

# #115

**COMPLETE**

**Collector:** Web Link 1 (Web Link)  
**Started:** Friday, March 11, 2022 5:19:01 PM  
**Last Modified:** Wednesday, March 16, 2022 1:50:09 PM  
**Time Spent:** Over a day

---

Page 2: Section 1: submitter contact information

**Q1**

Name

Confidentiality - 9(2)(ba)(i)

---

**Q2**

Email address

Privacy - 9(2)(a)

---

**Q3**

**No**

Can MBIE publish your name and contact information with your submission?  
Confidentiality notice: Responding "no" to this question does not guarantee that we will not release the name and contact information your provided, if any, as we may be required to do so by law. It does mean that we will contact you if we are considering releasing submitter contact information that you have asked that we keep in confidence, and we will take your request for confidentiality into account when making a decision on whether to release it.

---

**Q4**

**Yes**

Can MBIE contact you in relation to your submission?

---

Page 3: Section 2: Submitter information

**Q5**

**Individual**

Are you submitting as an individual or on behalf of an organisation?

---

Page 4: Section 2: Submitter information - individual

**Q6**

**No**

Are you a researcher or scientist?

---

**Q7**

Age

Privacy - 9(2)(a)

**Q8**

Gender

**Q9**

In which region do you primarily work?

**Q10**

Ethnicity

Page 5: Section 2: Submitter information - individual

**Q11**

Respondent skipped this question

What is your iwi affiliation?

Page 6: Section 2: Submitter information - individual

**Q12**

Respondent skipped this question

If you wish, please specify to which Pacific ethnicity you identify

Page 7: Section 2: Submitter information - individual

**Q13**

Crown Research Institute or Callaghan Innovation

What type of organisation do you work for?

**Q14**

No

Is it a Māori-led organisation?

**Q15**

Which disciplines are most relevant to your work?

Agricultural, veterinary and food sciences,  
Biological sciences,  
Chemical sciences,  
Engineering,  
Information and computing sciences,  
Mathematical sciences,  
Physical sciences

**Q16** **There is some Mātauranga Māori, but it is not the main science knowledge**  
What best describes the use of Mātauranga Māori (Māori knowledge) in your work?

---

Page 8: Section 2: Submitter information - organisation

**Q17** **Respondent skipped this question**  
Organisation name

---

**Q18** **Respondent skipped this question**  
Organisation type

---

**Q19** **Respondent skipped this question**  
Is it a Māori-led organisation?

---

**Q20** **Respondent skipped this question**  
Where is the headquarters of the organisation?

---

**Q21** **Respondent skipped this question**  
What best describes the use of Mātauranga Māori (Māori knowledge) in your organisation?

---

Page 9: Section 3: Research Priorities

**Q22**  
Priorities design: What principles could be used to determine the scope and focus of research Priorities?(See page 27 of the Green Paper for additional information related to this question)

Principles should include considering:

- areas where NZ should have capability to look after the welfare of New Zealanders now and into the future.
- areas that can support NZ's future needs (economy, society, environment, etc) for example, at an economic level boosting productivity through agritech, biotech etc. or at a sustainability level developing new green tech solutions – like the hydrogen economy.
- the consequences (risks) of not having NZ expertise in an area – would NZ be exposed if we did not have capability in key areas such as health, environment, natural hazards, etc.

It will be important to have flexibility to adjust research Priorities in tune with societies changing needs, and so there is a need to establish flexible processes to review and sense-check priorities, while providing stability that is essential to maintain and build capability and high performing research teams.

It is also relevant to ensure that each Research Priority has a clear overarching purpose and frames up research questions in terms of target impact to help research providers prepare proposals that align well with purpose.

---

### Q23

Priority-setting process: What principles should guide a national research Priority-setting process, and how can the process best give effect to Te Tiriti?(See pages 28-29 of the Green Paper for additional information related to this question)

Consultation processes to guide priority setting. Priorities should be assessed with respect to core values – with processes in place to calibrate assessments (given the different types of research opportunity) and to enable decision making where there are diverse views.

