

RESEARCH, SCIENCE AND INNOVATION DATA CONCEPTUAL MODEL: REPORT ON THE MĀORI ENGAGEMENT ROUND

Prepared for the
Ministry of Business, Innovation and Employment
by
Tiaho Limited
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Tiaho Limited is a kaupapa Māori research, evaluation and policy development group with experience in both qualitative and quantitative approaches, and in community engagement, workshop delivery, report writing, strategic planning services, and project management.

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INTRODUCTION

A long-term project of the Ministry of Business, Innovation and Employment (MBIE) is the building of a National Research Information System (NRIS) to house and link research information. The purpose of the NRIS is to: enable the aggregation of data and comparability across different parts of the research, science, and innovation (RS&I) system; improve the transparency and visibility of the system; and assist with collaborations between researchers, research organisations, funders, and the end-users of research.

The RS&I Data Conceptual Model begins the process of building a national data system by signalling what data will be needed and working to develop a common set of data specifications to be collated and linked. To ensure the conceptual model reflects the diversity of Māori research practices and is of use to Māori (researchers, research institutions and organisations, collaborators, and end-users), MBIE sought feedback on the conceptual model from key Māori researchers and scientists working in the RS&I sector.

The kaupapa Māori consultancy group, Tīaho Limited, was contracted by MBIE to undertake this engagement with Māori. Drawing on the expertise of the Rōpū Taumata that supports the work of Tīaho,¹ an information sheet summarising the planned NRIS and the conceptual model, and detailing key questions of interest, was developed.² Using that information sheet and questions, 15 Māori researchers, scientists, and those working in research offices were interviewed for feedback on the conceptual model.³ This draft report details their feedback on those questions and their wider reflections. From this feedback, a set of recommendations has also been drafted to assist MBIE in their further development and implementation of the RS&I Data Conceptual Model to support the model being of relevance to Māori in the RS&I sector.

OVERVIEW: HIGH-LEVEL REFLECTIONS

- There was considerable interest in the project to develop a Data Conceptual Model and a National Research Information Database. Participants thought it was an important programme of work and were willing to engage and share their views.
- An overarching issue was that of representation; that the data of relevance and interest to Māori researchers and communities should be adequately represented in the Data Conceptual Model and thus be findable in the database when developed. Consideration of this raised important questions about who and what research would be included, how Māori research and research processes and relationships are reflected, and the degree to which the model represents Māori values and their expression in the advancement of Māori knowledge.

¹ Members of the Rōpū Taumata are: Lee Cooper, Moana Jackson, and Ani Mikaere.

² See MBIE Research, Science & Innovation (RS&I) Data Conceptual Model: Summary and questions for Māori engagement round, 2017, in Appendix 1.

³ A list of interview participants and their roles and respective organisations is provided at the end of the report.

- Participants were of the view that the Data Conceptual Model (levels 1 and 2) needs significant reworking to include the data sets of relevance and interest to Māori researchers, Māori research organisations and institutions, and Māori community collaborators and users of research, and to reflect Māori values and knowledge-making processes. The model reflected the lack of inclusion of Māori in its development to date, which needs to be addressed with some urgency.
- Adequate representation of Māori interests and values in the Data Conceptual Model will be important in building the trust and buy-in of Māori and iwi research organisations and institutions. As more iwi settle their claims before the Waitangi Tribunal, their investment in research will increase and it will be of value to have a NRIS that is inclusive of more than government funded research.
- While there was acknowledgement that the overarching purpose of a national research information database is to enable government to track their return on investment in research, it was thought that this would also have significant strategic value for Māori. It would allow the tracking of government investment in Māori research and document how that research is contributing to supporting Māori outcomes, and more widely, provide transparency on the equity of that investment in terms of Te Tiriti o Waitangi.
- Caution is needed in how the database might inadvertently overstate investment in Māori research and the value of that research to Māori. Clear definitions of terms such as 'Māori research' will need to be developed, and the subjective claims of benefits to Māori by researchers will need to be ameliorated.
- At a practical level, consideration needs to be given to how information will be entered into the database, and by whom, as its veracity will depend on getting the right data into the right fields. Concern was raised at the increased resource costs to research organisations and institutions. In addition to this, some of the data specifications may require researcher knowledge and concerns were raised about researchers and scientists spending additional time on administration.

