

BEFORE KĀPITI COAST DISTRICT COUNCIL

IN THE MATTER of the Resource Management Act
1991 (Act)

AND

IN THE MATTER the hearing for Proposed Kāpiti
Coast District Plan 2012 – Chapter
11, Infrastructure, Services and
Resource Use

**STATEMENT OF EVIDENCE OF
MARY BARTON FOR
CHORUS NEW ZEALAND LIMITED**

1 August 2016

Introduction

Qualifications and Experience

1. My full name is Mary Louise Barton.
2. I am the Environmental Planning and Engagement Manager at Chorus New Zealand Limited (Chorus). I have held this position since February 2015, previously holding the role of Senior Environmental Planner commencing September 2012. I hold the qualification of Bachelor of Resource and Environmental Planning from Massey University and have 15 years of resource management experience, comprising roles in local government and private consultancy.
3. I am currently part of the Technical Advisory Group providing technical advice and input with respect to the proposed amendments to the National Environmental Standards for Telecommunication Facilities (NESTF). I am also a participating member of the New Zealand Telecommunications Forum.
4. In addition to these activities my role at Chorus also involves a range of functions including:
 - Managing and coordinating input to statutory documents;
 - Attending workshops, hearings and informal Council meetings;
 - Providing resource management advice and support with respect to the rollout of Ultra-Fast Broadband (UFB) and the rural broadband initiative (RBI);
 - Developing and managing resource management initiatives to support the UFB and RBI projects and ensure compliance with the relevant regional and district plan provisions;
 - Coordinating and project managing large scale resource consents and archaeological authorities.
5. In my evidence I will cover:
 - An overview of Chorus's role in the Ultra-Fast Broadband Rollout and Rural Broadband Initiative;
 - Recent Government initiatives supporting the delivery of telecommunications, including;

- The extension to the UFB and RBI programmes (and the mobile blackspot fund);
- Land Access under the Telecommunications Act 2001
- Confirmation of Mr. McCarrison' s summary of the proposed amendments to the NESTF
- Comment on the following matters contained within the s42A Report:
 - Overview of changes that have taken place since the original submission was lodged;
 - Chorus position on Regionally Significant Infrastructure Definition.

Code of Conduct

6. I confirm I have read the 'Code of Conduct for Expert Witnesses' contained in the Environment Court Code of Practice, 2014.

7. I have complied with the Code of Conduct in preparing this evidence and I agree to comply with it while giving oral evidence before the Hearing Panel. Except where I state that I am relying on the evidence of another person, this written evidence is within my area of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed in this evidence.

Chorus New Zealand Limited

8. Chorus was formed 1 December 2011 when it demerged from Telecom (now Spark). Structural separation of Telecom's (now Spark) retail business from the business that owns and operates the Fibre-To-The-Premise (FTTP) network was a pre-requisite for participation in the Government's Ultra-Fast Broadband scheme (UFB).

9. The core of Chorus' business is the nationwide network of fibre optic and copper cables connecting homes and businesses together. The fibre network continues growing rapidly with about 1,761,000 fixed line connections and 1,223,000 broadband connections. Cables typically connect back to local telephone exchanges, of which Chorus has about 600 nationwide.

10. The Chorus fibre also connects many mobile phone towers owned by mobile service providers.

11. Cabinets provide interconnection points for around 50% of the lines in the network. A large number of these cabinets are like mini telephone exchanges with electronic broadband equipment installed.

