

## KATE NOLAN - DOT CONNECTOR | INNOVATION STRATEGIST

### Response to Te Ara Paerangi Consultation

#### 1. INTRODUCTION

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This document offers independent feedback on the Te Ara Paerangi Future Pathways Green paper 2021, with a specific focus on system and process design to support Connection, Collaboration and Active Research Alignment across the research system.

Dotconnector.co.nz (Kate Nolan) was set up to offer consultancy services that build on 12 years of experience as a Research and Business Development Advisor, Strategist and Designer in the New Zealand Research System.

The feedback in this response draws on experience of the Research Funding system and efforts to support “connected research ecosystems”, including multi-organisation collaborations; transdisciplinary research; strategy design; and process designed to enable information and conversation cascades between strategic and operational levels of the research system and its communities, partners, stakeholders, and end-users.

Greater breadth of knowledge has been developed from a science mission-led perspective through work as Innovation Strategist for New Zealand’s Biological Heritage National Science Challenge. This work provided an opportunity to explore innovative ‘system’ and ‘process’ solutions in a microcosm of the wider research system. The intention of the role was to build on the design-led process of 2019 which led to formation of Tranche 2 and the NZBH Innovation System Approach. The Innovation System approach developed in 2019 described the WHAT of the innovation system. The work of the Innovation Strategist in partnerships with 2 other new Leadership appointments aimed to address the strategic HOW and WHY of new modes of delivery.

## 1.1 NZBH INNOVATION SYSTEM APPROACH



The purpose of the Strategic appointments:

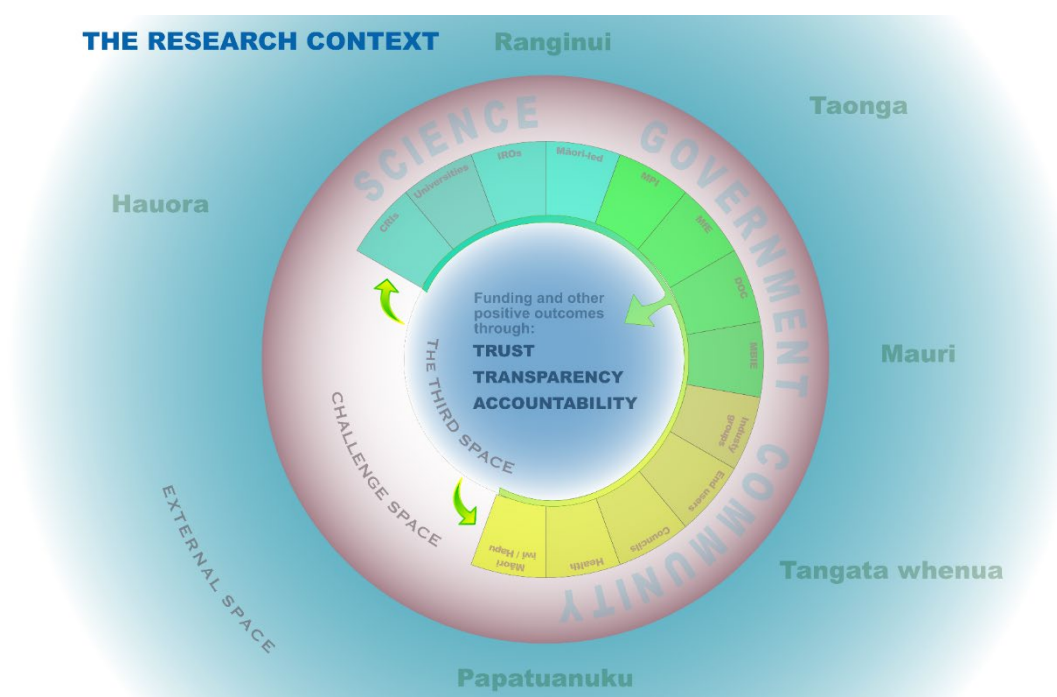
- Innovation Strategist** – (Kate Nolan, October 2020 - June 2022): Identify how and then enable the circumstances through which the NZBH Challenge might sustain networking across organisations; support collaboration; and facilitate research through Active Research Alignment with the Challenge mission. The plan – enable active research alignment across the system with the challenge and support design of strong implementation pathways for impact through bottom-up strategic innovation and design practice.
- Te Tiriti Relationships Manager** – (Jessica Hutchings, September 2020 – March 2022): Strengthen the Te Tiriti-led research platform across all aspects of the Challenge and utilize high level discussions and connections across the system to lead and support implementation of multi-level strategic te tiriti-led conversations and actions.
- Communications and Stakeholder Relationships Manager** – (Desi Ramoo, December 2020 – June 2022): Build and strengthen high level relationships with Government Ministries and stakeholders and provide top-down guidance and information sharing to support effective relationships, including identify pathways to impact between and across research and governance systems.