SUMMARY OF FEEDBACK

The order of the feedback differs somewhat to the order of the questions in the interview summary sheet. This change was made in order to provide the feedback in clear and simple format.

1. A National Research Information System

How might a National Research Information support Māori research activities? What purpose would it have for your work?

1.1 Assist with being better informed of the research in one's field

While some participants felt they were already well informed of the research work in their field, most thought that a national research information database would provide important information on what other research had occurred in one's own and other related fields.

In line with this, a number of participants raised the issue of inclusivity, including the need for the NRIS to include the research work of Master's and PhD students, and for ways to be found to include research work that is not funded by government.

1.2 Assist in building research projects and ideas

Participants saw value in being able to access information on previous research in order to draw from it and help build their own research projects and generate new research ideas, without having to 'start from scratch'. It was also thought a national research information database would help them identify what had already been done, where that knowledge could be built on, and where the knowledge gaps were that could be investigated further. It would also help them identify what lines of enquiry had or were currently being funded in their field, and by whom.

1.3 Assist in building research partnerships and collaborations

A national research information database would provide information on who was active in particular fields and help Māori researchers and Māori research organisations/institutions identify possible partnerships for collaboration and support the building of wider research relationships.

1.4 Assist in supporting new and emerging Māori researchers

Access to research information would be particularly important for new and emerging Māori researchers.

2. The Data Conceptual Model

How well do you think the model represents Māori research?

2.1 The Level 1 Data Conceptual Model does not represent Māori research

There was a general consensus that the level 1 model does not adequately represent Māori research or Māori values in a number of ways. Many of the important relationships in Māori research processes were not represented, with the process instead representing a more individualistic approach to research. The model also reflects the current top-down, one-way approach to research with the funder at the top. While this enables the tracking of investment flows and outputs through the system, it is not representative of Māori values which emphasise a whole-of-system approach. It was thus generally agreed that the current model was limited in scope and in need of further conceptual work.

Responding to the limitations in the level 1 model, participants suggested a number of ways in which it might be reconceptualised to better represent Māori research relationship processes and values.

2.1.1 Māori research relationship processes:

- The model needs to include linkages between the research community and end-users and Māori applicants and researchers to reflect that projects are developed by and through these relationships as well as with end-user collaborators.
- The model needs to include linkages between collaborators and outputs to reflect the roles they play in developing research outputs, assessing their value and use, and approving their release – including collaborators' capacity to place embargoes on research outputs that do not adequately reflect their values, priorities, and aspirations.

2.1.2 Whole-of-system approach:

- The model needs to include a loop from the research community and end-users of research back to funders to connect the interests, priorities and values of those groups back to funding decisions and the strategic directions of different research funds.

2.2 The Level 2 Data Conceptual Model needs to be strengthened and extended

Many of the participants said that the current data specifications in level 2 of the model needed to be strengthened and extended. They want Māori researchers and communities accessing the database to be able to know: the relevance and contribution of research projects to Māori advancement; how much research funding is being invested in Māori-led projects, Māori advancement, and Māori researchers; who is reviewing research applications; and know more about the individual researchers involved to support capability building for Māori researchers.

In light of this, participants said they wanted to see the following data sets reflected in the model's data specifications. A number of these are addressed further in the report.

2.2.1 Project data specifications:

- Ability to view a comprehensive description of the project, including the methodology and data collection methods used;
- Does the project have or include a focus on Māori?
- Does the project benefit Māori, iwi, hapū, marae?
- Is the project Māori-led?

2.2.2 Researcher data specifications:

- Ethnicity to be a mandatory or conditionally mandatory element;
- Gender to be a mandatory or conditionally mandatory element, and inclusive of trans-gender and intersex researchers;
- Te reo capability to be a mandatory or conditionally mandatory element;
- Māori community engagement and memberships to be a mandatory or conditionally mandatory element.

2.2.3 Output data specifications:

- Is the output relevant to Māori? Does it have or include a focus on Māori?
- Does the output benefit Māori, iwi, hapū, marae?