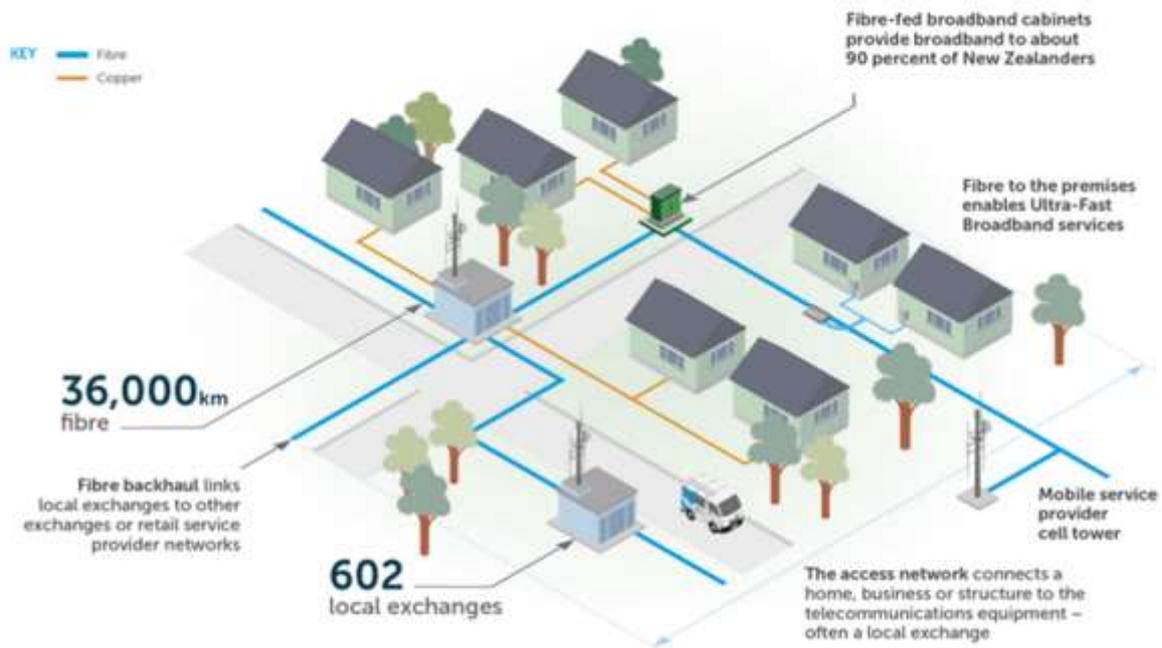


Figure 1: Overview of telecommunications network component parts

12. Attachment A to this evidence details the deployment methods used by Chorus and the different components of the network present within Kāpiti District.

13. Chorus has committed to a significant, ongoing infrastructure investment, building a world-class fibre network across New Zealand in order to help bring economic and social benefits that come with access to high-speed, reliable broadband infrastructure. An Alcatel-Lucent study estimated the economic benefits to New Zealand end-users of high speed broadband applications will amount to \$32.8 billion over twenty years.

14. Chorus' vision is to support the Government's policy of better broadband through ongoing infrastructure investment that continues to close geographic gaps and to do this efficiently to help drive affordable prices. The Government has set a target of achieving at least 50 megabits per second (Mbps) peak speeds for 99 percent of New Zealanders by 2025. This will necessitate the extension of existing networks and building new networks, often in remote areas that present challenges due to geographic and topographic constraints.

Ultra-Fast Broadband and Rural Broadband Initiatives

15. Chorus is the Government's largest UFB partner and is contracted to deliver UFB to over 830,000 properties - approximately 70% of the entire UFB deployment. Through UFB and RBI, we are currently undertaking a once-in-a-generation upgrade of New Zealand's telecommunications infrastructure by laying thousands of kilometres of fibre optic cable and ducting, the first stage of which will take until the end of 2019 to complete.

16. In line with the requirements of our contract with Crown Fibre Holdings fibre is delivered first to priority customers, including schools, hospitals and businesses. Chorus has been working on the rollout of UFB in Kāpiti District since 2013 (Build Year 3).

17. The UFB build has just entered into Year 6 of a 9 year programme, with Kāpiti District scheduled to be completed in Year 9. UFB fibre lines, like telecommunication copper lines or power lines, can be deployed either by overhead or underground means. Clear and flexible district plan provisions are integral to the efficient and timely rollout of UFB. It is for this reason I support the relief set out in the evidence of Ms Miles, as it relates to activities associated with the deployment of UFB, including undergrounding provisions and pole replacement.

