



**ENABLE NETWORKS LIMITED AND ULTRAFASST FIBRE LIMITED**

**CROSS SUBMISSION ON NZCC FIBRE INPUT METHODOLOGIES:  
DRAFT DECISION – REASONS PAPER AND DRAFT FIBRE INPUT  
METHODOLOGIES DETERMINATION**

**17 FEBRUARY 2020**

**PUBLIC VERSION**

## 1. Introduction

- 1.1 This cross-submission is made by Enable Networks Limited (**Enable**) and Ultrafast Fibre Limited (**Ultrafast Fibre**) (collectively referred to in this submission as **LFCs**) in response to submissions made on the Commerce Commission's *Fibre input methodologies: draft decision - reasons paper* dated 19 November 2019 (**Draft Decision**) and *Intended implementation approach for [Draft] Fibre Input Methodologies Determination 2020* dated 11 December 2019 (**Draft IM Determination**).
- 1.2 We have focussed our attention on key issues raised in submissions. On issues we have not commented on in this cross-submission we affirm the position set out in our submission of 28 January 2020.

## 2. Asset beta

- 2.1 We agree with Chorus and its independent economic expert, Sapere, that there is compelling evidence to support a higher asset beta in the pre-implementation period than the post-implementation period.<sup>1</sup> The two key factors that influence a company's systematic risk and therefore the asset beta are operating leverage and income elasticity of demand for a company's products. There is a strong argument that both factors are higher during the pre-implementation period relative to the post-implementation period, and therefore a higher asset beta needs to be used during this period:
- (a) During the pre-implementation period, capital expenditure is expected to be high and demand is expected to be growing. It follows that operating leverage (the ratio of fixed costs to total costs) will be particularly high. As Sapere points out, CEPA itself acknowledges this, but does not consider the matter further because it is concerned with estimating the asset beta that will apply in the post-implementation period, at which time the UFB roll-out is largely complete.<sup>2</sup>
  - (b) Similarly, income elasticity of demand for fibre services is expected to be particularly high during the pre-implementation period, when fibre networks were being rolled out. As Oxera notes, during this time fibre services are likely to be viewed more as a luxury good, with demand being more sensitive to changes in income.<sup>3</sup>
- 2.2 We acknowledge it is difficult to quantify the exact uplift in the asset beta that is justified by the higher systematic risk in the pre-implementation period. This is partly due to the small number of available relevant comparators. However, this does not justify ignoring the impact of higher systematic risk. We agree with Sapere that limiting the available choices of asset beta to the post-implementation period beta estimate or zero (as suggested by Lally) is invalid. If anything, an (equity) beta of one rather than zero should be used as the baseline because this reflects the systematic risk of the market.
- 2.3 Although few directly comparable companies exist, several sources of evidence are available to help estimate an appropriate asset beta in the pre-implementation period, as Sapere notes. For example, Crown Fibre Holdings (CFH) applied an asset beta of 0.50 to 0.65 for fixed fibre providers in 2011, while Oxera estimated a beta of 0.95.<sup>4</sup>
- 2.4 We previously submitted that including tower and satellite companies in the comparator sample is not valid because they have very different systematic risk exposure relative to fibre service

<sup>1</sup> Chorus *Submission on Fibre input methodologies: Draft decision – reasons paper dated 19 November 2019 and Draft fibre input methodologies determination 2020 dated 11 December 2019*, 28 January 2020 (**Chorus Submission**); Sapere *The cost of capital input methodologies for fibre*, 27 January 2020 (**Sapere Report**)

<sup>2</sup> CEPA *Cost of capital for regulated fibre telecommunication services in New Zealand: Asset beta, leverage, and credit rating – Response to submissions*, 17 October 2019 (**CEPA Response**), p25

<sup>3</sup> Oxera *Compensation for systematic risks*, 15 July 2019 (**Oxera Report**)

<sup>4</sup> Finance and Expenditure Select Committee *CFH Response to Select Committee questions*, 2011; Oxera Report as cited in the Sapere Report

providers.<sup>5</sup> The large sample analysis undertaken by Sapere supports this view. Using the well-known dataset provided by Professor Aswath Damodaran, Sapere finds that, other than Chorus, none of CEPA's wholesale comparators are present in three industry groups related to telecommunications.<sup>6</sup> The large sample analysis indicates an asset beta range of 0.54 to 0.65 for the developed country set of companies.