2.2.4 Reviewer data specifications:

- Ethnicity to be a mandatory or conditionally mandatory element
- Gender to be a mandatory or conditionally mandatory element, and inclusive of trans-gender and intersex researchers;
- Discipline/field to be a mandatory or conditionally mandatory element;
- Country in which they work to be a mandatory or conditionally mandatory element.

Some participants also wanted to see data specifications developed to capture research outcomes and the dissemination of research outputs.

3. End user collaborator data specifications

In defining end user collaborations, including with iwi (using Statistics NZ iwi classifications) and Māori organisations/communities, the types of collaboration included in the model are: objective setting; active engagement during project; transfer of results of project. What other types of collaboration should be included?

Participants suggested a number of additional types of collaboration for inclusion in the model. Of particular note is the need to recognise that collaboration sometimes begins before, and continues beyond, the actual project itself; that a project captures just part of a research journey.

Additional types of collaboration included:

- **research relationship**, where a collaboration is built on a pre-existing relationship and/or continues beyond the formal end of the project into uptake/delivery of outcomes;
- **research partnership**, where a collaboration is comprehensive across a project;
- **co-creation**, where a project is developed and undertaken collectively;
- **capacity building**, where a collaboration is for or includes capacity building;
- **capability building**, where a collaboration is for or includes capability building;
- **workforce development**, where a collaboration is for or includes workforce development.

There was an overarching concern that collaboration may blur the power relations which exist between different groups and the need for collaborators to maintain their rangatiratanga (authority) to make decisions about and within research projects. One way this could be addressed is by requiring collaborating parties to sign-off on research funding applications to say the proposal has met their objectives, processes, and expectations, and for this to also be provided for in the model.

4. Project data specifications: benefits to iwi, hapū, marae, and rohe

Would it be useful to include data on ‘benefits to specific iwi, hapū, and/or marae’ (with all iwi, hapū, and marae listed) and ‘benefits to rohe’ (with all rohe listed)? How might rohe be categorised?

4.1 Benefits to iwi, hapū, and marae

In general, participants thought it would be useful to include such data in the model, including if a project would be beneficial to Māori more generally.

However, there was concern about how ‘benefit’ would be determined, and by whom, and that researchers could be likely to overstate the benefits of their research project. To address this, it was suggested that a claim of benefit be coupled with a statement from the particular iwi, hapū, and/or marae about the possible benefits of a research project to them.

Some suggested, that it might also be useful to include data that simply reports on whether a project has: 1) a focus on Māori, and particular iwi, hapū, and/or marae; 2) includes such a focus; or 3) does not have such as focus.

4.2 Benefits to rohe

Again, participants thought it would be useful to include data on the benefits of a research project to a particular rohe (or that a project has a focus on a particular rohe). Importantly, they thought that rohe needed to be classified by iwi or waka boundaries as opposed to other classifications such as council or DHB boundaries.

5. Project data specifications: Vision Mātauranga (VM)

5.1 VM themes

Would it be useful to record a project's alignment with the themes of VM?

In general, participants agreed it would be useful to include a project's alignment with VM themes in the model. It would show how much research funding is being invested into each theme, and into projects which have no alignment with any of the themes.

Its use, however, is limited by the possibility of researchers overstating a project's alignment to one or more of the VM themes.

Some participants noted that the VM policy needs to be reviewed and updated.

5.2 VM scale

Is the VM scale sufficient to record a project's likely benefit or usefulness to Māori? If not, what further data would need to be included?

In general, participants agreed that it would be useful to include a project's rating on the VM scale in the model. It gives an approximate indication of a project's likely benefit or usefulness to Māori.

Again, concerns were raised about its limitations given the capacity for researchers to overstate a project's VM rating. Some noted that the variables in the rating scale were also subjective which limited its usefulness as a measure.

As a consequence, participants agreed that while the VM scale is a useful guide, it is insufficient by itself to capture whether a project is likely to be of benefit or use to Māori end-users of research. To address this it will be important to be able to link data on VM rating with more specific data sets such as the ethnicity of researchers on a project team, whether a project is Māori-led, whether it involves collaboration with Māori, whether it has produced outputs in te reo Māori, and so on.

6. Researcher data specifications: iwi affiliations

The draft specifications request the iwi affiliation of researchers be reported. Should a maximum number of responses be set? If yes, what would be appropriate? Is there additional information you would advise collecting?

