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Public

Cross-submission in response to submissions on the Commerce Commission's Process and Issues paper for determining a TSLRIC price for Chorus' unbundled copper local loop (UCLL) service in accordance with the Final Pricing Principle



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# Executive Summary



## EXECUTIVE SUMMARY

- 1 There is a degree of alignment in submissions, and also a number of areas that will need further consideration by the Commission. This submission seeks to assist the Commission in identifying the areas of alignment, and discusses the areas where there are differing views to inform the progression of a robust and timely process.
- 2 Areas of alignment include:
  - 2.1 TSLRIC is applied differently in different jurisdictions. This is due to differing legislative requirements and different policy objectives;
  - 2.2 in New Zealand TSLRIC has to be applied as prescribed by the Telecommunications Act 2001 (**Act**);
  - 2.3 the Act specifies TSLRIC must be “forward-looking”;
  - 2.4 the forward-looking framework is implemented by using the hypothetical network entrant (HNE) construct;
  - 2.5 the Commission should model the full network as the UCLL price flows through to services that run over both cabinetised and non-cabinetised lines;
  - 2.6 the TSLRIC modelling must keep an eye to coherency of the regime and the price review processes should be done contemporaneously; and
  - 2.7 where the Commission has a discretion to exercise, it should be guided by section 18. Section 18 does not confer a power to assert a discretion where the requirements of the Act are plain.
- 3 Flowing from these points, it is clear that international approaches to TSLRIC are not a reliable model for the forward-looking TSLRIC approach required by the Act.
- 4 In considering policy objectives, there is no international comparator for how TSLRIC should be applied in the New Zealand situation, with a combination of a structurally separated UCLL operator and an ongoing migration to a FTTH network built by a Public Private Partnership (PPP) investment ahead of commercial demand. The potential impacts on migration have been well traversed in Commission and policy processes.
- 5 Areas that require further consideration arising from submissions to date, which this cross-submission discusses at more length, are:
  - 5.1 submitters have proposed modern equivalent assets (MEAs) that are not capable of delivering the full functionality of the UCLL STD service. Telecom and Vodafone propose fibre and fixed wireless as the MEA. However, Frontier’s report is silent and provides no expert support for this;

- 5.2 we note however that Frontier has advised that copper could be used as the MEA.<sup>1</sup> In Chorus' view this is required;
  - 5.3 Frontier's "balanced" approach to asset valuation appears to incorporate elements of historic use of Chorus' assets, and the building blocks model – none of which fit within the statutory forward-looking TSLRIC pricing rule;
  - 5.4 the "balanced" approach appears to be motivated by well-known concerns with TSLRIC. Frontier refers to the decision by the ACCC to stop using TSLRIC, and the reasons it gives for making that decision. However, the Commission must use the forward-looking TSLRIC pricing rule included in the Act in 2001 and confirmed in 2011; and
  - 5.5 in addition, the concerns that Frontier has with the use of forward-looking TSLRIC in New Zealand are without foundation, including the suggestion that a forward-looking TSLRIC price sends an inefficient signal or results in Chorus receiving windfall gains. The scheme of the Act effectively recognises that a cost modelled TSLRIC price is more efficient as compared to a benchmarked price.
- 6 Chorus is proposing an approach to forward-looking TSLRIC that is:
- 6.1 consistent with the requirements of the Act to set a price for a specific service using a specific pricing rule;
  - 6.2 consistent with the approach the Commission explained to market participants in 2002 and 2004; and
  - 6.3 practical and timely from a modelling perspective.
- 7 Submissions attempt to frame up a trade off between the robustness of the TSLRIC modelling and the timeframe for modelling. In fact there is no trade off. As explained in our TSLRIC Submission, it is possible to complete the price reviews of the UCLL STD service, the UBA STD service and other reviews/processes on which the Commission's views have been sought by 30 November 2014.
- 8 Concerns about whether Chorus or the Commission does the modelling, and therefore the use of the section 45 process, are not well founded. Either way the Commission retains control of the modelling process. The focus should be on the best way to get this first stage done promptly.
- 9 Submitters have placed a heavy emphasis on arguing why backdating should not occur if prices go up. They ask the Commission to act contrary to the Court of Appeal's decision in 2006. Backdating (as well as forward-looking uncertainty) does increase uncertainty for everyone. But it is a function of a well known regime that has a two phase pricing process (first a benchmarking phase, and second a cost modelling phase

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<sup>1</sup> Frontier Economics "Determining a TSLRIC price for Chorus' UCLL service" (February 2014) at page vi (Frontier Economics Submission).

in which prices are calculated anew using an entirely different methodology). And the statutory framework means that, within a short prescribed time after a benchmarked determination, everyone is put on notice that there is a price review to come (that has backdating implications). The Court of Appeal has opined on this. None of the distinctions suggested in submissions are relevant to the Court of Appeal's reasoning or ruling.

