Here-turi-kōkā August 2024

Submission to the Ministry of Education

Use of Unique Identifiers for the Performance Based Research Fund Quality Evaluation or Similar Research Initiatives Consultation

New Zealand ORCID Consortium Advisory Committee

- ORCID is trusted and used throughout the New Zealand research sector by a wide range of research organisations and institutions, and it is integral to New Zealand research funding processes.
- ORCID is a long-standing investment by the New Zealand Government and the ORCID Consortium has been fully funded by the Ministry of Business, Innovation and Employment since 2016.
- The utility of using ORCID as a persistent unique identifier is enhanced by the interoperability offered through communication and collaboration with other IT systems and workflows in New Zealand and globally.
- Established persistent unique identifiers offer more value to organisations managing research systems as the identifier is more informative, globally unique, machine resolvable and has an associated metadata schema.
- There is international precedence for the utility of ORCID in national funding and research evaluation systems, for example, in the United Kingdom, the United States of America, Australia and South Africa.

The New Zealand ORCID Consortium Advisory Committee welcomes this initiative and strongly supports the use of unique identifiers to improve processes and relieve administrative burden for researchers participating in the Performance-Based Research Fund (PBRF) and similar research initiatives. This submission addresses how ORCID unique persistent identifiers could be used for this initiative to provide additional functionality and a range of benefits that are unique to the ORCID tool. **ORCID has the capability to be used as a primary unique persistent identifier in the PBRF, or as a complementary persistent identifier used to disambiguate and accurately identify researchers within the submission and evaluation process.**

What are persistent identifiers?

To promote trust and increase impact for the research system, it is imperative that organisations use established persistent identifiers within their workflows so that data can be interoperable across a range of systems. This approach is more effective than custom identifiers that are relevant to just one system, such as the NSN. Persistent identifiers (PIDs) are IDs that uniquely identify and connect entities such as researchers, funders, organisations, articles and datasets and consequently represent critical research infrastructure. PID strategies have been adopted globally, such as by the US Government. The use of established and interoperable persistent identifiers by research organisations has been found to provide a range of efficiencies and cost savings. For example, a cost-benefit analysis conducted in Australia found that the strategic use of persistent identifiers could save the Australian research system approximately $24 million annually[1]. The proposed NSN would not be considered a PID, because it does not meet the criteria of an open, actionable identifier that is supported by a metadata schema that is relevant to multiple systems and organisations.

What is ORCID?

ORCID, the global Open Researcher and Contributor ID, is the primary unique persistent identifier used worldwide to identify individual researchers. ORCID has two main functions: to act as a trustworthy researcher registry and as a means of authenticated system-to-system communication. After signing up, researchers are provided with a unique persistent ID that remains constant throughout their career despite any name changes or institution changes. In New Zealand, approximately 85% of publicly funded researchers already have an ORCID record, about 33,000 individual researchers at the time of writing.

New Zealand ORCID Consortium

The New Zealand ORCID Consortium was established in 2016 and currently consists of 45 organisational members. It is among the larger of ORCID's national consortia and is celebrated for spanning New Zealand's publicly supported research organisations. **Members include: all eight universities and other Tertiary Education Organisations including Institutes of Technology and Polytechnics; all Crown Research Institutes; all major New Zealand research funders; government departments, and independent research organisations.** The Tertiary Education Commission is a member of the consortium and is therefore able to utilise the ORCID API for free.

The consortium is fully funded by MBIE, which has ensured the Consortium is as inclusive as possible. The New Zealand ORCID Consortium work programme agreement has been renewed by MBIE until 2029 and a range of project expansions are planned for the coming 5-year period. The New Zealand

[1] https://ardc.edu.au/article/strategic-investment-in-identifiers-could-save-24-million-and-38000-person-days-per-year/

ORCID Consortium provides an exemplar for effective cross-sector collaboration bringing important digital infrastructure to the New Zealand research ecosystem.

ORCID is a unique persistent identifier

ORCID provides a range of benefits that would support the PBRF process by removing administrative burden for researchers, ensuring individuals are effectively disambiguated, confirming researcher identities, utilising the ORCID API for read and write processes and allowing for interoperability with other important systems within the New Zealand research sector. The flexibility of the ORCID tool means that the role that ORCID plays in the PBRF, or similar research initiatives, could either be as the primary unique persistent identifier associated with individual researchers, or as an additional persistent identifier used as a supportive tool in the disambiguation and accurate identification of researchers. There is a precedence for both approaches in national funding systems around the world.

The use of ORCID as a unique identifier in the PBRF process would ensure that the consultation's primary policy objective is achieved by providing a persistent verified identity which is used globally and trusted by research organisations throughout the New Zealand research sector. Trust is a key component of the ORCID 10 Founding Principles: the tool is open and available to all while ensuring the effective creation of a permanent, clear, and accurate record of research and scholarly communication which is associated unambiguously with a specific individual. ORCID is a not-for-profit organisation run by a global board that includes representatives from all corners of the research sector.

ORCID is used and trusted in New Zealand

ORCID is used extensively throughout the New Zealand research sector. These systems include funding calls at Royal Society Te Apārangi, the MBIE Pitau research funding system, all research information systems utilised by the eight New Zealand Universities, as well as repository and journal systems across the sector.