18. The coverage areas for Kāpiti both to date and at completion in 2019 are shown on the maps below:

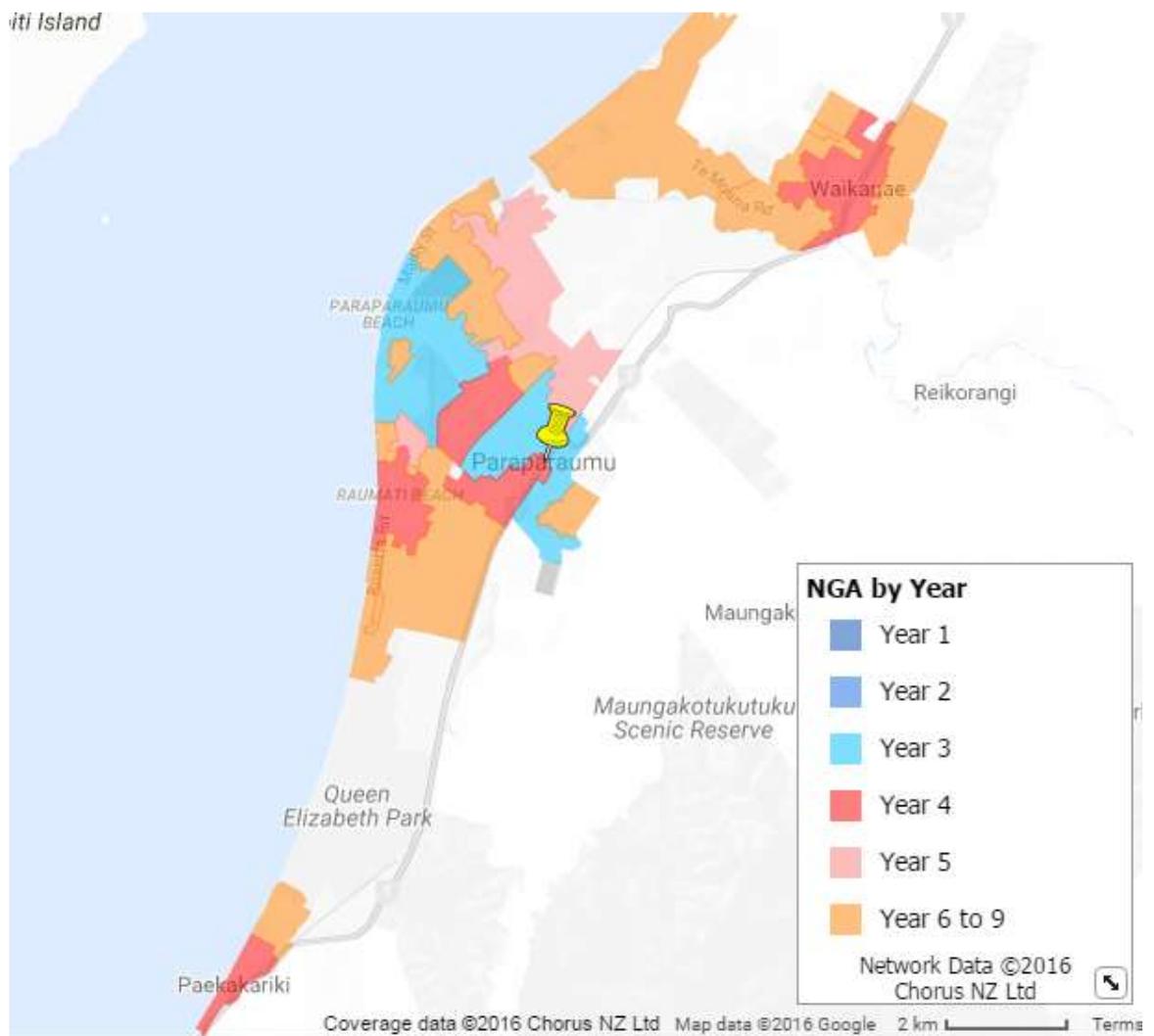


Figure 2: Coverage Map showing completed UFB build (Years 1 – 5) and remaining build (Years 6 – 9)

19. Uptake within Kāpiti District of UFB, while below the New Zealand average (22%), is increasing - as evidenced in the two graphs below. A clear and appropriately balanced regulatory framework is an essential component to ensuring customers are able to connect to our network quickly and efficiently.

