

From: no-reply@mbie.govt.nz
To: [Research, Science and Innovation Strategy Secretariat](#)
Subject: Late submission on draft RSI strategy
Date: Friday, 15 November 2019 1:34:14 p.m.
Attachments: [Online-submission-form-uploadsdraft-research-science-and-innovation-strategy-submissionsRSI-strategy-AgR-submission-Nov-2019.docx](#)

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

Organisation

Name

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Name of organisation or institutional affiliation

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Role within organisation

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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 , Government, Interface of research and industry

If you selected other, please specify here:

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

722

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.

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RSI-strategy-AgR-submission-Nov-2019.docx - [Download File](#)

AgResearch's submission on MBIE's RS&I Strategy

Alongside the Science New Zealand submission on behalf of the CRIs, AgResearch welcomes the opportunity to contribute to MBIE's RS&I Strategy with some additional comments. We are also happy to contribute in any ongoing design and implementation of RS&I Strategy initiatives identified.

We are supportive of the:

- Aspiration to see 2% of GDP invested in R&D,
- Connections as a third guiding principle
- Support for diversity and inclusion
- Need for long term funding to attract and retain talent
- Increased focus on international connections.

However, some of these areas have resourcing issues that we look forward to being addressed as the policy develops.

Government support for 'Behind the frontier' RS&I is critical to achieving impact

The RS&I Draft introduces a major shift in NZ funding policy in that it signals that Vote RS&I is expecting to only fund the generation of new knowledge and leave the application of existing knowledge to other portfolios. We are concerned that this leaves a gap in funding for research of benefit to New Zealand that may take some time to fill, particularly as generating impact requires the application of knowledge as well as its generation. Government still has key role in funding translation of research to impact.

For example: there is a real gap emerging for:

- Critical applied, more incremental research needed for environmental and social areas of impact for NZ; primary sectors where there is mix of public, government and industry good
- Strategic areas of R&D capability addressing national risks (e.g. biosecurity, climate change, fire)
- Support for players that lack resources to invest back along the R&D spectrum such as Māori, local, central government, SMEs in high value areas.

Transformation: at the frontier – improved definitions and transparency

There needs to be clarity on what is meant by 'at the frontier' and 'transformation' for researchers; research organisations and stakeholders. It is unclear and leads to a lot of misunderstanding. For example: the advice from the independent Panel for MBIE's recent review of AgResearch included a section on transformation and the following recommendation: *"... AgResearch should seek clarification on what transformation means for the sector from government, sector bodies and other entities, to allow them to provide a better approach to a future where "the ecosystem" provides for communities through a mix of land use and new and existing revenue streams and enhances the environment. "*

Offer: AgR has researchers looking at transformation and innovation within primary sectors who would be useful to support MBIE to seek agreed definition for transformation and “beyond the frontier”.

As well as improved and agreed definitions – a more transparent and rigorous process is needed to identify “new areas of focus” for research, particularly in strategic areas. It is not clear from the current draft how or why those areas have been identified.

Connections: take time and need resourcing

Having a distinct Connections Pillar is useful way of highlighting the many and varied connections that exist within the current NZ Science System – CRIs with each other; other research organisations and stakeholders nationally and internationally. Many of the existing government mechanisms already encourage connection(s). From this we know that forming and maintaining connections or relationships requires time and resourcing – which needs to be recognised in the investment mechanisms supporting them.

Given the focus on transformation, exploring additional needs are in the future under “Connections” will be critical as the Strategy is developed and implemented. This will help define the changes in relationships, behaviours and institutions needed to deliver intended impacts.

Connections: need mechanisms to support ‘clusters’ R&D connections

Currently the funding system is only partially supporting formation of RS&I connections. Additional mechanisms may be required. For example:

- MBIE partnership funding was a useful mechanism for encouraging long term industry/stakeholder and research organisation connections delivering a mix of industry relevant research with some science stretch alongside long-term industry investment into R&D. More flexible settings for a mechanism like that may open it up to wider range of opportunities to support connections.
- Outcome focussed investments that brought together capabilities from range of research organisations with ‘devolved’ funding readily accessible to companies to coinvest in projects relevant to their needs e.g. such as Seafood Innovation Ltd and Bioresource Processing Alliance. The value of the latter was recently recognised with new funding in 2019 Budget.
- Different mechanisms to support under-resourced SMEs, emerging sectors, Māori, local or central government may be required. Traditionally these players are either ineligible or unable to co-fund at required levels into partnership type funds such as MPI’s PGP/SFF Futures and MBIE Partnerships.

