

IN THE MATTER

of the Resource Management Act 1991 ("**RMA**")

AND

IN THE MATTER

of the Proposed Otago Regional Policy Statement
2021 (Non-freshwater parts) ("**PORPS**")

**EVIDENCE OF CHRISTOPHER MARK HORNE FOR
CHORUS NEW ZEALAND LTD, VODAFONE NEW ZEALAND LTD AND SPARK
NEW ZEALAND TRADING LTD**

PART 3: EIT ENERGY, INFRASTRUCTURE AND TRANSPORT

**(INCLUDES GENERAL SUBMISSION OVERVIEW AND QUALIFICATIONS
RELEVANT TO OTHER CHAPTER STATEMENTS)**

23 NOVEMBER 2022

1. INTRODUCTION

1.1 My full name is Christopher Mark Horne. I am a resource management consultant and director of the resource and environmental management consulting company, Incite (Auckland) Limited.

1.2 I hold the qualifications of the Bachelor of Arts (Geography), and Master of Regional and Resource Planning, both gained at the University of Otago. I am a member of the New Zealand Planning Institute.

Experience

1.3 I have approximately 30 years of professional experience in the field of resource management, and have represented a variety of public and private clients on a range of matters that raise planning issues. A significant part of my experience relates to network utility infrastructure, including both project consenting, and planning advice and assistance on resource management documents and changes that may affect the operation or deployment of infrastructure.

1.4 I have acted for a number of infrastructure clients including Spark New Zealand Trading Limited ("**Spark**"), Chorus New Zealand Limited ("**Chorus**"), Vodafone New Zealand Limited ("**Vodafone**"), Two Degrees Mobile Limited, Transpower, Ultra-Fast Fibre, Vital (previously branded as Teamtalk), New Zealand Police (radio network), KiwiRail, Vector, Watercare Services and Waka Kotahi NZ Transport Agency. Work for these clients has related to both linear infrastructure networks (e.g. lines, submarine cables, pipes and transport corridors), and site-specific facilities (e.g. radio communication facilities, exchanges, cable stations and a satellite earth station). I acted for the Auckland Utility Operators Group on the Auckland Unitary Plan, and more locally for Chorus, Spark and Vodafone on the Proposed Dunedin Second Generation District Plan and Queenstown Lakes District Plan within the Otago Region.

1.5 I was a member of the reference group including the Telecommunications Industry, Government Departments and Local Government New Zealand involved in the development of the *Resource Management (National Environmental Standards for Telecommunications Facilities) Regulations 2008*, and later provided advice to the New Zealand Police on the subsequent update to the 2016 regulations now in force: *Resource Management (National Environmental Standards for Telecommunications Facilities) Regulations 2016* ("**NESTF**").

Involvement in the PORPS

- 1.6 I assisted Chorus, Spark and Vodafone (collectively referred to here after as the ("**Telecommunications Submitters**")) in preparing their joint submission to the PORPS. I have reviewed the s42A reports and statements of supplementary evidence prepared on behalf of the Otago Regional Council to the extent that they address the matters raised in the Telecommunications Submitters' submission on the PORPS. Further submissions on behalf of the Telecommunications Submitters were prepared by a colleague of mine at Incite.

Code of conduct

- 1.7 I confirm that I have read the Code of Conduct for Expert Witnesses 2014 contained in the Environment Court Practice Note and that I agree to comply with it. I confirm that I have considered all the material facts I am aware of which might alter or detract from the opinions I express, and that this evidence is within my area of expertise, except where I state that I am relying on the evidence of another person.
- 1.8 My evidence relates to s42A reports on Chapter 1 (Felicity Boyd), Chapters 12 and 14 (Andrew McLennan) and Chapter 13 (Angela Fenemor) who are all employees of Incite (Ch-Ch) Limited. Incite is a group of three separate limited liability companies with joint branding, a joint website and a cooperative relationship. However, we remain as separate companies with no financial linkages and I have had no discussions with these reporting officers in regard to their s42A reports and/or supplementary evidence statements, the Telecommunications Submitters' submission or the preparation of this evidence.

2. SCOPE AND STRUCTURE OF EVIDENCE

- 2.1 In accordance with the First Minute and Directions of the Hearing Commissioners¹ I have prepared my evidence on the PORPS on a chapter-by-chapter basis.
- 2.2 Because a significant proportion of the Telecommunications Submitters' submission points relate to the Energy, Infrastructure and Transport ("**EIT**"), I have provided a general overview of the overall submissions approach and my relevant experience and qualifications in this statement.

¹ Dated 3 October 2022.

2.3 An overview of matters raised in the Telecommunications Submitters' submission covered in my evidence statements on various chapters is:

S42A report	Submission point
Chapter 1 Introduction and General Provisions: Felicity Boyd ²	<ul style="list-style-type: none"> • <i>within environmental limits</i> terminology (addressed in this evidence on the EIT chapter (chapter 11 s42A report) in regard to Objective EIT-INF-O4 which addresses the same terminology in regard to that provision)
Chapter 5 Significant Resource Management Issues: James Adams	<ul style="list-style-type: none"> • New Significant Resource Management Issue for Infrastructure
Chapter 11 Energy, Infrastructure and Transport: Peter Stafford ³	<ul style="list-style-type: none"> • Definition – <i>Nationally Significant Infrastructure</i> • Definition – <i>Regionally Significant Infrastructure</i> • Definition – <i>Telecommunication and Radiocommunication Facilities</i> • Objective EIT-INF-O4 Provision of Infrastructure (includes Chapter 1 and Chapter 11 s42A report assessment and recommendations in regard to <i>within environmental limits</i> terminology) • Policy EIT-INF-P11 Operation and Maintenance • Policy EIT-INF-P13 Locating and managing the effects of infrastructure
Chapter 13 Historical and Cultural Values: Angela Fenemor	<ul style="list-style-type: none"> • Policy HCV-HH-P5 Managing historic heritage
Chapter 14 Natural Features and Landscapes: Andrew Maclennan ⁴	<ul style="list-style-type: none"> • Policy NFL-P2 Protection of outstanding natural features and landscapes • Policy NFL-P3 Maintenance of highly values natural features and landscapes

2.4 Matters raised in the Telecommunication Submitters' submissions on sections other than the EIT chapter of the PORPS are addressed in my separate statements of evidence on sections covered by the Chapters 5, 13 and 14, s42A reports, also dated 23 November 2022.

