

VODAFONE NEW ZEALAND LIMITED
SUBMISSION TO THE NEW ZEALAND COMMERCE COMMISSION



**CROSS-SUBMISSION ON CONSULTATION PAPER OUTLINING
COMMISSION'S PROPOSED VIEW ON REGULATORY FRAMEWORK
AND MODELLING APPROACH FOR UBA AND UCLL SERVICES**

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A Executive Summary

- A1 Vodafone welcomes the opportunity to comment on the submissions received in relation to the consultation paper outlining the Commission's proposed view on regulatory framework and modelling approach for UBA and UCLL services (**Proposed Views Paper**), as well as the supporting papers from TERA Consultants (**TERA Report**) and Professor Ingo Vogelsang (**Vogelsang Report**).
- A2 This submission should be read along with the expert reports prepared by WIK-Consult (**WIK Cross-Submission Report**) and Network Strategies (**NWS Cross-Submission Report**), which are included with this cross-submission.¹

Regulatory framework

- A3 Vodafone remains of the view that Section 18 of the Telecommunications Act 2001 (the **Act**) provides wide discretion to the Commission in undertaking this cost modelling exercise, but it requires that the Commission is guided by the promotion of competition for the long-term benefit of end-users. There is no dispute that this is the Commission's primary duty when making these FPP determinations.
- A4 Vodafone submits that other, additional considerations cannot displace this primary duty. In particular, it is not appropriate for the Commission to treat the impact on investor expectations or incentives as determinative of whether a decision is consistent with its primary duty. This is especially the case when the evidence and analysis of the investment incentives or expectations at play are cursory and, in our view, insufficient to support the proposed views they currently underpin.

The hypothetical efficient operator

- A5 Chorus submits that its hypothetical new entrant (**HNE**) profile should underpin the TSLRIC model the Commission must develop. While Chorus accepts on the one hand that its proposed HNE would deploy an MEA network which is the most efficient (i.e., least cost), on the other hand Chorus implies that its HNE would be restricted to a single technology choice.
- A6 Vodafone rejects Chorus' HNE standard, and encourages the Commission to focus instead on a hypothetical efficient operator (**HEO**) standard. Chorus' narrow approach is not supported by the practice of other regulatory authorities, and our own experience (both in New Zealand and internationally) with both fixed and wireless network deployments, suggests that a FTTH and FWA hybrid is the most likely MEA deployment scenario.
- A7 Similarly, we do not accept the implication that the hypothetical efficient operator would face the same entry costs as a nationwide competitor entering the New Zealand market. Accordingly, for example, the Commission should expect the hypothetical efficient operator to achieve levels of

¹ WIK-Consult *Cross-submission in response to the Commission's "Consultation paper outlining our proposed view on regulatory framework and modelling approach for UBA and UCLL services (6 August 2014)"* (20 August 2014) and Network Strategies *Report for Spark New Zealand and Vodafone New Zealand: Cross-submission for consultation and UCLL and UBA FPP regulatory framework* (20 August 2014).

asset sharing and pole use which, at a minimum, reflect Chorus' current levels, but may be uplifted to reflect modern best practice network deployment.

Modelling considerations

A8 We remain of the view that the Commission should:

- (a) adopt a single FTTH and FWA MEA for both UCLL and UBA, and that the FWA component should be deployed to the extent it is the least cost option. This is consistent with a hypothetical efficient operator standard;
- (b) still consider re-use of certain Chorus assets, because that approach is more likely to give effect to s 18;
- (c) ensure the network is appropriately optimised, and avoid foreclosing any potential efficiency gains that could be achieved through adopting an orthodox modified scorched node approach; and
- (d) ensure an appropriate level of infrastructure sharing within the MEA, both internally across Chorus' assets and with third party infrastructure.

Demand

A9 An MEA network built today must assume demand growth in the future, arising from overall market growth or through the hypothetical operator competing to win a larger market share. The Commission must also assume that the hypothetical operator intends to compete with the HFC and LFC networks, as well as other FWA and mobile in the future.