- 10 The best way to mitigate any impacts of backdating and uncertainty (used by some submitters as a reason not to backdate) is to complete all price review determinations in a timely and robust manner and by 1 December 2014. How backdating payments are made should be responsibly worked through taking account of commercial realities.



## AREAS OF AGREEMENT

- 11 We highlight alignment in submissions to assist the Commission.

### TSLRIC

- 12 When developing the TSLRIC methodology and model the starting point is the legal framework required by the Act. From Frontier Economics:<sup>2</sup>

Under New Zealand's Telecommunications Act (the Act), the Commission must, when reviewing prices determined via an IPP, determine a price using an alternative final pricing principle (FPP). Subpart 1 of Part 2 of Schedule 1 of the Act specifies that the FPP the Commission must use to set the price for the UCLL is total service long run incremental cost (TSLRIC).

...

The starting point for determining a set of principles that will enable the Commission to choose a package of modelling methods that best meets the appropriate objectives lies in the requirements of the legislative regime it has to enforce.

### Forward-looking

- 13 It is an important feature of the New Zealand framework that the Act specifies that a forward-looking assessment of TSLRIC costs must be made. Telecom explains:<sup>3</sup>

The forward looking standard is an established and mainstream approach to establishing the costs of regulated services.

- 14 In the abstract, a TSLRIC calculation could be made using historic costs, current accounting costs or forward-looking replacement costs. The Act pre-empts that debate and requires that a forward-looking estimation of TSLRIC is made.

### Hypothetical New Entrant (HNE)

- 15 A number of submitters are agreed that the forward-looking framework is implemented by using the HNE construct.<sup>4</sup> The question to be answered is what costs would an HNE incur in providing the service that is the subject of the price review application? Telecom explains:<sup>5</sup>

For the reasons outlined above, we believe that a UCLL FPP price derived from an appropriate TSLRIC model which represents an efficiently built hypothetical network provides the correct cost

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<sup>2</sup> Frontier Economics Submission at pages 1 and 6. See also: Telecom "Submission: Process and issues paper for determining a TSLRIC UCLL Price" (14 February 2014) at [6] (Telecom Submission); Vodafone "Comments on process and issues paper for the unbundled copper local loop (UCLL) final pricing principle" (14 February 2013) at [B1] (Vodafone Submission); and Chorus "Submission in response to the Commerce Commission's Process and issues paper for determining a TSLRIC price for Chorus' unbundled copper local loop service in accordance with the Final Pricing Principle" (14 February 2014) at [36] (Chorus Submission).

<sup>3</sup> Telecom Submission at [7]. See also Vodafone Submission at [C2.8], Frontier Economics Submission at page 6 and Chorus Submission at [2.3].

<sup>4</sup> See Telecom Submission at [12], Vodafone Submission at [D4.5] and Chorus Submission at [4.2].

<sup>5</sup> Telecom Submission, Q&A at [100].



based pricing signals to Chorus and to RSPs, in respect of future investment irrespective of technologies.

### **TSLRIC not international comparison**

16 TSLRIC cost modelling is a different methodology to international benchmarking. Submissions have highlighted how international TSLRIC prices are the product of different legislative requirements and policy objectives. Evidence is presented that international benchmarks are not a reliable indicator of the forward-looking TSLRIC under the Act.

17 Frontier Economics explains:<sup>6</sup>

There is no single method used by all regulators worldwide to cost unbundled copper local loops. While there are many reasons for this, one key reason is that regulators operate under different legislative regimes that place different weights on the pursuit of different (potentially conflicting) objectives.

The consequence of this is that the Commission can't simply lift a standard cost modelling approach from elsewhere in the world and apply it directly to pricing the UCLL in New Zealand. Instead, it will have to develop a consistent package of modelling considerations that are tailored to best meet the requirements of the New Zealand legislative regime.

18 Each TSLRIC model and price will be a reflection of the particular legal framework and policy objectives in the jurisdiction concerned.<sup>7</sup> It will also be a reflection of the compromises and consensus building between stakeholders reacting to their market circumstances. Other jurisdictions have to be considered very carefully given all of the differences in their statutory scheme and policy objectives. The heavy reliance placed on the non binding EC recommendation by other submitters cannot be relied on to "benchmark" the likely outcome and is at odds with other evidence presented.<sup>8</sup>

### **Model the full network**

19 There is a high degree of alignment that the full network should be modelled.<sup>9</sup> Telecom states:<sup>10</sup>

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<sup>6</sup> Frontier Economics Paper at page iii.

<sup>7</sup> See Telecom Submission at [18], Vodafone Submission at [B2], Frontier Economics Submission at page 1 (paragraph beginning "As we shall note throughout our report...") and Chorus Submission at [208].

<sup>8</sup> Analysys Mason observe in the attached report that the EC recommendation was the result of a political process and that the "target range" quoted in Telecom's submission under-represents the real spread of local loop costs in EU jurisdictions.

