

**IN THE MATTER of the Resource
Management Act 1991**

AND

**IN THE MATTER of Porirua City Council's
Proposed District Plan**

Hearing Stream 5 – Subdivisions – SUB-S7

**STATEMENT OF EVIDENCE OF
GRAEME IAN MCCARRISON FOR
SPARK TRADING NEW ZEALAND LTD**

**IN RELATION TO HEARING STREAM 5 OF PORIRUA CITY COUNCIL'S
PROPOSED DISTRICT PLAN**

4 MAY 2022

1. EXECUTIVE SUMMARY

- 1.1 Spark, and Vodafone, along with other telecommunication providers, invest significantly every year in our networks to ensure New Zealanders have access to world class digital services. New Zealanders and businesses depend on access to these networks, as proven during the current Covid-19 pandemic and resultant economic matters, as set out in the joint evidence presented in Hearing 4.
- 1.2 The National Policy Statement on Urban Development (2020) (NPS-UD) includes recognition of “additional Infrastructure” in regard to urban growth and well-functioning urban environments. This includes telecommunications as defined under s5 Telco Act, which covers fixed, wireless and mobile networks.
- a. Policy 1 - requires planning decisions to contribute to well-functioning urban environments. Telecommunications promotes work from home solutions with solutions like this zoom hearing reflecting the importance of telecommunication networks.
 - b. Policy 10 - Local authorities are required to engage with providers of *Development Infrastructure*¹ and *Additional Infrastructure*² to achieve integrated land use and infrastructure planning.
 - c. Implementation method 3.5 - Local authorities must be satisfied that additional infrastructure to serve the development capacity is likely to be available.
- 1.3 New Zealand depends on the construction and provision of resilient telecommunication networks. Telecommunications networks, along with the other critical networks such as electricity have proven to be reasonably resilient. It is critical that the network operators have information about new large developments in order to achieve the direction provided under the NPS-UD.
- 1.4 The earlier that planning for telecommunications fibre, wireless and mobile are considered in form of urban development the easier it is to plan for, implement and integrate for the benefit of residents and businesses. Wireless and mobile solutions

¹ Defined in the NPS-UD as *to the extent they are controlled by a local authority or council controlled organisation (as defined in section 6 of the Local Government Act 2002) (a) network infrastructure for water supply, wastewater, or stormwater; (b) land transport (as defined in section 5 of the Land Transport Management Act 2003).*

² Defined in the NPS-UD as meaning *(a) public open space; (b) community infrastructure as defined in section 197 of the Local Government Act 2002; (c) land transport (as defined in the Land Transport Management Act 2003) that is not controlled by local authorities; (d) social infrastructure, such as schools and healthcare facilities; (e) a network operated for the purpose of telecommunications (as defined in section 5 of the Telecommunications Act 2001); and (f) a network operated for the purpose of transmitting or distributing electricity or gas.*

in particular can be difficult to retrofit once an area has been developed due to planning controls and constraints such as the style of light poles which may not be suitable for integration with antennas under the National Environmental Standards for Telecommunications Facilities 2016 (NESTF).

- 1.5 We rely on regulatory frameworks both nationally, via the NESTF, and locally, via the Operative and Proposed Porirua City District Plans, to appropriately enable the planning and funding for upgrading of existing networks and construction of new networks to support new growth areas. Local authorities and applicants often misunderstand of the role wireless/mobile networks play in supporting urban growth. This probably means that more education is required to clarify the need for more than just fibre to ensure the telecommunications services that residents and businesses of Porirua expect in urban and rural areas. Spark and Vodafone accept currently in urban areas that fibre is the Proposed District Plan specified means to provide for telecommunications via subdivisions. However, it should be noted that even though generally new development areas require new mobile and wireless infrastructure or upgrading of existing infrastructure, mobile network operators such as Spark and Vodafone have to fund this themselves whereas Chorus are funded by developers to build new fibre network.
- 1.6 The recommendations of the Reporting Planner Subdivision Chapter are accepted but subject to a small number of amendments to SUB-S7 as outlined in paragraph 3.11 below. The proposed amendments require applicants for large subdivisions to engage with telecommunication network operators which will assist in the support of telecommunications infrastructure in Porirua City. The proposed amendments we believe will assist Council to implement the provisions of SUB-S7.

2. INTRODUCTION

Graeme McCarrison

2.1 My full name is Graeme Ian McCarrison. I am the Engagement & Planning Manager at Spark New Zealand Trading Limited ("Spark"), a position I have held since February 2015. I am authorised to give this evidence on Spark's behalf. Details of my qualifications and experience were set out in our joint evidence presented in Hearing 4.