This strategic mahi required much bravery and creativity on behalf of the Challenge and was not without its difficulties, especially with a change in Directorship and Covid19 lockdown.

## 2. WHAT WAS LEARNED?

The information below provides an overview of the design work derived from identifying need and opportunity and testing and exploring options for connecting, matchmaking, collaboration, and Active Research Alignment across the system in relation to the Challenge mission. The work focused on how we shift from competition to connection and collaboration and how to design process and structure to enable the culture, functionalities, and behaviours we wish to see across the system. The graphics below provide a summary description of the design results.

### 2.1 CREATION OF A 3<sup>RD</sup> SPACE



The NZBH Challenge has demonstrated, like all other parts of the research system (Universities, CRIs, CORE's, IRO's and Challenges), that to effectively network, connect, collaborate, innovate, and actively align across the system, we must design and fund for openness, inclusion, collaboration, innovation, iteration, and co-design towards impactful research outcomes. The 3<sup>rd</sup> space offers an alternative to the competitive model of funding which characterizes our current funding system.

The concept of a 3<sup>rd</sup> space arose from a need to prioritize a high-trust values-based culturally centred design-led approach and 'gathering' space for relationship building and democratic decision-making across the system.

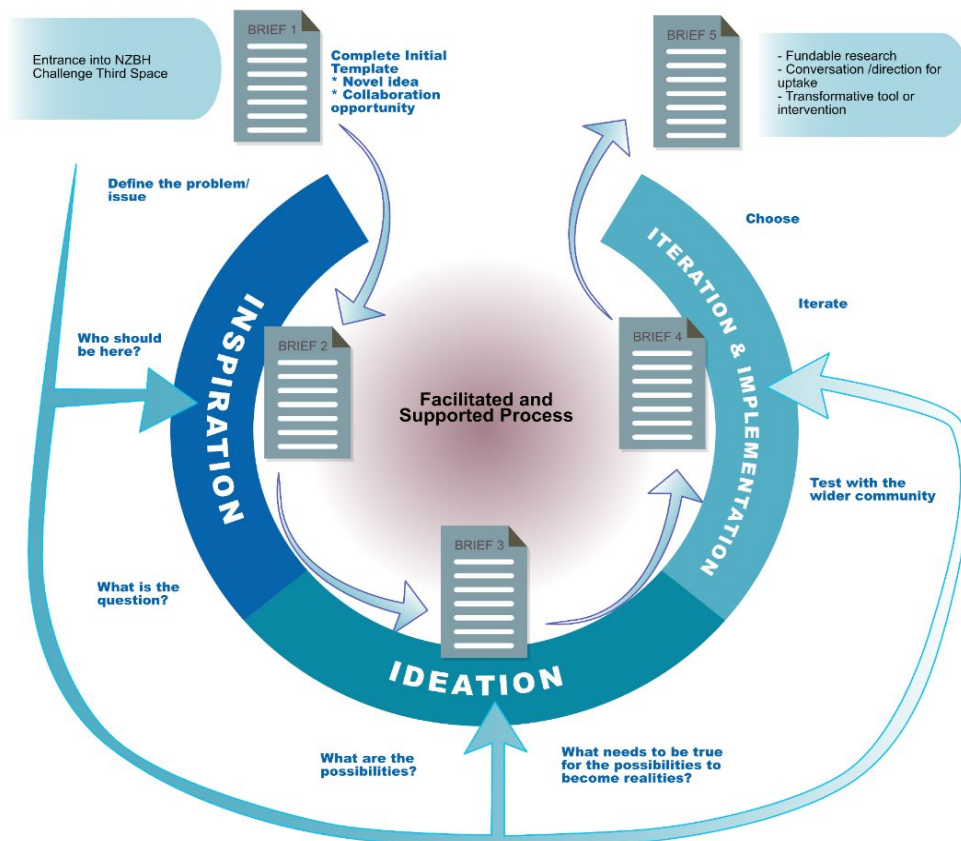
Several different kinds of conversations, collaboration and innovation opportunities were identified. These included providing a space:

