SUBMISSION TO TE ARA PAERANGI FUTURE PATHWAYS GREEN PAPER

SUBMISSION FROM THE CENTRE FOR RESEARCH, EVALUATION & SOCIAL ASSESSMENT (CRESA)
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1. Introduction and Summary of Recommendations

Thank you for the opportunity to make this submission.

Overall, we are concerned that the Green Paper appears to be driving down a pathway of institutional funding for public good funding. We understand the issues surrounding the efficiency, sustainability and value for money around CRIs and university commitments to public good science research and researchers. However, we believe that an institutional funding approach will be counter-productive and is backwards looking. It is likely to will inhibit user responsive priority- and mission- based research which encompasses research arising out of Treaty partnerships as well as Kaupapa Māori researcher.

We are surprised that special funding vehicles and the funding of priorities directed research appear to be largely side-lined and their potential largely unexplored. The National Science Challenges are one rendition of special vehicles but there have been others both here and overseas. In our view, despite there being room for improvement, funding transformation research focused on priority domains (and some of those already are represented among the national science challenges) have delivered much more responsive, relevant research with impact.

In this submission we note that funding institutions rather than research:

- Risks organisational inertia, unproductive competition or dominance, and generating nimble responsive research.
- Limits and makes indirect the response to Treaty commitments within the public good science system.

We have made the following recommendations to move forward:

- That a clear distinction made between:
 - o Generating a research system that delivers relevant, timely and transformational public good science, research and innovation; and
 - The ownership interests of Government in CRIs and the improvement of CRI performance across a range of value for money and efficiency dimensions.
- That the public good science system should primarily be directed to funding domains of research priorities set in relation to a mission not institutions.
- That public science investment is directed to well-funded, multi-year research special vehicles which can:
 - Harness the imagination, skills and ambitions of researchers, communities, stakeholders and users
 - o Generate robust research programmes that work with communities, stakeholders and users
 - o Provide opportunities for career and research skill development.
- Outside of mission led research funding, there needs to be:
 - o Robust, long-term side-car mechanisms to deal with research infrastructure funding but ensuring access to critical infrastructure.
 - Identified the responsibilities for and mechanisms for high-priority services and emergency responses sitting.

The submission that underpins those recommendation is structured as follows:

- Section 2 sets out the background, research experience and orientation of the submitter.
- Section 3 makes:
 - Some summary comments around the approach evident in the green paper, its adequacy and issues of logic, argumentation and evidence.

- Comments on the outcomes likely to arise if some of the directions signalled in this green paper are pursued.
- Section 4:
 - Comments on each of the questions posed in the consultation document; and
 - Makes recommendations around a more effective way forward.

2. Submitter and Public Good Research Experience

This submission has been prepared by the Centre for Research, Evaluation and Social Assessment Ltd (CRESA). CRESA undertakes a wide range of solutions-directed research into the critical conditions affecting New Zealand's social and economic well-being with a particular focus on housing, neighbourhoods, built environments and enabling communities and stakeholders to define, engage with and use research and evidence.

We do not rehearse or re-present that extensive platform of public good research in detail but its solutions orientation, the research collaborations across research organisations, and engagement can be explored by referring to both CRESA's organisational site as well as the research site developed and maintained by CRESA to provide users access to a range of recent research programmes funded through recent public good science investment:

- www.cresa.co.nz;
- www.goodhomes.co.nz.

Since the early 1990s, CRESA has consistently led public good science programmes through contestable processes. Those programmes have been multi-disciplinary and involved crossorganisational teams with researchers coming from independent research organisations, universities, and crown research institutes. Significant in-kind and direct funding from stakeholders and end-users have been secured. That research and the tools generated through it have had significant impacts on both policy and practice, across sectors, and scales.