- 2.5 In our view, Telstra Super provides highly relevant and credible evidence in relation to the risk to which Chorus and the LFCs are exposed, and which may previously have been underestimated.<sup>7</sup> The nature of New Zealand's telecommunications industry structure means that these companies face substantial competitive risk from vertically integrated mobile networks. Telstra Super presents compelling evidence to support this:
- (a) mobile substitution has already become a reality, as demonstrated by Spark actively marketing and encouraging new and existing customers on to its fixed wireless service instead of fibre since 2016. Telstra cites the Commission's Annual Market Monitoring Report 2018 which documents 10% of broadband customers being on fixed wireless;
  - (b) Vodafone NZ reportedly plans to have 25% of its customers on fixed wireless within the next few years; and
  - (c) the advent of 5G technology will accelerate fixed wireless uptake in substitution for fibre services.
- 2.6 We support evidence presented by Chorus that questions the conclusions drawn by the Commission from recent market analyst reports on asset betas. As Chorus notes, the reports are mainly based on Chorus overall, rather than fibre service providers in particular. Further, Table 3.7 presented by the Commission duplicates one of the 0.5 estimates and omits the high estimate of 0.70.<sup>8</sup> Given this information, the Commission's view that the majority of estimates are at 0.5 is therefore incorrect.
- 2.7 A number of submissions including those made by Chorus and Telstra Super reference Ofcom's proposed asset beta for Openreach and supporting discussion as evidence justifying a higher asset beta for Chorus and the LFCs. While Ofcom suggests an asset beta of 0.57 for Openreach, it identifies a higher beta of 0.65 for a fibre only service provider. In our view, this presents compelling evidence that the Commission should consider, given that Openreach is closely comparable to Chorus and the estimates were established independently in a similar regulatory setting.
- 2.8 Both Spark and Vodafone argue in favour of a lower asset beta, while failing to provide any significant new evidence to support their reasoning.<sup>9</sup> Spark questions the Commission's approach to equally weighting the firms in CEPA's comparator sample. However, Spark presents no compelling new evidence against the Commission's justification that wholesale companies are likely exposed to lower systematic risk than regulated fibre providers.<sup>10</sup>
- 2.9 Vodafone argues in favour of a lower beta in the pre-implementation period, making the following assertion:

<sup>5</sup> Enable Networks Limited and Ultrafast Fibre Limited *Submission on NZCC fibre input methodologies: draft decision – reasons paper and draft fibre input methodologies determination*, 28 January 2020 (LFC Submission) section 10

<sup>6</sup> The three industry groups referenced by Sapere are Telecom Wireless, Telecom Equipment and Telecom Services.

<sup>7</sup> Telstra Super *Submission on Fibre input methodologies Draft decision*, 24 January 2020

<sup>8</sup> NZCC *Fibre input methodologies: Draft decision - reasons paper*, 19 November 2019 (Draft Decision), p283.

<sup>9</sup> Spark *Fibre Input Methodologies: draft determination*, 28 January 2020; Vodafone *New regulatory framework for fibre: Submission on Fibre Regulation Draft Decision Public Version*, 28 January 2020

<sup>10</sup> Draft Decision [3.917]

“Lally clearly identifying that it must be less, and may be closer to zero than the full Beta.”<sup>11</sup>

- 2.10 In our view, this is a mis-interpretation of Lally’s reasoning. Due to the lack of available comparators, Lally argues that the choice of beta in the pre-regulatory period should be between a beta of zero and the beta applied in the regulatory period. He further suggests that:

“Using a beta of zero would be too low whilst using the same beta applied to the regulatory situation may be too high or too low. The latter is preferable because the error from doing so is likely to be much smaller.”<sup>12</sup>

- 2.11 Therefore, Vodafone’s argument that the pre-implementation period beta should be lower than the pre-implementation beta is flawed. As discussed above, compelling evidence is provided in submissions that the pre-implementation period beta should in fact be higher than the post-implementation period beta.