2.2 I hold the qualification of Bachelor of Regional Planning (Honours) from Massey University. I am a full member of the New Zealand Planning Institute and have 38 years' experience in New Zealand and overseas.

Scope of evidence

2.3 This statement of evidence is focused only on SUB-S7 Telecommunications and power supply.

3. SUB-S7 TELECOMMUNICATIONS AND POWER SUPPLY

3.1 The NPS-UD now clearly contemplates consideration of infrastructure other than roads and 3-Waters in urban growth provision. Telecommunications networks (fixed-line and wireless) fall under Clause (e) of the definition of "additional infrastructure" under the NPS-UD as follows:

additional infrastructure means:

- (a) public open space
- (b) community infrastructure as defined in section 197 of the Local Government Act 2002
- (c) land transport (as defined in the Land Transport Management Act 2003) that is not controlled by local authorities
- (d) social infrastructure, such as schools and healthcare facilities
- (e) a network operated for the purpose of telecommunications (as defined in section 5 of the Telecommunications Act 2001)
- (f) a network operated for the purpose of transmitting or distributing electricity or gas

3.2 Spark considers that, despite the guidance provided in the NPS-UD, there was insufficient focus on additional infrastructure such as telecommunications in the notified provisions of the Proposed District Plan, with most focus on land use change and development being on public infrastructure. The importance of telecommunications to functioning urban environments is set out at Hearing 4 in the primary evidence of myself, Mr Kantor and Mr Clune.

- 3.3 Policy 10 of the NPS-UD requires Tier 1, 2 and 3 local authorities to engage with the providers of development infrastructure and additional infrastructure to achieve integrated land use and infrastructure planning. Under Part 3: Implementation - Clause 3.5 is:

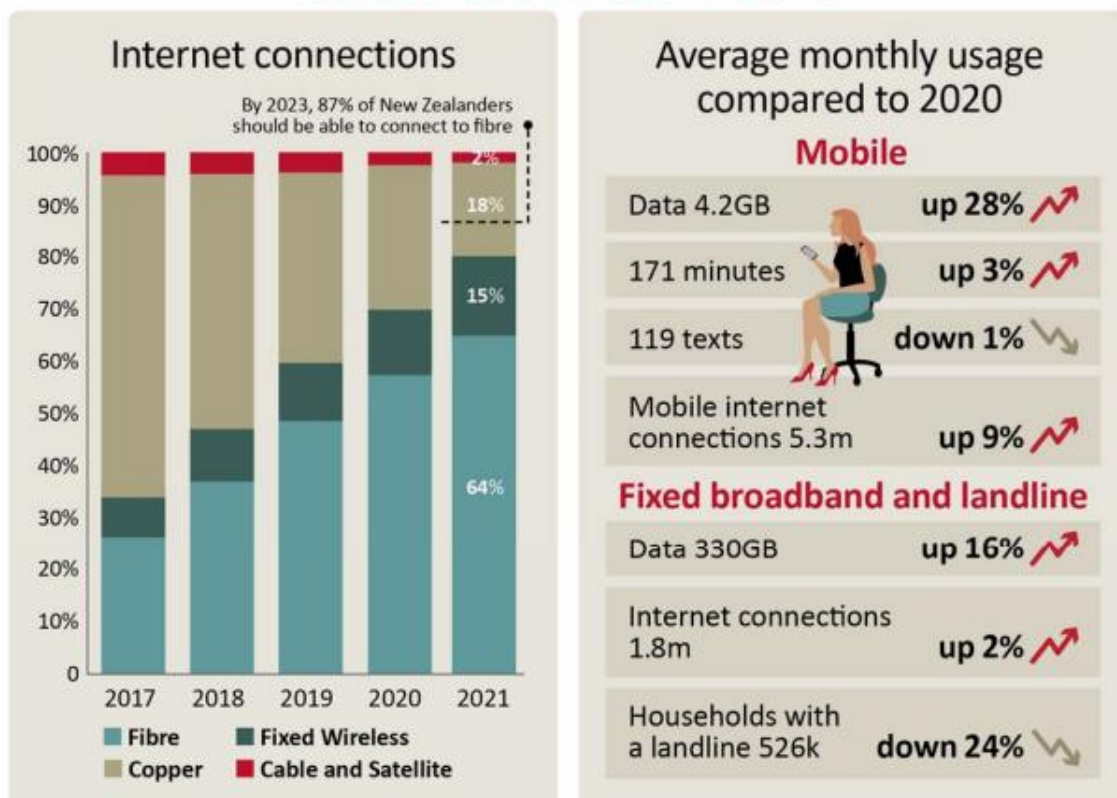
3.5 Availability of additional infrastructure

- (1) Local authorities must be satisfied that the additional infrastructure to service the development capacity is likely to be available.