² Further assessed in supplementary evidence of Felicity Boyd dated 11 October 2022.

³ Further assessed in supplementary evidence of Marcus Langman dated 11 October 2022.

⁴ Further assessed in supplementary evidence of Andrew Maclennan dated 11 October 2022.

2.5 My evidence only addresses matters where the Telecommunications Submitters' wish to contest the s42A recommendations and where I consider further change from the recommendations in the s42A report is appropriate. However, for completeness, I have set out in **Appendix A** the other s42A report recommendations where no evidence is being filed on behalf of the Telecommunications Submitters.

3. EXECUTIVE SUMMARY (EIT SECTION MATTERS)

3.1 The Telecommunications Submitters' submission and further submission on the PORPS seeks to ensure there is a practical and workable framework in the PORPS for telecommunications infrastructure in the Otago region. In my opinion it is not reasonable or practical to adopt a policy framework which starts on the assumption that adverse effects of infrastructure located in sensitive areas (ie with identified values and attributes) need to be avoided in all circumstances. In my evidence below, I set out a number of examples of where telecommunications infrastructure may reasonably need to be located in sensitive natural and physical environments.

3.2 A key issue arising in the context of the PORPS, that will impact on the practicality of locating telecommunications infrastructure in sensitive environments, relates to the definitions of *Nationally Significant Infrastructure* and *Regionally Significant Infrastructure* in the PORPS, given that the policy framework provides more flexibility for infrastructure covered by these definitions when compared to *infrastructure* more generally.

3.3 The definitions for *Nationally Significant Infrastructure* and *Regionally Significant Infrastructure* as notified are particularly problematic for telecommunications networks for the reasons set out in the Telecommunication Submitters' submission and in my evidence below. However, Supplementary Evidence to the Chapter 11 s42A report from Marcus Langman recommends a change to the definition of *Regionally Significant Infrastructure* relevant to telecommunications and radiocommunications networks which largely resolves the issue. I support Mr Langman's amendment and consider that the Hearing Commissioners should adopt that amendment. In the event that Mr Langman's change is not adopted, a number of consequential amendments will be required throughout the PORPS, including to policy EIT-INF-P13, to ensure that important telecommunications infrastructure is properly recognised and provided for.

- 3.4 For the reasons I set out in my evidence, I consider that alternative wording should replace the terms “*Environmental Limits*” or “*Limits*” which have been used throughout the PORPS, including in Objective EIT-INF-O4. I also consider that some changes to policies EIT-INF-P11 and P13 are required to better provide for infrastructure more generally.

4. GENERAL APPROACH IN SUBMISSION AND REGULATORY FRAMEWORK APPLYING TO TELECOMMUNICATIONS INFRASTRUCTURE

Submissions Overview

- 4.1 The Telecommunications Submitters’ submission and further submission on the PORPS seeks to ensure there is a practical and workable framework in the PORPS for telecommunications infrastructure in the Otago region. Telecommunications services are lifeline infrastructure⁵ and are a very necessary and critical component to a well-functioning community.
- 4.2 A workable provisions framework for telecommunications infrastructure is critical for ensuring that providers can continue to improve, maintain and install new telecommunications infrastructure to service people and communities in the Otago region. This is particularly important in sensitive natural and physical environments where an avoidance approach in the policy framework may compromise the ability to service communities with lifeline infrastructure where there are functional needs and operational needs to locate in such areas.
- 4.3 I have been involved in a range of projects which demonstrate that both linear and site-specific infrastructure are often required in sensitive environments. Examples of projects I have been involved with where this has been the case include:
- (a) Ultra-Fast Broadband fibre rollouts in heritage areas and areas of significance to mana whenua in Auckland, and in regard to work around trees in a heritage area in Arrowtown.
 - (b) Submarine cable from Maraetai Auckland to Waiheke Island traversing a Significant Ecological Area Marine overlay.
 - (c) Submarine cables from Takapuna to the mid pacific and from Raglan to Sydney.

⁵ Under s4 of the Civil Defence Emergency Management Act 2002.

- (d) Numerous cell phone/wireless broadband projects in outstanding natural landscapes (due to the need for elevated topography) including sites in Queenstown Lakes District.
- (e) Realigning Transpower transmission lines across Tauranga Harbour in an area classified as Outstanding Natural Landscape, High Natural Character and Significant Cultural Value.
- (f) Antennas on heritage buildings including a Police Station in a heritage precinct in Arrowtown.
- (g) Antennas on buildings within view shafts.
- (h) KiwiRail culvert replacement work within a Māori heritage overlay.
- (i) Road widening and associated stormwater discharges within 100m of a natural wetland.

4.4 Accordingly, in my opinion it is not reasonable or practical to adopt a policy framework which starts on the assumption that effects on sensitive areas (ie with identified values and attributes) need to be avoided in all circumstances.

4.5 Given the importance of telecommunications infrastructure as a physical resource contributing to the wellbeing and to the health and safety of people and communities, I consider that some changes to the notified provisions are required to ensure that the importance of infrastructure is appropriately recognised and enabled. This of course needs to be weighed and considered against protective provisions for important natural and built environments and culturally sensitive places. In my view there needs to be appropriate recognition in the policy framework for the circumstances where there is a functional need or operational need to locate infrastructure in sensitive areas. This has not been assisted by the lack of a National Policy Statement for Infrastructure, aside from the infrastructure specific *National Policy Statement on Electricity Transmission 2008* and *National Policy Statement for Renewable Electricity Generation 2011*.