### 3. TAMRP

- 3.1 A number of submitters (for example, BARNZ, MEUG, Vodafone) argue against the Commission’s practice of rounding the TAMRP to the nearest 0.5%.<sup>13</sup> There is a trade-off between the increase in precision from not rounding the TAMRP estimate and the additional costs that this imposes. We support Dr Lally’s view that the costs significantly outweigh the benefits. In an illustrative example described by Lally, rounding to 0.50% raises the mean squared error of the estimate by only 0.01%, from 0.87% to 0.88%.<sup>14</sup> At the same time, not rounding imposes substantial costs including:

- (a) direct costs to the regulator from estimating the TAMRP with a very high degree of precision; and
- (b) costs related to lobbying by various parties over very small differences in the TAMRP estimate.

- 3.2 BARNZ claims that there is no reason why the TAMRP alone should be rounded, and not the other WACC parameters. We disagree with this view for two reasons.

- (a) other WACC parameters are also rounded. For example, while the TAMRP is rounded to the nearest 0.005, the asset beta is conventionally rounded to the nearest 0.01; and
- (b) the practice of rounding is particularly appropriate for the TAMRP. This is because of the high uncertainty involved in estimating this parameter. The TAMRP is a forward-looking parameter capturing market participants’ ex-ante expectations, which makes forming an estimate based on historical or current data very challenging. As Lally states, claiming to have estimated a TAMRP with a high degree of precision is spurious.

Unlike the claim made by BARNZ, rounding WACC parameters such as the TAMRP does provide valuable protection from frequent changes. It helps ensure that a change in the TAMRP is only made in response to a significant change in market parameters and provides a more appropriate level of certainty to regulated entities, their customers and other market participants.

<sup>11</sup> Vodafone *New regulatory framework for fibre: Submission on Fibre Regulation Draft Decision Public Version*, 28 January 2020, p2.

<sup>12</sup> Lally *The cost of capital for fibre network losses*, 30 April 2019, p9.

<sup>13</sup> BARNZ *Submission Fibre IMs Draft Decision – TAMRP*, 24 January 2020; MEUG *Fibre Input Methodologies draft decision – submission on the Tax Adjusted Market Risk Premium*, 28 January 2020

<sup>14</sup> Lally *The Risk Free Rate and the Market Risk Premium 2012*, section 5, as cited in Lally *Review of further WACC issues*, 22 May 2016, p66.

#### 4. **Leverage**

- 4.1 We agree with Chorus that there needs to be consistency between leverage and the credit rating. If the Commission applies a credit rating of BBB+, then it should use leverage of 34% rather than 31%. As documented by CEPA, a credit rating of BBB would be consistent with a leverage of 31%.<sup>15</sup>

#### 5. **Risk-free rate and debt premium**

- 5.1 We previously submitted on the issues related to applying annual resets of the risk-free rate during the pre-implementation period. We agree with Chorus that the pre-implementation period should be treated as one regulatory period. Hence, the risk-free rate should be based on the three months preceding a 1 May 2011 estimation date with a term matching the expected term of the pre-implementation period (8.7 years), as documented by Sapere. This would be consistent with the Commission's usual approach and the approach applied in the post-implementation period.
- 5.2 We further agree with Sapere's view that if the Commission does not treat the pre-implementation period as a regulatory period, then it should use a term of 10 years when determining the risk-free rate for each WACC estimate. The term of 10 years is consistent with common commercial practice and was used in the Commission's recent retail fuel market study.<sup>16</sup>
- 5.3 Consistent with the arguments above and our previous submission, we note that the proposed approach for determining the debt premium in the pre-implementation period should also be amended. The current proposed approach is to calculate the debt premium prevailing at the beginning of the median loss year. We support the suggestion put forward by Chorus and Sapere of using a single estimate based on a five-year historical average of New Zealand issued BBB rated bonds as at May 2011. We agree that this is more consistent with the Commission's usual approach and with treating the pre-implementation period as a regulatory period.

