:

Name of infrastructure	Key purpose	List of integrated PIDs
ARDC Identifier Services ARDC DataCite DOI Consortium Global RAiD Registration Authority	ARDC provides a range of services for research organisations to create and manage persistent identifiers (PIDs).	DOI, RAiD, Handle, IGSN, ROR, ISNI, ORCID and more
AAF Australian ORCID Consortium	Australia's ORCID Consortium led by the Australian Access Federation	ORCID
ARDC Data Discovery portals including Research Data Australia , Research Vocabularies Australia , Research Link Australia , Research Grants Australia	Discovery of research data and related materials	DOI, RAiD, Handle, IGSN, ROR, ISNI, ORCID and more
ARC & NHMRC Grant opportunities portal	Research grant applications	ORCID
Institutional and discipline repositories	Storing, describing, sharing research outputs	Various
Government data repositories and portals (various)	Storing, describing, sharing government data	Various

PIDs

List which functions and PIDs are identified in the strategy e.g. identification of research grants is a function and the PID recommended in the PID approach and/or strategy is CrossRef DOI

The functions and PIDs are yet to be decided. Working Groups have been formed according to the needs of the Strategy and Roadmap and will feed into the work of the National PID Taskforce. Each Working Group will make a submission to the National PID Strategy using the template provided by the National PID Taskforce. Working Group focus areas have been confirmed following an open call for Working Group topics and participation:

1. Engaging Government
2. Grant Identifiers

3. HERDC
4. Instrument Identifiers
5. Non-Traditional Research Output (NTRO) Identifiers
6. Observation Identifiers
7. Organisation and Facility Identifiers
8. Project Identifiers

Additional Working Groups may be needed and formed as the conversation progresses.

A 'general submission' template is also available for anyone (individual, organisation, group) who wishes to submit a use case to the National PID Strategy outside of the Working Groups.

The following table reflects the current state of national PID infrastructure, not necessarily those that will be recommended in the final Strategy and Roadmap (since that conversation is still underway):

Function	PID type	Recommended or required?
Research grants	PURL or DOI	TBC
Research outputs - articles, data, software, instruments, samples and related materials	DOI	
Researchers, contributors	ORCID	
Research projects	RAiD	
Research instruments	DOI, Handle	
Samples and specimens	IGSN, DOI	
Research organisations	ROR	

Impact and monitoring

Summarise any work to describe or track impact of the approach/strategy, including review and/or monitoring processes

Yet to be determined for the National PIS Strategy and Roadmap. Likely to leverage the following:

- ARDC internally tracks and monitors the usage of our PID services. Our co-investment projects are required to provide [impact reporting](#) and PIDs play a major role in this.
- AAF reports usage of the ORCID service to the Australian ORCID Governance and Advisory Groups as well as to the AAF Board.

Links

Include any links to relevant documents

- ARDC National PID Strategy and Roadmap homepage - <https://ardc.edu.au/project/australian-national-persistent-identifier-pid-strategy-and-roadmap/>
- Update: Australian National PID Strategy (4 May 2023) <https://doi.org/10.5281/zenodo.7897961>
- ARDC PIDs Policy - https://ardc.edu.au/about_us/policies-and-guidelines/persistent-identifiers-policy/