4.6 I am not by any means suggesting infrastructure should have a 'free ride' in such sensitive areas, but rather that the benefits to communities, reasonable alternatives outside of areas valued by communities and the ability to mitigate adverse effects are all properly weighed. I have noticed in a number of more recent draft and notified proposed district plans that there has been a tendency to focus on the protective provisions and use of terms such as "avoid" in chapters dealing with sensitive environments, which can impact the ability for

infrastructure providers to rely on the more enabling provisions in infrastructure chapters. This is particularly problematic in areas with expansive Outstanding Natural Landscapes, which is a common occurrence in the South Island in particular. These recent examples include the notified versions of the Selwyn District Plan and Waimakariri District Plan, and the exposure draft of the West Coast Combined District Plan. In my opinion, it is critical that the policy provisions in the PORPS work properly together to achieve the best overall balance of protecting the values and attributes of valued environments whilst also recognising and providing for the infrastructure needs of people and communities. That is, providing a pathway in the planning framework for proper consideration of necessary infrastructure in appropriate circumstances.

4.7 One of the key themes arising in the Telecommunications Submitters' submission is the scope of "*Nationally Significant Infrastructure*" and "*Regionally Significant Infrastructure*", which has a very different policy framework in the notified PORPS in sensitive environments when compared to Infrastructure more generally. I discuss this in more detail below in regard to the specific submission points relevant to the EIT section and the s42A recommendations.

4.8 As set out in the Telecommunications Submitters' submission, there is uncertainty in the scope of the definitions for "*Nationally Significant Infrastructure*" and "*Regionally Significant Infrastructure*" as notified insofar as these definitions apply and relate to telecommunications networks. I am strongly of the view that amendments to the relevant definitions are required as a starting point to provide clarity and certainty for the Telecommunications Submitters. The supplementary evidence of Mr Langman recommends changes to the definition of *Regionally Significant Infrastructure*⁶ which in my opinion addresses the concerns raised by the Telecommunication Submitters. I support the approach recommended by Mr Langman and consider that his approach should be adopted by the Hearing Commissioners.

NESTF

4.9 Significant elements of telecommunication networks are regulated under the NESTF and are provided for as permitted activities, reflecting their importance as a significant physical resource under section 5 of the RMA.

⁶ Supplementary evidence of Marcus Langman at [45].

4.10 The NESTF now provides for the following as permitted activities in all district plans subject to standards:

- (a) Telecommunications cabinets in all locations;
- (b) Antennas on existing poles in road reserve (including pole replacement);
- (c) Antennas on new poles in road reserve;
- (d) Antennas on existing poles outside of road reserve, including pole replacements if required (i.e. upgrades to existing telecommunication facilities outside of roads);
- (e) New poles and attached antennas in rural zones;
- (f) Antennas on buildings (the standards exclude any residential zones unless the point of attachment to the building is at least 15m above ground level);
- (g) Small cell units (integrated radio equipment and antennas not exceeding 0.11 m³);
- (h) Customer connection lines (excluding new support poles);
- (i) Aerial telecommunications lines along the same routes as existing telecommunications and power lines;
- (j) Underground telecommunications lines;
- (k) Ancillary earthworks (excluding access tracks); and
- (l) Radio frequency exposures in all locations.

4.11 The regulations apply to regulated activities undertaken by a *facility operator*⁷ which includes a network operator (as defined in section 5 of the Telecommunications Act 2001), the Crown or a Crown agent. The Telecommunications Submitters are facility operators.

4.12 Regulated activities⁸ not complying with the relevant permitted activity standards in the NESTF remain subject to the relevant district plan. Where

⁷ Defined in NESTF Regulation 4.

⁸ Means activities covered by regulations 19, 26, 28, 30, 32, 34, 36, 39, 41 or 41 which in summary relates to poles, antennas, cabinets and lines in the circumstances prescribed in those regulations.

such an activity would otherwise be a permitted activity in the district plan (but does not meet the standards in the NESTF), it requires resource consent as a controlled activity under Regulation 14. In each other case it is the same status as that included in the relevant district plan.

4.13 Subpart 5 of the NESTF identifies certain types of district plan rules relating to sensitive natural and built environments which still apply to regulated activities and where resource consent would otherwise be required in the relevant district plan. Poles, antennas and cabinets are subject to all of these controls, whilst customer connection lines, aerial lines following existing telecommunications or power lines and underground lines may only be subject to some of these matters depending on circumstances. District rules still apply to regulated activities in regard to the following:

- (a) Regulation 44 - Trees and vegetation in road reserve;
- (b) Regulation 45 - Significant (scheduled) trees;
- (c) Regulation 46 – Historic heritage (including cultural heritage);
- (d) Regulation 47 – Visual amenity landscapes (e.g. significant ridgelines, view shafts etc);
- (e) Regulation 48 – Significant habitats for indigenous vegetation;
- (f) Regulation 49 – Significant habitats for indigenous fauna;
- (g) Regulation 50 – Outstanding natural features and landscapes;
- (h) Regulation 51 – Places adjoining the coastal marine area (in regard to specific coastal protection rules such as coastal yards etc); and
- (i) Regulation 52 – Rivers and lakes (the regulations do not apply to works in, on, under or over the bed of any river, except that they apply to anything done over a river or a lake such as on a bridge).⁹ Regulation 52 confirms that any relevant regional rules apply in addition to the regulations that may be relevant.

4.14 Given the hierarchy of planning documents under the RMA (and the requirement for district plans to give effect to the relevant Regional Policy Statement ("**RPS**")),¹⁰ the objective and policy framework in the PORPS

⁹ NESTF Regulation 8.

¹⁰ RMA, s 75(3)(c).

relevant to these Subpart 5 areas (i.e. historic heritage, visual amenity landscapes, significant habitats for indigenous vegetation and fauna and outstanding natural features or landscapes) is relevant to the rule framework applying to telecommunications infrastructure. As the NESTF does not include any objectives and policies, where resource consent is required for telecommunications infrastructure, the objectives and policies in the relevant regional policy statements and plans are directly relevant to the assessment of the application.