#### 6. **Uplift**

- 6.1 We agree with Chorus' and Sapere's submission that not imposing an uplift to the WACC in the pre-implementation period is inconsistent with reasonable investor expectations at the time, including reliance on the 2011 UFB Government Policy Statement. The WACC should reflect a fair expected rate of return for a future period from the perspective of investors at a given point in time. In the context of the pre-implementation period, this corresponds to investor expectations as at May 2011. Therefore, expectations about regulatory policy and practice as at that date need to be considered in setting the WACC. Information about subsequent changes in regulatory practice only available with the benefit of hindsight are irrelevant. We agree with Chorus that:
- (a) if the pre-implementation period is treated as a regulatory period (as argued above) then a WACC uplift to the 75<sup>th</sup> percentile is appropriate, as was applied to energy companies in 2011; and
  - (b) if the pre-implementation period is not treated as a regulatory period, then an uplift to the 75<sup>th</sup> percentile should still be applied from 2011 to 2014. Consistent with the amendment in the uplift percentile by the Commission, an uplift to the 67<sup>th</sup> percentile should be applied thereafter.
- 6.2 We further support the submission made by Chorus that using the mid-point estimate of the cost of capital in the post-implementation period is inappropriate. There is a high degree of uncertainty in the WACC and each point estimate represents a single value which could be above or below the true WACC. If it is assumed that the estimator is unbiased and normally distributed, then there is a 50% probability that the value lies above the true WACC and a 50% probability that it lies below the true WACC. This means there is a 50% chance that the applied cost of capital is insufficient to compensate capital providers with a fair rate of return. This creates a compelling case to add a margin to the point estimate of the WACC, consistent with current regulatory practice.

<sup>15</sup> CEPA Response p44.

<sup>16</sup> NZCC *Market study into the retail fuel sector: Final report*, 2019, [B13], as cited in the Sapere Report

## 7. Quality IM - Response to RSP Joint Submission

### *Meeting end-user service expectations*

- 7.1 The four major RSPs, Spark, Vodafone, 2degrees and Vocus, representing 87% of broadband connections, have made a joint submission on the quality IM<sup>17</sup>.
- 7.2 The RSPs claim to "*understand consumer demands better than any other party involved in the process*"<sup>18</sup>. They submit that we have an incentive to reduce service quality<sup>19</sup>, and "*once the Part 6 regime comes into force, LFCs will be motivated to erode quality related terms*".<sup>20</sup> Accordingly, they say, "*the quality regime proposed by the Commission would leave too much in the hands of the fibre providers and result in poor outcomes for our customers*"<sup>21</sup>.
- 7.3 These propositions, simply put, are absurd.
- 7.4 We operate in a very competitive broadband access market, where three of the joint submitters are not only our largest wholesale customers but also offer (and heavily promote) fixed wireless access (**FWA**) services to end-users as an alternative to our fixed fibre services. We compete with them on an uneven playing field, as while they can offer services to end users the regulatory regime does not allow us to do so.
- 7.5 As we only sell fibre services, we have every incentive to ensure we meet end-user expectations because the uptake of fibre services depends on it. In this context, prescriptive regulation of the sort advocated in the Joint Submission is unwarranted; it would merely raise our compliance costs (which are already significant), impede innovation, and make us less competitive in relation to their FWA services, while providing no additional benefits to end users.
- 7.6 We are very closely attuned to the requirements of end-users. We both conduct a monthly customer satisfaction survey for new connections, which covers a range of topics including efficiency (how easy was it to get information and arrange installation), communication, performance of technicians, quality of installation, and overall performance of the fibre broadband connection.
- 7.7 We review responses to identify areas to improve our performance, follow up any issues that a respondent may have identified, and share the results with RSPs so they can also benefit from the feedback. We also commission reports analysing the survey data to identify trends and improve our performance. Examples of reports from Enable and UFF are annexed at Confidential Annexure A and Confidential Annexure B respectively. There is no regulatory requirement for us to produce these reports; we do so because, in the competitive world in which we operate, meeting the expectations of fibre users is paramount to the success of our respective businesses.
- 7.8 When considering the Joint Submission, the Commission must bear in mind that our major wholesale customers are also our competitors and promote their fixed wireless services as superior to fixed fibre services. For example, a recent Vodafone sponsored story in the NZ Herald claims that new faster 5G wireless products "*will leave UFB fibre in the dust.*"<sup>22</sup>
- 7.9 This creates a conflict of interest that impacts on the quality of FFLAS they make available to end-users. For instance, as explained in the case study below, when LFCs reduced the wholesale price of the 1G service to make it more attractive for end users, the large RSPs did not pass the price reduction on to their customers, consequently reducing uptake of the service.