Commission's process

A10 We remain of the view that the Commission should release and consult on a model reference paper before it issues its draft determination.

B Regulatory Framework

B1 The Commission's objective (Section 18)

- B1.1 All parties agree that the Commission's primary duty when making FPP determinations for the UCLL and UBA services is to promote competition in telecommunications markets for the long term benefit of end-users of telecommunications services.² Differences arise in relation to how various factors that inform how to best give effect to this purpose should be weighed.
- B1.2 Chorus argues that any decision by the Commission that undermines investment incentives would undermine competition (by deterring future investment) and therefore operate against the long term benefit of end users.³
- B1.3 Investment incentives are certainly relevant to the Commission's decisions. However, as set out in our primary submission, the Commission should not defer to investment incentives in circumstances where it has not identified and examined to any extent:
- (a) the specific investor expectations that it is accounting for;
 - (b) how these expectations have been created; and
 - (c) whether they are in fact reasonable.⁴
- B1.4 We agree that a decision that undermines incentives to invest may undermine competition over the long run and consequently may not be in the long-term benefit of end-users. However, the question of whether this is in fact the case requires closer examination than has been presented to date. In our view, the Commission's assessment falls short of the examination that is required if this factor is to be given the weight that has been afforded in the Proposed Views Paper and, consequently, in many of the conclusions set out in the Chorus Submission.
- B1.5 However, even where a proper examination of this matter takes place, Vodafone submits that it is not appropriate for the Commission to treat impact on investment incentives as determinative of whether a decision is consistent with its primary duty as expressed in s 18(1) of the Act. As stated in our primary submission, promoting competition as required by s 18(1) does not require the Commission to ensure that investment incentives are prioritised above other considerations.⁵
- B1.6 Finally, as our primary submission sets out, the Commission should exercise discretion consistent with s 18.⁶ The discretionary area of judgement available to the Commission depends on the nature of the evidence that is before it. Where a question can be answered with reference to analysis of objective evidence and analysis, s 18 may not have a separate observable effect. Rather, it comes into play where the Commission faces a genuine choice that cannot be determined purely with reference to the evidence before it. Chorus rightly appears to agree that the Commission does not have discretion at every step of its assessment, noting that "[i]t is

² See for example Chorus *Submission in response to the Commerce Commission's Consultation Paper outline its proposed view on the regulatory framework and modelling approach for UBA and UCLL services* (9 July 2014) at [195.1] (**Chorus Submission**).

³ Chorus Submission at [195.4].

⁴ Vodafone *New Zealand Comments on consultation paper outlining the Commission's proposed view on regulatory framework and modelling approach for the UBA and UCLL services* (6 August 2014) at [D1.15] (**Vodafone Submission**).

⁵ Vodafone Submission at [D1.19].

⁶ See Vodafone Submission at [D1.5-D1.15].

*important not to assume or overstate the scope for discretion.*⁷ We are encouraged by this alignment in thinking, even though it is difficult to reconcile with arguments Chorus has made elsewhere that the Commission must account for s 18 when exercising judgement at every stage of its analysis, and that not doing so would constitute an error of law.

B2 Reasonable investor expectations

- B2.1 As set out in our primary submission, we agree that investors' expectations are a relevant consideration when making the FPP determinations for the UCLL and UBA services. However, investors are at best simply a subset of the end-user group. Respect for the expectations of investors as sub-group of end-users cannot be the Commission's sole consideration and it cannot be decisive.⁸
- B2.2 Chorus adopts the view that a decision that undermines incentives to invest is likely also to undermine competition for the long-term benefit of end-users by deterring future investment.⁹ This general statement makes no reference to the specific investment incentives that are affected by the Commission's decision on regulated services. It is couched at this general level precisely because the Commission has not in fact examined what investor expectations are at play, whether they are reasonable and how they might be affected by the outcome of this process.
- B2.3 As Chorus notes, the Commission relies on assumptions regarding reasonable investor expectations to reject any suggestion that it assume re-use by a hypothetical new entrant of Chorus' assets or make capability-based performance adjustments to the valuation of the modelled FTTH network.¹⁰ As set out in our primary submission, we consider it to be incorrect for the Commission to prioritise "reasonable investor expectations" so that an (un-evidenced) estimation of those expectations determines how the Commission makes various analytical judgements (we note that Chorus' own reading of the Commission's proposed approach identifies this factor as determinative¹¹). This approach effectively ranks a relevant consideration read in via s 18(2A) (i.e., investor expectations) above the Commission's primary duty in s 18(1) to promote competition for the long term benefit of end users. This is inconsistent with the statutory scheme. Moreover, it is insupportable as a matter of administrative law in circumstances where the Commission's assessment of reasonable investor expectations appears to rely on nothing more than intuition, and where its consideration of this factor suffers from the defects identified in [D1.14] – [D1.41] of Vodafone's primary submission.
- B2.4 Finally, in our submission, the application of a reasonable investor expectation test as it is currently formed is more likely to undermine rather than promote predictability and credibility in regulation.