Participants felt strongly that there should be no maximum number of responses set. They wanted to be able to search for researchers they share whakapapa connections with, and to know the links between a project's researchers and iwi collaborators where this was applicable. It would also enable iwi organisations to search for and identify all of their members engaged in research work.

One participant noted that researchers should be encouraged to name those iwi they most closely identify with as identification also carries accountability to that iwi. It was reported that the census has five fields for iwi, with the majority of Māori stating up to three iwi. Less than 10 per cent identify with four or more iwi.

Some participants felt that it would be important to include hapū affiliations, as much of iwi-based research has a hapū focus. This would be relevant to include where the researcher is from the hapū who is leading or collaborating in the research.

One participant said it would be important to report Pacific researchers' whakapapa affiliations with all the different Pacific nations.

7. Output data specifications: te reo Māori

Is it important to know whether an output was in English, te reo Māori, or another language?

Participants strongly agreed it would be important to know whether an output was in te reo Māori, English, or another language, including Pacific languages. It would also be important to record whether the output was originally produced in te reo Māori or if it was a translation.

Having a database record of te reo Māori research outputs would be beneficial for a number of reasons. It would enable Māori researchers, research organisations and institutions, and Māori communities to know what outputs have been published in te reo, who produced them, and to track its connection to investment in the revitalisation and development of te reo Māori in general. At present, there are limited options for researchers to publish their outputs in te reo Māori. A database record would make this more transparent and help generate greater accountability for institutions and funders to support the production of te reo Māori research outputs.

It would also assist Māori researchers, research organisations and institutions, and Māori communities in assessing the value of research projects to Māori end-user audiences.

8. Output data specifications: specific Māori outputs

A number of specific Māori research outputs have been included. Some are integrated into 'equivalent' definitions while others are separated out. What approach is the most appropriate? Are the current descriptions/definitions complete or accurate? Is further detail needed for any outputs e.g. Waitangi Tribunal claim? What additional outputs are required to accurately reflect the diversity of outputs produced from research by Māori? Could some be usefully combined under a broader title?

8.1 Classification of Māori research outputs

Participants were pleased to see that MBIE is thinking more broadly about specific Māori outputs from Māori research. The mixed method approach to classifying Māori outputs was thought to be appropriate as some outputs are unique and need their own classification (such as hui and wānanga) but not all. Terminology in the table needed to align across disciplines so that there is consistency in how outputs are classified,⁴ strengthening accessibility in database

⁴ For example, Māori museum staff have been developing a Māori classification system or Māori thesaurus for use in their work.

searches. Classifications need to be clearly defined and user-friendly to assist with database entry.

A number of participants commented on the ‘artefact, object, craftwork’ classification and felt it was outdated and needed to be reworked.

Questions were also raised about the rules for entering outputs into the database. If outputs need to be entered into a singular category this would require some level of expertise, including direction from a project leader or researcher, which would take up researcher time.

8.2 Alignment with the PBRF

Classifications developed for the model need to inform and align with those used in the PBRF.

8.3 Waitangi Tribunal Claims outputs

In terms of outputs generated for Waitangi Tribunal Claims, it was suggested that this category focus on written outputs as there are a number of different outputs generated from the claims process including hui and wānanga.

8.4 Additional Māori research outputs

Some suggestions were made regarding the addition of further Māori research outputs, and these are highlighted in the table below.

Specific Māori research outputs table (draft)

Output name	Description
Artefact, Object, Craftwork Taonga	Original creative work that includes painting, sculpture, carvings, raranga, photographs, illustrations, taonga, and other created objects.
Hīkoi	Kaupapa driven; a walk or march with a set purpose and output.
Hui	A large gathering for the sharing of research insights.
Performance Art	Avant-garde or conceptual pieces of music, song, haka, waiata, kapa haka, dance, or theatre performed for an audience. It may be scripted or improvisational.
Traditional Oratory	Including whaikōrero, mōteatea (traditional chant), karanga, pao, and karakia.
Waitangi Tribunal Claim	Documentation and other written evidence gathered to support or make a Waitangi Tribunal claim.
Wānanga	Kaupapa driven (vision or clear purpose) event held as a knowledge generation process. Does not refer to a tertiary education institution.
Framework	Framework, model or tool
Māori community outputs	

9. Reviewer data specifications: ethnicity and iwi affiliations

Currently, if a reviewer is a researcher then ethnicity and iwi affiliations of those reviewing research funding applications are collected. Is it important to collect this information if the reviewer is not a researcher?