In addition, CRESA's director, Dr Saville-Smith has served:

- On research assessment bodies including: the Public Health Committee of the Health Research Council, various assessment processes of public good science applications for MBIE, and the Australasian Housing Research Institute.
- On advisory bodies seeking to develop research-based policy and practice which takes into
 account research-based knowledge. Those include currently: Independent Expert Advisory for
 the Office of Seniors, Expert Advisory Group to the Retirement Commissioner, External Advisory
 Group to Statistics New Zealand, and the Marlborough Regional Skills Leadership Group.
- As reviewer for internationally peer reviewed journals, reports generated from the Royal Society, and Statistics New Zealand.

In short, CRESA has longstanding, extensive and well-regarded involvement in leading, co-leading and participating in innovative public good research that engages with communities and a wide range of stakeholders on the issues most important to them. That research is high in impact. The recommendations in this submission reflect that history of engagement since the early 1990s as an independent research organisation.

3. The Case for Change and Direction of Travel

The need to ensure that Government research investment has impact as well as attracts, develop and retains skilled practitioners who can work with communities, stakeholders and agencies to development relevant research knowledge and solutions is indisputable.

While the Green Paper provides some useful insights, its analysis of the current systems deficiencies and problems is limited by a tendency to:

- Make generalisations that are unclear in nature and unsupported by evidence. Examples include but are not limited to:
 - Lack of clarity across the research landscape of research funding investments, research outputs and impacts.
 - o Claims that (p.2) there are "elements of unproductive competition across **all** organisations in the research system."
 - CRESA has constantly sought and succeeded in bringing together best-fit teams across multiple organisations and disciplines for almost thirty years in the public good science space. Our record of research outputs shows that we have successfully collaborated within with a wider range of other researchers.
 - o Claims that international models are moving towards fewer and larger organisations (p. 58).
 - It is not clear that this is occurring or, if it is, that the driver of this is to generate more engaged and effective research. An alternative interpretation is that it may be promoted by organisational interests in anti-competitive behaviours that leverage price and dominance in market share.

It is true, that several jurisdictions are creating special vehicles to pursue more refined, sophisticated and better resourced research programmes.

An example is CaCHE (Collaborative Centre for Housing Evidence) in the United Kingdom which attracts research funding and draws on researchers in from nine universities, the National Institute of Economic and Social Research, the Royal Town Planning Institute, the Chartered Institute of Housing and the Royal Institution of Chartered Surveyors. AHURI in Australia can be seen as a very longstanding example of sustained co-operative working together stimulated by clear research priority setting and research fund investment.

The track record of these sorts of special vehicles are more mixed in New Zealand. They range formally over consortia, centres of excellence, and the national science challenges. Informally, clusters of fit-for-purpose teams for specific programmes have been established and often maintained over many years despite the vagaries of research funding. It would be more productive if those clusters had more secure funding. This has been one of the advantages of national science challenges.

CRESA's experience suggests that some of these models have been more effective than others. Success does not depend on 'big' organisations structures, overly elaborate managerial or governance structures within the special vehicle, but is driven by agreement around research mission and purpose, values of collaboration and respect, steady-handed team leadership, and sufficient, predictable medium to long term funding that allows researchers to be nimble and responsive to the changing needs and preoccupations of communities, stakeholders and research users. That approach not only generates increasingly good fit but amplifies and makes more effective the relations between researchers and the communities, stakeholders and users with whom they are working.

- Mix up four connected, but different, issues, those being:
 - How priorities for research investment should be set and investment levels determined;

- Vehicles to support the development of best fit teams which are responsive to communities, stakeholders, and the diverse and diffuse user-participants over of period of extended research investment;
- Sustainable research infrastructure and workforce;
- The institutional landscape of research provision across the Government's ownership interests, universities and independent research organisations.
- Confusion between operational and investment mechanisms including base funding and overheads.
- A scatter gun approach to explaining undesirable behaviours, particularly in relation to 'competition', lack of collaboration and inability to sustain cross-disciplinary teams and invest in researcher development.