- 3.4 Telecommunications infrastructure is critical and essential to a modern economy and connecting the 'system of systems' that supports New Zealand's economy and wellbeing of people and communities. Telecommunications plays an important role in national resilience, demonstrated most recently through our national response to Covid-19, as recognised by the Infrastructure Commission³.
- 3.5 Residents/occupiers/businesses and visitors to Porirua want to have choice of service options for telecommunications including:
- Fixed line broadband over fibre,
 - Wireless broadband via a mobile network operator such as Spark or Vodafone,
 - Mobile calling mobile network operator such as Spark or Vodafone, or
 - Any combination of the above
- 3.6 In January 2021 according to NZ Statistics there was 6.56 million mobile connections or 135.6% of the New Zealand population. The number of connections is growing at just 80,000 per year depending on population and immigration. The following table highlights some trend data related broadband connectivity. The table highlights that in urban areas fibre connections remain dominate but that wireless connections are continuing to increase.

³ <https://www.tewaihang.govt.nz/assets/Uploads/Telecommunications-State-of-Play-December-2020.pdf>

Telco trends 2021



3.7 The importance of a telecommunications connection in 2022 is recognised by the Spark Foundation, which supports the delivery of the Skinny Jump program. Skinny Jump is a not-for-profit wireless broadband service for those who find cost is a barrier to having an internet connection at home. The Skinny Jump program is significant in Porirua to families to connect and enables digital equity. To date 245 families have signed to the program through 5 local partners in Porirua.

Snapshot: New Zealand's telecommunications industry

In 2020:



155,000 more homes and businesses

are able to connect to UFB fibre – up 9%.
84% of New Zealanders can now access UFB, with 63%¹ connected.



137 new rural mobile cell towers

went live, bringing faster wireless broadband to 17,000 more rural homes and businesses, as well as new mobile coverage to 25 tourist hotspots and a further 429km of state highways.



Fixed broadband data average monthly usage grew 37%
while the number of connections rose by 4%.



Mobile data average monthly usage grew 22%

while mobile calling grew 4% but texting was down 12%.
Mobile connections rose by 3% to 6.2m.



Homes with a landline phone fell a further 12%

Over half of NZ homes no longer have a landline and of those that still do, only a third have a traditional copper line connection (the rest are connected via their broadband connection).



New Zealand ranked 3rd in the world

in the Mobile Connectivity Index, retaining a top 3 ranking for sixth year in a row.



New Zealand ranked 12th in the world

for overall digital connectivity in the Global Connectivity Index 2020², up from 13th a year earlier and 14th in 2017.



Prices for the most popular consumer broadband and mobile plans remain close to or below OECD averages.

3.8 A risk of the proposed SUB-S7 limiting the requirement for telecommunications to fibre means that current and future wireless technologies, evolving now may not be enable in new development areas when needed by customers. Over the next 10 years how customers access telecommunication services is expected to be significantly different as telecommunication technology and service options evolve. This evolving technology is focused on general requirements of NZers, rather than bespoke business services, includes:

- 5G networks in both rural and urban areas providing the opportunity for customers to have no dependency on fixed line service ie fibre

- 6G wireless technology
- Extensive satellite network – global networks offering services such as Starlink
- Fibre services upgraded to remain competitive with wireless

3.9 Mobile and wireless technology networks are essential as a backup in the event of natural disasters like earthquakes, floods, fires, and storm events. Integration with networks to manage connectivity to cars, vessels, airplanes and other IoT devices and Machine to Machine (M2M) connections on farms and remote worksites in remote and rural areas, assist with the delivery of enhanced mobile broadband and next-generation IoT devices by providing higher data rates and low latency across a constellation of satellites. The proposed subdivision requirements could be in place for 10 to 15 years depending on if the proposed Natural and Built Environments legislation proceeds. It appears to Spark and Vodafone that the recommended amendments in the S42a report are reasonable to enable and reasonably ensure people in Porirua has access to telecommunications services on their choice.

3.10 There is an assumption that wireless and mobile coverage and capacity will be available and not required to be provided by the developer. This is not always going to be the situation when the investment plans of the network operators have not provided for new development. Consultation with the network operators will at least enable conversations that will support network investment planning including capacity and coverage modelling. Potential benefit for the applicant/developer include:

- a. Integration of wireless/mobile assets into the development potentially reducing the visual amenity impacts of infrastructure.
- b. Marketing of the development with the knowledge that residents will have choice of telecommunication connectivity and service provider.