Participants agreed that the ethnicity and iwi affiliations (where applicable) of all reviewers need to be collected. They wanted to be able to know if Māori research applications were being reviewed by panels that included Māori, and if iwi-based or iwi-collaboration applications included people from those communities in the review process. It was felt to be an important accountability step back to project applicants.

A question was raised about the applicability of this to blind reviews of research applications.

10. Unique identifiers

What do you think about the use of unique identifiers, including for researchers, end user collaborators, reviewers of research applications, projects, and research outputs?

There was general agreement that the use of unique identifiers would be useful in being able to link different datasets in meaningful ways and enhance accessibility and transparency. It will be important to gain consent from different groups to have them identifiable via a unique identifier in the database, including iwi, hapū, and Māori community collaborators and end-users of research.

One participant also raised the important point that some Māori names are not typically well recognised by databases, and that names can change. Unique identifiers for individual researchers would thus need to be able to identify the person and be linked to/include all versions of their name so they are able to located by a database search.

11. Te Tiriti o Waitangi

How might we think about Te Tiriti o Waitangi in the context of the Data Conceptual Model?

11.1 Te Tiriti o Waitangi to be embedded in the Data Conceptual Model

Concerns were raised about the lack of Māori engagement in the initial stages of developing the Data Conceptual Model; where Te Tiriti o Waitangi could have informed its founding logic rather than being 'added in' down the track. Participants thought that Te Tiriti o Waitangi should be embedded in the model as it is developed and that this presents an exciting partnership opportunity.

11.2 Rangatiranga: Māori authority and control over access to their research

A key consideration is rangatiranga: that Māori retain authority and control over access to their research information and research findings and thus being able to determine what data gets shared in a public database and what is retained for their own use and dissemination.

11.3 Aggregation of data by Treaty partner

Another key consideration is that the data specifications in the Data Conceptual Model should enable the aggregation of research data by Treaty partner: the research conducted by each of the Treaty partners (who is conducting/leading the research); the research investment made to

each of the Treaty partners (the awarding of funding); and the focus or benefit of research to each of the Treaty partners (the purpose of a project and its outputs).

This would help ensure that the research information available in the national database supports the goals and aspirations of both the Crown and Māori. It would also provide transparency on where investment in research is being made and to what ends, and help reshape research investment decision-making in line with Te Tiriti o Waitangi.

In line with this, it was also suggested that the iwi-based data be aggregated annually by Statistics NZ and reported back to iwi.

12. Database management

How should data about Māori research be managed? How should Māori be involved in managing this data?

Participants advised that data on Māori research is a taonga that needs to be appropriately cared for and managed by Māori, according to Māori values to ensure such data would be collected, categorised/classified, stored, and used with integrity. There was thus a strong call for the establishment of a Māori data governance group and Māori data governance framework to inform the development of the Data Conceptual Model and the wider NRIS project in line with Māori values, consistent with a Treaty partnership approach. Importantly, the membership of this Māori governance group would need to reflect the diversity of the Māori research community.

This approach would help ensure that Te Tiriti o Waitangi is embedded in the Data Conceptual Model and the NRIS, and that Māori values in relation to data and data management are given expression. This accountability to Māori will be important in building the trust necessary for the overall success of the project, including buy-in from independent Māori and iwi research organisations and institutions.

Participants were particularly concerned that data is managed to ensure accessibility to research data by Māori, that is, that Māori research data is defined and categorised in ways that is meaningful to Māori. They were also particularly concerned that data is managed to enable Māori and iwi to restrict access to sensitive data, where, for example, permission would be required for access.

RECOMMENDATIONS

- That MBIE engage with Te Mana Raraunga, the Māori Data Sovereignty Network, to establish a Māori data governance group, and for this group to lead the development of a Māori data governance framework to inform the development of the Data Conceptual Model. Given MBIE has already begun to develop the Data Conceptual Model, this engagement is recommended as a priority action.
- That MBIE develops a Māori specific work plan for the Data Conceptual Model and that this work plan ensures the integration of Māori views into the model and provides for a strong working relationship with the Māori data governance group and/or Te Mana Raraunga.

