Joint Statement of Principle: Adoption and use of ORCID identifiers in New Zealand

Researchers, research institutions, publishers and funding bodies routinely face the problem of accurately linking research publications, data and other research activities to the right researcher. A unique persistent identifier resolves problems of name ambiguity in search and discovery and can ensure that works are correctly and unambiguously attributed to their creator. ORCID solves this long-standing problem by providing a persistent digital identifier (ORCID iD) that distinguishes each researcher. Identifiers are a basis for digital data governance because they enable machine readability, disambiguate and enforce uniqueness, and enable accurate attribution and data integration.

The Health Research Council of New Zealand, the Independent Research Association of New Zealand, the Ministry of Business, Innovation and Employment, the Ministry of Education, the Ministry for Primary Industries, the New Zealand Association of Scientists, the Royal Society of New Zealand, Science New Zealand, the Tertiary Education Commission and Universities New Zealand recognise:

1. the value of unique researcher identifiers in reducing red tape, increasing efficiency, improving data quality, integrating disparate data, promoting the reuse of data, and enhancing the discoverability and visibility of New Zealand research domestically and internationally

2. that widespread adoption and use of ORCID iD across New Zealand's research system has many tangible benefits across the sector

3. that ORCID iD aligns with the government's data and information management principles: open, protected, readily available, trusted and authoritative, well managed, reasonably priced and reusable.

As a matter of principle we:

1. Strongly encourage the use of ORCID iD across the research and science system

2. Commit to support the use of ORCID iD as a common researcher identifier across New Zealand's research and science system.

ORCID is non-proprietary

ORCID is a non-profit organisation, operating as a charitable trust, incorporated in the USA on 5 August 2010. It is supported by a global community of organisational members, including research institutions, publishers, funders, professional associations and other stakeholders in the research ecosystem. The research community conceived and developed ORCID and set it up as a trust to ensure it remains platform-neutral. It acts as a hub that connects with other researcher identification systems, publishers, funders, professional associations, repositories, and higher education bodies.

ORCID iD is a non-proprietary, platform-neutral identifier that links a researcher and affiliation with other identification schemes. Unlike some other identifiers, ORCID iD is not limited by discipline or by geographic region. It can be used by all researchers, not just those in the 'hard' sciences. The researcher controls his/her ORCID record, including the privacy settings for each item.

ORCID iD supports automation and connection of data

ORCID's key goal is to unambiguously identify researchers and provide tools to automate the connection between researchers and their creative works. ORCID iD supports automated linkages between the researcher and the researcher's activities and outputs through integration in key workflows such as manuscript and grant submission. ORCID iD can be used as a digital 'key' to aggregate information from publisher catalogues, institutional archives, data archives, HR records and funding management systems.

ORCID iD adoption is growing rapidly around the world

ORCID was launched in October 2012 and in three years has served more than two million ORCID iDs. Already around 3000 ORCID records have a public affiliation with a New Zealand institution and almost 5700 ORCID records are associated with a .nz email address.

Worldwide, many publishers, libraries, learned societies and research providers are integrating with ORCID iD.

Some funders are now requiring the use of ORCID iDs, including the Swedish Research Council, Science Foundation Ireland, the Austrian Science Fund and the UK National Institute for Health Research.

Overall benefits of ORCID iD

ORCID iD delivers benefits to all parts of the research system, from the researcher to the research institute and onto the funder and policy agencies. The broad benefits of ORCID iD include:

› Ability to disambiguate researchers through an online identifier that links to a researcher's works (publications, datasets etc), links to other identification systems, and is retained regardless of a researcher's institutional affiliation.

› Enabling researchers to interact with multiple institutions, publishers and funders in New Zealand and around the world through the use of a common identifier.

› Simplifying and automating data entry processes, reducing the administrative burden on researchers, research institutions and funding agencies.

› Addressing duplication of effort and enabling the reuse of data for multiple purposes, both within and across organisations through automation of processes and data exchanges.

› Improving data quality (accuracy, completeness, consistency, validity etc) through automated data extraction across systems and organisations.

› Reducing the workload for researchers, research institutions and funding agencies in the long term, improving the overall efficiency of the system as a whole.

› Providing the infrastructure to integrate data and facilitate timely and efficient data collection for the management of a research institution, and more broadly for monitoring the performance of New Zealand's research and science system.

› Enhancing the online presence and exposure of New Zealand researchers and their research activities and outputs to the global market, industry partners, international collaborators, and students aspiring to study in New Zealand.

Benefits to the researcher

1. Enables the researcher to distinguish his/her research activities from others with similar names.

2. Enables the researcher to easily and uniquely associate her/his identity to a wide range of research activities and outputs such as publications, datasets, media stories, citations, experiments, patents, online resources and notebooks.

3. Reduces manual data entry through automatic harvesting of associated activities and outputs.

4. Makes the research process and collaboration across borders, institutions and disciplines easier because the data associated with a researcher can 'move' across organisations and national boundaries.

