



Research outcomes reporting, planning and implementation: Guidelines for National Data Assets Projects

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Content enquiries	contact@ardc.edu.au
Related documents	FAIR Data Guidelines for Project Data Outputs
Definitions	Project Outputs: the output of ARDC projects that is new infrastructure (measured by delivery of systems, standards, interfaces, governance arrangements, improved datasets) Research Outcomes: The outcome of the project that is achieved when the infrastructure is used in research (measured by publications, grants, etc supported by the infrastructure). Broader Impact: Broader impact (beyond research) occurs when the research or infrastructure is applied to societal problems (measured by positive social, environmental, economic changes etc stemming from the research supported by the infrastructure)
Purpose	Provide guidance to <u>National Data Assets</u> project partners on how the impact of data outputs from the partnership may be monitored over time.



Requirements for post-project reporting in National Data Assets Investments

ARDC's National Data Assets portfolio aims to support the development of research data assets and infrastructure to produce reliable high quality research, improve efficiency through greater sharing of resources, catalyse data innovation through data science, and enhance research translation to produce benefits for communities beyond the research sector.

To ensure that these strategic goals are achieved, the ARDC requires all National Data Assets projects to plan, implement and report on research outcomes and impact from ARDC invested activities. This document provides broad guidance on the requirements of research outcome and impact reporting, planning and implementation for outputs of all National Data Assets activities.

Reporting Requirements

Research Outcomes Report

All National Data Asset projects are required to provide a Research Outcomes report 12 and 24 months after project completion. The report should include any Research Outcome produced through the use of the ARDC invested data asset or infrastructure. This may include, but is not limited to:

- Publications (e.g. journals, conferences, books or book chapters)
- Grants (domestic and international funders, including foundations)
- Projects (especially projects with external partners, e.g. NCRIS projects, government, industry, NGOs or other community groups)
- Patents
- Reports (including any report for governments, NGOs or official national or international committees)
- Licences
- Usage (including where possible, usage by sectors higher education, public sector, industry etc)
- Citations (from journal publications or official reports)
- User satisfaction
- Training delivered
- Reuse/repurpose

Research Impact Report

All National Data Asset projects are required to provide a Broader Impact report 12 and 24 months after project completion. The report should outline any Broader Impact, i.e. benefits, produced through the use of the ARDC invested data asset or infrastructure. Benefits may include any demonstrated social, economic, environmental, cultural and health benefits produced by research utilising the ARDC invested data asset or infrastructure. The report should provide details relating to:



- Who or what has benefitted from the results of the research (this should identify relevant research end-users, or beneficiaries from industry, the community, government, wider public etc.)
- The nature or type of impact and how the research made a social, economic, cultural, environmental, and/or health impact
- The extent of the impact (with specific references to appropriate evidence, such as cost-benefit-analysis, quantity of those affected, reported benefits etc.)
- The dates and time period in which the impact occurred

The report may use a case study approach to report on impact. Sample case studies can be found at the <u>NHMRC</u>, <u>ARC</u> and <u>CSIRO</u>. CSIRO's <u>Impact Evaluation Guide</u> provides a framework and reference to resources for conducting impact evaluation.

Planning Requirements

At Application stage: Research Outcomes and Broader Impact Statement

All National Data Assets project applications are required to submit a short statement giving a general outline of what research outcomes and broader impacts are expected from the infrastructure project. This statement will include steps to be taken during the project (e.g. requirements gathering from research groups) to ensure use of the infrastructure in research. The statement will be assessed as a part of the application selection process.

At Project Plan stage: Research Outcomes and Broader Impact Plan

Approved projects are required to develop a research outcomes and impacts plan prior to the commencement of work, addressing elements such as:

- Establishment of monitoring framework
- Inputs from research users in design of the infrastructure
- Partnerships with research translation specialists
- Establishment of policies, systems and workflows to track uptake

The OECD's <u>Reference Framework for Assessing the Scientific and Socio-Economic Impact of Research Infrastructure</u> provides a framework of 58 indicators for monitoring the outcomes and impact of research infrastructure. While not all 58 indicators are relevant to every project, projects are advised to develop their monitoring plans in accordance with at least some of these indicators. In addition, projects should also consider other additional indicators relevant to their projects.

Implementation Work Packages

All National Data Asset projects are eligible to receive up to 5% extra of the overall project budget to implement changes within the project to their systems, workflows, policies, and broader research culture to support monitoring of research outcomes and impacts beyond the infrastructure project's completion. Implementation work packages must include several of the following elements:



- 1. Automated and pervasive system integration of key persistent identifiers (ORCID, DOI, RAID, Grant ID, IGSN) that support tracking and monitoring of research outcomes and impact.
- 2. Changes to data access workflows to register users, and capture information about projects, funding sources, intended uses.
- 3. Tracking of the download of datasets using the COUNTER Code of Practice for Research Data in Repositories.
- 4. Automated ongoing communications with end-users regarding their usage.
- 5. Other systems to track research publications, grants, projects, awards, industry funding, patents, etc enabled by the infrastructure
- 6. Collaboration with journal publishers so that they capture citations to data and acknowledgements to infrastructure (new policies and systems)
- 7. Collaboration with scholarly societies and funders to implement community policies for data citation and infrastructure acknowledgement (new policies and systems)

Successful projects who opt in to the supplementary 5% investment will have two extra milestones:

- 1. "Impact/outcome monitoring systems" work package description included in the project plan and acceptable to ARDC (invoicing milestone for the 5%)
- 2. Delivery of "Impact/outcome monitoring systems" work package