

16 April 2021



Hon Dr Megan Woods  
Minister of Research, Science and Innovation  
Parliament Buildings  
Wellington

1 Fairway Drive, Avalon  
Lower Hutt 5010  
PO Box 30368  
Lower Hutt 5040  
New Zealand  
T +64-4-570 1444  
F +64-4-570 4600  
[www.gns.cri.nz](http://www.gns.cri.nz)

Dear Minister

## **Response to GNS Science Annual Letter of Expectations for 2021/22**

Thank you for your annual Letter of Expectations for 2021/22 received on 25 March 2021.

GNS Science is committed to building an organisation that aligns to national science objectives and delivers better outcomes for government, industry, iwi and the community. We support evidence-based decisions through information, advice and services for a resilient society, sustainable environment and strong economy.

The COVID-19 pandemic has changed the priorities and needs of communities across Aotearoa New Zealand and the world. It has highlighted the crucial role that science and technology play in undertaking research, delivering analysis and offering solutions. The ongoing impacts of the COVID-19 pandemic and the need to build a long term vibrant and sustainable GNS are key considerations in our Strategic Science Roadmap and science theme plans currently being developed. These documents describe our future science direction and focus, and align to national challenges and direction.

Alongside the implementation of this science roadmap, we will continue to invest in people and infrastructure to maintain capability and capacity in key areas for New Zealand.

### ***GNS Science Priorities***

We would like to draw your attention to the strategic priorities that GNS Science will be focusing on in the 2021/22 year.

**Property Strategy** - In the coming year, GNS is committed to completing our proposed Property Strategy and progressing its implementation. Our current facilities in Wairakei and Wellington (Avalon and Gracefield) are over 50 years old are no longer fit for purpose. Challenges include outdated and insufficient laboratory and analytical facilities that are at the end of their service life, compromised containment of hazardous materials at our Gracefield site, and business continuity risk to the National Geohazards Monitoring Centre (NGMC) at Avalon. Given the critical nature of the NGMC the structure should have a higher importance level than Importance Level 2 for seismic resilience.

GNS requires contemporary facilities to enable the delivery of great science, to minimise health and safety risks to our staff and support their wellness, to create connection both internally and externally, and to bring our people together under a one GNS vision, where our facilities enable connection, collaboration, and innovation. We are committed to working closely with others in the science system and government as we work through the process of completing our Property Strategy to ensure the best outcome for ourselves and the New

Zealand. Discussions with other organisations are ongoing, including with Callaghan Innovation, ESR and Victoria University.

**Ongoing impacts from the Whakaari/White Island eruption** - As you are aware, the year-long investigation by WorkSafe NZ into the Whakaari/White Island eruption concluded with charges being laid against GNS Science and other parties. The concept that GNS Science (and other science providers) can be held criminally liable for providing scientific advice significantly changes the context within which GNS Science performs its functions. The consequences for GNS Science, and for other science and research agencies, will be far reaching should charges be upheld. The ongoing process will continue to require a significant commitment of resources and substantial obligations on our key scientists and managers.

As you are aware from our 12 February briefing note, GNS Science technicians have been unable to land on Whakaari/White Island since the 9 December 2019 eruption, which means that our monitoring equipment has not been serviced since that time. A plan is being developed to return to the Island for monitoring and sampling purposes, and we are working with Ngāti Awa, the owners of Whakaari White Island, transport operators and other key stakeholders on this plan. This will allow us to meet our statutory and contractual obligations.

**GeoNet programme** – The GeoNet programme will celebrate its 20-year anniversary in July this year. The programme has successfully established a multi-peril geological hazard monitoring system for New Zealand and its Pacific neighbours. During its lifetime the scope and expectations of the programme have grown, along with complexity in the GeoNet operations, contracting, funding and governance arrangements. In the coming year the EQC owned GeoNet assets (the sensor network and IT hardware) will be transferred to GNS and the contracting arrangements will be updated. We also expect ownership of the Deep-ocean Assessment and Reporting of Tsunamis (DART) buoy network to transfer from DPMC to GNS and to contract with NEMA for the provision of DART data to support tsunami advice. GNS will subcontract with NIWA for the in-water operation and maintenance of the buoys.

The GeoNet Programme is midway through a review process. Strategic insights to date include a recognition that as the scope of GeoNet's work has incrementally grown, funding has not kept pace. GNS expects to work with NEMA on the development of a NEMA led multi-agency business case to support the ongoing operations of the GeoNet programme and other GNS hazard and risk initiatives such as the National Seismic Hazard Model.

**Enterprise Resource Planning System** - GNS has been working collaboratively with ESR to identify a common replacement for our enterprise systems, which will address issues with our core capabilities of Financial Management, Human Resources Management and Contract and Project Management. The business case will be considered by the Board in the next few months. An effective and integrated system will result in significant efficiency gains and enable the delivery of timely information and transparency for managers and decision makers. We hope that the establishment of a shared system with ESR, will provide a platform that other CRIs will be able to join in future years.

**Strategic Science Roadmap** - The completion of our major strategic review in 2019 aligned our strategic direction with government priorities and the needs of our stakeholders, industry partners and iwi/Māori interests. This year, we started the next step in this process, which is the development of a Strategic Science Roadmap which will describe our future science

direction and focus to 2030 and ensure our outcome focussed Science Themes are driving the delivery of impactful and relevant science for the country. The development of the roadmap is supported by our independent Strategic Scientific and User Advisory Panel. We look forward to discussing the draft Roadmap with your officials in the coming year.

**Collaboration and partnerships** - We recognise that collaboration and interdisciplinary research partnerships are key in enabling us to deliver on our science themes, and we work hard to ensure such collaboration is part of our culture. As evidenced in the projects discussed above, we seek to collaborate with CRIs and other partners whenever possible for mutual benefit and to improve the outcomes for New Zealand. Our relationships and partnerships with Māori/iwi are also essential as we explore opportunities to incorporate mātauranga Māori into relevant research programmes and build internal and external capability. Over the coming year we will develop and implement a Vision Mātauranga training programme, which will include staff workshops and a review of our Ahunuku (Māori internship) programme. We will also be working with other CRIs to agree a consistent approach to working with Māori/iwi to strengthen the capability, skills and networks between Māori and the Research, Science and Innovation system.

### ***Meeting the Government's priorities***

Staying strategically aligned with Government direction and priorities remains key to our purpose, and GNS Science is well positioned to support government initiatives. Highlights include progress with our energy futures theme, including research into new materials and green hydrogen production, as a key enabler in the move to a zero carbon economy. We remain committed to deepening our relationships and collaboration with other research entities, both nationally and internationally. In particular, building on the increased collaboration amongst the Crown Research Institutes evident during the response to the COVID-19 pandemic, and as a result of the Te Pae Kahurangi review report.

We recognise that the Government has a range of urgent and competing demands on investment, particularly to support the livelihoods of New Zealanders. The funding boost we received from the Government was very much appreciated and offset much of the loss of commercial revenue during the COVID-19 pandemic.

We note that, over the coming year, the Government will be progressing work to understand what measures could improve how the science system operates. GNS Science looks forward to being involved in these discussions.

If you would like any further information on any of the matters raised in this letter, please feel free to get in touch and we will be happy to provide details.

Yours sincerely



Dr Nicola Crauford  
Chair