- That MBIE consider calling a hui with Māori in the RS&I sector, with sufficient time and resources allocated, to discuss the Data Conceptual Model and the NRIS. The purpose of the hui would be two fold; to build Māori interest in their development, and to enable a wider collective conversation to be held. This would provide another level of information for MBIE.
- That the feedback with participants in this study be considered and worked in to the Data Conceptual Model.

INTERVIEW PARTICIPANTS

While individual contributions have been anonymised in this report, all interviewees agreed to be named.

Tiāho Limited thank the following for their time and expertise:

Interviewee	Role and organisation
Graham Allely	Research Office, Landcare Research
Puawai Cairns	Senior Curator Māori, Te Papa Tongarewa
Donna Cormack	Senior Researcher, Eru Pomare Māori Health Research Centre
Heather Gifford	Director, Whakauae Research
Associate Professor Maui Hudson	School of Māori and Indigenous Studies, University of Waikato; member of Te Mana Raraunga
Associate Professor Tahu Kukutai	National Institute of Demographic and Economic Analysis, University of Waikato; member of Te Mana Raraunga
Associate Professor Jenny Lee-Morgan	Deputy Director, Kotahi Research Institute, University of Waikato
Daniel Patrick	Executive Director, Ngā Pae o te Māramatanga
Professor Jacinta Ruru	Professor of Law, Otago University; Co-director, Ngā Pae o te Māramatanga
Mereana Selby	Tūmuaki, Te Wānanga o Raukawa
Dr Charlotte Severne	Assistant Vice-Chancellor Māori, Massey University
Associate Professor Jo Smith	Deputy Head of School, English, Film, Theatre and Media Studies, Faculty of Humanities and Social Sciences, Victoria University of Wellington; Reviewer, Humanities Panel, Marsden Fund, Royal Society of New Zealand
Associate Professor Alice Te Punga Somerville	School of Māori and Indigenous Studies, University of Waikato
Dr Adele Whyte	Marine scientist; CEO, Ngāti Kahungunu Iwi Incorporated
Jeanette Wikaira	Research Manager, Research Enterprise Office, University of Otago

APPENDIX 1:

MBIE Research, Science & Innovation (RS&I) Data Conceptual Model

Summary and questions for Māori engagement round

2017

The RS&I Data Conceptual Model

A long-term project of the Ministry of Business, Innovation and Employment (MBIE) is the building of a National Research Information System (NRIS). This system will house and link administrative data commonly referred to as research information that includes information about research such as: researchers and organisations conducting research; their funding sources; projects; outputs and knowledge exchange activities; collaborations including with end users of the research; and the use of their research outputs by end users and the research community. The NRIS will join up already collected research information to build a data map for the research system. It will not store information on research outcomes or about research content. The NRIS will be managed by MBIE and be available for public use.⁵

In centralising administrative data on research, science, and innovation activities, the purpose of the NRIS is to enable the aggregation of data and comparability across different parts of the system, improve the transparency and visibility of the system, and generate more evidence-based policy development. For researchers and research organisations in particular, the purpose of the NRIS is to assist with collaborations with other researchers and organisations, funders, and end users. It is proposed that the NRIS would also reduce transaction costs for researchers and research organisations as, in time, the reporting of administrative data would be made to one central location.

The RS&I Data Conceptual Model begins the process of building a national data system by signalling what data will be needed and working to develop a common set of data specifications to be collated and linked (shown on page 4). It will apply to all RS&I activities funded by government, and those activities undertaken in state sector organisations including Crown research institutes and tertiary education institutions. For other organisations, adoption of the model will be voluntary.

MBIE is wanting to ensure that the RS&I Data Conceptual Model aligns with the diversity of Māori research practices so that it is of use and benefit to Māori researchers, Māori research institutions and organisations, and collaborators and end users of Māori research outputs such as iwi and Māori organisations and community groups.

Engagement with Māori

⁵ For other examples of similar databases see Research Councils UK gateway to research www.rcuk.ac.uk and the Netherlands research portal www.researchportal.be/en/about.html

MBIE is seeking feedback on the conceptual model from Māori in the sector across the data specifications in general, and on key areas in particular including end user collaborations, researcher iwi affiliations, Māori research output types, and the alignment of projects with the government's Vision Mātauranga policy.