Balance commercialisation/IP with Connections

The Strategy needs to balance the drive for commercialisation and focus on capturing IP with building wider connections and benefit amongst wider set of players. The former creates tensions for the latter.

Managing IP to maximise the value, economic and social, of research to New Zealand is complex and best managed on a case by case basis, such as is the existing policy for MBIE funded research. A blanket approach is likely to prove restrictive and have unintended consequences. In addition, we recommend a focus on wider definition of IP or Intellectual Assets. A focus on patents should not be the ultimate measure of research commercialisation success.

Impact: require shift in focus & resourcing

It was great to see the release of the impact paper alongside the RS&I strategy. AgResearch was pleased to take a lead role in contributing to its development through the cross CRI iPEN (Impact, Planning & Evaluation) group.

Improving the way research impact is currently measured will require shifting the focus of funding excellent research with **potential** impact to funding excellent research with **real measurable impact**. This will encourage monitoring, evaluation and learning (M,E&L) activities to be prioritised, enabling evidence of impact to be collected during and after the project to demonstrate the value of science investment. Funders need to acknowledge that M,E&L should be part of a project's funding, and as a guide these costs are often estimated to be around 10% of a project's investment.

AgResearch has driven a culture of impact/outcome focus enabled by tools for identifying and measuring impact (www.beyondresults.co.nz); M,E&L Champions embedded throughout the organisation; supporting researchers to ensure credible cost-benefit analyses and clear implementation pathways are developed at project co-design phase and a new project management tool to further enhance AgResearch's ability to systematically identify and track impact. In addition, case studies providing a mix of quantitative and qualitative evidence are reproduced each year to demonstrate the impact of our research.

Recommend: MBIE continues to work with the iPEN group who is developing an Aotearoa-New Zealand evaluation framework embedding a Māori perspective - to complement work done by MBIE.

AgResearch also offers to share with MBIE lessons from our experience in the organisational practice of M,E&L.

Co-design initiatives

It is critical that MBIE co-designs the RS&I strategy implementation and actions with the sector.

Co-design will be vital for extended Vision Mātauranga and we recommend you continue working with the CRIs' Te Ara Putaiao group alongside organisations as we all working to improve. We are also able to bring our wider networks with Māori into those processes.

Offer: AgR has experience in the theory and practice of co-innovation approaches and are happy to contribute expertise into MBIE's processes.

Talent and diversity

Our science system of future will need to:

- Enable more flexible ways of working and career pathways, particularly to enable movement between different institutions, industries, and countries
- Attract and support early career researchers and technicians in ways that work for *them*.
- Increase employment of Māori, including via diverse career pathways.
- Enable and reward multiculturalism and diversity in the workplace
- Promote an internationally competitive package of salary and lifestyle

A fit for purpose talent pool will require more of a focus on training our researchers with broader range of skills including science discipline(s), ability to fit their work into a system and behavioural characteristics such as interpersonal relationship skills that will enable enhanced, vital collaborations, listening skills and respect for different knowledge systems.

Given the focus on impact, engaging with New Zealanders, and building trust in science, it would be valuable to identify how best to support science communicator and translator careers within the wider system as well. AgResearch applauds the call for diversity within our talent pool.

Diversity should include gender, youth and a respect for the value of a range of knowledge systems including practitioners embedded within Te ao Māori.

Offer: AgResearch is working in conjunction with Diversity Works, New Zealand's national body for workplace diversity and inclusion to formulate a Diversity & Inclusion strategy and programme of work underpinned by best practice. We can share that with MBIE.

International connections

A strategy that will assist in identifying where NZ wishes to priorities its international collaborations will be required. Particularly where we want to solve problems of high importance to NZ that no-one else in the world has addressed or are unique to Aotearoa. Linking international research relationships to government to government initiatives will also be helpful in prioritisation of effort.

While the system currently supports new international connections, how do current RS&I funding structures, criteria, and investment decision-making facilitate bringing international best-practice and excellence into New Zealand, to enable our research to become world class? Particularly given the challenge of establishing larger ongoing research with international collaborators when funding is constrained.