

Strategic Science Investment Fund: New Zealand Data Science Research Programmes 2019 Funding Round Questions and Answers

Excellence

What do you mean by team excellence?

Team excellence refers to the skills and knowledge the team has to deliver the activities in your proposal. It includes leadership expertise, experience and relevant collaborations. An Investment Goal is to develop data science capability in New Zealand so excellent early career researchers working on novel ideas should be considered as part of the team. The intention of the long term contract is to encourage the development of new capability.

What do you mean by transformative?

You should consider transformative research under excellence and impact. Excellent research will enable exciting new and original avenues of research or lead to radically new technologies. Impactful research will help solve key problems for New Zealand.

Collaboration

Do you expect collaboration between the Data Science Research Programmes?

Collaboration between programmes is not a requirement; however, if it enhances research excellence, it would be reasonable to expect some collaboration.

MBIE will facilitate an annual workshop with the Programme science leaders to discuss and share progress on their work. At the core of this investment we want to encourage community building and to fund excellent science so we encourage collaboration where it adds value.

If a Programme has international collaborators, what are the requirements for funding and eligibility to access and use data?

The assessment panel will assess the international collaborations in the context of the research being proposed and the Investment Goals, one of which is to foster and grow international collaborations. Applicants should consider how international collaboration can help grow New Zealand data science research capability.

Funding may be used to bring key international researchers to New Zealand or to provide key/early researchers with international experience if it fits within the Investment Goals.

It is common practice for international collaborators to provide an in-kind contribution to the New Zealand

research organisation. Contributions (cash and in kind) are welcome, but not mandatory.

International collaborations may be informal or formal (subcontracts). If you have international collaborators, all parties should be able to access any data required for the Research Programme.

Australians are investing heavily in data science research and data infrastructure; can we collaborate with them?

We are definitely interested in opportunities with Australian and other international data science researchers. Explain in your proposal the value of collaboration with international researchers and why you have chosen your proposed collaborator. One of the Investment Goals is to leverage collaboration.

Growing Capability

Is this investment about data science research or is it about the domain focus?

This is an investment to lift capability in data science; therefore the data science aspects of your proposal are very important. Our aim is to lift New Zealand data science capability so that we are leading the way internationally with data science knowledge, catalysed by real world problems. We are interested in the application of data science in the domain(s) you describe, but it is the development of data science, not the solution provided by its application that needs to be your main focus.

Your proposal should cover:

- > how the research is positioned in the data science context,
- > the novelty of the work,
- > how the work is inspired by real world problems, and
- > how it will contribute to solving these problems.

Data Management, Open Access, Licensing and Intellectual Property

Is there guidance around open access and licencing?

We encourage Programmes to make information available for others to use. This includes research results, input data and methodologies. Your approach to open science, intellectual property and data management will be covered in your application. These requirements are outlined in the Call for Proposals on Page 8, *Meeting the New Zealand Government Data Requirements*.

Is there guidance around Data Management and Intellectual Property?

Successful applicants will be required to include an Intellectual Property Plan and a Data Management Plan in the Investment Contract. MBIE will work with you to develop programme specific arrangements. You should refer to the Investment Contract Template which complies with MBIE's policies and practices and New Zealand Government Data Requirements.

What is the expectation about international Intellectual Property?

We expect your proposal to show how you will manage Intellectual Property (IP), including any arrangements you have made with your collaborators. Agreed conditions between collaborators must be included in the IP Plan that will be included as a Schedule to the Investment Contract.

Can we collect new data?

Yes. However, you would have to show the data collection is important to implement the Investment Goals. It cannot be a goal in itself, rather you would need to demonstrate it is required to develop data science capability.

How much of the investment can be on preparing better data?

There is no set limit but it should not be the largest part of your work. Where extensive data preparation is required you need to explain how it contributes to the overall aim of your research and how it meets the investment goals.

End Users

Is end user engagement expected?

Yes, end user engagement is expected. End users are critical to help define the real world problem you are addressing and to achieve future impacts from your data science. MBIE will work with successful applicants to develop an Outcomes and Impacts framework that specifies the impacts sought from the programme. The Call for Proposals provides a high level Outcomes and Impacts framework for the portfolio of investments.

Are you interested in end users using the data science?

Yes, but this is not the primary focus of the investment which seeks to build capability in advanced data science research. How end users will use data science can influence your approach to ensure the right science is developed to address specific problems or challenges that users face.

Eligibility and Application

To be eligible, the applicant must be a New Zealand-based legal entity with established research capability. How will you define research capability?

In most cases, it will be clear that the applicant has established research capability (e.g., Universities, Crown Research Institutes and Independent Research Organisations). Other types of organisations will have evidence of their research capability (e.g., publications in peer-reviewed academic journals). To support your

application, you are welcome to upload a summary of your entity's research capability which demonstrates that your organisation has sufficient internal capability for carrying out research. Please refer to the *Other Information* section in our Information Management System (IMS).

Eligibility criteria apply to the Applicant, not organisations that you may be collaborating with.

Must all research be done in New Zealand?

No, not all research needs to be done in New Zealand. However the eligibility criteria states research must be primarily based in New Zealand unless MBIE agrees there are compelling reasons not to. Consideration needs to be given to the location of the research in light of the Investment Goals particularly the goal to grow capability in the New Zealand Research community.

Can a joint application be made?

No. An applicant must be a single entity. If you have a collaboration or memorandum of understanding or other agreement with another entity you may supply this background by uploading the relevant documentation in the *Other Information* section.

If there are similar proposals in a particular area, will MBIE ask the different teams to work up a combined proposal rather than have numerous competing proposals?

Each proposal will stand on its own and will not be considered in combination with other proposals. MBIE will not be involved in "working up" competing proposals.

