

From: no-reply@mbie.govt.nz
To: [Research, Science and Innovation Strategy Secretariat](#)
Subject: Draft Research, Science and Innovation Strategy submission
Date: Sunday, 10 November 2019 8:55:55 a.m.
Attachments: [Online-submission-form-uploadsdraft-research-science-and-innovation-strategy-submissionsubmission-form-research-science-and-innovation-strategy-MWC-ECSG-Final-1.docx](#)

Submission on Draft Research, Science and Innovation Strategy received:

Are you making your submission as an individual, or on behalf of an organisation?

Organisation

Name

Dr Kate Lee

Name of organisation or institutional affiliation

Maurice Wilkins Centre

Role within organisation

Chair of the Early Career Steering Group Committee

Email address (in case we would like to follow up with you further about your submission)

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Which of the below areas do you feel represents your perspective as a submitter? (Please select all that apply)

If you selected other, please specify here:

Gender

Ethnicity

Name of organisation on whose behalf you are submitting, if different to the organisation named above

In which sector does your organisation operate: (Please select all that apply)

Research

If you selected other, please specify here:

How large is your organisation (in number of full-time-equivalent employees)?

Please indicate if you would like some or all of the information you provide in your submission kept in confidence, and if so which information.

Please upload your submission document here

submission-form-research-science-and-innovation-strategy-MWC-ECSG-Final-1.docx - [Download File](#)



Research, Science and Innovation Strategy Submission form

The Government is developing a Research, Science and Innovation (RSI) Strategy to set out our vision for RSI in New Zealand and its role in delivering a productive, sustainable, and inclusive future.

We are keen to hear the views of New Zealanders on the draft Strategy so that we can get a better understanding of what our country needs from RSI. We also are looking for feedback on how we can take action to ensure New Zealand's RSI system is optimised for success. These views will inform the direction of Government investment in RSI and the research and innovation areas for us to focus on as a country, as well as help us understand the challenges we need to overcome.

We encourage anyone with an interest to make a written submission.

How to have a say

We have included a number of questions in the draft RSI Strategy document to highlight issues on which we would like further input. We encourage you to use these questions as a guide when submitting your feedback.

This document provides a template for you to provide your answers. Please upload the completed document using our [online submission page](#).

You do not have to fill out every section – we welcome submissions on some or all of the questions.

The closing date for submissions is 10 November 2019.

After the consultation period finishes, we will analyse the submissions received and incorporate the feedback in the final version of the strategy.

Confidentiality

Please note: All information you provide to MBIE in your submission could be subject to release under the Official Information Act. This includes personal details such as your name or email address, as well as your responses to the questions. MBIE generally releases the information it holds from consultation when requested, and will sometimes publish it by making it available on the MBIE website.

If you do not want some or all the information you provide as part of this consultation to be made public, please let us know when you upload your submission. This does not guarantee that we will not release this information as we may be required to by law. It does mean that we will contact you if we are considering releasing information that you have asked that we keep in confidence, and we will take your reasons for seeking confidentiality into account when making a decision on whether to release it.

If you do not specify that you would prefer that information you provide is kept in confidence, your submission will be made public. While we will do our best to let you know that we plan to publish your submission before we do so, we cannot guarantee that we will be able to do this.

Contribution of Research, Science and Innovation

This strategy is about New Zealand's Research, Science and Innovation (RSI) at a high-level. Its aim is to identify challenges and opportunities that will have the broadest impact on our research and innovation activities. For this reason, it mentions few specific areas or sectors of research and innovation. For this draft version of the Strategy, we are keen to hear from researchers, innovators, businesses, and providers of public services on what the RSI system could be doing to accelerate progress on Government's priorities.

Question 1: Where can the RSI system make the greatest contribution towards the transition to a clean, green, carbon-neutral New Zealand?

Question 2: Where else do you see it making a major contribution?

Question 3: What else could else the RSI system be doing to accelerate the progress towards the Government's priorities*?

Please type your submission below. If applicable, please indicate the question(s) to which you are responding.

We have chosen not to respond to Q1, 2 and 3.

Researching and innovating towards the frontier

- Question 4:** Do you agree that the RSI Strategy should be focused on innovation at the “frontier” (creating new knowledge) rather than behind the frontier (using existing knowledge to improve the ways we do things)?
- Question 5:** In which research and innovation areas does New Zealand have an ability to solve problems that nobody else in the world has solved? Why?
- Question 6:** In which areas does New Zealand have a unique opportunity to become a world leader? Why?
- Question 7:** What do you consider to be the unique opportunities or advantages available to the RSI system in New Zealand?
- Question 8:** What RSI challenges are unique to New Zealand, that New Zealand is the only country likely to address?
- Question 9:** What are the challenges of innovating in the public sector? How do they differ from those in the private sector?