- where te tiriti-led research, te tiriti partnerships, mātauranga Māori and te ao Māori are enacted in the framing, design, practice, leadership, delivery, measurement, and reporting of research
- to receive external offerings and evaluate their goodness of fit for active research alignment and/or potential for innovation aligned across the system
- to cross-pollinate between and across challenge research investment areas and leverage each other's collective efforts including:
  - pivot around new findings/information/capability
  - respond to gaps and opportunities
  - influence and strengthen each others work
  - innovate
  - make informed go/no-go decisions
  - map research undertaken in the system to need and opportunity on the ground
  - design implementation pathways
  - explore opportunities for research uptake
  - contribute to identification of long-term legacy research possibilities aligned to the challenge mission
- to support two-way feedback loops and conversations between external parties, end-users, stakeholders, iwi, hapu and mana whenua and the wider research system at rohe, local, regional, and national levels
- to explore 'the valley of death' and where and how to direct funding to address the gap between research activity and research uptake, implementation, application, commercialisation, and impact
- to bring together Government and Research entities to talk across cultural divides, address opportunities, explore strategic multi-organisation cross-pollination, identify tensions, test policy, make decisions and plan implementation pathways to impact
- safely risk-take, test ideas, innovate and prototype
- provide a space to host, support, facilitate, design, and implement strategy and multi-entity, fundable, trans-disciplinary research design

Current examples of entities that operate as 3<sup>rd</sup> Spaces to support collaborative, multi-organisational research, innovation, and activities with a focus on application of research for uptake and impact include B3, Tauranga Moana Biosecurity Network, and PlantTech. Other versions of these spaces will exist elsewhere with opportunities for cross-pollination between and across 3<sup>rd</sup> spaces.

## 2.2 WELL DESIGNED FIT-FOR-PURPOSE PROCESS

### Design-led approach for matchmaking, collaboration and Active Research Alignment in The Third Space



To action what happens in the 3rd space, a well-defined inclusive process is needed that is safe and trustworthy; adaptable and responsive; provides rigour and transparency; holds us accountable at every step for:

- the voices we include
- the power and privilege we assume
- the problems, issues, opportunities we prioritize
- the stories we tell
- the questions we frame
- the possibilities we explore
- the measures we use
- the end-users we consider
- the options we test
- the decisions and choices we make and how we make them

The graphic above indicates a series of design steps. There are many design models, this model has been developed through application internationally and is used effectively elsewhere and has potential to translate well to the collaborative research space. Entry into the process can happen at any point, dependent on the nature of offering, need and want and considering the work that may have already taken place between collaborators. All steps are documented with progress and iterations made transparent throughout the process.

This work needs to be supported and facilitated by designers, dot connectors and knowledge brokers whose role it is to support process independent of research area and specific subject expertise. Feedback throughout the process is ongoing with go/no-go decision making and opportunities for development as research cycles in and out of the process within the 3<sup>rd</sup> space.

**Step One Brief** is an initial offering. It is a way for entities to initiate connection by tabling a well-formed research idea or possibility aligned with the mission. This includes alignment with Impact areas, Strategic Objectives, Research Investments and/or Strategic Investment Plans. It can also be a novel idea that offers additionality under the broader mission statement. It can come from end-users, stakeholders, mana whenua as a bottom-up initiative. It can come from research organisations and partners from across the system. It can come from government and ministries as a top-down initiative or driver for joined up discussion. It can come from within the challenge as a call for internal collaboration.

**Step Two Brief** follows a process of evaluation to assess goodness-of-fit and possibility for matchmaking across the system to progress connections and collaborations. It is where a collaborative idea is design scoped alongside a group of people who clarify the problem, issue or opportunity and do the work of framing a Strategic question.

**Step Three Brief** is the ideation phase where possibilities are explored and the challenging work of determining “what needs to be true” for these research possibilities to be successful is decided. This is a creative phase of the process that enables teams to become focused and planful while also allowing for novelty and innovation.