<sup>9</sup> See Vodafone Submission at [C6.2], CallPlus "Submission on the Commissions process and issues paper for determining a TSLRIC price for UCLL in accordance with the FPP" (14 February 2014) at pages 1 – 2, Chorus Submission at [70] and Chorus "Submission in response to the Commerce Commission's Process and issues paper for determining a TSLRIC price for Chorus' unbundled bitstream access service in accordance with the Final Pricing Principle" (21 February 2014) at [46].

<sup>10</sup> Telecom Submission at [49].

We support the Commission's view in paragraph 30 of the issues paper that it is most appropriate to model the full UCLL network as the UCLL price flows through to services that run over both cabinetised and non-cabinetised lines and the costs are shared between the services.

## **THE MODERN EQUIVALENT ASSET**

### **The service**

- 20 Submissions encourage the Commission to use an MEA that cannot deliver the full functionality of the UCLL STD service. As we explained in our submission on the Commission's Process and Issues paper (UCLL TSLRIC Submission), this is inconsistent with the Commission's statutory task.<sup>11</sup>
- 21 Some submitters have suggested that section 18 empowers the Commission to unilaterally adjust its statutory task and cost a service that is different from the service that is the subject of the price review application.<sup>12</sup> This is not correct. The framework of the Act is clear that the price review process is to identify the forward-looking TSLRIC costs of providing *the service* that is the subject of the price review application.
- 22 Frontier, Telecom and Vodafone acknowledge their recommended MEAs are not equivalent to the existing network, and ignore the requirement that the asset to be modelled must be equivalent in functionality to the network providing the service that is being costed.

### **The appropriate MEA**

- 23 In our UCLL TSLRIC Submission we explained why the appropriate MEA is copper. We also explained why the full fibre / fibre + fixed wireless proposals in the TSLRIC Paper were not valid MEAs.
- 24 Submissions from other participants do not give a strong and unqualified support for the MEA approach in the TSLRIC Paper. Frontier advises that the current FTTN network could be used.<sup>13</sup>
- 25 Telecom supports Frontier's MEA choices. Telecom also suggests fibre and fixed wireless as the MEA, but Frontier is silent on this. Accordingly there is no evidence that this could provide the same functionality as the UCLL STD service. Analysys Mason has explained why fibre and fixed wireless cannot deliver the required functionality.
- 26 Vodafone implicitly agrees with Analysys Mason's definition of the MEA as the technology which meets the requirements at the lowest cost in NPV terms:<sup>14</sup>

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<sup>11</sup> Chorus "Submission in response to the Commerce Commission's Process and issues paper for determining a TSLRIC price for Chorus' unbundled copper local loop service in accordance with the Final Pricing Principle" (14 February 2014) at [36] to [54] (Chorus Submission).

<sup>12</sup> See Vodafone Submission at [E1.2].

<sup>13</sup> Frontier Economics Report at page vi, Figure 1, 4.

<sup>14</sup> Vodafone Submission at [E4.3].

To meet this requirement, pricing achieved using the MEA must be at least lower cost than the current cost of service provision.

- 27 Vodafone also supports fibre and fixed wireless as the MEA. Vodafone’s arguments for fixed wireless in rural areas are inconsistent with its position that fixed to mobile substitution will not materially impact demand for UCLL in the TSLRIC cost model.<sup>15</sup> As explained in the Analysys Mason report<sup>16</sup>, fixed wireless can meet the needs of some voice and low-end broadband customers, but is not capable of providing an equivalent layer 1 input to UCLL – therefore, affecting the total demand for the modelled operator’s local loops.

### **Performance adjustments**

- 28 These are not relevant because fibre is not the MEA, as outlined by Analysys Mason. In addition, modelling an HNE that builds a fibre network and then discounts based on estimates of customers’ willingness to pay for the UCLL STD service would not be consistent with the statutory pricing rule. The result would not be a cost-based price. Further, the calculation itself would seem to fall short of the standard required for regulatory decision-making, as it sets prices by reference to a loss-making HNE and the information needed to perform the calculation credibly is not available.

### **ASSET VALUATION**

- 29 Frontier’s “balanced” approach to asset valuation incorporates elements of historic use of Chorus’ assets, and the building blocks model – none of which fit within the statutory forward-looking TSLRIC pricing rule. The following explains why.

#### **Forward-looking approach**

- 30 The Act requires a “forward-looking” approach to TSLRIC. A historic approach is therefore ruled out. As noted earlier, this is one example where international references (that leave choices on the form and approach of TSLRIC or pricing more generally to the regulator) cannot override the plain words of the Act.
- 31 The Commission has looked at the question of which method of valuing assets meets the legal framework in the Act in its 2002 and 2004 TSLRIC papers. In 2004 the Commission found that (in agreement with the earlier 2002 Paper<sup>17</sup>):

31.1 “ORC [Optimised Replacement Cost] is the appropriate asset valuation methodology for the purposes of any determination that applies TSLRIC as the final pricing principle.”<sup>18</sup>

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<sup>15</sup> Vodafone Submission at [B10] to [B11].