Overall, the Green Paper's analysis and propositions appear to be, and can be read as:

- Unduly driven by the Crown's ownership interests in crown research institutes and broader funding considerations around universities. Inadequate attention is given to independent research organisations.
- Overly determined by preoccupations of organisations that provide research and give limited attention to how researchers, communities, sectors, and other users interact to generate relevant research which is solutions-oriented across sectors and scales.
- Limited by a lack of sustained attention to the difference between:
 - Organisations that provide research as part of a range of other core activities (universities for example) and organisations dedicated to research as core business (CRIs and independent research organisations); and,
 - o Researchers and the organisations in which they are employed.
- Mis-framed around research infrastructure. In particular, it fails to differentiate between
 research infrastructure required to undertake bio-physical science and experimental, lab-based
 science relative to infrastructure necessary for robust research in the social science disciplines.
 This means that the discussion on p.78(2 and 3-refers) is mis-framed and likely to generate
 equally mis-framed responses.
- Limited by its lack of attention to public statistical sets as infrastructure. Public statistics and data necessary to the analysis of social and economic dynamics are ignored in the discussion around infrastructure, yet these and their enhancement (particularly necessary for Māori researchers) are critical research infrastructure. The Green Paper remains silent on the funding as well as sovereignty, access and maintenance of these and other datasets critical to social analysis and research-based solutions including the census, the IDI, HES, the GSS, valuation and business data.
- Unclear about, and understates, the importance of secure, predictable, medium to long term funding as a pre-condition for relevant research that:
 - o reflects the research needs of communities, sectors and policy;
 - o leverages and engages with the knowledge and expertise of communities;
 - o harnesses the skills and imagination of researchers;
 - o is generated out of cross-disciplinary research and collaborations across organisations.
- De-valuing special vehicles and researcher/stakeholder initiatives as a means of investing in responsive, relevant, cutting edge as well as solutions-based research.
- Supporting large-scale organisations which have long been marked as driven by organisational rather than research imperatives, inertia, and limiting the development of best-fit crossdisciplinary teams.

 Promoting a shift to funding organisations rather than funding the knowledge requirements of communities, stakeholders and users through transformational and nimble research programmes and researchers.

Whether these directions are intended on not, the Green Paper as it currently frames issues and solutions looks backwards not forwards. It does not build on the strengths or potential associated with special vehicle funding arrangements such as national science challenges. It glosses over the inertia embedded in large organisations. It rightly identifies that:

- Some organisations and institutional arrangement in the research system (primarily CRIs and universities) are driven to unproductive competition by organisational imperatives and interests rather than imperatives of relevant, responsive research that will carry the country and researchers into the future.
- That the organisational interests of some organisations are decoupled from the interests of researchers and researcher development, both as individuals and as an aggregate workforce.

A it stands, the Green Paper discusses on each element of the research system but in sum, the overall direction of travel seems to be rearranging CRIs and universities in ways that will dominate research provision rather than investing in research and researchers. This will be counterproductive for community and stakeholder engaged and collaborative research specification and production. If the problems are as set out on p.18, the direction of travel appears unlikely to address them.

4. Ways Forward

This section of the submission is divided into two parts. First, the submission addresses each of the questions presented in the Green Paper. In some cases, we submit that the question itself miscues, irrelevant or misses the key issue. Our submission then comments on how the important work represented by this Green Paper can lead to a nimbler, mission-led, relevant and sustained research platform that provides for an evidential base for building a better future for this country.

4.1 Green Paper Key Questions

KEY QUESTION 1: What principles could be used to determine the scope and focus of research priorities?

- Treaty commitment to preserving and enhancing sovereignty and the wellbeing of indigenous peoples and those welcomed to this land.
- Transformational potential and impact on the fundamental social, cultural and bio-physical dynamics that determine well-being through economic, social, and environmental activities.
- Resonance with the public and future well-being.

KEY QUESTION 2: A) What principles should guide a national research Priority-setting process? B) How can this process best give effect to Te Tiriti?