---

### Q24

Operationalising Priorities: How should the strategy for each national research Priority be set and how do we operationalise them?(See pages 30-33 of the Green Paper for additional information related to this question)

Strategy setting guidance / frameworks provided for each of the research priorities.

Strategy setting supported by a Research, Science, and Innovation Strategy team with expertise in strategy development processes to provide a consistent approach.

If strategy development is devolved to different groups charged with leading a Strategic Priority – then Research, Science, and Innovation Strategy team can provide support to groups developing strategy [frameworks, facilitation, strategy development management, etc.]

Strategy work should define target outcomes and criteria for research programmes / projects.

Standardised structure / structures (Steering Group / Board) to oversee allocation of resources in a research priority area to projects / programmes that address outcomes and meet criteria. There should be a focus on efficiency – and effective and ‘lite’ structures to enable funding to be applied to research (c.f. excessive overhead).

[Devolved funding for each Research Priority – with resource allocation based on funding projects that meet criteria ‘on-demand’ and a preference for staged projects to enable reviews to ensure work is on track and target outcomes are still relevant – c.f. allocation of significant funding to programmes where the research plan is less flexible (within reason)]

Where there is flexibility in a Research Priority (as suggested above) there would be Management teams responsible for contracting the projects / programmes to be delivered, ensuring activities and outcomes are clear. And whether the target is community uptake of research outcomes (could be open access IP) or commercial uptake of research – Management teams to ensure IP strategy is fit-for-purpose – and creates opportunities for greatest impact.

---

## Q25

Engagement: How should we engage with Māori and Treaty Partners?(See page 38 of the Green Paper for additional information related to this question)

Now, there are Māori engagement teams at each CRI. Engagement is often via each programme – with link to one or two Māori groups. A national approach could provide more cohesive engagement across Research Priorities and Programmes and be a more efficient way to engage with Iwi / Māori Māori Trusts / Māori enterprise.

Establish a centralised management team to support Māori and Treaty Partner engagement across NZ Research Priorities.

Effectiveness would be enhanced by having:

- mechanisms to make NZ Research Programmes visible to all Māori,
- nationally run communications programme(s) so that Māori organisations with an interest in programmes can reach out to relevant researchers and connect on programmes.
- a team that champions Māori engagement on programmes and proactively connects research providers,
- forums (perhaps an annual national conference) where outcomes from key programmes are reported to representatives from the various Māori groups to make outcomes accessible and to support greater connection around research opportunities and to encourage transfer of knowledge.

## Q26

Respondent skipped this question

Mātauranga Māori: What are your thoughts on how to enable and protect mātauranga Māori in the research system?(See pages 38-39 of the Green Paper for additional information related to this question)

## Q27

Regionally based Māori knowledge hubs: What are your thoughts on regionally based Māori knowledge hubs?(See page 39 of the Green Paper for additional information related to this question)

These may be useful for organisation and engagement at a regional level – alongside it would be ideal to have strong organisation via a centralised team – to ensure opportunities are not missed and to make all NZ Research, Science, and Innovation priorities visible, the Research Programmes that form part of each RS&I Priority visible and the Research teams accessible to foster broad engagement.

---

Page 11: Section 5: Funding

## Q28

Core Functions: How should we decide what constitutes a core function, and how do we fund them?(See pages 44-46 of the Green Paper for additional information related to this question)

Funding Core Functions in specific Service Units makes sense – and then having oversight of the Service Units to support their work and monitor delivery. These should be independent of research and development work that is undertaken in the research organisations – where researcher-led programmes (MBIE programmes) and company-led projects would be homed.

It is good to recognise that sometimes capability developed through a strategic R&D programme will deliver databases or tools that then form part of a new Core Function – and to be fully utilised the database or tool will require an ongoing investment of funding. Looking at the transition to a Service Unit that can manage in the longer term would be a useful part of planning processes.

