

National PID Strategy & Roadmap

Working Groups 2023 Summaries

In 2023 the ARDC began consultation with the Australian research community to inform the development of a national PID strategy and roadmap. This consultation included webinars, national workshops, an open call for submissions and working groups with guidance provided by a Taskforce composed of senior stakeholders.

The Working Groups met over the course of four months in the second half of 2023 and consisted of volunteers from a variety of areas in the research landscape. This report summarises the discussions and recommendations made by the Working Groups.

Working groups

1. [WG1 Government](#)
2. [WG2 Grants](#)
3. [WG3 HERDC](#)
4. [WG4 Instruments](#)
5. [WG5 NTRQ](#)
6. [WG6 Observations](#)
7. [WG7 Organisation](#)
8. [WG8 Projects](#)

WG 1 Government

Goals in adopting and using PIDs

- Reduction in the effort required to reconstruct after machinery of government change.
- Reduction in the effort required to report on historical states of affairs (for example: responsibility for a policy area, responsibility for a contract, and so on).
- Increased ability to provide more linked-up reporting to support transparency goals.
- Increased ability to align with the goals of the Data and Digital Strategy (<https://www.dataanddigital.gov.au/>)

Suggested actions

- 2-pager aimed at government agencies covering why is this of interest, how to engage, articulate pathways
- Leverage Govt Data Champions Network, Govt Research Agencies Meeting and network

- Offer of a 2-hour workshop
- Examples of practice (such as ONDC catalogue) as putting this into practice is the challenge, identifying resources required etc. Broader context of good practice in data management.
- Leveraging tools, prototypes, catalogues available
- Environmental scan of PID-related and data-related activities in government

WG 2 Grants

Goals in adopting and using PIDs

Explore PIDs for research grants

Suggested actions

- Expanded stakeholder involvement to reflect range of research funders such as ABS, ARC, NHMRC, MRFF, universities
- Explore implementation of Grant DOIs in line with international best practice and leveraging ARDC DataCite DOI Consortium
- It is also recommended that the roadmap include capture of the current related data activities being undertaken or planned by the government, such as the development of a data catalogue.

WG 3 HERDC

Goals in adopting and using PIDs

- Explore the use of PIDs for HERDC

Suggestion actions

- Recommend further consideration of developing a PID and associated metadata for HERDC income. Some actions are proposed in the Roadmap.

WG 4 Instruments

Goals in adopting and using PIDs

- Metrics that quantify the use of instruments and the rationale for future funding
- Improve connection between data outputs and the instruments that generated them
- Facilitate of interoperability and open data sharing, especially in advancing technologies that foster sharing of instruments
- Improve discoverability and visibility of instruments and their data, published on the web
- Improve reproducibility of scientific results
- Support appropriate authentication and access to sensitive data
- Improve tracking/locating of systematic errors generated by an individual instrument in a dataset/data collection, particularly where a survey has used several instruments/sensors.

Suggested Actions

Technical

- Upgrades to institutional repository systems to enable records for instruments and related entities
- Financial, technical and staffing support for institutions to undertake upgrades
- Support to develop crosswalks for common metadata schemas
- Upgrades to institutional PID minting capabilities
- Augmentation of the PID graph and related services to visually display PID connections

Communications and culture change

- A preliminary gap analysis of capability across the sector
- Communication of the roadmap and invitations to early adopter/pilot organisations for co-development
- Communications with stakeholders around standards
- Raising awareness of the need for internal organisation of Universities
- Raising support for implementing automation in data management systems

Standards and policies

- Funder support and policy to drive PID uptake across agencies
- Publisher practice to embrace PIDs in the research process
- Further [Best Practice development](#) and socialisation to be key in policy
- Discipline Support for implementation via discipline bodies and international academic bodies

WG 5 NTRO

Goals in adopting and using PIDs

- Adopt a broad understanding of what constitutes an NTRO.
- The group does not recommend creating a definitive list of types, but instead advises a focus on outputs with a research component regardless of form.
- Apply DOIs to record NTRO activity.
- This process should include an analysis of existing DOIs used by research providers so that NTROs can be better integrated into the improved ecosystem.
- New DOIs will need to be minted that satisfy an agreed metadata schema.
- Encourage Researchers to link NTRO DOIs to their digital imprint, such as ORCID.
- It will be important for researchers to engage with members of their institutional Research Office and the Library to help with the promotion of PIDs. Data Librarians will be a key resource for support.
- Encourage data providers to improve NTRO coverage and users to increase the capture of their NTROs in these databases.
- This includes universities, commercial database vendors, the ARC and other research funders.

Suggested actions

5 key stages:

- In consultation with relevant stakeholders, create a standard for NTRO metadata that identifies and articulates the research and its contribution.
- Improve understanding of NTROs and articulate value propositions.

- Ensure buy-in from users including data providers, funders, researchers and institutions.
- Improve DOI and ORCID use among researchers.
- Follow up implementation and provide ongoing guidance.