Please type your submission below. If applicable, please indicate the question(s) to which you are responding.

We have chosen not to respond to Q4, 5, 6, 7, 8 and 9.

PROACTIVELY RELEASED

Our key challenge – Connectivity

Question 10: Do you agree that a key challenge for the RSI system is enabling stronger connections? Why or why not?

Please type your submission below.

We have chosen not to respond to Q10

PROACTIVELY RELEASED

Guiding Policy – Excellence

- Question 11:** Do you agree with the definition of excellence presented here as the best thing possible in its context? Why or why not?
- Question 12:** How can we achieve diversity within our research workforce? What are the current barriers preventing a diverse range of talent from thriving in the RSI system?
- Question 13:** Do you agree that excellence must be seen in a global context, and draw from the best technology, people, and ideas internationally? Why or why not?
- Question 14:** Do you agree that excellence is strengthened by stronger connections?

Please type your submission below. If applicable, please indicate the question(s) to which you are responding.

Q11: We believe the definition of Research Excellence should go beyond simply counting publications and Impact Factors. It is widely recognised that the current measures of Excellence have resulted in an exploitative industry of publishers profiting from publicly funded activities—exemplified by the ever-increasing volumes of solicitations from fake or predatory journals filling our inboxes.

Dissemination of research in the future should encompass more ‘open source’ formats and include communication with both scientific and non-scientific audiences. Excellence should be judged by the quality of the research and its reproducibility, collaboration over competition, and ongoing engagement with stakeholders (often the public). Excellence is striving to both further our understanding of nature and contributing to ‘classic’ measurable impacts, such as directly linking medical or technological advancement and producing quality publications. The current system often presses grant applicants to ‘over-sell’ the potential of their research to have tangible translational impacts in the short term, which we feel is disingenuous and underappreciates the value of fundamental research.

In terms of defining Excellence in a PBRF context, the global approach to define Excellence taken by the PBRF assessment is inadequate for considering the different examples of Excellence demonstrated in different disciplines and in different types of research. Even within biomedical research, some studies are time-consuming high man-power efforts whilst others can be carried out relatively simple. Both may have equal merit and impact but one will yield fewer research outputs over a given time. Systems which judge researcher Excellence based on counting outputs will limit our ability to take on more technically challenging research. The PBRF system should in general be replaced with something less time-consuming for staff—often the PBRF staff put a lot of time into the evaluation process, but do not receive commensurate benefits from the scheme. Any future evaluation scheme should be less divisive in judging the worth of early career researchers. We have also observed instance of short (1 year) Postdoctoral contracts being offered to people likely to score a C(NE)

grade, with no further support once the University 'clips-the-ticket' for a further 6 years. If PBRF were to continue, a better system might be aimed at assessment of whole groups or departments, i.e. considering the quality of research outputs overall, number of postgrad students, total research FTEs, staff to student ratios (students do better with more Postdoctoral Fellow in the research group), the amount and quality of collaborations outside of the department/institution/country etc.

Q12: Aotearoa New Zealand is a cultural melting-pot, with a rich diversity of individuals who come here to study from all over the world. The challenge is to retaining this talent in NZ, after they graduate with their postgraduate and/or doctoral qualifications and not losing them to overseas opportunities due to lack of industry jobs in NZ, visa restrictions, and higher salaries overseas. Grant applications are also highly competitive and limited to the "lifespan" category you're placed in as an early career researcher. The limited options for career progression, and the disheartening reality of poor job security, are major barriers to retaining a diverse array of talented researchers.

The "publish or perish" problem breeds research practices that may lack robust, reproducible data just for the sake of getting a publication. Poor quality research directly undermines future follow-up research (often internationally), which wastes time and resources. This cycle self-perpetuates itself and is insidious of the system and how it currently rewards quantity over quality. This problem is certainly not unique to NZ, but should be considered in how we can potentially pioneer new ways of reward and support to our scientists and their contributions within the NZ system. There have been countless times where we have lost researchers with decades of world-class research experience who leave and take their knowledge and expertise with them, and these staff are invaluable towards mentoring and developing new talent here. The current system under recognises the benefits of continuity and knowledge transfer between Early to Mid-Career researchers.