2(a) repeats question 1; 2(b) Requires a much more serious consideration of priority setting process, the specification of method, and a reduced preoccupation with funding research organisations as opposed to providing categories of mission that enable Treaty partners to act together but also to ensure that Kaupapa Māori research is recognised defined by and undertaken appropriately. Overdetermining the institutional landscape (as indicated in some off the discussion in the Green Paper) inhibits rather than promotes this. The mission-led priorities that were set in the NSC process may not have quite got it right, and the way the NSC vehicles have been constituted and managed have not, but the potential is there. It is problematic to see the sort of discussion in Section 4. Creating institutions (by which the Green Paper means organisations) is not the key to research for a fast changing world, creating an approach for whole of system priority setting, funding vehicles and adequate investment which unleashes the expertise, imagination and commitment of researchers (and the communities, stakeholders and end-users for whom they should be working) does.

KEY QUESTION 3: How should the strategy for each research Priority be set and how do we operationalise and implement them?

The first issue is ensuring that the research priorities, mission and impact expectations are clearly stated. The second is clarity around vehicle or vehicles. The question and associated discussion is far too broad, abstracted and opaque to allow a sensible response except that:

- Transaction costs need to be minimised both in relation to strategy development and implementation
- Drag from unproductive structures around management and governance need to be avoided.
 Strategy, governance and management need to add value to research relevance, enhance knowledge and impact not suck the life, nimbleness and material benefits out of the research or researchers and the communities, sectors and users they work with.
- Be research directed not directed to positioning or allowing certain organisations to dominate, command or control the priority space.

KEY QUESTION 4: How would you like to be engaged?

Early, not late. With clarity, good faith and a sense of joint endeavour. If there are non-negotiables these need to be clear along with their logic.

KEY QUESTION 5: What are your thoughts on how to enable and protect matauranga Maori in the research system?

Māori are the repository of knowledge around this. However, this submissions comments on Key Question 2 indicate that there are parts of the Green Paper discussion which appear to CRESA to compromise the research system doing so. The focus on institutions (organisations) rather than research and best fit teams and collaborations evident throughout the paper, if followed through would suggest that mātauranga Māori is unlikely to be either enabled or protected.

KEY QUESTION 7: How should we determine what constitutes a core function and how should core functions be funded?

This question is indicative of the fundamental limitations of the Green Paper and its persistent confusion between the research system, some research activities, and organisations that undertake research either as a core or peripheral activity. That confusion is exacerbated by failing to separate out the Government's interest in the research system AND its interests in CRIs (as owner) and as the primary funder of universities. One can agree with 2020 *Te Pae Kahurangi* report recommending dedicated funding should be provided for critical research functions, high-priority services, emergency responses and databases and collections, the discussion subsequently does not adequately address those issues and, indeed, appears to reduce clarity rather than increase it by the reference to core functions. None of *Te Pae Kahurangi*'s list should be couched in terms of core/periphery. They are simply functions that are important and probably do not fit within the domain of critical, mission-led, transformational research.

KEY QUESTION 8: Do you think a base grant funding model will improve stability and resilience for research organisations, and how should we go about designing and implementing such a funding model?

For the very reasons that the Green Paper identifies, funding research institutions rather than research is likely to create inertia, flabbiness and a self-referential world.

There are issues around choosing organisations to base fund. There are also issues around the quantum of funds and periods of funding. CRIs in past regimes had advantages over others because of NSOF.

With regard to overheads, all research organisations should be over-head based, the issue for some organisations who do stuff other than research, is what does a research overhead actually mean? And the issue for Government is what part of generalised overheads will it be prepared to fund. The complexities, inequities, perverse incentives created by this approach are overwhelming. Better to be funding research rather than institutions or organisations. Special vehicles such as the NSCs (although that model needs refinement) are a way out of the institutional funding conundrum recognised but not dealt with in the Green Paper. Special vehicles for mission led research does not

mean that research infrastructure can not be funded directly or there can not be direct commissioning of research functions identified in *Te Pae Kahurangi*.