WG 6 Observations

No report received

WG 7 Organisations

Goals in adopting and using PIDs

The WG provided a number of recommendations:

<p>Recommendation 1: That organisations in the Australian research and innovation sector incorporate organisational and facility identifiers into workflows. Due to the variance in maturity and ability to offer particular characteristics of Persistent Identifiers, organisations could start with more mature identifiers and include more as maturity improves.</p>
<p>Recommendation 2: That ROR be the default identifier for organisations and facilities in the public and private Australian research and innovation sector.</p>
<p>Recommendation 3: That the Australian Research Data Commons work with organisations without ROR IDs to guide them through the process of obtaining one.</p>
<p>Recommendation 4: That the Australian Research Data Commons work with partner organisations to investigate the feasibility of an Australian ISNI registration agency</p>
<p>Recommendation 5: That the Australian Research Data Commons work with partner organisations to investigate the feasibility of LEIs to be used to identify international legal entities that are not eligible for ROR IDs.</p>
<p>Recommendation 6: That organisations in the Australian research and innovation sector use CrossRef Funder Registry IDs when identifying research funders.</p>
<p>Recommendation 7: That the Australian Research Data Commons work with appropriate stakeholders to develop ABN/ACN so that they meet the characteristics required for the stability of the PID graph.</p>
<p>Recommendation 8: That the Australian Research Data Commons work with the Department of Finance to develop AGOR to provide PIDs for government departments.</p>

Suggested actions

Within one year

- Recommendation 4: That the Australian Research Data Commons work with partner organisations to investigate the feasibility of an Australian ISNI registration agency
- Recommendation 5: That the Australian Research Data Commons work with partner organisations to investigate the feasibility of LEIs to be used to identify international legal entities.

Within two years

- Recommendation 6: That organisations in the Australian research and innovation sector use CrossRef Funder Registry IDs when identifying research funders.

Within three years

- Recommendation 2: That organisations in the Australian research and innovation sector consider ROR IDs to be the default organisation and facility identifier and be used whenever possible.
- Recommendation 3: That the Australian Research Data Commons work with organisations without ROR IDs to guide them through the process of obtaining one.

Within five years

- Recommendation 1: That organisations in the Australian research and innovation sector incorporate organisational and facility identifiers into workflows.
- Recommendation 7: That the Australian Research Data Commons work with appropriate stakeholders to develop ABN/ACN so that they meet the characteristics required for the stability of the PID graph.
- Recommendation 8: That the Australian Research Data Commons work with the Department of Finance to develop AGOR to provide PIDs for government departments.

Supporting information provided by the WG

Research Organisation Registry Identifier (ROR ID)

ROR is a registry of “research organisations.” “Research organisation” is defined as any organisation that conducts, produces, manages, or touches research. Each organisation in the ROR database is allocated a ROR ID. ROR inherited the GRID database and already has entries for many Australian research organisations. Anybody may submit a curation request to have any organisation added to the ROR database. Requests are not automatically approved, but are processed by the ROR Curation Advisory Board.

ISNI

[ISNI is an identifier for creators, either individuals or organisations and is of potential use for identifying organisations who do not have a research focus. Unfortunately, there is no Australian registration agency](#) and one will need to be identified.

ISNIs are a good option for identifying organisations that have creative outputs, but are not in scope for ROR IDs. Unfortunately, creating new ISNIs in Australia is difficult as there is no Australian registration agency.

LEI

[Legal Entity Identifier](#) enables clear and unique identification of legal entities participating in financial transactions. This identifier could be used to identify corporate entities that are associated with research.

CrossRef Funder Registry ID

[CrossRef maintains a database of global research funding organisations](#) and allocates each a unique identifier. The database is open access.

Other identifiers

Within Australia, there is already a robust framework for uniquely identifying businesses and corporations, but they require some enhancements to be used as fully-fleshed persistent identifiers.

Identifying government organisations is particularly difficult due to the shifting and ephemeral nature of government departments in Australia. The AGOR - Australian Government Organisations Register - is maintained by the Australian Department of Finance and could be co-opted to provide government organisation PIDs.

WG 8 Projects

Goals in adopting and using PIDs

The ARDC's emerging RAiD is best-positioned to become a widely accepted Project PID to identify research projects, capture key project information, and link projects to their constituent contributors, organisations, inputs, and outputs.

It has software nearing maturity, the backing of the ARDC as well as major European research organisations and initiatives (especially via FAIRCORE4EOSC), and the support of existing PID providers (including ORCID, DataCite and Crossref). In addition to the ARDC, one other Registration Agency has been recruited (SURF in Europe), while seven other organisations have expressed interest in becoming Registration Agencies. RAiD's features and functionality have been developed in close consultation with potential partners, end users, and other stakeholders to ensure that the system is fit-for-purpose.

Suggested actions

As per Brown et al. (2022), a target of 80% uptake in five years for the five 'priority PIDs', including RAiD, would ensure that the benefits described above are realised. To enable RAiD adoption and use, actions include:

- technical development
- organisational development
- outreach and engagement.