A modern day, diverse workforce encompassing those from different ethnic backgrounds and those with carer responsibilities (well known to hinder women), will require several changes to our current systems:

- Not just more flexible work hours (academia can often provide this) but a more flexible career path. Allowances for those with family commitments to account for longer times to amass a CV with the hallmarks of attainment such as papers, students, and funding etc. This could be reflected better in career development grants, which currently have time limits that don't consider time actually spent as a full-time researcher (the recent changes to Rutherford Discovery Fellowship are a welcome change). Also, recognition that people with carer responsibilities or cultural/community time commitments are not able to work 60h/week when working full time and therefore may be out-competed by someone who can. NZ often lags in international trends, but flexible work hours, and flexible working locations (such as working from home when lab work isn't the bulk of your work load) etc, are becoming more mainstream internationally, and should be adopted

in NZ more openly. This is also a strategy to reduce carbon emissions due to long commuting distances and times, particularly within urban locations such as Auckland. Flexibility could also be better worked into grants under HR considerations, e.g. contract time extensions for any extended period of leave (parental or otherwise) of key personnel. The efforts of the RSNZ to allow an extra 2 years for each child for applying for career development grants is applauded as it recognises the impact of having children beyond just the time taken away from work on parental leave. In fact, this model should be adopted by all funders and advertised more widely.

- Mentoring is also key for improving diversity. Providing career advice and day to day support to those who may not have a mentor or someone 'like' them as a role model in the industry is vital during the stressful early career stage. Research shows that women who receive mentoring early in their career are more likely to be successful (<https://doi.org/10.1073/pnas.1613117114>)
- The early career researchers in NZ already represent an increased diversity compared to the established mid-career and senior researchers. Providing more support for existing researchers at all career levels to both reward excellence, provide opportunities to demonstrate excellence and support to allow development of excellence are all key (see Q 19).
- The other obvious moves are to increase diversity in speaker line-ups, panel discussions, grant reviewers, grant awardees, committees, publications etc. Compulsory diversity education must also be mandatory for all grant review committees. Blinding of grant committees is also potential mechanism against bias, however in such a small research community where senior researchers often know all the other people working in and around their field, this may be ineffective.
- As a funder, the MBIE can work requirements for measures that encourage diversity into its funding systems and enforce an expectation that funding recipient organisations also adhere to these measures. An expectation that all funding recipient organisations adhere to minimum requirements such as diversity, discrimination and bullying education compulsory for all staff (new starters) with refreshers for anyone moving into a position of management or involved in hiring/career advancement decisions.
- The entire Science and Education system needs to be more pragmatic in developing group-up approaches to encourage better inclusion of more diverse members of society. The positive impacts of community engagement and outreach initiative are often less valued than publications in 'high-impact' journals. Often researchers excel at one or other of these aspects. We need to develop team strategies to bridge these gaps.

The major NZ universities currently have some policies surrounding diversity and gender bias; however, our membership sees, in general, that these policies are not well embedded in the university systems and therefore are ineffective.

Q13: Research excellence in NZ should absolutely be assessed against the rest of the

world, whilst also recognising that we are a small nation with only a few research institutions. However, that gives us the edge to do things differently, be more interconnected (especially industry and academia), and perhaps re-structure the research funding landscape in a way that isn't possible for larger countries. Research budget per capita in NZ (1.34 in 2017) is shamefully below OECD average (2.37 in 2017). If the MBIE wishes to see NZ to perform on the global stage, the government will have to provide substantially increased funding to realise the potential of its RSI workforce. We should be able to waste less time trying to obtain funding and more time researching and communicating knowledge.

Q14: There is a body of research looking at the value of collaboration; between institutes, between disciplines and also between countries. Although difficult to measure, most studies have indicated collaboration improves quality of research. It is also clear from many career advice sessions we have run over the years that senior academics believe collaboration helped to enhance their own work early in their career. This is a feature determining career excellence that we hear time and time again. Attending conferences and networking events allows us to meet those outside our field and institutions and build the connections that will form the basis of new and future collaborations. For early career researchers these connections are independent of our supervisors and mentors and allow us to forge new independent research ideas.

Building more conference/or networking opportunities into career development awards and fellowships can only be beneficial.

Encouraging genuine collaborative research can be challenging. Too often 'token' collaborators are added to increase the chances of grant success. Additionally, many prolific collaborators, many with very successful careers, ultimately under-contribute, due to lack of free time. Unfortunately, these cases can prevent more junior, perhaps equally capable, researchers from establishing new collaborations.