⁷ Chorus Submission at [202].

⁸ See Vodafone Submission at [D1.8] *et seq.*

⁹ Chorus Submission at [195.4].

¹⁰ Chorus Submission at [198].

¹¹ Vodafone Submission at [D1.24].

B3 Relativity

B3.1 We agree with Chorus that the relativity consideration should guide the Commission towards the efficiency aspect of s 18.¹² However, we disagree about the nature of the efficiencies that are at play.

B3.2 Chorus considers that innovation effects and other positive network externality effects identified by Professor Vogelsang will deliver efficiencies that will outweigh any detriments:¹³

The positive network externality effects of a UCLL price increase for UFB subscribers are likely to exceed the negative externalities imposed on the remaining subscribers of the copper-based services.

B3.3 In our view, this claim has no objective foundation. Professor Vogelsang provides no estimate of value of positive network effects, and it is apparent that no reliable estimate can be derived. As noted in our primary submission, Professor Vogelsang does not assert that positive externalities will, as a matter of fact, result from an increased UCLL service price. He simply notes that they might, without offering any view on the economic value of positive externalities that might result from an increased price.¹⁴ As WIK observes, the nature and value of any positive externalities is an empirical question. The Commission has presented no quantitative analysis supporting its assessment and it cannot simply assume the operation of these effects.¹⁵ Where quantitative assessment of this issue cannot be done, it is incumbent on the Commission to conduct a far more robust qualitative assessment than is set out in the Proposed Views Paper.

B3.4 The Commission's proposed view, endorsed by Chorus, that positive externalities are likely to exceed the value of negative externalities is therefore entirely speculative. As it stands, there are no reliable grounds for settling on this view or for believing that the operation of positive externalities will generate a result that best promotes competition for the long term benefit of end-users of telecommunications services.

B4 The hypothetical efficient operator

B4.1 Chorus submits that the hypothetical operator "essentially steps into Chorus' shoes and becomes the network operator", characterising the hypothetical efficient operator as replacing its copper infrastructure to service Chorus' existing demand (Chorus characterises this hypothetical operator as the "hypothetical new entrant" or "HNE").¹⁶ Chorus submits that this hypothetical new entrant would deploy a replacement copper network, not in competition with but as a new (efficient) Chorus. We disagree that this HNE meets the definition of the hypothetical efficient operator which the Commission must have in mind for its TSLRIC model. This is because that operator would not necessarily deploy a copper network, but would deploy an MEA which is the most efficient (i.e., least cost) network choice.

¹² Chorus Submission at [210].

¹³ Chorus Submission at [211].

¹⁴ Vodafone Submission at [E2.4].

¹⁵ Vodafone Submission at [E2.7].

¹⁶ Chorus Submission at [240].

B4.2 We note that there are inconsistencies between the position set out in Chorus' submission and that of its expert consultant Analysys Mason in relation to this point.¹⁷ In contrast to Chorus, Analysys Mason effectively submits that the hypothetical operator is a greenfields new entrant that sets about replacing Chorus' network.¹⁸ Both Chorus and Analysys Mason also argue that the hypothetical operator would be (economically) constrained to selecting one technology for its network deployment:¹⁹

There are inherent costs to using multiple technologies and the costs must be taken into account in calculating the efficient cost of the network. To avoid these, an HNE could select the lowest cost MEA for its entire network.