- 4.15 Of particular note, Regulation 57 of the NESTF specifically disapplies district plan natural hazard rules to regulated telecommunications activities. As outlined in the Cabinet Paper to authorise the submission of the NESTF to the Executive Council for approval, the reasoning behind these rules being disapplied were that resilience to natural hazards was already factored into [telecommunications] industry practice, and there was no information provided in consultation feedback demonstrating having Councils involved would improve telecommunications outcomes.¹¹ While the Telecommunications Submitters' submission included matters regarding the section on Natural Hazards and Risks, they are not contesting any of the relevant s42A report recommendations in evidence. In any case I had no particular concerns with the relevant recommendations in the s42A report.
- 4.16 As set out in Regulation 8, the NESTF does not apply to anything done in the Coastal Marine Area or in, on, under or over the bed of the river or lake (other than anything done over a river or lake such as on a bridge, where in which case the relevant regional rules apply).

5. DEFINITIONS

Submissions

- 5.1 The Telecommunications Submitters in their submission seek amendments to the definition of *Nationally Significant Infrastructure* in the PORPS, and either an amendment to the definition of *Regionally Significant Infrastructure* or a new definition for the sub-term *Telecommunication and Radiocommunication Facility*.
- 5.2 In my opinion the scope of these definitions is critical in understanding how telecommunications equipment engages with the objectives and policies of the

¹¹ Cabinet Paper 1 November 2016, paragraphs 33-37, published on Ministry for Environment Website.

EIT section, and in particular to understanding how certain provisions apply to telecommunications infrastructure. For example, *Nationally Significant Infrastructure* and *Regionally Significant Infrastructure* is differentiated from *Infrastructure* more generally in sensitive environments in Policy EIT-INF-P13.

Nationally Significant Infrastructure

- 5.3 The Telecommunications Submitters' submission seeks that the definition of *Nationally Significant infrastructure* be amended by adding "*International and inter-regional telecommunications links*" to the list within the notified definition. This was requested given the role this infrastructure plays in New Zealand's international and inter-regional connectivity for broadband services, data transfer and telecommunications.

Regionally Significant Infrastructure / Telecommunication and Radiocommunication Facilities

- 5.4 "*Telecommunication and Radiocommunication Facilities*" is included in the notified definition of *Regionally Significant Infrastructure*.
- 5.5 While equipment such as a microwave station, exchange or radiocommunication facility (e.g. a cell site or radio repeater) is a site-specific installation that could be considered a "facility", it is unclear if a cable distribution network including fibre networks would meet the definition of a *facility* in the PORPS. In my opinion such infrastructure would not be *Nationally Significant Infrastructure* in the current PORPS definition and may also not be *Regionally Significant Infrastructure*.
- 5.6 The Telecommunications Submitters' submission requests either:
- (a) a new definition of *Telecommunication and Radiocommunication Facilities* is included that encompasses all lines and wireless networks; or
 - (b) an amendment to the definition of *Regionally Significant Infrastructure* so that it is clear what infrastructure it covers (i.e. the definition includes *Telecommunication and Radiocommunication Networks* rather than "facilities").

s42A Report and supplementary evidence

Nationally Significant Infrastructure

- 5.7 This definition is discussed in section 11.6.4.3 of the s42A report. The reporting planner, Peter Stafford, discusses at paragraph 500 that *Nationally Significant Infrastructure* as defined in the PORPS has, to the extent applicable to the Otago region, the same meaning as clause 1.4(1) of the National Policy Statement for Urban Development 2020 ("**NPS-UD**"). Mr Stafford considers that use of consistent definitions within the New Zealand regulatory framework is critical to the interoperability of the PORPS related regulatory and policy frameworks within the Otago region and nationally. As such Mr Stafford does not consider it appropriate to amend the definition as notified.
- 5.8 At paragraph 503 of the s42A report Mr Stafford specifically notes that the amendment sought by the Telecommunication Submitters to the definition of *Nationally Significant Infrastructure* is included in the definition of *Regionally Significant Infrastructure*.
- 5.9 Mr Stafford recommends at paragraph 510 that no amendments be made to the definition.

Regionally Significant Infrastructure/Telecommunication and Radio Communications Facilities

- 5.10 Mr Stafford discusses the requested new definition of *Telecommunication and Radiocommunication Facilities* in Section 11.5.3.5 of the s42A report. He disagrees a new definition is needed and that an amendment requested by New Zealand Forest and Bird Society Inc ("**Forest and Bird**") in regard to the *Regionally Significant Infrastructure* definition would address the concerns of the Telecommunications Submitters. At paragraph 80 the recommendation is to reject the submission point by the Telecommunications Submitters.
- 5.11 The definition of *Regionally Significant Infrastructure* is assessed in Section 11.6.4.4. At paragraph 550. Mr Stafford recommends the relevant clause of the definition be amended as follows:¹²

- (4) telecommunication and radiocommunication facilities as respectively defined in section 5 of the Telecommunications Act 2001 and in section 2 of the Radiocommunications Act 1989²⁹⁴.

¹² Recommendation is in response to Forest and Bird 00230.011.

- 5.12 Following pre-hearing discussions, this definition has been further considered in the supplementary evidence of Mr Langman, who now recommends a change in line with the Telecommunications Submitters' submission by amending the definition of *Regionally Significant infrastructure* to refer to *telecommunications and radiocommunications networks* rather than *facilities*.¹³ I agree with and support that recommended change.