<sup>16</sup> Analysys Mason “Paper in Support of UCLL Cross-submissions” (26 February 2014) at page 6 (Analysys Mason Corss-submission Paper).

<sup>17</sup> Commerce Commission “Application of a TSLRIC Pricing Methodology – Discussion Paper” (2 July 2002).

<sup>18</sup> Commerce Commission “Principles Paper: Implementation of TSLRIC Pricing Methodology for Access Determinations under the Telecommunications Act 2001” (20 February 2004) at [142] (2004 TSLRIC Principles Paper).

31.2 “[E]ven if the assets were to be replaced by the same asset, historical costs will not capture the current and future cost of purchasing and installing that equipment.”<sup>19</sup>

32 Chorus agrees that approach is consistent with the statutory requirement that a forward-looking TSLRIC approach is used.

### **The Frontier proposal**

33 Asset valuation is the central focus of the Frontier Report. Frontier recommends:

33.1 making a distinction between network assets that would be “re-used” by the HNE and those that would not be;

33.2 assets that would be “re-used” by the HNE, such as ducts and trenches with ducts, should be valued at DORC. The adjusted asset base should then be locked in, and rolled forward recognising efficient new capital expenditure; and

33.3 assets that would not be “re-used” by the HNE, such as copper and fibre loop assets, would be valued at ORC. The asset valuation should be fixed “for as long as feasible”.

34 We discuss below three aspects of the Frontier proposal:

34.1 it is inconsistent with the statutory pricing rule;

34.2 it misunderstands and miscalculates DORC; and

34.3 it incorrectly assumes windfall gains will result from use of the statutory pricing rule.

### **Forward-looking requirement**

35 Frontier makes these recommendations in order to avoid what it sees as the potential downsides of using a forward-looking TSLRIC approach.

36 We address Frontier’s key downsides and our response as follows:

36.1 to the extent that a forward-looking TSLRIC approach would lead to higher cost estimates, Frontier argues that this will disincentivise Chorus from investing in new technologies or upgrading its network.<sup>20</sup> *In response we note that the report does not address the fibre to the home investment and policy of a transition to fibre occurring in New Zealand;*<sup>21</sup>

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<sup>19</sup> 2004 TSLRIC Principles Paper at [136].

<sup>20</sup> Frontier Economics Submission at page 10.

<sup>21</sup> Apart from a brief acknowledgement in Frontier’s footnote 9, which contains an incomplete description of investment incentives in UFB and non-UFB areas.

- 36.2 it can create disincentives for investments in other telecommunications infrastructure.<sup>22</sup> *Again, we note that the report does not address New Zealand's FTTH policy;*
- 36.3 it can lead to a disassociation between the actual costs incurred in providing the services and the costs that are modelled to be incurred.<sup>23</sup> *In response we note that the report does not address the fact that this is precisely the legislative intention behind requiring a forward-looking TSLRIC approach; and*
- 36.4 where legacy assets are largely depreciated, there should be no need to allow additional depreciation in access charges based on the costs of investing in a hypothetical new network that will not actually be built by Chorus.<sup>24</sup> *In response we note that the report does not address how this backward-looking concern is relevant to the statutory pricing rule that requires a forward-looking TSLRIC approach. The specific issue of "windfall gains" that are said to result from a forward-looking TSLRIC approach is addressed below.*
- 37 Frontier argues that these issues explain why other regulators have moved away from pricing unbundled local loops "on the basis of a strict TSLRIC methodology".<sup>25</sup> Frontier quotes the explanation given by the ACCC for stopping its use of TSLRIC and adopting a building blocks approach to setting telecommunications access prices, including:<sup>26</sup>
- The ACCC has for some time noted the limitations of a TSLRIC approach to the pricing of fixed network legacy services and has expressed that view in a number of recent decisions and consultation.
- 38 Vodafone highlights the backward-looking nature of the Frontier approach when it says in support:
- The Commission should take into account the elapsed economic life of the assets used by Chorus in providing the UCLL service to ensure that those costs are not double-recovered through the TSLRIC model.<sup>27</sup>
- 39 To respond to these issues, Frontier proposes five key principles that it says should guide the Commission:
- 39.1 the Commission's model should be designed with regard to the utilisation of existing sunk assets.<sup>28</sup> *In response we note that the report does not address how this can be reconciled with the statutory pricing rule;*

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<sup>22</sup> Frontier Economics Submission at page 10.

<sup>23</sup> Frontier Economics Submission at page 11.

<sup>24</sup> Frontier Economics Submission at page 11.

<sup>25</sup> Frontier Economics Submission at page 11.

<sup>26</sup> Frontier Economics Submission at page 11.