ORCID is used by key New Zealand funders as an effective identifier to link individuals to a range of funding opportunities. For example, Royal Society Te Apārangi and MBIE use ORCID as a unique identifier to accurately identify funding applicants and recipients. The use of ORCID in these instances reduces the administrative burden for funding assessors when attempting to disambiguate the identities of grant applications. For instance, ORCID is specifically trusted by Marsden Fund management staff to disentangle and disambiguate the researchers listed on grant applications and the referees chosen to assess applications. Marsden staff use ORCID to remove any doubt about researcher identities through the unique nature of the identifier, the widespread ORCID use within the national and global research sector, and the interoperability between different systems within New Zealand.

Reducing administrative burden for researchers, TEOs and research management organisations is one of the key benefits that the ORCID tool can achieve. TEOs can more easily and effectively track the outputs and professional activities of their staff while writing accurate information to staff ORCID records.

The time savings apply to researchers too, with some application systems, such as Royal Society Te Apārangi funding calls and the Prime Minister's Science Prizes, featuring an auto-population function in their application portals. This login and auto-population function allows information from ORCID records to automatically populate the funding application, a function that could be used when submitting professional activities or career information to PBRF. This saves researchers time and therefore saves money for their TEOs.

ORCID will be implemented in the New Zealand Research Information System (NZRIS) workflow to simplify and support the utility of the system. Unique identifiers are most effective when they are used consistently and are relevant to more than one system and organisation. The consistent use of ORCID throughout the New Zealand science and innovation sector ensures that the capabilities and benefits are cumulatively strengthened.

A best-practice digital identifier should be globally unique, persistent, machine resolvable, have an associated metadata schema, identify an entity, and be frequently used to disambiguate between entities. This best practice is attained by ORCID IDs but may not be achieved with in-house identifiers relevant to a single organisation.

The use of ORCID also promotes FAIR practices (Findability, Accessibility, Interoperability, and Reusability) by supporting linkages, providing increased discoverability, and enabling interoperability between research components. Researchers appreciate consistency when using research sector systems. ORCID accounts can be linked or used to log in to a plethora of research systems in New Zealand and this functionality could be extended to the PBRF. Using ORCID in a PBRF system would further leverage the interoperability of the unique identifier and provide the opportunity for constructive collaborative and cooperative work across research organisations. There would also be an opportunity for more effective statistical analyses when using a persistent identifier relevant to multiple systems.

ORCID and privacy

Institutional and sector-wide implementation of ORCID must be fully compliant with the New Zealand Privacy Act, in particular, Principle 13 which regulates the use of unique identifiers. Hesitations regarding the utility of ORCID as the primary unique identifier in the PBRF process would also apply to the NSN and there are several possible approaches to resolving this issue.

Privacy Act considerations would not apply if using ORCID within the PBRF or similar process as a complementary supportive unique persistent identifier. Acquiring an ORCID ID requires no more than the name of an individual and a functional email address, and researchers must personally sign up for an ORCID ID. No detailed, sensitive personal information is collected during this process. Most of the data collected in relation to research activities is already in the public domain and part of their public persona as a researcher, and individuals have direct control over which data are publicly presented on their ORCID record. This means that researchers sign up for an ORCID ID for research administrative purposes and would only use the ID for research administrative purposes. Users retain complete control of their data. The researcher can also authorise a third party, such as a journal publisher, affiliated institution or funder to edit the data on their record but only with expressed permissions and these permissions can be revoked at any time.

ORCID is used and trusted internationally

There are 8.5 million active ORCID records worldwide across every country in the world. As such, **there is international precedence for the use of ORCID in large national research schemes.** In the UK, a national Open Access Policy has been published which states that ORCID must be supported in research management systems. The four UK Higher Education funding bodies have indicated ORCID will be integral to the next Research Excellence Framework, while ORCID IDs were strongly encouraged for all active research staff in the 2021 REF round. ORCID IDs are already mandated in the UKRI funding process. In the USA, the White House has ordered federal agencies to incorporate established PIDs in their research assessment and funding workflows. This mandate includes criteria for a researcher digital persistent identifier, and these criteria are only met by ORCID IDs. Similarly, in Australia, the Australian Research Council use an ORCID ID sign in and profile association in their national grant application process. The National Research Foundation in South Africa mandates ORCID

use when applying for any national research grant. These examples, as well as other workflows across the world, demonstrate that ORCID is trusted by the research sector and that national organisations and government departments recognise the benefits that ORCID can provide without sacrificing privacy or utility.

Conclusion

We strongly recommend that ORCID be included in the next PBRF, or similar research initiative, owing to the range of benefits and capabilities outlined in this submission. The role of ORCID in the process can be flexible to match the requirements of the current PBRF assessment system and other relevant criteria and considerations, however, it is apparent that the PBRF process would be strengthened and streamlined with the inclusion of ORCID. We welcome further conversation with the Ministry of Education and Tertiary Education Commission regarding unique persistent identifiers.

The members of the New Zealand ORCID Consortium Advisory Committee who endorse this submission are:

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