5. Facilitates researcher interaction with multiple organisations, publishers and funders through a common identifier.

6. Provides an online record, improving discoverability of researchers and their associated research activities and outputs.

Benefits to the research institute

1. Improves data quality for the management of an organisation and tracking of research performance.

2. Enhances an institution's research profile through improved visibility and discoverability of research outputs.

3. Increases efficiency due to the reduction in manual data entry and minimisation of double handling of data.

4. Helps maintain up-to-date records of an institution's researchers by permitting updates through existing records, such as institutional repositories.

Benefits to the funding agency

1. Improves data quality for the management of funds and tracking of research performance.

2. Increases efficiency of data collection for applications and reporting purposes.

3. Facilitates analysis of funding across agencies as funding sources can be more easily tagged to specific researchers and their activities and outputs.

4. Enables reuse and exchange of data across funders throughout the entire life cycle of a research project, e.g. for grant application and reporting.

Benefits to the policy agency

1. Improves data quality on the inputs, activities and outputs of the national research and science system which leads to a better understanding of the national system and more informed policies.

2. Enables a more effective means of monitoring the performance of the national research and science system.

Benefits to the New Zealand research and science system

1. Reduces transaction costs across the system by facilitating data collection and reporting, including for contestable funds and institutional funding.

2. Improves the accuracy of data on the research system in New Zealand by managing data and information through integration, which reduces errors and increases consistency in data entry.

3. Establishes a 'trust network' across institutional boundaries, facilitating collaboration through wide adoption of ORCID iD.

4. Supports open access institutional repositories of research outputs.

5. Enhances New Zealand's research profile through improved visibility and discoverability of research outputs across diverse systems and sources (eg publishers' websites, search engines, disciplinary repositories), creating greater opportunities for international collaboration and access to New Zealand research by end users or industries.

6. Position New Zealand research institutions and New Zealand researchers as leaders in research management practices.

7. Enhances the transparency of the New Zealand research and science system for the New Zealand public through greater discoverability and visibility of research activity.

Membership

The ORCID registry is free to use for individual researchers who may register, maintain and share their ORCID iD and associated ORCID record data. Organisations may integrate ORCID identifiers into research systems and workflows using a public ORCID Application Program Interface (API) for no fee. Organisations support ORCID through paying membership fees in exchange for access to specific API features and technical support.

ORCID provides two types of membership agreements: standard (for a single organisation) and consortium for a group of five or more organisations. ORCID also offers two member categories: basic and premium which vary in terms of the ORCID features that are available and discounted rates on premium membership for groups apply. Premium levels of membership confer full benefit of programmatic access, integration assistance, multi-implementation and operational issues, including user support.

All consortium members are afforded premium member benefits, which include up to five Member API credentials per organization, access to the call-back notification API (which will send a 'push' notification when an ORCID record of interest is updated), and higher bandwidth access to our APIs. In addition, ORCID will provide training for the consortium technical support contact, support for consortium on-boarding webinars, a local in-person meeting if desired, and a consortium portal website for coordinating tech support and communications.

Implementation considerations

A number of key issues need to be considered in the implementation of ORCID iD:

1. **Privacy:** institutional and sector wide implementation must be fully compliant with the New Zealand Privacy Act, in particular, Principle 12 which regulates the use of unique identifiers. ORCID is committed to ensuring that researchers maintain full control of their ORCID record. Acquiring an ORCID iD requires no more than the name of an individual and a functional email address. 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. Users retain control of their data. The researcher can also authorise a third party, such as a journal publisher or affiliated institution to edit the data. The researcher can also allow a funder to post a grant or award to their ORCID record.

2. **Costs:** the initial upfront cost and subsequent maintenance and support cost associated with the implementation and use of ORCID iD may vary across institutions. Each institution has different systems, capacities, budgetary constraints and support structures in place. Implementation of a common researcher identifier is a long-term investment. Integration of information in institutional repositories, HR databases or grant management systems will depend on the local provision and operational skill in mapping data between multiple specifications. The main cost associated with ORCID implementation is the installation, integration and uptake. A study of eight universities in the UK showed that the benefits significantly outweighed the costs of ORCID integration.

3. **Identity and access management:** Accurate and integrated identity management is not essential for registering an ORCID iD. Users are free to use their personal email addresses and create their own passwords in order to establish their own ORCID record. However, institutional credentials provide an important validation of institutional affiliation for appropriate ORCID records, eg, 'x' asserts they worked at research institute 'y' during a certain period and this is validated by 'y' via their identity and access management services. The principle is that, once validated, the ORCID record is more trustworthy. Trust, identity and federated identity management services currently in use could be leveraged to deliver a trustworthy framework which enables collaboration.

4. **Communication:** the use of a common researcher identifier has many implications for a wide range of stakeholders: researchers, universities, research institutes, funding agencies. A communication plan would be needed to ensure the rationale and full benefits are widely understood. The benefits of a common researcher identifier may not be distributed evenly across the research sector. For instance, collecting data for non-traditional research outputs may require effort.

New Zealand Government