<sup>27</sup> Vodafone Submission at page 20, recommendation 16.

- 39.2 focusing overly on build-buy incentives reflects a “legacy” approach to regulation.<sup>29</sup> *Again, the report does not address how this can be reconciled with the statutory pricing rule;*
- 39.3 incentives for efficient investment will best be created by an approach to modelling that delivers more certainty.<sup>30</sup> *While Frontier discusses the issue of regulatory resets, regulatory certainty is not addressed;*
- 39.4 revaluation windfalls for Chorus would be inconsistent with the purpose of the Act. Frontier argues that “costing methods that are too heavily focused on the costs of a hypothetical network that is far removed from the actual network being used to provide the service are at risk of creating a divergence between prices and actual costs.”<sup>31</sup> *In response we note that the report does not address the statutory requirement to model costs that are different to Chorus actual costs, nor the backward-looking nature of Frontier’s concern. The specific issue of “windfall gains” that are said to result from a forward-looking TSLRIC approach is addressed below; and*
- 39.5 the Commission must be wary of approaches that cherry-pick inconsistent features of different models.<sup>32</sup> *We agree. The Commission’s 2002 and 2004 TSLRIC papers explain an orthodox, internally consistent application of the forward-looking TSLRIC approach.*
- 40 Frontier refers to its proposed approach as “balanced”.<sup>33</sup> In substance the Frontier approach incorporates elements of historic use of Chorus’ assets, and the building blocks model. Frontier contrasts this with an application of forward-looking TSLRIC that does not make these changes, which Frontier labels as “extreme”.
- 41 However, this does not get away from the fact that Frontier is proposing a move away from the use of a forward-looking TSLRIC methodology that is required by the Act. Frontier is clearly of the view that a forward-looking TSLRIC approach is not the best pricing rule for unbundled local loops. Frontier’s proposal is intended to address these perceived deficiencies.
- 42 The response is that the Act requires a forward-looking TSLRIC approach. This pricing rule was endorsed when Parliament changed the service description of UCLL in 2011. Frontier may not agree with that policy choice, but it is not the role of the Commission nor the court to legislate for a different pricing rule.

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<sup>28</sup> Frontier Economics Submission at page 13.

<sup>29</sup> Frontier Economics Submission at page 14.

<sup>30</sup> Frontier Economics Submission at page 15.

<sup>31</sup> Frontier Economics Submission at page 15.

<sup>32</sup> Frontier Economics Submission at page 16.

<sup>33</sup> Frontier Economics Submission at page iii.

- 43 As a result, Frontier's proposal is inconsistent with the Act's requirements. It is backward-looking, in direct conflict with the statutory requirement to use a forward-looking TSLRIC.
- 44 Frontier is explicit about the backward-looking nature of its proposal to use DORC:
- ... our view is that the approach to the valuation and depreciation of assets that will be re-used from today's existing current generation access (CGA) network should be different to the approach used for next generation access (NGA) networks, **to reflect the historic recovery of the costs of the former assets.**<sup>34</sup> [emphasis added]
- Assets valued at ORC, **adjusted for accumulated depreciation** (i.e. DORC)<sup>35</sup> [emphasis added]
- 45 In addition, the argument advanced by Frontier for the use of DORC involves a nonsensical HNE. Frontier asserts that the HNE would:<sup>36</sup>
- ... seek to use some existing sunk assets (such as ducts and trenches) to build its network. This is because the cost of rebuilding some of these assets is likely to be prohibitively high, and it would be more efficient to simply use some existing assets.
- 46 Frontier does not explain how an HNE would come to use those assets nor how that use would be valued or priced. Its proposal is not an internally consistent application of the forward-looking TSLRIC approach.
- 47 It is also inconsistent with the submissions from Vodafone and Telecom that the Act intends an orthodox application of forward-looking TSLRIC. The Commission's 2002 and 2004 TSLRIC papers informed the market as to the key features of the orthodox forward-looking TSLRIC required by the Act. The principles set out in the 2004 paper include:
- 47.1 forward-looking costs ought to be based on a network design where the location of core network nodes is taken as a given...A scorched node assumption for network design is the most appropriate for TSLRIC modelling;<sup>37</sup>
- 47.2 forward-looking costs should reflect the costs of providing services using best-in-use technology with modern equivalent assets;<sup>38</sup>
- 47.3 a bottom-up approach is likely to result in more accurate estimates of the TSLRIC than a top-down approach;<sup>39</sup>

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<sup>34</sup> Frontier Economics Submission at page iv.

<sup>35</sup> Frontier Economics Submission at page vi, figure 1.

<sup>36</sup> Frontier Economics Submission at page iii.

<sup>37</sup> 2004 TSLRIC Principles paper at [67].

<sup>38</sup> 2004 TSLRIC Principles paper at [82].