B4.3 We do not accept this view. As set out in our earlier submissions, the practice of other regulatory authorities and our own experience with both fixed and wireless networks (both in New Zealand and internationally) all suggest that a FTTH and FWA hybrid is the most likely MEA deployment scenario.²⁰

B4.4 This view is consistent with that recently provided by Analysys Mason to the Portuguese regulator on LRIC modelling for fixed services.²¹ In that advice, Analysys Mason discusses the importance of the choice of access technology for modelling core and backbone network design, noting that a wireless network may be more cost efficient in rural areas:²²

The model considers that the modern equivalent technology to provide voice services on a fixed network is VoIP over a fibre access network (or at least, in most of the network - it might be the case that in certain rural areas it could be more cost efficient to deploy a wireless network.). Therefore, the model considers a copper and fibre access network, without explicitly considering alternative technologies such as cable, wireless or other access technologies.

B4.5 Finally, we note that Analysys Mason recommends that it would be reasonable to assume that the hypothetical network may be shared with an entity that has assets in the required locations. We assume that this reference is to third party assets, because Analysys Mason also states that Chorus' poles, ducts and trenches are not available for sharing.²³ This is, however, as Network Strategies observes: "... quite irrelevant as, in Chorus' own view, the hypothetical operator replaces Chorus – it is not present in addition to Chorus. Sharing is then logically a non-issue."²⁴

¹⁷ See NWS Cross-Submission Report at [2].

¹⁸ See discussion in NWS Cross-Submission Report at section 2.2

¹⁹ Chorus Submission at [261].

²⁰ Vodafone New Zealand *Submission on UCLL Process and Issues Paper* (14 February 2014) at Section E.

²¹ Analysys Mason *Conceptual approach for the fixed BU-LRIC model, Report for discussion for ICP – Autoridade Nacional de Comunicações* (20 November 2013). See discussion in NWS Cross-Submission Report section 2.3.

²² Analysys Mason *Conceptual approach for the fixed BU-LRIC model, Report for discussion for ICP – Autoridade Nacional de Comunicações* (20 November 2013) at p 16.

²³ Analysys Mason *Response to Commission consultation on regulatory framework and modelling approach for UCLL and UBA* (6 August 2014) at Section 1.13 (**Analysys Mason Report**).

²⁴ NWS Cross-Submission Report at section 2.3.

The relevant operator is a hypothetical efficient operator (HEO), not a hypothetical new entrant

B4.6 We agree with Network Strategies' assessment of the Analysys Mason approach in Portugal:²⁵

The characterisation of the relevant operator construct as a hypothetical existing operator, rather than a hypothetical new entrant is consistent with Analysys Mason's recent recommendation to the Portuguese regulator. Analysys Mason describes the hypothetical existing operator as having 'characteristics similar to, or derived from, the actual operators in the market, except for specific hypothetical aspects that are adjusted', in contrast to the hypothetical new entrant: 'an operator entering in 2013 with today's modern network architecture, which acquires an incumbent's share of the market'. Note that use of the hypothetical existing operator construct does not imply that legacy technology should be included in the model, as noted by Analysys Mason: Legacy network deployments can be ignored if migration to next-generation technology is expected in the short-to-medium term or has already been observed in real networks. However, some real world characteristics of the operator being replaced would remain for the hypothetical existing operator: for example, it would be able to deploy aerially where the actual operator has done so previously.

B4.1 The hypothetical efficient operator that we recommend is consistent with the Commission's objectives, and it is also consistent with local circumstances in New Zealand. This is also outlined in Network Strategies' earlier submission which describes the most likely new telecommunications operator as an existing lines company.²⁶

Ensuring consistency with a modified scorched node approach

B4.2 We agree with Network Strategies' observation:²⁷

In discussing the constraints on the hypothetical operator Chorus and its consultant offer a mix of inconsistent and conflicting recommendations, some of which reflect brownfields and some greenfields environments.