Planning Assessment

- 5.13 I disagree with the reasoning in the s42A report that *International and inter-regional telecommunications links* should not be included in the definition of *Nationally Significant Infrastructure* as it is inconsistent with how that term is defined in the NPS-UD, and that it is covered in any case within the notified definition of *Regionally Significant Infrastructure*.
- 5.14 In my opinion, the importance of *International and inter-regional telecommunications links* is equally as important as the other matters which are included, such as state highways, the National Grid, renewable electricity generation facilities that connect to the National Grid, specified pipelines, the New Zealand rail network, rapid transit services, airports and ports. New Zealand society, economy, and well-functioning urban environments are in my view reliant on connectivity in regard to telecommunications and wireless data and broadband to function. People's reliance on telecommunications infrastructure has been brought to the forefront by the recent COVID-19 pandemic. A large proportion of New Zealanders and New Zealand businesses have relied heavily on well-functioning telecommunication services to continue working during the COVID-19 level 3 and 4 lockdowns. These services have been critical to people's health and wellbeing and to supporting New Zealand's recovery from the economic and social impacts of COVID-19.
- 5.15 Publicly available information in the media shows that Hawaiki Cable, who have already constructed a submarine cable from Whangarei linking to Australia and across the Pacific to the United States, are actively investigating a new cable system called Hawaiki Nui landing at Invercargill, Dunedin and Christchurch and linking to Australia and then onto Asia and the United States.¹⁴ It is also well publicised in the media that a major data centre is being investigated in Southland with the potential to utilise power from the Manapouri Power Scheme if and when the Tiwai Point Smelter closes down. I understand

¹³ Supplementary evidence of Marcus Langman at [45].

¹⁴ Stuff article November 4, 2021 <https://www.stuff.co.nz/business/126851934/huge-subsea-internet-cable-will-boost-south-islands-digital-economy>

that connection to a major international submarine cable system would be particularly advantageous for linking such a centre to international customers. Accordingly, there is every chance that a major international submarine cable system could land in and/or traverse the Otago Region. I have overseen staff in my company obtain resource consents for installation of an international submarine cable from Raglan in the Waikato to Sydney (Tasman Global Access or "TGA") which is now operational, and a new international submarine cable from Auckland linking in mid pacific to a new transpacific cable between Australia to the United State (Southern Cross Next) which is currently under construction.

- 5.16 Spark, who manage the Southern Cross and Southern Cross Next cables and are a major shareholder in the TGA cable along with Vodafone, and who own and operate the Warkworth Satellite Earth Station, conservatively estimate that 98% of New Zealand's connectivity to the World in regard to communications, data transfer and the internet is via international submarine cables. Accordingly, New Zealand's connectivity to the World is reliant on this critical infrastructure.
- 5.17 These cables serve all of New Zealand, so rely on good inter-regional connections including backbone fibre cables to link other regions of New Zealand to these cables. They are all part of the system and accordingly in my opinion the international cables and the major links from other parts of New Zealand to these cables are *Nationally Significant Infrastructure*.
- 5.18 I disagree with the reasoning in the s42A report that the definition needs to align with the same term used in the NPS-UD. In my opinion the NPS-UD definition does not properly capture critical international and inter-regional telecommunication and radiocommunication links as being a component of *Nationally Significant Infrastructure* for the reasons I have just outlined. A well-functioning urban environment in the modern world requires integration with this infrastructure as this enables technology we all use and rely on. Further, the NPS-UD has a specific focus on urban development and well-functioning urban environments, whilst this infrastructure may be deployed in coastal and rural environments in addition to urban environments, so in my opinion applying the approach adopted in an urban context to the wider environment is not appropriate.
- 5.19 In regard to this equipment being included in the notified definition of *Regionally Significant Infrastructure*, in my opinion there is a high risk that cable networks including fibre backbone and distribution networks would not be considered a telecommunication facility and as such would not fall within

the definition. I think that this would lead to unintended consequences, particularly where it is necessary for such infrastructure to traverse sensitive environments.

- 5.20 The proposed amendment in response to the Forest and Bird submission to include reference to definitions in s5 of the Telecommunications Act 2001 and s2 of the Radiocommunications Act 1989 does not assist in determining what is within the scope of a facility, it merely clarifies what telecommunication and radiocommunication means so in my opinion is not particularly helpful.
- 5.21 Accordingly, I support the recommendation in the supplementary evidence of Mr Langman to amend the definition of *Regionally Significant Infrastructure* by amending that definition to refer to *telecommunications and radiocommunications networks* rather than *facilities*. I still support inclusion of “*international and inter-regional telecommunications links*” in the definition of *Nationally Significant Infrastructure* to properly reflect the importance of this infrastructure.

Recommendation

- 5.22 **Amend** the definition of “*Nationally Significant Infrastructure*” by adding the following:
- *International and inter-regional telecommunications links*
- and
- 5.23 **Amend** the definition of Regionally Significant Infrastructure by changing the listed term “Telecommunication and Radiocommunication Facilities” to “Telecommunication and Radiocommunication Networks”.

6. OBJECTIVE EIT-INF-04 PROVISION OF INFRASTRUCTURE, AND “WITHIN ENVIRONMENTAL LIMITS” TERMINOLOGY

Submission

- 6.1 The approach of the notified objective is to provide for effective, efficient and resilient infrastructure that enables the people and communities of Otago to provide for their social and cultural well-being, and health and safety, and supports sustainable economic growth. This is caveated with a requirement for this to be *within environmental limits*, a term which I assume has been adopted from the exposure draft of the NBA.

- 6.2 The Telecommunications Submitters' submission seeks removal of the term "*within environmental limits*" on the basis that this PORPS is being promulgated under the RMA and until such time that it may transition to a new legislative regime and any transitional period, will be implemented under an RMA framework.

s42A Report

- 6.3 The phrase "environmental limits" is addressed in the Chapter 11 s42A report on the EIT topic in the context of EIT-INF-O4, and more generally within the Chapter 1 s42A report.
- 6.4 Objective EIT-INF-O4 is assessed in Section 11.6.5 of the Chapter 11 s42A report. Mr Stafford addresses use of the phrase "environmental limits" at paragraph 575 and considers the terminology to be appropriate as it provides clarity with respect to a range of bottom lines that are expressed throughout the PORPS and in other regulations such as the NES-F. Mr Langman refers to the Natural and Built Environments Bill Parliamentary Paper 2021 to explain that the term can support the RMA in the following two key ways:

by being much more explicit about having to comply with environmental limits to protect ecological integrity and human health; and through setting up a framework of outcomes for restoring, enhancing or improving the natural environment, as well as promoting specific development and cultural outcomes that support the well-being of present generations, without compromising the well-being of future generations.