- 47.4 an element-based approach involves developing a network model that determines the quantity and dimensions of the network elements necessary to provide the services<sup>40</sup> ...an elements-based approach is the most appropriate for TSLRIC modelling;<sup>41</sup>
- 47.5 optimised replacement cost (ORC) is the appropriate asset valuation methodology for the purpose of any determination that applies TSLRIC as the final pricing principle;<sup>42</sup>
- 47.6 the tilted annuity approach, which combines both a return on capital and a return of capital (depreciation) is the most appropriate approach for TSLRIC modelling;<sup>43</sup>
- 47.7 the total service should include all services that use the assets used by the designated service. This definition of the total service takes into account the access provider's provision of other telecommunications services, in the sense that these services share costs with [the services being modelled]. This should lead to an appropriate range of services over which to allocate the assets' costs,<sup>44</sup> and
- 47.8 the long-run is the period of time over which all resources, including fixed and sunk, costs are variable.<sup>45</sup>
- 48 In summary, Frontier's "balanced" approach leads to a patchwork of decisions that are inconsistent with the statutory pricing rule of forward-looking TSLRIC. As Chorus made clear in its submission on the Ministerial Review, Chorus supports a change in telecommunications regulation to setting access prices by reference to a building blocks model. However the only way to make that change is to reform the Act.
- DORC**
- 49 We attach to this Cross-submission a report from Jeff Balchin, Incenta Economic Consulting. Mr Balchin explains that Frontier misunderstands, and as a result miscalculates, DORC (or ODRC).

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<sup>39</sup> 2004 TSLRIC Principles paper at [100].

<sup>40</sup> 2004 TSLRIC Principles paper at [101].

<sup>41</sup> 2004 TSLRIC Principles paper at [104].

<sup>42</sup> 2004 TSLRIC Principles paper at [142].

<sup>43</sup> 2004 TSLRIC Principles paper at [152].

<sup>44</sup> 2004 TSLRIC Principles paper at [261].

<sup>45</sup> 2004 TSLRIC Principles paper at [267].



50 Mr Balchin advises:<sup>46</sup>

Frontier's assumption that the choice between using an ODRC or ORC valuation in the TSLRIC model for ducts and trenches will deliver a materially different answer – and so address matters like protecting against windfalls on past investments being made – is, in my view, incorrect.

51 As explained in the Incenta Economic Consulting report:

51.1 use of DORC or ORC should result in the same TSLRIC value. If they do not then one or the other has not been applied properly;

51.2 to calculate DORC is information intensive;

51.3 DORC valuations are more suitable in a building block model where the task is to establish the initial Regulatory Asset Base to which on-going capital expenditure is added;

51.4 the particular calculation of DORC proposed by Frontier, though used in regulatory processes in the past, is no longer seen as appropriate; and

51.5 because DORC and ORC are equivalent, and the Commission is engaged in modelling forward-looking TSLRIC not a building blocks model, Mr Balchin recommends that the Commission use ORC as it is much less information intensive.

52 This is consistent with the advice from Analysys Mason:<sup>47</sup>

For the avoidance of doubt, we do not favour approaches using depreciated asset values and remaining lives, but favour a replacement cost valuation with full asset lives; this is consistent with the recent entry of the LFCs, the need to maintain investment incentives for the LFC investors, and (as a result) the need to reflect the true cost differences between services based on UCLL and LFC services by costing copper in a way that is consistent with the costs faced in building the LFC network.

53 Analysys Mason also notes that Frontier's proposal to use depreciated asset values for assets that Frontier asserts the HNE will "reuse" is inconsistent with:

53.1 the use of optimisation, unless the Commission's model identifies the actual location of the assets and the ability to reuse them;<sup>48</sup> and

53.2 use of a tilted annuity approach to depreciation going forward, when Frontier's DORC proposal assumes straight line depreciation has been used in the past.<sup>49</sup>

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<sup>46</sup> Incenta Economic Consulting "TSLRIC for UCLL Service – Asset Valuation Issues" (28 February 2014) at page 2 (Incenta Report).

<sup>47</sup> Analysys Mason Cross-submission Paper at page 8.

<sup>48</sup> Analysys Mason Cross-submission Paper at page 9.

**Windfall gains**

54 There is no evidence that taking a forward-looking approach to TSLRIC will lead to windfall gains. Submitters argue that the use of a forward-looking TSLRIC approach will result in access prices that depart from Chorus' actual costs.<sup>50</sup> But this is the very approach from a forward-looking TSLRIC that is premised on a HNE that the Act has mandated.

55 Submitters also seek to argue against a forward-looking TSLRIC approach by saying it will result in Chorus receiving windfall gains.