Assessment

Will the assessors be the same as the last call?

It is likely the international assessors will be the same. The number of assessors may be increased depending on the number of proposals we receive.

When will you name the assessors?

We will finalise the assessors following Registration, when we know the likely number of proposals. Their names will be posted on our website as soon as their participation is confirmed.

How many assessors will be New Zealanders?

There will be New Zealand assessors. The final number will be determined by the number of proposals we receive. MBIE will chair the panel and will be a non-voting member.

Will the Assessment Guidelines be shared?

Yes. Assessment Guidelines will be published before Registration closes.

How will you get a mix of proposals across domains?

Assessors will consider the quality of proposals and portfolio balance. More than one proposal may be funded in any domain. The assessors will recommend both the proposals and the portfolio mix to MBIE. This process is outlined in the Call for Proposals.

Vision Mātauranga

Vision Mātauranga appears to be an overriding policy. Te Ao Māori is mentioned as a potential research focus area. How do they fit together?

All proposals should consider how they give effect to the Vision Mātauranga policy. A proposal that focuses on Te Ao Māori and Data Science should implement the Vision Mātauranga policy in a way that achieves its research goals.

How will Vision Mātauranga be assessed?

A Vision Mātauranga expert or experts will provide advice to both the assessment panel and to MBIE. The process is outlined in the Call for Proposals and Assessment Guidelines.

What is the difference between the Vision Mātauranga experts and assessors?

Panel members (assessors) have been selected primarily for data science research expertise and will review the proposals and provide recommendations to MBIE. The Vision Mātauranga experts will advise the panel on the relevance of Vision Mātauranga and how well it has been addressed in the individual proposals. This advice will be considered in panel discussion. The number of Vision Mātauranga experts will be finalised once we know how many proposals there are, and once their participation is confirmed their names will be posted on the MBIE website.

Decision Making

Who makes the final decision?

The final investment decision is made by the Deputy Chief Executive (DCE), of the Labour, Science and Enterprise Group of MBIE, taking into consideration recommendations from the assessors and advice from the Vision Mātauranga experts.

How will MBIE ensure that the investments made are complementary with other similar investment streams within MBIE and/or other research funding agencies in NZ?

Our approach would be to avoid duplication of research. MBIE is knowledgeable across its investment portfolio and will look at synergies including Endeavour, Science Challenges, Strategic Science Investment Fund, and Regional Research Institutes. MBIE also has extensive links with Government departments and an awareness of their research investments. We would also expect researchers to have knowledge of research being funded within their field.

Contract Term and KPIs

What is the length of the contract term?

The contract term is seven years. MBIE recognises that research may evolve over that time. You can describe the programme in greater detail for years one through to

three, and for the later years provide a higher-level outline of research that demonstrates your strategic direction, indicative research priorities and a pathway to implementation.

KPI expectations look very high level across the years – can they change?

KPIs should be written at a level that ideally enables them to remain unchanged over the duration of the Programme. There will be flexibility in how they are worded and we will work with you to develop them. We appreciate that research may evolve in unexpected ways resulting in some KPIs no longer being meaningful. If so, they may change over the life of the programme. KPIs however cannot be changed simply because they are not being met.

Will funding be for the government financial year?

Yes. Funding will be for the July/June financial year. If your contract starts during the year funds will be pro-rated.

Singapore Research Programme (an investment alongside but separate to the New Zealand Research Data Science Investment)

What are the reasons to have a collaborative data science research programme with Singapore?

- > Singapore is a developed economy which is geographically and politically close to New Zealand and both Governments wish to deepen the relationship.
- > We have identified two broad research topics of mutual interest, Food and Data Science.
- > Singapore has significant expertise and is internationally renowned in specific fields of data science.

How do we get involved with the Singapore Programme?

MBIE will issue an Expression of Interest to select researchers to be involved in preliminary discussions. A Call for Proposals for the joint Singapore Research Programme will be issued later in the year

When we respond to the Expression of Interest, would it be an advantage to have a level of collaboration with Singapore already?

You do not need to have an existing collaboration with Singapore. We want researchers who can establish and maintain a long term collaboration with Singapore.

Do you know what data science topics Singapore is interested in?

We are yet to scope topics of interest. That is the purpose of the Expressions of Interest.

Will the Call for Proposals for the Singapore Research Programme be similar to the New Zealand Data Science Research Programmes?

We need to work with MBIE's Singapore partners to determine the context of the Call for Proposals. We expect the Investment Goals will be similar however we will be working in collaboration with the Singapore partner and their investment goals.

The current Call for Proposals eligibility is for New Zealand based legal entities. Will this be the same for Singapore?

Yes, it will be on the same basis. Singapore will fund the Singapore partner(s) and New Zealand will fund the New Zealand partner(s).

Do we know the total funding available?

We have funds allocated, but there is flexibility about the total investment as it depends on the level of investment made by Singapore. It will be one of the biggest international collaborations we have done to date.

Is this to facilitate a partnership or to do research?

The investment is to carry out research, we are not just funding facilitation between Singapore and New Zealand.

Should I build a Singapore collaboration into my New Zealand Data Science Research Programme application?

We are interested in opportunities with all international data science researchers. You are welcome to include Singapore, but there is no obligation to do so and it will not prejudice your application either way. Explain in your proposal the value of collaboration with international researchers and why you have chosen your proposed collaborator. One of the Investment Goals is to leverage collaboration. However the specific Joint Programme with Singapore is a separate investment.

Other Data Science Research Funding Opportunities

What other funding opportunities will there be for Data Science Research?

The Data Science Research Programmes investment and the Singapore New Zealand Research Programmes are the only MBIE investments that are targeted specifically at data science research. Data science researchers are eligible for funding support via other contestable funds such as Endeavour and Marsden.