Guiding Policy – Impact

Question 15: How can we improve the way we measure the impact of research?

Please type your submission below. If applicable, please indicate the question(s) to which you are responding.

We have chosen not to respond to Q15

PROACTIVELY RELEASED

Guiding Policy – Connections

Question 16: Where do you think weak connections currently exist, and what are the barriers to connections at present?

Question 17: What actions will stimulate more connectivity between parts of the RSI system?

Question 18: How could we improve connections between people within the RSI system and people outside it, including users of innovation, and international experts, business communities, and markets?

Please type your submission below. If applicable, please indicate the question(s) to which you are responding.

We have chosen not to respond to Q16, 17 and 18

Actions – Making New Zealand a Magnet for Talent

- Question 19:** How can we better nurture and grow emerging researchers within New Zealand and offer stable career pathways to retain young talent in New Zealand?
- Question 20:** How could we attract people with unique skills and experience from overseas to New Zealand?
- Question 21:** What changes could be made to support career stability for researchers in New Zealand? What would be the advantages and disadvantages of these approaches?
- Question 22:** Do you agree with the initiatives proposed in the Strategy to support and attract talented researchers and innovators? Are any changes needed for these initiatives to be successful? Are there any other initiatives needed to achieve these objectives?

Please type your submission below. If applicable, please indicate the question(s) to which you are responding.

Q19:

Researchers are drawn towards and retained by workplaces that provide facilities to carry out research using the best available tools and latest technologies. They will also value a collegial supportive working environment with opportunities to develop their own research paths.

Providing career development and stability for the RSI workforce.

There needs to be an assessment across government RSI funding to support career pathways for researchers and prevent 'leakage' in the system.

There are several career development grants provided by the RSNZ and the HRC. However, these grants are limited in number and each holds a limitation in terms of career stage (mainly assessed temporally).

Too often the grants seem to be awarded to applicants outside of the stated scope for the Fellowships. For example, Rutherford Discovery Fellowship are stated to help attract and retain researchers while they establish a track-record to become competitive in their careers. However, every year several RDF Fellowships are awarded to Senior Lectures and Associate Professors—people who, although clearly excellent researchers, are unlikely to give up their careers to move offshore. An RDF category aimed specifically at non-tenured (i.e. Postdocs and Research Fellow only) researchers would be very welcome.

Fellowship opportunities are needed that cover all stages of training to allow those who have different career paths and trajectories an opportunity to demonstrate their quality and make key contributions to NZ research.

- Fresh out of PhD or first few years postdoctoral research position with a project likely developed in collaboration with a mentor (definition of time

out of PhD needs to be careful as not all researchers enter a research career immediately post PhD and also needs to consider time taken out for personal/family reasons).

- o Excellent researchers in early career (definition of early career needs to be carefully thought out to prevent discrimination, perhaps those without permanent contracts or those that haven't held a grant as PI before)
- o Early/mid-career (can include lecturers but salary buy out may be limited)
- o Mid-career (aimed at the same people targeted by the discovery grants now).

Careful consideration needs to be taken on applicant salary. Career development grants that include only partial salary for a PI need to come with not just an expectation that the host organisation will top-up, but a requirement for them to do so. Funders also need to consider the size of the award as some research is costly and universities take large overheads from any salary component of a grant, leaving applicants with a difficult balance of providing enough staffing costs as well as enough money to carry out the research without relying on student labour. For example, the typical overheads on a \$300,000 Marsden Fast-Start grant leaves <\$50,000 per year for the applicant's research. Moreover, the total value of Marsden Fast-Start grants hasn't risen in line with inflation, whereas the cap on full Marsden grants was raised.

Recipients of prestigious fellowships and grants should be monitored beyond the time of the research contract to ascertain what determines future success or failure. The HRC First Grant includes no applicant salary and as such become very difficult to manage for persons being 100% employed to work on other research contracts. Essentially this grant can only be applied for by those already in a permanent academic position, although they are likely to have already obtained a grant as PI to get that position. In general, early career researchers are employed on 100% soft money, contracted to carry out research for a full 1.0 FTE. In academia, there is always a requirement to take on service roles, and it is also advisable to carry out some teaching if your aim is to get a permanent academic position in the future. It would therefore be great to build into some fellowship type grants a commitment from the academic institution (if the awardee is hosted by an academic institution) to contribute some % of salary to cover service and teaching time as this work is often done on the awardees 'own' time adding to stress.