56 In the attached report from Incenta Economic Consulting, Mr Balchin advises:<sup>51</sup>

Whether or not setting an asset value at ORC/ODRC may lead to a windfall gain over the life of the asset in question is an empirical issue, requiring an analysis of past pricing and the historical pattern of expenditures. However, there is no sound basis for an a priori conclusion that ORC/ODRC would lead to a windfall. Indeed, where infrastructure services are efficiently priced, capital is almost certainly returned to investors at a slower rate than assumed by a hypothetical new entrant asset valuation (i.e, ORC/ODRC). . The implication is that it may equally be the case that ORC/ODRC valuations understate the RAB required to earn an NPV=0 over the relevant asset's life.

57 In short, it cannot be assumed that a replacement cost valuation understates or overstates the value of the network investment. Therefore it cannot be asserted there are windfall gains. The assertions used rely on equating accounting depreciation with economic depreciation, which is not correct.<sup>52</sup>

**International reference points**

58 In relation to asset valuation, Frontier's report refers to a range of international reference points, and makes suggestions as to what the Commission can draw from them. However, as already highlighted above, different approaches to TSLRIC in other jurisdictions cannot be assumed to fit within the particular policy, market and legislative requirements in New Zealand.

59 Frontier submits that:<sup>53</sup>

there has been a wide variety of approaches used to determine a cost-based price for unbundled local loops by regulators around the world (and even across Europe).

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<sup>49</sup> Analysys Mason Cross-submission Paper at page 9.

<sup>50</sup> See Frontier Economics Submission at page 15 and Vodafone Submission at [D4.3].

<sup>51</sup> Incenta Report at page 3.

<sup>52</sup> Economic depreciation is the change in the value of an asset during a specified period of time (and is discussed in the Annex to Analysys Mason's report of 12 Feb 2014). Accounting depreciation is the systematic allocation of the cost of an asset over its expected useful life. It relies on mechanistic rules of thumb and is unlikely to produce similar results to economic depreciation.

<sup>53</sup> Frontier Economics Submission at page 4.

- 60 Frontier provides a table designed to show the divergence of approaches taken by regulators to modelling UCLL costs.<sup>54</sup> However this is not the same thing as saying there is a divergence of approach to modelling forward-looking TSLRIC.
- 61 This is demonstrated by Australia with a pre-2010 and post-2010 pricing approach. The implication is that Australia has changed the way it models forward-looking TSLRIC costs, when the reality is it abandoned forward-looking TSLRIC for a Regulated Asset Base (RAB) model.
- 62 Similarly, the European Commission recommendation referred to by Frontier is a recommendation that National Regulatory Authorities *change* their costing methodologies to adopt a RAB for civil infrastructure (although none have yet done so).
- 63 Of the countries listed in Table 1 of the Frontier report, Australia (pre 2010), Germany, Denmark and Ireland implement a TSLRIC pricing methodology, while Australia (post 2010) and the UK implement a hybrid HCA/CCA Regulatory Asset Base (RAB) pricing principle.
- 64 A recent study prepared for the Canadian Radio-television and Telecommunications Commission, which surveyed costing methodologies in Australia, France, Germany, Sweden, the United Kingdom and the United States, made this observation about changing pricing models for UCLL:<sup>55</sup>

#### **Changes in Methodology Over Time**

Three of the six surveyed countries have made significant changes in the cost methodology they use for ULLs: the UK, France and Australia. In 2005, both the UK and French regulators shifted from LRIC [Long Run Incremental Cost] to FAC [Fully Allocated Costs] methodologies. In the UK, Ofcom justified the shift to FAC due to concerns with the complexities of the LRIC approach and 'low visibility' into the LRIC costing approach used by BT at the time. In France, ARCEP came to a similar conclusion. More recently, in 2011, ACCC justified moving away from its former LRIC costing methodology for a variety of reasons including (i) the fact that continual revaluation of network assets created pricing uncertainty and risked over/under recovery of costs, (ii) use of forward-looking costs required use of debatable MEA asset valuation considerations and (iii) the cost of bypassing incumbent's copper access network was rising not falling, consequently the likelihood of replication has also fallen. As a result, it appears these three countries moved to a FAC costing methodology to largely reduce complexity and uncertainty.

- 65 The report further analyses the three FAC methodologies as a Hybrid HCA/CCA Regulatory Asset Base (RAB) model for Australia and the UK, and CCA for France. Clearly these models are not forward-looking TSLRIC.
- 66 Frontier also refers to Ofcom's 'anchor pricing' approach, which sets prices for copper services on the basis of the hypothetical operator continuing to operate the legacy

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<sup>54</sup> Frontier Economics Submission at page 5, table 1.

<sup>55</sup> Wall Communications Inc "A Study of Wholesale Costing Methodologies in Selected Countries" (2 October 2012) at page 56.

network.<sup>56</sup> However, it is important to understand that Ofcom's anchor pricing approach was made in the context of a commitment that BT's fibre investment would remain unregulated in the near term and set out clear principles as to how it would be regulated in the future.<sup>57</sup> Clearly this commitment has significant implications for BT's overall position. It would not be appropriate to rely on Ofcom's approach to regulating copper in New Zealand's circumstances where there is no equivalent commitment to unregulated fibre prices.