B4.3 In our view, consistency will be important to ensure the internal integrity of the Commission's modelling. As such, we strongly support Network Strategies' recommendation that:²⁸

the Commission applies [the scorched node] standard consistently. In other words, while the hypothetical operator will be artificially constrained by previous decisions by Chorus via the scorched node assumption, it should not be more constrained than Chorus. For example, the hypothetical operator should not be constrained to the extent that it cannot locate civil structure where Chorus has located it previously. This suggests that the hypothetical operator should be permitted to share Chorus' civil infrastructure in addition to third party assets where it is efficient to do so. In any event, as already discussed, the hypothetical operator is the new Chorus, not a competitor to Chorus. This recommendation will deliver a modelled price that provides Chorus with incentives to use its existing infrastructure efficiently, and to the long-term benefit of end-users.

²⁵ NWS Cross-Submission Report at section 2.4.

²⁶ Network Strategies *Key issues in modelling UBA and UCLL services* (6 August 2014) a section 2.5 (**NWS Submission Report**).

²⁷ NWS Cross-Submission Report at section 2.4.

²⁸ NWS Cross-Submission Report at section 2.4.

The impact of build or buy signals

- B4.4 If the Commission is to deliver appropriate build or buy signals then the hypothetical operator must deploy an efficient network using the lowest cost technologies most suited to the various areas in which it will supply services.
- B4.5 As discussed above, an efficient network will not typically be composed of only one technology.²⁹ Instead, the Commission should expect it to comprise a mix of technologies, with composition and location of those technologies determined by the overarching consideration: what technology would a HNE consider to be most efficient in each location. If the Commission's model is consistent with this consideration and reflects use of lowest cost technologies to the maximum extent possible, rather than the inflated current costs of Chorus' copper network, then this is more likely to deliver efficient price signals.³⁰ Conversely, as WIK notes, failure to observe this principle will significantly distort build/buy signals and, to the extent that the UCLL price increases as a result, it would encourage the inefficient duplication of access networks to continue over a longer term.³¹

C Modelling demand

- C1.1 As discussed above in Section B4, the network characteristics and constraints faced by a hypothetical operator directly influence the demand profiles that will underpin the Commission's TSLRIC cost model. Future end-user demand for the MEA network services is relevant to:
- (a) technical dimensioning of the network; and
 - (b) the allocation of costs resulting in unit cost per connection.
- C1.2 These are addressed in turn, below, in response to the analysis set out in Chorus' submission.

C2 Technical dimensioning for the hypothetical operator's MEA network

- C2.1 The Commission has stated that the starting point for demand in the access network should be the current connection volume of Chorus lines (which the Commission describes as "100% of demand").³² Chorus has expressed its support for this view, observing that "the best forecast volume of the HNE is the forecast volume of the incumbent".³³
- C2.2 Networks are designed and costed based on the number of premises passed, and so this factor is the most important determinant of network design, rather than solely current or future demand. Vodafone's recommendation is that a hypothetical efficient operator would deploy a FTTH/FWA network across the combined set of premises passed by Chorus' copper and fibre networks, also allowing for growth in market share.

²⁹ See discussion above, at [B4.3].

³⁰ NWS Cross-Submission Report at section 2.4. See also discussion at [D4.4] of this submission and WIK Cross-Submission Report at [14].

³¹ WIK Cross-Submission Report at [14].

³² Commerce Commission *Consultation paper outlining proposed views on regulatory framework and modelling approach for UBA and UCLL services* (9 July 2014) at [236].

³³ Chorus Submission at [84].