Annual symposia/meetings should be encouraged to facilitate connectivity among awardees (who are the stars of the future RSI) to meet, learn and collaborate with their peers on a national scale. A Marsden Fast-Start meet-and-greet would be great.

The PhD machine

There are more students doing research PhDs than there are research jobs in NZ...by a huge margin.

Mechanisms which incentivise postgrad student recruitment and disincentivise

Comment [A1]: Great idea!

jobs for postdoctoral staff have generated a big hole in which investment is being lost. Research has shown that Postdoctoral student in labs with more early career researchers (postdocs) become better scientists. Revising funding systems to encourage better staff/student ratios and a more sensible number of PhD awards per year that will underpin our research workforce is absolutely key. Universities should be in the business of training young people to be make useful contributions to society through their working life. Wasting 3-4 years of highly specialised training on many individuals who will never use those skills is a massive waste of time and taxpayer's money. Not to mention the loss of these highly specific skills to a research team or the NZ RSI as a whole whenever a student or an early career researcher is forced to move out of research. As discussed below doctoral training programmes that involve some industry training should also be encouraged.

Training a research workforce for work outside of academia

Postdoctoral training should work as the nation's "stock" of STEM (science, technology, engineering, and math) workforce, and as a gateway to the research enterprise. In New Zealand there is clearly a lack of outlet for the trained early career researchers. Academic institutes cannot provide enough permanent employment and tenure to scholars, and industry does not have positions that match the higher qualifications. Therefore, the country fails to sustainably retain talents, and investment spent in training young researchers cannot be converted to academic or economic output.

In many other countries the university-industry linkage has become a popular and efficient way to enhance national and regional innovations. However, in NZ the connectivity between universities and industrial organisations are hindered by the absence of funding, insufficient channels of engagement, and lack of communication between the two sectors. The connectivity barrier may rise from the lack of an efficient platform to achieve characteristics necessary for collaboration, such as required skills, complementing knowledge and partner identification. MBIE's National Science Challenge does provide a stand for large scale, collaborative research programmes in the country. But the collaboration seems to be restricted in existing institutional network and does not extend further. For example, most partners in the challenges are universities, so that it is not surprising that the research outcome cannot be effectively translated to policy making, industry innovation and economic growth.

Similar barrier also exists in the connectivity between different research institutes. The current funding scheme doesn't really encourage inter-institutional collaborations, technology/knowledge transfer and fund/facility sharing.

Q20: New Zealand is already an attractive place to come and live/work. Navigating the systems from the outside might be streamlined by having a central resource/website for those seeking information on jobs, funding and visa

information.

Q21: Our comments in Q19 summarise the things that would enable career stability, however there are still far more postgrad and postdoctoral researchers than there are full time research positions. Therefore, any strategy has to include components which attenuate the PhD machine, improve postgrad level training pathways for life 'outside of' or 'in support of' research, as well as improving career stability for existing and upcoming researchers. A leaky pipeline may be plugged by providing ringfenced funding that supports specialist research staff with highly specialised methodological knowledge that can support a multitude of research projects regionally or nationwide. For example, in statistics, mass spec, image analysis or genetic analysis, to mention just a few.

These could be supported through CoREs, or within institutions on the proviso they can service in house and external research. These sorts of skills take years to learn and require constantly updating knowledge with the latest methods/technology. Universities are constantly losing people with these sorts of skills and knowledge and it is a shameful waste of public money. This sort of support would also alleviate costs to universities for running expensive and highly specialist equipment and save grant awardees costs associated with training up a whole new student or staff member in a technology/methodology that they may only use once or twice. They would also provide an alternative career path for NZ researchers which would be 100% research. Also recognising that not all academic researchers want to move into a 40/40/20 (research/teaching/service) role. These sorts of roles exist, but are far and few between and not sufficient to prevent the loss of knowledge and skills that exists and also not enough to provide a viable alternative career path.

Potentially, some portion of PBRF funding given to universities could come 'ring-fenced' to support research staff, both permanent technical staff as well as providing bridging support for those between research contracts. This activity already exists within the University of Auckland as an example; however, the bridging funding is not well advertised. Forcing institutions to have a less opaque and better funded mechanism to support research staff salaries would be very helpful.

Q22: There was no detail available in the Strategy to provide comment on the initiatives you propose, however we and others are providing submissions that provide information on where we think the issues are with the current system as well as some recommendations. The MWC ECSGC and ECR groups around the country are open to further discussion and perhaps MBIE can look at a co-design approach for these initiatives with existing ECR groups.