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<sup>17</sup> Spark, Vodafone, 2degrees and Vocus, *Joint submission on the quality aspects of the Commerce Commission's draft decision on the fibre fixed line access service input methodologies*, 28 January 2020 (**Joint Submission**)

<sup>18</sup> above p3

<sup>19</sup> above p4

<sup>20</sup> above p7

<sup>21</sup> above p3

<sup>22</sup> NZ Herald, *Does 5G live up to its hype?* 31 January 2020

1 Gig case study
<ul style="list-style-type: none"> <li>LFCs led the market to release a Bitstream 2 Gig residential and business product in advance of any regulatory requirement to create a 'fast, faster, fastest' product offering suite (i.e. 100/20, 200/20 and Gig) to make it simple for RSPs and end-users; with incremental pricing and a LFC price cap of \$65 for the Gig service to give RSP's price certainty.</li> </ul>
<ul style="list-style-type: none"> <li>Throughout 2017-2019, LFCs reduced the wholesale price below the price cap, seeking to provide consumers with affordable access to the fastest and best broadband in the world.</li> </ul>
<ul style="list-style-type: none"> <li>Despite starting from a release price of \$55.00 for the 1 Gig service, reduced in successive promotions to \$50.00 and then \$45.00, RSP uptake failed to materially increase because the large Tier 1 retailers did not pass the wholesale price reduction on to consumers. Only smaller RSPs such as MyRepublic, Stuff and Vocus reduced their retail prices to reflect the wholesale discount.</li> </ul>

7.10 It is telling that the Joint Submission implies that the IM regime should be designed to restrain us from offering innovative services to the wholesale market, criticising us for upgrading technical specifications "*too quickly, causing costs for RSPs as we scramble to keep up*"<sup>23</sup>. Nothing could be further removed from outcomes in a competitive market than a regime where a supplier is deterred from introducing new products to the market that it perceives would be valued by end-users.

#### **Existing commercial arrangements**

- 7.11 As we explained in our submission, existing contracts and codes which contain quality obligations will remain in force after Part 6 has come into effect, including our current UFB Services Agreement or Reference Offer (**RO**), and numerous TCF Codes.<sup>24</sup> We agreed with the Commission's view that regulation should avoid duplication between instruments regulating quality.<sup>25</sup>
- 7.12 The Joint Submission argues that these existing arrangements "*will fail under the proposed regime*"<sup>26</sup> because our RO contains "*specific clauses that may be at risk*"<sup>27</sup>. Attachment A of the Joint Submission lists "*seven specific topics*" that should be incorporated into the quality IMs<sup>28</sup>, and 35 clauses that may be at risk.
- 7.13 The Joint Submission does not explain why the 35 specified clauses are at risk. What it seeks to do is replicate the Standard Terms Determination regime in subpart 2 of Part 2 of the Act, noting that "*unfortunately the important role that these agreements play is not reflected in the regime proposed by the Commission. This is a significant departure from past telecommunications regulations where many of these terms were set directly by the Commission.*"<sup>29</sup> This approach is misguided. Part 6 introduced a differently regulatory model, and prescriptive regulation such as in advocated in the Joint Submission is inconsistent with the policy intent of ID regulation.

<sup>23</sup> Joint Submission p17

<sup>24</sup> LFC Submission [5.1(a)]

<sup>25</sup> Draft Decision [697] – [698]

<sup>26</sup> Joint Submission p6

<sup>27</sup> above p15

<sup>28</sup> above p7

<sup>29</sup> above p6

- 7.14 It must also be noted that the RO is itself a regulatory instrument that continues in force when Part 6 comes into effect. The Joint Submission advocates that the Commission “*enhance the quality of information disclosure regulation by making disclosure of fibre wholesale agreement reference offers mandatory*”,<sup>30</sup> but this is an existing regulatory requirement – our Deed of Open Access requires that we produce a single non-discriminatory Reference Offer for each service ((setting out the terms of the offer and including the Wholesale Services Agreement) and publicly disclose this including on our website, no later than 10 working days after the service is available.
- 7.15 The Joint Submission also argues that the quality IM regulation should specify that any changes we make to the RO comply with the Fair Trading Act<sup>31</sup>. As the Act already applies to us, no additional regulatory intervention is required or appropriate.