- C2.3 It is important to recognise that no network is built such that it would immediately be operating at capacity. Instead, the MEA network will be built today in such a way as to cope with growth to meet future demand that might arise through overall market growth or through the hypothetical operator successfully competing to win a larger market share. The Commission must assume that the hypothetical operator intends to compete with the HFC and LFC networks, as well as other FWA and mobile. As such, it will build a network today that can cope with migrations inward over time.
- C2.4 The Commission may also wish to consider a time dimension to dimensioning the network, to take into account new greenfield residential or business/industrial areas that can reasonably be predicted to be developed during the time horizon of the model. This would include areas on the outskirts of Auckland, and new residential areas around Christchurch and fast growing regions such as Tauranga and Nelson.
- C2.5 As such, the relevant network to model is one large enough to accommodate expected growth during the lifetime of the asset. As WIK explains:³⁴

Since the FTTH MEA network is to be modelled for the whole territory of New Zealand, equivalent to the one that in the final state will be covered by a network providing a new set of services with a technology that is better performing than the current one (either UFB or FWA), one should expect that there will be growth. It follows that the infrastructure, in terms of premises passed, should have the capacity to provide the number of access lines demanded in the period when this growth has materialized.

- C2.6 We propose therefore that when technically dimensioning the modelled network the premises to be passed should be the sum of Chorus' premises expected to be passed by copper and fibre (including leased line, bounded line and special data access line services) and, within the time horizon of the model; a projection for growth. This could include new premises that will be accessible via FWA (in areas currently unserved by Chorus).³⁵
- C2.7 We agree with the advice from Analysis Mason to the Norwegian regulator (identified in the Network Strategies Cross-Submission Report) that:³⁶

[...] the size [of the network] is largely fixed at the time of initial deployment and is driven by the number of buildings passed. Hence, a projection of demand, rather than actual demand carried, will be used to dimension the access network that reflects the number of buildings that are passed over time.

C3 Denominator for cost allocation

- C3.1 The Commission's proposed view is to:

³⁴ WIK Cross-Submission Report at [39].

³⁵ We acknowledge that to avoid double counting, where within-network existing copper or fibre connections might be replaced in an MEA network by FWA (due to lower provisioning costs) the relevant copper or fibre connections can be deducted from any current count of premises passed by fibre. Similarly, any premises that (in a current network assessment) are passed by more than one of copper, UFB, HFC and LFC should also only be counted once.

³⁶ Analysys Mason *Conceptual approach for the LIFC model for fixed networks* (11 February 2010) at section 3.1.1, cited in the NWS Cross-Submission Report at section 3.1.

- (a) assume immediate migration to the hypothetical efficient operator's MEA FTTH/FWA network; and
- (b) consider applying a tilted annuity approach, with a tilt for anticipated future changes in price as well as a tilt for expected changes in demand.

C3.2 This position is supported by the Commission's expert consultant. TERA conclude that this starting point:³⁷

[...] leads to the most efficient utilisation of assets. In addition, its implementation is the simplest as no assumption needs to be made with respect to exact values of demand for each year

C3.3 To support the Commission, TERA modelled scenarios in which demand ramped up:

- (a) slowly; and
- (b) more quickly to 100%.

C3.4 In our view, the hypothetical efficient operator should be considered to enter the market with at least the current market share of Chorus' copper and fibre connections, with an allowance for growth as discussed above a [C2.3].

C3.5 As Vodafone has previously submitted, demand should be modelled for a single efficient next generation access network and the MEA network should include users which may migrate to Chorus' fibre network:³⁸

We agree with the European Commission's conclusion that modelling a single efficient NGA Network for copper and NGA access will neutralise the inflationary volume effect when modelling a copper network, and allows for the progressive transfer of traffic volumes from copper to NGA with deployment of and switching to NGA. As such, we support the principle (and the Commission's apparent view) that demand should be modelled for a single efficient next generation access network that includes end-users that may migrate to Chorus' fibre network.

C4 Chorus wrongly ignores total demand

C4.1 Chorus submits that the hypothetical network's future demand cannot be estimated using only current demand, and that the relevant demand is likely to be below 100% initially (given the presence of alternative LFCs) and then decline over time due "mobile substitution, competition from alternative fixed wireless networks and from Chorus' own UFB infrastructure".³⁹

C4.2 We do not agree with this approach. The consequence of Chorus' declining demand scenario would likely be that the total number of lines over which total cost is to be spread would be lower so that the cost and the price based on it would be higher.⁴⁰ The underlying premise of declining demand is, as argued above, not warranted given that the hypothetical FTTH MEA network will

³⁷ TERA Consultants *TSLRIC price review determination for the UCLL and UBA services: Modern equivalent asset and relevant scenarios – Report for Commerce Commission* (July 2014) at p 57 (**TERA Report**).