Actions – Connecting Research and Innovation

- Question 23:** What elements will initiatives to strengthen connections between participants in the RSI system need to be successful?
- Question 24:** What elements will initiatives to strengthen connections between participants in the RSI system and users of innovation need to be successful?
- Question 25:** What elements will initiatives to strengthen connections between participants in the RSI system and international experts, business communities, and markets need to be successful?
- Question 26:** Are there any themes, in addition to those proposed in the Strategy (research commercialisation and international connections), that we need to take into consideration?

Please type your submission below. If applicable, please indicate the question(s) to which you are responding.

PROACTIVELY RELEASED

Actions – Start-up

Question 27: How can we better support the growth of start-ups?

Question 28: Do the initiatives proposed in the draft Strategy to support growth of start-ups need to be changed? Are there any other initiatives needed to support start-ups?

Question 29: What additional barriers, including regulatory barriers, exist that prevent start-ups and other businesses from conducting research and innovation?

Please type your submission below. If applicable, please indicate the question(s) to which you are responding.

PROACTIVELY RELEASED

Actions – Innovating for the public good

Question 30: How can we better support innovation for the public good?

Question 31: What public-good opportunities should our initiatives in this area be focused on?

Please type your submission below. If applicable, please indicate the question(s) to which you are responding.

PROACTIVELY RELEASED

Actions – Scale up

Question 32: What is the best way to build scale in focused areas?

Question 33: Do the initiatives proposed in the Strategy to build scale in focused areas need to be changed? Are there any other initiatives needed to build scale?

Note: see following page to comment on possible areas of focus

Please type your submission below. If applicable, please indicate the question(s) to which you are responding.

PROACTIVELY RELEASED

Scale up – Choosing our areas of focus

For this draft iteration of the strategy, we seek input on the selection of possible areas of focus. We will consider establishing around five focus areas, but, depending on the eventual selection, are likely to introduce them over time, rather than immediately. In addition to the criteria set out in the Strategy document, we invite stakeholders to consider the following factors in their suggestions –

- The ambition of this strategy to focus efforts in the RSI portfolio at the global frontier of knowledge and innovation.
- Ways in which the RSI system can accelerate progress on the government’s goals.
- The focus areas already determined by *From the Knowledge Wave to the Digital Age*.
- Work already underway where we are already seeking to build depth and scale in the RSI system.

The following areas could be a useful start, and are highlighted in *From the Knowledge Wave to the Digital Age*:

- **Aerospace**, including both autonomous vehicles and our growing space industry.
- **Renewable energy**, building on recent investments in the Advanced Energy Technology Platform.
- **Health technologies** to improve delivery of health services and explore opportunities in digital data-driven social and health research.

We invite comment on these suggestions and welcome input on other possible focus areas.

Please type your submission below.

Actions – Towards an Extended Vision Mātauranga

This section of the draft Strategy signals our intention to consult and collaborate further with Māori stakeholders to co-design our responses and initiatives. From that perspective, we consider the signals in the draft Strategy to be a start, rather than a set of final decisions. Nonetheless, we are keen on initial feedback in the following areas.

- Question 34:** Does our suggested approach to extending Vision Mātauranga focus in the right five areas? If not, where should it focus?
- Question 35:** How can we ensure the RSI system is open to the best Māori thinkers and researchers?
- Question 36:** How can we ensure that Māori knowledge, culture, and worldviews are integrated throughout our RSI system?
- Question 37:** How can we strengthen connections between the RSI system and Māori businesses and enterprises?

Please type your submission below. If applicable, please indicate the question(s) to which you are responding.

PROACTIVELY RELEASED

Actions – Building Firm Foundations

Question 38: Do the current structures, funding, and policies encourage public research organisations to form a coordinated, dynamic network of research across the horizons of research and innovation? What changes might be made?

Question 39: Is the CRI operating model appropriately designed to support dynamic, connected institutions and leading edge research? What changes might be made?

Question 40: What additional research and innovation infrastructure is necessary to achieve the goals of this Strategy? What opportunities are there to share infrastructure across institutions or with international partners?

Question 41: What elements will initiatives in this area need to be successful?

Please type your submission below. If applicable, please indicate the question(s) to which you are responding.

PROACTIVELY RELEASED

Actions – General

Question 42: How should the Government prioritise the areas of action, and the initiatives proposed under each area?

Please type your submission below.

PROACTIVELY RELEASED

General

Question 43: Do you have any other comments on the Strategy which have not yet been addressed?

Please type your submission below.

PROACTIVELY RELEASED