3.11 Spark requests amendments to SUB-S7 subdivision standard (see SUB-S7.5 below) requiring applicants for large urban subdivisions engagement/consultation with the network operators. This would assist Council planners to determine if and when the requirement for an applicant to provide land for telecommunications as provided for in SUB-S7.4, is necessary.

Red edits with ~~strikethrough-or-~~ underline are Council (through the s42a report)

Bold blue edits with underline are proposed by Spark

SUB-S7	Telecommunications and power supply	
<u>All zones</u> <u>Residential Zones</u> <u>Commercial and</u> <u>Mixed Use Zones</u>	1. All new allotments must have provision for fibre optic cable connections to the legal boundary of the allotments.	Matters of discretion are restricted to:

SUB-S7	Telecommunications and power supply	
<u>General Industrial Zone</u> <u>Sport and Active Recreation Zones</u> <u>Hospital Zone</u>	<p>2. All new allotments must have provision for electricity connections to the legal boundary of the allotments.</p>	<p>1. Alternative provision of telecommunication and power supply.</p>
<u>Rural Zones</u> <u>Open Space Zone</u> <u>Special Purpose Zone (BRANZ)</u> <u>Māori Purpose Zone (Hongoeka)</u>	<p>2. All new allotments must have provision for connection to telecommunication infrastructure. This may be achieved by either:</p> <ol style="list-style-type: none"> <u>Provision for fibre optic cable connections to the legal boundary of the allotments; or</u> <u>Provision with any subdivision consent application of written confirmation from a telecommunication network operator confirming that connection (wireless and mobile) to a telecommunications network can be provided to all new allotments and describing how this can be achieved.</u> 	<p><u>Matters of discretion are restricted to:</u></p> <ol style="list-style-type: none"> <u>Alternative provision of telecommunication and power supply.</u>
<u>All zones</u>	<ol style="list-style-type: none"> <u>All new allotments must have provision for electricity connections to the legal boundary of the allotments.</u> <u>At the time of subdivision, sufficient land for telecommunication network infrastructure, transformers and any associated ancillary services for telecommunication and electricity supply must be set aside.</u> <u>The applicant for subdivision of 100 allotments or more or 200 premises/dwellings shall consult with the network operators to determine what existing telecommunication services (fixed line, wireless and mobile) are available to support the subdivision. The outcome of the consultation will be used to inform the need for land to be set aside as provided in requirement SUB-S7.4</u> 	<p><u>Matters of discretion are restricted to:</u></p> <ol style="list-style-type: none"> <u>Alternative provision of telecommunication and power supply.</u>

3.12 The implementation of the proposed amendments could be as follows:

Telecommunication information to be provided by the applicant in the application

1. Applicant provides an actual assessment of what and how telecommunications will be provided to the subdivision (lots/development).
2. Confirmation in writing from network operator/s how telecommunications will be provided to the subdivision. Noting this potentially could be via confirmation of
 - a. Contract to construct fibre connection;
 - b. Information that sets out the existing availability ie coverage and capacity of the existing mobile and wireless facility/ies to serve the subdivisions and developments with a 100plus allotments.
 - c. Identification of any land required to enable telecommunications and electricity.

Application assessment and consent including conditions for telecommunications

1. Reporting planner confirms with the network operator/s supporting the application that telecommunication proposal is correct.
2. Share for comment any draft telecommunication condition/s with the network operator/s

Applicant information as part of the confirmation of the conditions related to Telecommunications

1. Applicants provides confirmation from the network operator/s that the telecommunication have been completed.

4. CONCLUSIONS

4.1 Telecommunications infrastructure is essential for shaping and enabling the future of Porirua and the Greater Wellington region by ensuring that residents and businesses continue to have the opportunity to be connected internationally and across New Zealand. Changes in the way people access and use telecommunications and data networks is rapidly evolving. It is critical that the regulatory framework provides certainty and enables efficient roll out of current and future technology.

4.2 The recommendations of the Reporting Planner Subdivision Chapter are accepted but subject to a small number of amendments to SUB-S7. The proposed amendments as set out in paragraph 3.11 require applicants for large subdivisions to engage with telecommunication network operators which will assist in the support telecommunications infrastructure in Porirua City. The proposed amendments we believe will assist Council to implement the provisions of SUB-S7.

GRAEME MCCARRISON

4 May 2022