MBIE has contracted Tīaho Ltd to engage with Māori researchers and scientists working in the RS&I sector. This will involve identifying and talking with up to 20 people across the breadth of the sector, and presenting a written report summarising feedback from interviews and workshops on the topics raised, with recommended actions and approaches for MBIE implementation in the RS&I Data Conceptual Model where appropriate.

The work of Tīaho Ltd is supported by a Rōpū Taumata to ensure the framing, process of engagement, and the analysis and presentation of findings is consistent with a kaupapa and tikanga-based approach and gives expression to Te Tiriti o Waitangi.

Key questions for Māori participants

- How might a National Research Information System support Māori research activities? What purpose would it have for your work?
- How well do you think the model represents Māori research? Is it important to know whether an output was in English, te reo Māori, or another language?
- The draft specifications request the iwi affiliation of researchers be reported. Should a maximum number of responses be set? If yes, what would be appropriate? Is there additional information you would advise collecting?
- In defining 'end user collaborations',⁶ including with iwi (using Statistics NZ iwi classifications) and Māori organisations/communities, the types of collaboration included in the model are: objective setting; active engagement during project; transfer of results of project. What other types of collaboration should be included?
- A number of specific Māori research outputs have been included (please see the table on page 3). Some are integrated into 'equivalent' definitions while others are separated out. What approach is the most appropriate? Are the current descriptions/definitions complete or accurate? Is further detail needed for any outputs e.g. Waitangi Tribunal claim? What additional outputs are required to accurately reflect the diversity of outputs produced from research by Māori? Could some be usefully combined under a broader title?
- What do you think about the use of unique identifiers, including for researchers, end user collaborators, reviewers of research applications, projects, and research outputs?

⁶ Collaboration in this context is drawn from the OECD definition: *Active participation in joint research, development and innovation projects with other organisations but excludes pure contracting out of work. It can involve the joint development of new products, processes or other innovations with customers, suppliers as well as horizontal work with other enterprises or public research organisations.* OECD (2011).

- What further data specifications need to be included in the conceptual model for it to be of the most use to Māori researchers, Māori research institutions and organisations, and our communities?
 - o Would it be useful to include data on ‘benefits to specific iwi, hapū, and/or marae’ (with all iwi, hapū, and marae listed) and ‘benefits to rohe’ (with all rohe listed)? How might rohe be categorised?
 - o Currently, if a reviewer is a researcher then ethnicity and iwi affiliations of those reviewing research funding applications is collected. Is it important to collect this information if the reviewer is not a researcher?
 - o Would it be useful to record a project’s alignment with the themes of Vision Mātauranga (VM)?⁷
 - o Is the VM scale sufficient to record a project’s likely benefit or usefulness to Māori?⁸ If not, what further data would be need to be included?
- How might we think about Te Tiriti o Waitangi in the context of the data conceptual model?
- How should data about Māori research be managed? How should Māori be involved in managing this data?

Specific Māori research outputs table (draft)