## SECTION 18

67 Chorus agrees with other submitters that in instances where the Commission has discretion, it must be guided by section 18. Section 18 does not, however, confer a power to assert discretion where the requirements of the Act are plain.

68 The Act, makes plain:

68.1 the requirement to start with the service that is the subject of the price review application, and identify the TSLRIC costs of delivering the full functionality of the service;

68.2 the requirement to use an MEA that can deliver the full functionality of the service;

68.3 the requirement to take a forward-looking cost approach rules out historic cost approaches; and

68.4 the requirement to recognise the demand for the service, and only the demand for the service.

## BACKDATING

69 Other submitters ask the Commission to distinguish the Court of Appeal judgment in *Telecom New Zealand v Commerce Commission* and instead apply discretion. They focus on trying to distinguish the Court of Appeal judgment and say backdating is only relevant if it relates to a lower (rather than higher) price.

70 The Court of Appeal in *Telecom New Zealand v Commerce Commission* applies whether the final price is higher or lower than the initial price:<sup>58</sup>

If the reviewed price is lower than the initial price the end users will have paid an inefficiently excessive price for the service. But if it is higher the end users would have paid an inefficiently inadequate price for the service. Absent the possibility of the consequences being passed on to

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<sup>56</sup> Frontier Economics Submission at page 24, box 1.

<sup>57</sup> Ofcom "Delivering super-fast broadband in the UK" (3 March 2009), accessible at: [http://stakeholders.ofcom.org.uk/binaries/consultations/nga\\_future\\_broadband/statement/statement.pdf](http://stakeholders.ofcom.org.uk/binaries/consultations/nga_future_broadband/statement/statement.pdf).

<sup>58</sup> *Telecom New Zealand v Commerce Commission and TelstraClear*, CA75/05, 25 May 2006 (*Telecom New Zealand*) at [41].

the end users in some way, the potential for inefficiencies in relation to end users is unavoidable on either the Telecom position or the respondent's position. What can be achieved, however, is the establishment of the most efficient price as between the access provider and the access seeker.

- 71 The Court was very aware of the general application of its judgment to all final price review determinations and in fact proceeded with the judgment for that reason despite a commercial settlement having been reached.<sup>59</sup>
- 72 While submitters seek to rely on uncertainty as a reason for not backdating if there is a higher price outcome from application of the TSLRIC methodology, at the same time, they suggest the processes should be done less quickly. The best mitigators to the uncertainty are timely and robust outcomes.
- 73 The opinion by Lowndes Associates explains that backdating a higher final price will be amending the commercial terms agreed between Chorus and RSPs, which the Commission should not do. However the commercial terms for the UCLL service are those in the STD, which the Commission has the power to amend under section 30R. The Commission is not "regulating" RSPs, it is simply setting the terms of the STD.
- 74 Lowndes Associates also argues that backdating a final price which is lower than the initial price can be done, but backdating a higher final price cannot. Lowndes relies on an argument that a lower price ought to be backdated because Chorus will have otherwise charged a higher price than the framework would retrospectively have allowed – a "breach". This is circular logic: the "breach" assumes that backdating has occurred, so Lowndes is justifying backdating based on backdating.

### **REGULATORY PERIOD**

- 75 Frontier rightly notes the importance of certainty and the difficulty that frequent revaluations create for investment incentives. It suggests the Commission lock in the costing methodology and UCLL price for a minimum period of five years. We believe that rather than accepting a minimum period as the regulatory period, Frontier's arguments would better support a regulatory period a little longer than their suggested minimum.
- 76 Vodafone suggests 2019 for a number of reasons:
- 76.1 this is the completion date of UFB and LTE rollouts. We don't see that this has much relevance. Of more relevance would be when the majority of customers are no longer expected to be on copper but will be getting their broadband on either the LTE or UFB networks;
  - 76.2 this is the date of the scheduled review of the Act. In our view this would be a good reason to extend the regulatory period for ten years so that it does not coincide with the intensive activity associated with the review. Further, a longer

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<sup>59</sup> *Telecom New Zealand*, CA at [16].

period would allow the Commission time to consider the implications of any new legislation arising from the review. That legislation will not be enacted for some time after the review;

76.3 the resources and time spent on the price review process. We suggest that this is more a reason for extending the reset period for ten years rather than five; and

76.4 certainty – again we think this is a reason for a longer regulatory period than five years.

77 Telecom suggests in effect a five year regulatory period with a possibility of a reset after three years. We think this would undermine any sense of certainty for the industry. It would mean in effect that, very shortly after this current, very extensive and intensive process for establishing a UCLL FPP, the Commission would be commencing a review. The Commission must accept that the price review process should produce an outcome more robust than implied by this proposal. Otherwise we are heading toward the continual re-optimisation and revaluation cycle suggested by Frontier as stifling investment incentives.