³⁸ Vodafone New Zealand *Submission on UCLL Process and Issues Paper* (14 February 2014) at [D1.2].

³⁹ Chorus Submission at [85].

⁴⁰ WIK Cross-Submission Report at [39] and equation (1).

cover at least the same area as its copper and UFB footprint together, and therefore is expected to rather generate an increasing demand.

C4.3 Vodafone's view is that the appropriate costs to take into account for the cost allocation denominator is the sum of the total costs of total fixed line connections (i.e., Chorus' copper and fibre connections) assuming the network deployed is the optimal mix of FTTH and FWA. The cost (including appropriate share of common costs) of lines that service non-relevant market share (e.g. the provision of non-regulated services) can be deducted from the cost calculation.

C4.4 The demand profile for cost allocation must also include a time dimension. It is reasonable to assume that over time, demand for copper connections will reduce whilst demand for fibre and FWA connections will increase. Demand for mobile services may also increase.

C4.5 Correspondingly, we favour the analysis set out in the WIK Cross-Submission report, as follows:⁴¹

When Chorus argues that fibre already migrated should not be considered, it neglects to recognize that the hypothetical FTTH MEA network is to be present wherever Chorus was present before the advent of the UFB, independently of whether realized by Chorus or the other LFCs.

C4.6 As observed by Network Strategies, Ofcom has developed a notional demand model as an input into charge controls for unbundled local loop (LLU) and wholesale line rental charge control. In its most recent forecasting model (which produces forecasts for the period 2012/13 to 2016/17), Ofcom states that it:⁴²

...identifies the drivers of volumes for different services and using a combination of quantitative data and regulatory judgement forecast[s] their effect on volumes. Where possible, we use input data which is publicly available allowing us to publish our model, with the aim of improving the transparency of our analysis.

C4.7 Accordingly, Ofcom recognises:⁴³

'there are many reasons why a forecast is likely to diverge from outturn figures, particularly when market developments cannot be foreseen, or where there are complex interactions between the different services being modelled. While we have aimed to provide a forecast based on current knowledge and data, we welcome respondents' views on the parameters included in our model and suggestions about other parameters which could materially affect forecast volumes but which have not been included in our model.'

C4.8 We commend this approach to the Commission, and refer to the Network Strategies Cross-Submission Report (a Section 3.2) for further details of parameter inputs into the demand forecasting undertaken by Ofcom. In our view, further and separate consultation on this issue is warranted.

⁴¹ WIK Cross-Submission Report at [42].

⁴² Ofcom *Fixed access market reviews: Approach to setting LLU and WLR Charge Controls: Annexes* (updated 20 August 2013) at [A8.6] – [A8.7]. Note that Ofcom's forecast model can also be downloaded from the Ofcom website.

⁴³ Ofcom *Fixed access market reviews: Approach to setting LLU and WLR Charge Controls: Annexes* (updated 20 August 2013) at [A8.6] – [A8.7].