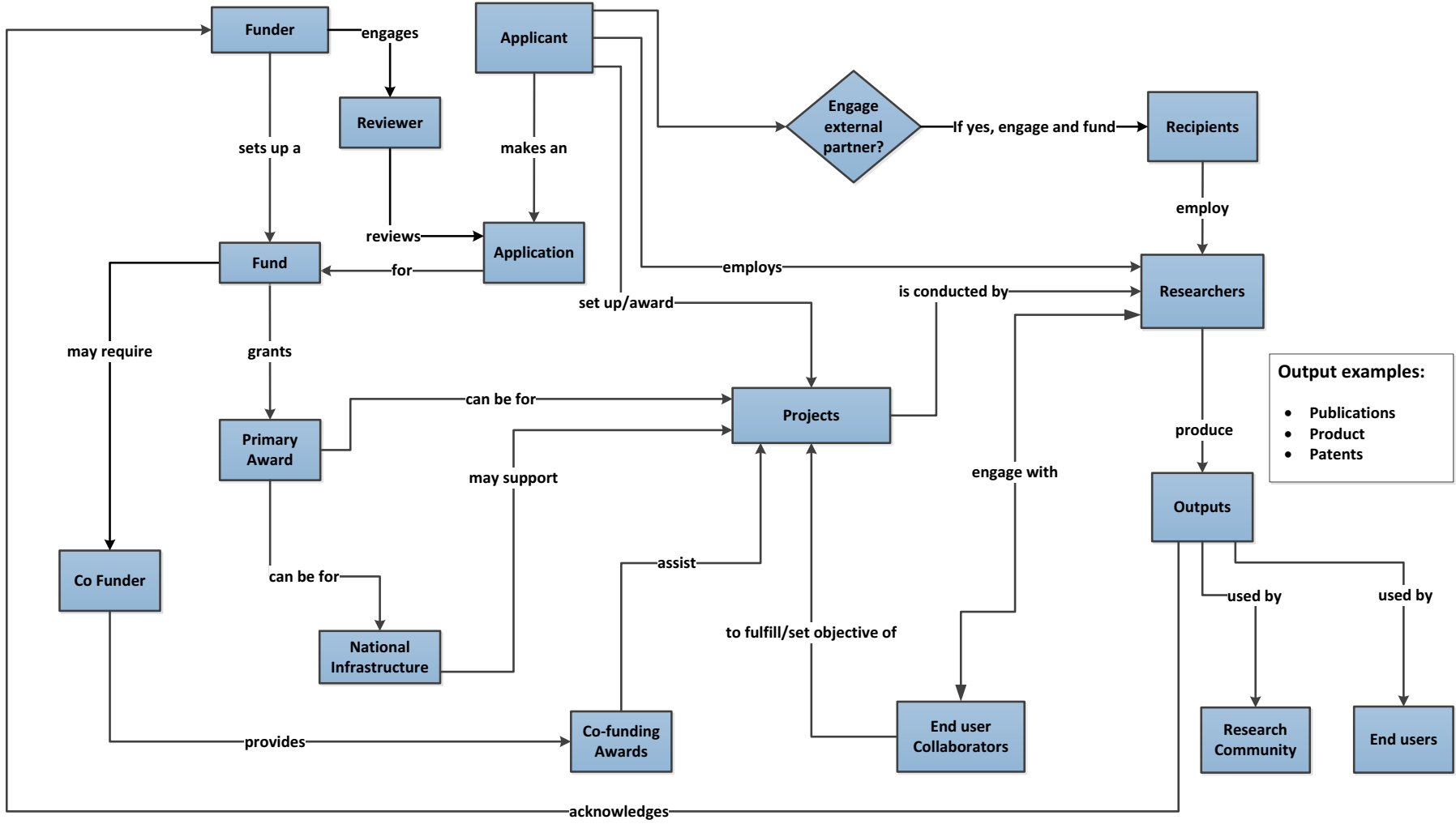
Output name	Description
Artefact, Object, Craftwork	Original creative work that includes painting, sculpture, carvings, photographs, illustrations, taonga, and other created objects.
Hīkoi	Kaupapa driven; a walk or march with a set purpose and output.
Hui	A large gathering for the sharing of research insights.
Performance Art	Avant-garde or conceptual pieces of music, song, haka, waiata, kapa haka, dance, or theatre performed for an audience. It may be scripted or improvisational.
Traditional Oratory	Including whaikōrero, mōteatea (traditional chant), and karakia.

⁷ The four themes of Vision Mātauranga are: indigenous innovation; taiao/environment; hauora/health; and mātauranga.

⁸ Vision Mātauranga is considered on a scale of 1-5: VM1 is research not relevant to Māori; VM2 is research not involving Māori; VM3 is research involving Māori; VM4 is Māori centred research; and VM5 is kaupapa Māori research.

Waitangi Tribunal Claim	Documentation and other evidence gathered to support or make a Waitangi Tribunal claim.
Wānanga	Kaupapa driven (vision or clear purpose) event held as a knowledge generation process. Does not refer to a tertiary education institution.

NRIS Level 1 Conceptual Data Model – Core entities and concepts



- Output examples:**
- Publications
 - Product
 - Patents

NRIS Level 2 Conceptual Data Model – Core entities and elements

M = mandatory CM = conditionally mandatory O = optional