- 6.5 Accordingly Mr Stafford recommended that submissions seeking removal of the *within environmental limits* terminology be rejected (paragraph 576).
- 6.6 This terminology was also assessed more generally in the Chapter 1 s42A report in section 1.6.3. Importantly, in this report, a new definition of *Environmental Limit* was proposed, which would then give it meaning in the PORPS. As set out in paragraph 143, the recommended definition is:

environmental limit means, in relation to natural resources:

(1) the minimum biophysical state (where biophysical means relating to biotic or abiotic physical features); or

(2) the maximum amount of harm or stress that may be permitted; and

(3) may be:

(a) qualitative or quantitative;

(b) set at different levels for different circumstances and locations; or

(c) set in a way that integrates more than 1 natural resource.

- 6.7 The recommendation at paragraph 147 of the Chapter 1 s42A was that the terminology be retained in Objective EIT-INF-O4.
- 6.8 However, this matter has now been revisited in the supplementary evidence of Ms Boyd.¹⁵ Ms Boyd is now recommending a change in terminology from *Environment Limit*, to *Limit*, with a supporting definition such that in the Land and Freshwater Chapter, it has the same meaning as the *National Policy Statement for Freshwater Management 2020*, and elsewhere in the PORPS *Limit* has its natural and ordinary meaning. I understand that the intent in chapters other than the Land and Freshwater Chapter is to ensure the term is not only limited to a consideration of biophysical limits.

Planning Assessment

- 6.9 I do not consider it to be good planning practice to introduce new terminology based on an exposure draft of a proposed new act that is not yet well understood in an RMA context. While including a definition for *Environmental Limit* or *Limit* within the PORPS is certainly an improvement to the provisions as notified, the definition itself may still in my opinion be open to differences in interpretation creating uncertainty.
- 6.10 Based on public statements by the Minister for the Environment I understand that there may be a long transitional period where the RMA continues to apply in each region until the first Regional Spatial Strategies and Natural and Built Environments Act Plans are prepared. On this basis I understand that in practice current RMA policy statements and plans will not operate under the new NBA framework. There is therefore no benefit to adopting language which might be used in the new framework in the PORPS.
- 6.11 Within a plan, a policy stating “avoid adverse effects” would presumably mean the environmental limit or limit is exceeded if there is any effect, and similarly if the policy prerogative is avoid significant adverse effects, then that is the limit (example is qualitative in regard to natural environments such as Outstanding Natural Landscapes, rather than biophysical standards for say air or water quality). In practice this would therefore serve as an absolute limit which would have significant consequences to the provision of infrastructure in the Otago

¹⁵ Supplementary evidence of Felicity Boyd at [2] – [24].

region. Broadening from *Environmental Limit* to *Limit* is an improvement in regard to ensuring the term applies more broadly than just to biophysical limits. However, whilst still operating in a RMA framework, it is my preference that this language is removed from the PORPS being promulgated under the RMA.

- 6.12 In my opinion it is better to use more well understood RMA language for the PORPS given it is a planning document promulgated and operating under the RMA framework. I have suggested some alternative wording for consideration below that in my opinion would achieve the same outcome I understand the Otago Regional Council is trying to achieve whilst using more well understood language (noting other sections of the PORPS give more specific guidance on managing environmental effects on the likes of Outstanding Natural Landscapes or the Coastal Environment). I note the amendment I suggest also applies more broadly than just natural environments (e.g. historic and cultural values) as would be the case with the notified definition of *Environmental Limit*, although acknowledging the reporting planner now proposes that this be broadened to “*limits*” I have also suggested removal of the phrase “within the region” given the infrastructure may traverse Otago but have benefits wider than just the Otago region. Whilst not specifically included in the Telecommunication Submitters’ submission, I consider that this amendment would improve the policy given that infrastructure located in or traversing the Otago region may also benefit other Regions (e.g. traversing of the Otago Region by a significant fibre cable).
- 6.13 If the Hearing Commissioners consider the use of *Environmental Limit(s)* or *Limit(s)* appropriate, then I am of the view that it is essential that a definition be included to provide context as to its meaning.

Recommendation

- 6.14 Amend Objective EIT-INF-O4 as follows:

EIT-INF-O4 – Provision of infrastructure

Effective, efficient and resilient infrastructure **that** enables the people and communities of Otago to provide for their social and cultural well-being, their health and safety, and supports sustainable economic development and growth ~~within the region within environmental limits~~, while managing the adverse effects on the environment, in particular natural resources natural heritage, the coastal environment, amenity values, and heritage and cultural values.

7. POLICY EIT-INF-P11 OPERATION AND MAINTENANCE

Submission

- 7.1 The policy provides for the operation and maintenance of existing nationally and regionally significant infrastructure. The Telecommunications Submitters' submission seeks the deletion of the words *nationally and regionally significant* such that it applies to all existing infrastructure. This is because all components of existing infrastructure contributes to the overall functionality of the network. Policy EIT-INF-P11 implements Objective EIT-INF-O4 *Provision of Infrastructure* applies to all infrastructure.

s42A Report

- 7.2 At paragraph 665 Mr Stafford does not agree with the submissions by the Telecommunication Submitters and OWRUG that the policy should be broadened to infrastructure more generally on the basis that the policy is intended to apply to *Regionally Significant Infrastructure* and *Nationally Significant Infrastructure*. Mr Stafford provides no analysis of the merits of the submission in regard to whether it could be broadened to consider infrastructure more generally.
- 7.3 The recommendation in Section 11.6.9.4, paragraph 672 is that the policy be amended to:

EIT-INF-P11 – Operation and maintenance

Except as provided for by ECO – P4, allow for the operation and maintenance of existing *nationally significant infrastructure*³⁶⁹ and *regionally significant infrastructure* while:

- (1) avoiding, as the first priority, significant adverse *effects* on the *environment*, and
- (2) if avoidance is not practicable, and for other adverse *effects* minimising adverse *effects*.