#### ***Customer satisfaction survey***

- 7.16 The Joint Submission argues that a detailed customer satisfaction survey “*could play an important role in incentivising regulated suppliers to deliver services that meet end user demands. Regulated suppliers have few other incentives to provide FFLAS that meets end-user requirements*”.<sup>32</sup> While acknowledging that our RO requires us to assess end-user satisfaction, the Joint Submission advocates that the Quality IM should mandate a “*broader and more detailed*” customer satisfaction survey obligation.<sup>33</sup>
- 7.17 As noted above, we already conduct monthly customer satisfaction surveys and discuss the results with our RSP customers. Clearly regulatory intervention is not needed.
- 7.18 If the RSPs think a more detailed survey would be useful, there is nothing to prevent them from surveying their own customers.
- 7.19 Finally, as we have already explained, competition from alternative technologies provides all the incentive we need to meet end-user requirements.

#### ***Electricity industry “learnings”***

- 7.20 The Joint Submission sets out in Attachment B<sup>34</sup> “*learnings*” from the electricity industry which it argues are relevant for setting service quality measures for LFCs.
- 7.21 The electricity analogy has limited, if any, relevance to fixed line telecommunications. In electricity the retailer does not own infrastructure, and there is a clear handover point between Transpower and the retailer. In telecommunications, congestion (equivalent to voltage drop in electricity) can be caused by many factors, including customer inhouse wiring/CPE, the LFC network, RSP handover point, RSP aggregation, RSP backhaul, and international backhaul.

### **8. Quality IM - Response to Chorus submission**

- 8.1 We support Chorus’ proposed amendments to the drafting of the Quality IM set out in Appendix C of its submission, and agree with Chorus that:
- (a) quality measures should apply only to matters that are solely under the control of the regulated provider;<sup>35</sup>
  - (b) regulation should avoid duplication between instruments regulating quality;<sup>36</sup> and

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<sup>30</sup> above p3

<sup>31</sup> above p8

<sup>32</sup> above

<sup>33</sup> above p13

<sup>34</sup> above p18

<sup>35</sup> Chorus Submission [288] - [289]

<sup>36</sup> above [290]



- (c) the reference to setting different quality measures under ID based on end-users should be removed.<sup>37</sup>

## 9. Scope of regulated service

- 9.1 In our submission we stated that the case for inclusion of network services and property development services within the scope of the regulated service was questionable, as they did not “enable” access to and interconnection with the fibre network.<sup>38</sup>
- 9.2 We agree with Chorus that the boundaries of the regulated service as proposed by the Commission are “*vague and unpredictable*”, and the definition must “*clearly delineate what activities do and do not form part of the regulated service*”.<sup>39</sup>
- 9.3 The Commission in its Draft Decision adopted a test of “*services that are necessary and proximate to the fibre network*”<sup>40</sup>, which would suggest that network design and property services should have been excluded as not being sufficiently proximate. The Commission has included them however, which suggests the word “proximate” is too vague and unpredictable to form the basis of the test.
- 9.4 We agree with Chorus<sup>41</sup> that the focus of the test should be on whether the service represents an economic bottleneck, as that is the only justification for regulation to be imposed. Network design and property services clearly fail this test and should therefore be excluded from the scope of the regulated service.

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<sup>37</sup> above [299]

<sup>38</sup> LFC Submission [3.2]

<sup>39</sup> Chorus Submission [49]

<sup>40</sup> Draft Decision [2.61]

<sup>41</sup> Chorus Submission [51]

**CONFIDENTIAL ANNEXURE "A"**

**CONFIDENTIAL**

**CONFIDENTIAL ANNEXURE "B"**

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