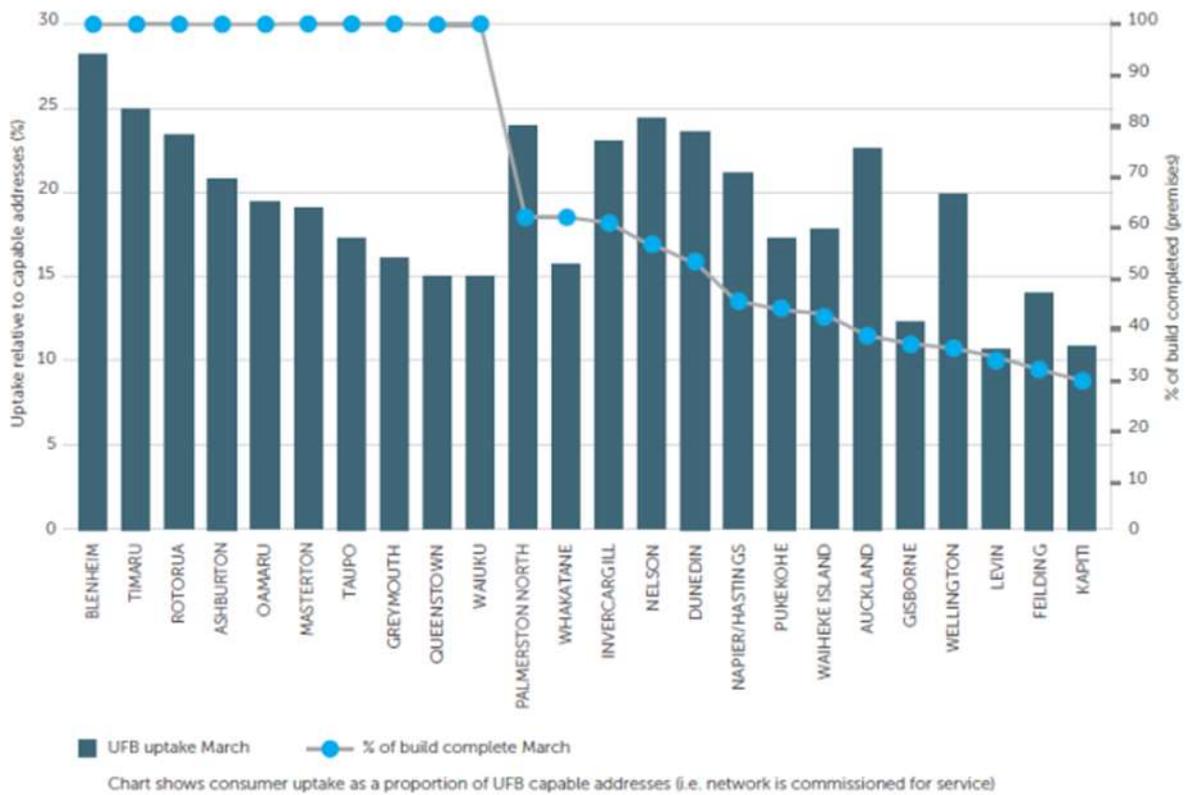


Figure 3: Chorus UFB build areas consumer uptake as a proportion of UFB capable addresses (as at March 2016).

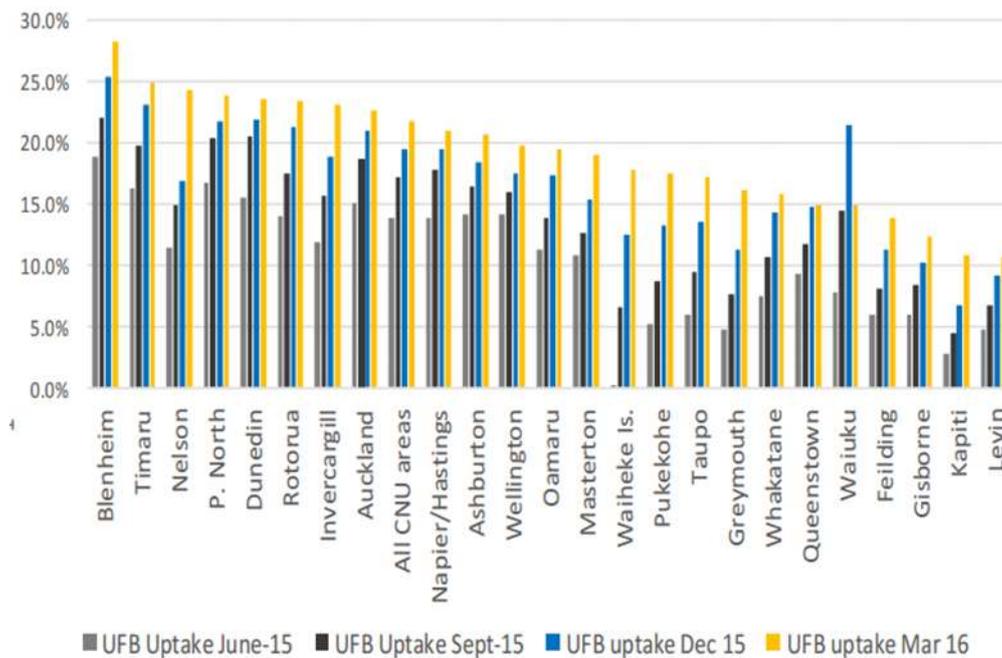


Figure 4: Chorus UFB fibre uptake trends (June 2015 – March 2016)

20. The Rural Broadband Initiative (RBI) has involved providing better broadband to rural schools, health providers, some libraries and tens of thousands of residents throughout the country. RBI combines copper, fibre and wireless

networks to overcome the technical and financial difficulties that come from line distance and low population density. The RBI works programme is now complete, however as detailed below, an extension to this initiative is proposed.