**Step Four Brief** is where ideas and directions arising from possibilities are tested with and alongside a wider community (researchers, end-users, stakeholders etc). Results and feedback are used to further iterate and fine tune research and design of implementation pathways to impact then choose and collectively commit to a final idea. This is refined and polished as a fundable output.

It is notable, that when committed fully to the process with regular sessions to progress thinking and decision-making and iterate and finesse documents, this process can take an average of 12 weeks to complete. Testing takes up the largest proportion of this time.

## 2.3 RESPONSE TO QUESTIONS IN THE GREEN PAPER

Responding to several questions in the green paper, the following views are offered:

### RESEARCH PRIORITIES

#### 2 – 1.3.2.

#### **Ngā kōwhiringa hoahoa mō te tukanga tautuhi whakaarotau – Priority-setting process.**

What principles should guide a national research Priority-setting process? How can the process best give effect to Te Tiriti?

When confronted with challenges or priorities linked to urgent issues, “war time” is used as justification to limit the balance of power and decision-making voices around the table for the sake of expedience.

A design-led process with clear expectations around the ‘HOW’ of Strategy Design and effective decision-making, presents an opportunity for greater inclusion and diversity of relevant expertise from multiple cultural, research and other perspectives during both “war time” and “peace time”.

Design process provides opportunities for creative solutions finding, possibilities testing and design via a collective decision-making process that builds on and is driven by te Tiriti-led imperatives. It offers a way to ‘hold space’ for Māori leadership and enact tikanga as part of process. Holding ourselves accountable for being transparent ensures we interrogate the shifts and balances of power as the process unfolds and we unpack fundamental assumptions which normalize and systemize colonizing practice.

One of the challenges in setting priorities is determining how a problem, or complex issues are framed, and solutions or opportunities explored. Speculative design and design process creates space to explore possibility, challenge assumptions and anticipate future trajectories based on diverse expertise, cultural views, knowledges as well as future facing signals.

### TE TRIRITI, MĀTAURANGA - MĀORI AND MĀORI ASPIRATIONS

#### 6 – 2.4.

#### **Te whakapakari hononga ki te mātauranga Māori ā-rohe – Regionally based Māori hubs.**

What are your thoughts of regionally based Māori knowledge hubs?

One of the risks of system wide model is that they can become or present as colonizing spaces that diminish, dilute, or misrepresent the voices of mana whenua and or marginalized voices. A 3<sup>rd</sup> space can be led by anyone anywhere (either face to face or virtually) nationally, regionally, and locally. The process, when values based and aligned with a te tiriti imperative, will support and enable decolonization and democratisation of decision-making spaces. Transparency and accountability to values are what enables any process to become trustworthy.

The notion of regionally based Māori hubs makes sense to ensure mana whenua are represented and can lead and define the Kaupapa of the process.

## INSTITUTIONS

### 9 – 4.4.1.

#### **Te āhua, whakaruruhau me te hanganga o te whakahaere - Institution design.**

How do we design collaborative, adaptive, and agile research institutions that will serve current and future needs?

The example of a 3<sup>rd</sup> space combined with a design-led process offers a solution for how we might re-imagine and support system functionality to enable system wide collaboration, adaptability, and agility. This includes supporting openness across the system and investing in transparent process that enables inclusion of diverse voices (including marginalized voices) and expertise.

### 13 – 4.6.

#### **Ngā pāpātanga pai ake – te whakawhiti mōhiohio me ngā pāpātanga rangahau - 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?

The 3<sup>rd</sup> Space and the design-led process have been created in part, to bridge the gap between research and impact. Currently we have a system divide that struggles to identify and then fund the critical steps that enable research to land for uptake and impact. The mahi of transferring and operationalizing research sits in a vacuum without funding. Additional funding is required to support then enable knowledge transformation and implementation pathways to impact.

## RESEARCH INFRASTRUCTURE

### 17 – 6.2.2.

#### **Ngā kōwhiringa hoahoa matua mō te tuku pūtea ki te hanganga rangahau - Funding research infrastructure.**

How do we support sustainable, efficient, and enabling investment in research infrastructure?

Critical to delivery in the 3<sup>rd</sup> space is investment in human resource who have the right attitude, skills, capabilities, and competencies to facilitate and work alongside system wide communities and organisations to deliver the design-led process. As observed in other settings, critical to this approach is trust in the process and the people who help facilitate it.