Planning Assessment

- 7.4 Policy EIT-INF-P11 is a provision to implement the objectives of the PORPS including Objective EIT-INF-O4 Provision of Infrastructure. The final wording of Objective EIT-INF-O4 as recommended in the Chapter 11 s42A report is:

EIT-INF-O4 – Provision of *infrastructure*

Effective, efficient and resilient *infrastructure, nationally significant infrastructure and regionally significant*

*infrastructure*³²⁰ enables the people and communities of Otago to provide for their social and cultural well-being, their health and safety, and supports sustainable economic development and growth in ~~within~~ the region,³²¹ within *environmental limits*.

- 7.5 The objective relates to all infrastructure. The operation and maintenance of existing infrastructure enables people and communities to provide for their social and economic wellbeing, their health and safety and supports sustainable development and growth. Where infrastructure is part of the existing environment, it can be operated and maintained within environmental limits/managed to take appropriate account of the receiving environment (depending on the final wording and terminology of the objective that is adopted) and as specified in clause 1 and 2 of policy EIT-INF-P11 and Policy ECO-P4.
- 7.6 Therefore, in my opinion, any infrastructure that has been lawfully established should be able to be operated and maintained. In my opinion this is a different proposition to a policy framework to establish new infrastructure or significantly upgrade infrastructure in a manner than may have a different effects envelope. In my opinion this policy dealing with operation and maintenance of existing infrastructure should be broadened to infrastructure more generally.
- 7.7 I am familiar with overhead Chorus cables in Waitakere Ranges serving Auckland west coast communities (e.g. Piha) that traverse the Significant Ecological Area overlay, where the physical roads do not necessarily follow the legal road reserve and where trimming of vegetation may be required to protect these cables from damage. This is an example of infrastructure that could be considered critical for the particular community it serves, which was not included as *Regionally Significant Infrastructure* in the notified definition.
- 7.8 The way in which *Regionally Significant and Nationally Significant Infrastructure* is defined will have significant potential implications on telecommunications networks if this provision is not broadened to encompass infrastructure more generally. In particular, facilities of a linear nature such as submarine cables or inter-regional cable links do not appear to be facilities so would currently fall outside of either of these definitions and could be located in sensitive environments such as Significant Natural Areas where access to undertake maintenance may be required. The proposed amendment to the definition of *Regionally Significant Infrastructure* in Mr Langman's supplementary evidence would address my concerns around telecommunications/fibre lines networks being covered by this policy, although that may not necessarily be the case for other existing infrastructure that may not fall within the definition.

Recommendation

- 7.9 Amend Policy EIT-INF-P11 to apply more generally to *Infrastructure* as follows:

EIT-INF-P11 – Operation and Maintenance

Except as provided for by ECO-P4, allow for the operation and maintenance of existing ~~nationally and regionally significant~~ infrastructure while ensuring that:

.....

8. POLICY EIT-INF-P13 LOCATING AND MANAGING THE EFFECTS OF INFRASTRUCTURE

Submission

- 8.1 The policy provides a hierarchy for managing the effects of *Nationally Significant Infrastructure and Regionally Significant Infrastructure* in identified sensitive environments. For other infrastructure, the requirement is to avoid the adverse effects of infrastructure on the values that contribute to the area's outstanding nature or significance.
- 8.2 The Telecommunications Submitters' submission seeks an amendment to Policy EIT-INF-P13 such that the effects management regime in Clause 2(a) of the policy applies to all infrastructure. This submission was largely driven by the notified definition of *Regionally Significant Infrastructure* which applies only to telecommunications and radiocommunications facilities, and not networks.

s42A Report

- 8.3 This policy is analysed in Section 11.6.11 of the s42A report. The intent of the policy, to give interpretive meaning to how infrastructure is managed in sensitive natural and built environments, is discussed in paragraphs 696 and 697. At paragraph 730, the Mr Stafford does not agree with the submission of the Telecommunications Submitters on the basis that the provision is intentionally targeted at *national and regionally significant infrastructure* due to its importance, and accordingly it is not appropriate to broaden its application to infrastructure generally. He also notes that recommended changes to the definition of *Regionally Significant Infrastructure* may address the Telecommunication Submitters' concerns.
- 8.4 In response to other submissions on this provision, the following amendments to the policy are recommended by Mr Stafford at paragraph 743:

EIT-INF-P13 – Locating and managing effects of infrastructure, nationally significant infrastructure and regionally significant infrastructure outside the coastal environment

When providing for new infrastructure, nationally significant infrastructure and regionally significant infrastructure outside the coastal environment

- (1) *avoid, as the first priority, locating infrastructure in all of the following:*
 - (a) *significant natural areas,*
 - (b) *outstanding natural features and landscapes,*
 - (c) *natural wetlands,*
 - (d) *outstanding water bodies,*
 - (e) *areas of high or outstanding natural character,*
 - (f) *areas or places of significant or outstanding historic heritage,*
 - (g) *wāhi tūpuna ~~wāhi tapu~~, ~~wāhi taoka~~, and areas with protected customary rights, and*
 - (h) *areas of high recreational and high amenity value, and*

- (2) *if it is not possible to avoid locating in the areas listed in (1) above because of the functional needs or operational needs of the infrastructure, nationally significant infrastructure and regionally significant infrastructure manage adverse effects as follows:*
 - (a) *for nationally significant infrastructure or regionally significant infrastructure:*
 - (i) *in significant natural areas, in accordance with ECO-P4,*
 - (ii) *in natural wetlands, in accordance with the relevant provisions in the NESF,*
 - (iii) *in outstanding water bodies, in accordance with LF-FW-P12,*
 - (iia) *in relation to wāhi tūpuna, in accordance with HCV-WT-P2*
 - (iv) *in other areas listed in EIT-INF-P13 (1) above, minimise the adverse effects of the infrastructure*

on the values that contribute to the area's importance,

- (b) *for all infrastructure that is not nationally significant infrastructure or regionally significant infrastructure, avoid adverse effects on the values that contribute to the area's outstanding nature or significance.*