21. Chorus has worked with Vodafone to roll out the Government's RBI programme which has delivered improved services to 87% of rural New Zealand. The project involved the installation of an additional 1,200 fibre-fed cabinets nationwide to deliver fixed line broadband access to around 57% of rural New Zealand. We are also working with Vodafone to provide fixed wireless solutions to some rural communities.

22. Within Kāpiti District Chorus constructed an additional 15 cabinets to support RBI and improve broadband in rural communities.

Government recognition of the importance of telecommunications

23. There are a number of Government initiatives currently being progressed that provide a clear indication of the importance that it is placing on access to telecommunications.

UFB and RBI extensions

24. The Government announced last year its intention to extend its two flagship broadband initiatives (UFB and RBI) and establish a new initiative to expand mobile coverage. This commitment for further investment provides a clear indication of the importance the Government places on access to telecommunications. To this end the Ministry of Business and Innovation (MBIE) publication: Registration of Interest – Support¹ states:

In the digital age, information and communication technologies are critical for economic growth and social inclusion for New Zealanders, in order to enhance and create links both within New Zealand and internationally. Access to and use of digital technologies, particularly broadband infrastructure, has been shown to achieve a range of social and economic outcomes. Greater and smarter use of these technologies can encourage business productivity across a range of sectors and industries, improve health and

¹ ROI released: 12 March 2015

<http://www.med.govt.nz/sectors-industries/technology-communication/fast-broadband/pdf-and-documents-library/new-initiatives/roi-support.pdf>

education outcomes, enhance service delivery, and increase social connectivity and inclusion.

25. MBIE sought registrations of interest from local authorities for the supply of information and support to facilitate infrastructure deployment under each of the initiatives. This includes commitments to reducing costs, regulatory barriers, demand-side risks and other factors associated with deployment.

26. Kāpiti Coast District Council has lodged a ROI with MBIE for consideration for increased broadband coverage. A copy of the KCDC ROI can be found at the following link:

http://www.KapitiCoast.govt.nz/contentassets/2adf8c8204b94af582989e1e1315abe1/kcdc_ufbbid.pdf

27. In summary the ROI recognises:

- Being connected and online has become an essential part of everyday life;
- The benefit of improved internet connectivity opens up a huge range of business, educational, community and other opportunities;
- That the next stage of the UFB rollout will provide faster, better internet to the region that will in turn grow the region and economy, drive innovation and improve outcomes in education, health, business and connect Kāpiti regionally and nationally.
- Better internet for Kāpiti will drive the prosperity of not only the region but also New Zealand;
- The criticality of improved connectivity in supporting Council to effectively manage natural disasters in an efficient, safe and community focused manner.

28. In my opinion the Panel is now in the ideal position to provide a clear policy direction to support its ROI by ensuring that the provisions incorporated into the Proposed Plan recognise the importance and provide for the efficient deployment of telecommunications.

Land Access

29. On 29 June this year the Government announced that the Telecommunications (Property Access and Other Matters) Bill had been

introduced to Parliament. The Bill involves changes to the Telecommunications Act 2001 that will make it easier for people involved in shared property or apartments to connect to UFB. In summary this involves:

- The creation of a new tiered consent regime for different fibre installation methods, such as aerial cabling, micro trenching, burying the cable in grass or mounting the cable on structures like fences or retaining walls in certain instances.
- The establishment of two new categories for installation methods depending on the impacts each method has on the property that neighbours share. Each category has a different consent requirement.
 - Category One methods have no lasting impacts on the shared property, such as a fibre cable buried in grass on the side of a driveway. For these installations, network operators installing fibre will not require consent but will need to provide neighbours with no fewer than five working days' notice.
 - Category Two methods have lasting impacts, for example an incision about 1cm wide is made in a concrete drive to conceal a cable and is then reinstated. For these installations neighbours will be provided a high level design of what is proposed and will have 15 working days to object based on a limited number of grounds. If they do not object within that timeframe, their consent will be deemed.
- Higher impact installations that have an impact that go beyond these two categories are outside this regime. For example, if the length of a driveway needs to be dug up it will still require all parties to agree.