KEY QUESTION 9: How do we design collaborative, adaptive and agile research institutions that will serve our current and future needs?

Do not try. Get the funding levels and investment vehicles right and organisations will be incentivised to engage in appropriate ways.

This question reflects the fundamental confusion in the Green Paper between:

- The Government's role in setting the conditions for a research system and its investment in public good science; versus
- The Government's interests in CRIs as an organisational owner.

Get the former sorted, then the Government as owner of CRIs and funder of universities will have a better ability to ensure those organisational structures are fit to deliver to the desired research system's outcomes.

KEY QUESTION 10: How can institutions be designed or incentivised to better support capability, skills and workforce development?

Fund research priorities through flexible but secure funding, multi-year. The issue of universities and their funding and career development of early and mid-career researchers is critical but an issue that needs to be dealt with directly with universities.

KEY QUESTION 11: How should we make decisions on large property and capital investments under a more coordinated approach?

This confuses research infrastructure with CRI ownership issues. The system issue here is (a) around appropriate p[rice and value for money and (b) where these items are necessary to fundamental infrastructure. Notably, as a social scientist I would suggest that one of the most important investments that Government can make in infrastructure is properly funding the census, HES, GSS and associated datasets.

KEY QUESTION 12: How do we design Tiriti-enabled institutions?

I think a more appropriate question is, how do we design a research system that enables Treaty commitments? And, secondly, what research investment vehicles facilitate that.

KEY QUESTION 13: How do we better support knowledge exchange and impact generation? What should be the role of research institutions in transferring knowledge to operational environments and technologies?

Research organisations need to support exchange and impact, but it is researchers and the communities, sectors and users they work with that generate knowledge, exchange solutions and deliver research impact. Research vehicles and the programmes within them need to have the resources to weave and tailor. Large organisations, by and large, do that poorly and often disrespectfully.

KEY QUESTION 14: How should we include workforce considerations in the design of research Priorities?

Unclear what this means. However, throughout this submission we have commented on the need to nurture early and mid-career researchers in ways that honestly provide career paths. There has been and remains a tendency for those researchers to end up in precarious positions, essentially used a semi-casualised labour force.

KEY QUESTION 15: What impact would a base grant have on the research workforce?

Arguably universities have had this for decades and yet conversations with many academics suggest that they have little time to do research and even when they bring research dollars in from outside they rarely have that recognised in the allocation of other workloads. So base grants may have an impact or may not.

KEY QUESTION 16: How do we design new funding mechanisms that strongly focus on workforce outcomes? Surely the focus should be on research relevance and impacts.

KEY QUESTION 17: How do we support sustainable, efficient and enabling investment in research infrastructure?

See previous comments.

4.2 Ways Forward

The Green Paper expresses some important ambitions and concerns, but the pathways suggested and the questions asked around designing the future pathways seem unlikely to generate the outcomes that the Green paper suggests that it wishes to achieve. We recommend that moving forward:

- There is clear distinction made between:
 - Generating a research system that delivers relevant, timely and transformational public good science, research and innovation; and
 - The ownership interests of Government in CRIs and the improvement of CRI performance across a range of value for money and efficiency dimensions.

It is clear that work is needed on both. Addressing the first of these will provide clarity about how the Government needs to position CRIs structures and contributions.

- Prioritise funding research priorities not institutions and ensure that public science investment is directed to research with research special vehicles:
 - Used to harness the imagination, skills and ambitions of researchers, communities, stakeholders and users
 - With funding set a level, term and certainty to:
 - generate robust research programmes that work with communities, stakeholders and users
 - provide opportunities for career and research skill development
 - Mitigating organisational inertia, unproductive competition or dominance, and generating nimble responsive research.
 - o Optimise the response to Treaty commitments.
- Outside of mission led research funding, there also needs to be:
 - Robust, long-term side-car mechanisms to deal with research infrastructure funding but ensuring access to critical infrastructure.
 - o Identified the responsibilities for and mechanisms for high-priority services and emergency responses sitting.