- 8.5 A further new Policy EIT-INF-P13A is recommended at paragraph 744 clarifying that within the Coastal Environment that the provisions of the CE Coastal Environment section apply.
- 8.6 The supplementary evidence of Mr Langman now also recommends that EIT-INF-P13(2) be amended from "*possible*" to "*demonstrably practicable*" in regard to the management approach for considering infrastructure in sensitive environments. The reasoning given is that it provides a high test to be met before infrastructure is located in these areas, but enables an evaluative process to take place including an assessment of the route, method or site selection process.¹⁶

Planning Assessment

- 8.7 I agree with the overall intent of Policy EIT-INF-P13 to provide guidance on the management approach for infrastructure within sensitive natural environments outside of the Coastal Environment, and agree that there should be a separate management regime and policy framework within the Coastal Environment given the directive provisions of the New Zealand Coastal Policy Statement 2010 ("**NZCPS**"). However, I have concerns that the avoidance of effects approach for telecommunications infrastructure that is not *Regionally Significant Infrastructure* or *Nationally Significant Infrastructure* as per the notified definitions and not in coastal environments is too stringent and may have unintended consequences in regard to infrastructure serving the needs of people and communities.
- 8.8 Even the NZCPS does not seek an effects avoidance approach in Policies 11, 13, and 15 other than in regard to indigenous biological biodiversity areas meeting Policy 11(a) criteria, areas of Outstanding Natural Character and Outstanding Natural Features and Landscapes. For other areas in regard to indigenous biological biodiversity, natural character and natural landscapes and natural features, the policy approach of the NZCPS is to avoid significant adverse effects.

¹⁶ Supplementary evidence of Marcus Langman 11 October 2022 at [42] – [44].

- 8.9 Due to functional needs and operational needs, some infrastructure not meeting the nationally and regionally significant infrastructure threshold, at least in regard to the notified scope of these definitions may be required in the listed sensitive areas. For example, it may preclude providing a service connection to a heritage building which may be needed to support its viable use, or installing services in a road over which a heritage overlay may apply. As drafted and in the absence of a change to the definition of *Regionally Significant Infrastructure* as proposed by the Telecommunications Submitters and now supported by Mr Langman, the policy would preclude this by use of the avoidance of effects approach, even where there are minor adverse effects and community benefits.
- 8.10 I agree with the proposed change in wording from “possible” to “demonstrably practicable” in clause 2 of Policy INF-EIT-P13 to provide a pragmatic framework for considering if infrastructure reasonably needs to locate in a sensitive environment.

Recommendation

- 8.11 Amend the definitions of *Nationally Significant Infrastructure* and *Regionally Significant Infrastructure* as set out in Paragraphs 5.22 and 5.23 of my evidence.
- 8.12 In the absence of the change recommended by Mr Langman to *Regionally Significant Infrastructure*, changes will be required to Policy EIT-INF-P13 to ensure all infrastructure is subject to the management approach of Clause 2(a) of the policy and removal of the avoidance of effects clause in regard to other infrastructure under clause 2(b).
- 8.13 Amend the work “possible” to “demonstrably practical” in Policy INF-EIT-P13(2) as recommended in the supplementary evidence of Mr Langman.

9. CONCLUSION

- 9.1 Overall, the proposed amendment to the definition of *Regionally Significant Infrastructure* in Mr Langman’s supplementary evidence related to telecommunications and radiocommunications networks resolves several concerns I have with a number of provisions throughout the notified PORPS that may unreasonably and unnecessarily constrain the location of infrastructure. These concerns particularly relate to situations where infrastructure needs to be sited in sensitive environments as a result of their functional needs and operational needs.

- 9.2 In the event that the recommended change to the definition of *Regionally Significant Infrastructure* is not be adopted by the Hearing Commissioners, then there will need to be a number of consequential amendments throughout the PORPS including to Policy EIT-INF-P13 and potentially provisions in other chapters (covered in other statements of evidence) to avoid unintended consequences related to locating telecommunications infrastructure in areas required support people and communities.
- 9.3 Council's supplementary evidence has recommended changes to Objective EIT-INF-O4 (from *Environmental Limits* to *Limits*). I do not consider the proposed amendment resolves the concerns I had in relating to using terminology derived from the proposed new legislation to replace the RMA, whilst still operating under an RMA framework. I see no benefit in using this terminology over more well understood RMA terminology while in this transitional period between different legislative arrangements and planning instruments.
- 9.4 I have recommended or supported a small number of further changes to provide for existing and proposed infrastructure.in the EIT chapter.

Christopher Mark Horne
23 November 2022

APPENDIX A

s42 Recommendations not contested by the Telecommunications Submitters

s42A report	Submission point	s42A recommendation reference
Chapter 11 Energy, Infrastructure and Transport: Peter Stafford	Objective EIT-INF-O5 Integration	Recommendation 11.6.6.4, para 608
	Policy EIT-INF-P17 Urban Growth and Infrastructure	Recommendation 11.6.15.3., para 803
Chapter 12 Hazards and Risks: Andrew MacLennan	Policy HAZ-NH-P4 – Existing Activities	Recommendation 12.4.8.4, para 168
	Policy HAZ-NH-P8 – Lifeline utilities and facilities for essential or emergency services	Recommendation 12.4.12.4, para 222 and supplementary evidence of Andrew MacLennan, para 14
	Policy HAZ-NH-P11 - Kaitiaki decision making	Recommendation 12.4.15.4, para 254
Chapter 13 Historical and Cultural Values: Angela Fenemor	Policy HCV-WT-P2 – Management of wāhi tupuna	Recommendation 13.5.6.4, para 108
Chapter 14 Natural Features and Landscapes: Andrew MacLennan	APP 9 Identification Criteria for outstanding and highly valued natural features, landscapes and seascapes	Recommendation 14.19.4, para 242 And supplementary evidence of Andrew MacLennan para 16
Chapter 15 Urban Form and Development: Kyle Balderston	Objective UFD-O2 – Development of Urban Areas	Recommendation 15.6.4, para 156
	Policy UFD-P3 Urban Intensification	Recommendation 15.12.4, para 269 and supplementary evidence of Elizabeth Jane White, para 22