National Environmental Standards for Telecommunication Facilities Review

30. Mr. McCarrison has provided a summary of the current status of the proposed amendments to the NESTF. I concur with his evidence and note that the proposed amendments to the NESTF are intended to be enabling in recognition of the benefits associated with access to telecommunications, while ensuring environmental effects are mitigated through the imposition of appropriate conditions. While the policy direction of the proposed NESTF is clear these changes have not yet been finalised and confirmed in a revised NESTF. Chorus is therefore continuing to seek the relief set out in its submission.

31. These changes to existing legislation provide an indication of the degree of importance being placed on access to telecommunications and recognises the contribution that this makes to the productivity, and therefore economic development, of the Country as a whole.

Response to s42A report and Reporting Officer's Comments

32. As highlighted in Ms Miles' evidence the rapid changes in network architecture and deployment methodologies that have taken place in the four years since the Proposed District Plan was notified means the submission we are supporting today does not represent our current approach. While we accept that we are unable to address the additional matters or alter our position it is noted that this means the provisions of the proposed district plan will not be in step with other plans as they relate to infrastructure and utilities within the region that have recently been made operative (namely Porirua, Hutt City and Upper Hutt).

Telecommunications and Radiocommunications as Regionally Significant Infrastructure

33. As noted in Mr McCarrison's evidence Chorus and Spark lodged submissions seeking the deletion of the definition of "Regionally Significant Network Utilities" on the basis that the term is not used in the Proposed District Plan and is therefore redundant. This submission has been rejected by the reporting officer, and the definition amended to exclude references to Telecommunication and Radiocommunications. I do not support this recommendation.

34. As an alternative to the relief sought in the Chorus submission I concur with the statement of Mr McCarrison that seeks the Panel accept the relief of NZ Police as it relates to Regionally Significant Network Utilities.

35. While I accept outside the scope of our submission (again as a result of changes in our position over the past 4 years as a consequence of responding to the Porirua, Hutt and Upper Hutt Plan Changes) I consider inclusion of a definition of Regionally Significant Network Utilities that excludes telecommunications and radiocommunications is inconsistent with the strong

emphasis the Council has placed on the value access to these networks has to the District. This is evidenced in not only the ROI but also Councils Digital Enablement Plan and Economic Development Strategy 2015 - 2018.

36. As identified in Mr. McCarrison's evidence and highlighted in the Council's ROI telecommunications and radiocommunications are recognised as "Lifeline Utilities" under Part B of Schedule 1 of the Civil Defence Emergency Management Act 2002 (CDEMA). Lifeline utilities are entities that provide essential infrastructure services to the community. There is increased evidence in the many media reports that have recently been published of the importance New Zealanders place on access to telecommunications both during a natural disaster but also in order to respond to other emergency situations.

37. Mobile, copper and wireless technologies all ultimately require fibre transport. As the availability of fibre increases together with increase in capacity its contribution to social and economic development will continue to grow. The installation of fibre in association with the UFB programme within Kāpiti is one component of the telecommunications network that has regional significance, however the contribution of the fibre line cannot be viewed in isolation. The network as a whole is critical to the social and economic development of the cities and the Wellington Region and as a lifeline utility that provides essential services during emergency situations.

Conclusion

38. The telecommunications network is made up of many constituent parts. Fibre is at the heart of everything. Mobile, copper and wireless technologies all ultimately require fibre transport. As the availability of fibre increases together with increase in capacity its contribution to social and economic development will continue to grow.

39. As identified in my evidence the successful rollout of the fibre infrastructure necessary to support this the current UFB rollout and any future extension to the current footprint together with the RBI programme is reliant on an appropriate and enabling regulatory framework. I consider that the Panel has an opportunity to ensure unnecessary and ambiguous provisions that may affect the rollout are removed or rectified in order to provide a balanced and

clear regulatory framework for future deployment. While this may be achieved through accepting the relief sought in Ms Miles' evidence I also concur with the sentiments of Mr McCarrison that greater regional consistency and a clearer and less complex outcome could be achieved through the withdrawal and redrafting of Chapter 11.

A handwritten signature in blue ink, appearing to read 'Mary Barton', with a stylized flourish at the end.

Mary Barton

**Environmental Planning and Engagement Manager
Chorus New Zealand Limited**