**Q29**

**Yes**

Establishing a base grant and base grant design: Do you think a base grant funding model will improve stability and resilience for research organisations?(See pages 46-49 of the Green Paper for additional information related to this question)

---

**Q30**

Establishing a base grant and base grant design: How should we go about designing and implementing such a funding model?(See pages 46-49 of the Green Paper for additional information related to this question)

Having a base grant funding would be valuable to invest in and maintain NZ's Research and Development infrastructure (facilities, equipment, etc.) Funding for the R&D programmes that sit within different Research Priorities can then be independent of the fixed costs that must currently be built into any programme.

Looking at overseas models would be useful, though should not limit the scope of what makes sense for NZ. Note also that as a small Country there is opportunity to look at how the R&D infrastructure can be made accessible to researchers from various institutes in a flexible way to optimise use of specialised facilities and equipment and to justify investment in high quality infrastructure.

---

---

Page 12: Section 6: Institutions

### Q31

Institution design: How do we design collaborative, adaptive and agile research institutions that will serve current and future needs?(See pages 57-58 of the Green Paper for additional information related to this question)

Collaboration: There is an opportunity to look at ways that CRI and Callaghan Innovation RDS capability can be drawn on to respond to Research Priorities and to deliver research programmes. Currently collaborative research programmes take time to set up as the lead provider must contract with MBIE and then establish sub-contracts with the contributing research organisations / collaborators.

While there are fair and generally accepted principles on how IP arrangements will work, it often takes time to work these through as alongside incentivising the uptake of research results / commercialisation, each organisation wants to ensure that they do not unnecessarily limit their FTO – their freedom to use IP they create that may be central to their domains expertise. This concern would be reduced if research institutions were part of one agency.

In a multi-disciplinary project there would still be the requirement to co-ordinate input from the collaborating teams and to contract with any independent research institutes / Universities – though there would be fewer sub-contracts and discussions on IP rights, allowing Business and IP professionals to focus less on transactional details and to focus more on strategy. These strategic areas would include research impacts (engaging stakeholders on their needs to be able to make use of the research outcomes), path to uptake / path to market (to create opportunity for tech transfer), and IP strategy to effectively support the uptake of knowledge and IP arising from research programmes.

Adaptive and Agile: The BioResource Processing Alliance is a good example of a collaborative programme that works in an adaptive and agile way. The BPA is a collaboration between Callaghan Innovation, Plant & Food Research, AgResearch and Scion. The Research Priority is clear and there are clear criteria for the type of research projects that align with the Research Priorities. BPA project proposals are put forward to the BPA Steering Group and Board and the process enables opportunities to be explored and work (projects) to be set up 'on-demand'. The flexible mechanism has an advantage over research programmes where research aim is all mapped out and locked in at the outset. A key focus for all projects is to encourage a 'best-team' approach – with projects often involving several of the BPA Partners / University researchers – drawing on their specialist expertise and facilities.

Key factors that support adaptive and agile delivery include:

- Research Priority is clear on the overarching purpose
- Research Questions are framed up effectively and relate to the impact the research is intended to have
- Funding is devolved with Steering Group / Board responsible for ensuring research projects align with purpose and funding criteria
- Project proposal review processes create opportunities for Steering Group to enrich research proposals and bring a best team approach,
- contracting is simple (e.g. Master contracts in place with statements of work to document project details and enable sign off)
- funding is staged providing regular review points to evaluate delivery and impact.

With an agile and adaptive approach, MBIE advisors could provide guidance on best practice structures for managing devolved funding. This would provide some consistency in approach – and create efficiencies in terms of setting up projects to optimise the level of programme management. MBIE advisors could also monitor impact and look for opportunities to continuously improve the practices and model used to deliver programmes in a devolved funding setting.

---

**Q32**

Role of institutions in workforce development: How can institutions be designed to better support capability, skill and workforce development?(See page 58 of the Green Paper for additional information related to this question)

It would be good to have a focus across all the CRI's and Callaghan Innovation RDS teams on the career development for research scientists and engineers – from early stage researchers through to principal researchers. Recognising the value of our research scientists and engineers is essential and so having a national focus on best practice career development and career pathway planning and mentoring would be ideal. This should also include programmes to support building high performance teams – so that research programmes leverage the experience of their teams in the most effective way to achieve more through collaboration.

---

**Q33**

Better coordinated property and capital investment: How should we make decisions on large property and capital investments under a more coordinated approach?(See pages 58-59 of the Green Paper for additional information related to this question)

Property and capital investment could be undertaken with greater interest / oversight of national needs to bring a more coordinated approach.

Every CAPEX case should address whether existing infrastructure exists and assess whether it is fully utilised as well as evaluating the demand for the facility in relation to researcher-led programmes and commercial research. It is also relevant to consider strategic value – recognising that facilities and capabilities at CRI's and Callaghan Innovation often provide important services/capability for the commercial sector that are not otherwise available and therefore fill an important market gap.

In some cases, there is duplication in the construction of facilities and equipment – and then underutilisation of the resources.

Specialised / state-of-the-art facilities should be managed to provide access to a wider research community. Booking systems would be required as well as management to ensure appropriate training and use.

---

**Q34**

**Respondent skipped this question**

Institution design and Te Tiriti: How do we design Tiriti-enabled institutions? (See page 59 of the Green Paper for additional information related to this question)

---



**Q35**

Knowledge exchange: How do we better support knowledge exchange and impact generation? What should be the role of research institutions in transferring knowledge into operational environments and technologies?(See pages 60-63 of the Green Paper for additional information related to this question)

There is opportunity for research office managers and commercialisation teams at the respective institutes to come together more and share resources and experience. Kiwinet provides a great example of how commercialisation managers from CRI's, Callaghan Innovation, Universities and others are working together to contribute their collective experience to new opportunities arising from publicly funded research programmes, to provide guidance on progressing new business opportunities and commercialising research outcomes.

For Kiwinet the focus is commercialisation of new IP. For many MBIE programmes tech-transfer is not focussed on commercialisation and the question is less path-to-market – and more path-to-uptake. It would be useful to consider whether some of the skills and resource that go into supporting tech-transfer for commercial opportunities could be applied to support research uptake from our 'non-commercial' research programmes.

Having a Bioresource Processing Alliance type model enables the steering group / board to keep the 'path-to-uptake' conversation live, alongside this it is important to have dedicated Business Development / Analyst support to engage and maintain relationships with relevant stakeholder groups and to support tech-transfer to the groups and agencies that can make use of the research outcomes.

While IP may be 'open access' there is a need to focus on how to make research outcomes available in a form / stage that they are ready for uptake by the groups than can implement and derive value from them. Where Kiwinet focus on IP being 'investor ready' – other programmes may focus on what is required to be 'implementation ready'.

---

Page 13: Section 7: Research workforce

**Q36**

Respondent skipped this question

Workforce and research Priorities: How should we include workforce considerations in the design of national research Priorities?(See pages 69-70 of the Green Paper for additional information related to this question)

**Q37**

Respondent skipped this question

Base grant and workforce: What impact would a base grant have on the research workforce?(See pages 70-71 of the Green Paper for additional information related to this question)

**Q38**

Respondent skipped this question

Better designed funding mechanisms: How do we design new funding mechanisms that strongly focus on workforce outcomes? (See page 72 of the Green Paper for additional information related to this question)

---

Page 14: Section 8: Research infrastructure

**Q39**

Funding research infrastructure: How do we support sustainable, efficient and enabling investment in research infrastructure?(See pages 77-78 of the Green Paper for additional information related to this question)

As a small Country there is opportunity to look at how the R&D infrastructure can be made accessible to researchers from various institutes in a flexible way to optimise use of specialised facilities and equipment and to justify investment in high quality infrastructure.

It is also important to look at the 'impact' that could arise from having the facility – c.f. will it be financially sustainable. The Food Bowl is an example of a facility that has real value in terms of impact, as it fills a market gap and enables companies to access pilot plant facilities to develop their initial POC products and test the market. A focus on research investment to provide capability and specialised facilities that would otherwise be unavailable and that can create NZ benefit (economic, environmental, social) in the long-term will be valuable. Alongside managing infrastructure (and institutes) efficiently, there should be emphasis on delivering 'impact' in each area of Research Priority.

---