D Modelling the network

D1 Modified scorched node approach to optimising the network

- D1.1 Chorus submits that a scorched node approach should be adopted because:⁴⁴
- (a) it is consistent with common approach to TSLRIC modelling;
 - (b) it is “important that the Commission’s cost model is grounded in reality” and (Chorus asserts) the nodes of its network cannot be readily altered; and
 - (c) it is a less complex and more pragmatic approach.
- D1.2 In our view, it is essential that the Commission selects a TSLRIC modelling approach which reflects a hypothetical efficient operator deploying a network using modern and efficient technology, in an optimal manner. We recognise that scorching only to the node is both a pragmatic approach (it is less complex than a scorched earth approach) and that it is a relatively common approach in TSLRIC modelling conducted by other regulators.
- D1.3 However, we agree with WIK that the Commission should not foreclose some further optimisation of the network through a modified scorched node approach. This is clearly an orthodox approach to TSLRIC modelling, and (as WIK observes) reflects international best practice.⁴⁵ It also reflects the emphasis on efficiency considerations reflected in s 18(2A) of the Act, which are a critical component of TSLRIC modelling generally. A modified scorched node approach permits the model to identify the efficiency properties of a network.⁴⁶ We do not accept Chorus’ view that a requirement to “ground the model in reality” prohibits a modified scorched node approach. If correct, Chorus view would place an extreme, and in our view unreasonable, constraint on the Commission’s discretion to decide how best to apply TSLRIC in any particular case.
- D1.4 Regardless of how the Commission approaches optimisation of or to MDFs however, it is critical that the balance of the access network is optimised.⁴⁷ This clearly reflects international best practice modelling for identifying efficient network provision as part of orthodox TSLRIC modelling.⁴⁸ For example, WIK refers to the approaches taken by national regulatory authorities in Germany, Austria, Switzerland, Norway and Spain. In each of these jurisdictions the regulator typically takes the existing MDF locations into account but makes optimisations (including, in some cases, to the relevant MDF boundaries) from that point. We support this approach.
- D1.5 Finally, we note that both a scorched node and a modified scorched node approach afford a degree of deference to the earlier (not necessarily efficient) investment decisions of the monopoly service provider. As such, where the Commission is required to exercise any discretion with respect to promoting the s 18 purpose, it should take into account the inefficiencies which a non-scorched earth approach have already permitted the access provider to recover.

⁴⁴ Chorus Submission at [52] – [53].

⁴⁵ WIK Submission Report at [5].

⁴⁶ WIK Submission Report at [27].

⁴⁷ WIK Report at section 4. See also Frontier Economics *Determining a TSLRIC price for Chorus’ UCLL service: A report prepared for Vodafone New Zealand, Telecom New Zealand and CallPlus* (February 2014) at section 3.3.2.

⁴⁸ WIK Report at section 4.

D2 The Modern Equivalent Asset

D2.1 Chorus submits that:⁴⁹

In framing the HNE for modelling purposes, the Commission should ensure that the HNE is grounded in real world New Zealand conditions and faces the legal obligations and constraints currently facing Chorus and other service providers operating in the New Zealand market. Any scenario in which a network operator serving 100% of demand in New Zealand could operate without being subject to appropriate legal obligations and constraints would not be realistic.

D2.2 It also argues that:⁵⁰

the Commission is constrained by the STD service which is purchased by RSPs and relied upon by New Zealand consumers and markets, and which the HNE's network must also support.

D2.3 Chorus suggests that a hypothetical operator deploying a network would face the same real world constraints and local conditions as Chorus does.⁵¹ If this principle is adopted then it must be consistently applied to a hypothetical operator operating as Chorus, not a hypothetical new entrant competing with Chorus.⁵² As set out in the Network Strategies Cross-Submission Report, Chorus does not adopt a consistent position on whether the hypothetical operator is operating in a brownfields or greenfields environment.⁵³ The nature and extent to which real world constraints will affect a hypothetical network operator depends critically on which environment it faces.

D2.4 To illustrate, as Chorus has argued in other regulatory proceedings that the UBA STD requires it to deliver a 32kbps service only.⁵⁴ If Chorus were correct that the Commission's selection of MEA is constrained by and must strictly reflect the UBA service, then grounding analysis in real world New Zealand conditions, FWA should be seen as a credible substitute for the regulated UBA service at almost all points of the network (not simply outlier points of the network), because it is readily able to deliver a 32kbps service. While we do not believe a decision that provided services at this level would be consistent with the Commission's primary duty in s18(1), it serves to illustrate that Chorus' suggested application of the dual constraints imposed by i) the UBA STD service description; and ii) real world conditions tends to be rather partial.

D2.5 Where we may agree with Chorus is that the Commission must settle on the core functionality of the relevant services. As with MEA selection, we consider that the Commission has broad discretion to determine the core functionality of UCLL and UBA services provided on a modern equivalent basis. However, it does not appear to have progressed materially beyond identifying list of 'possible characteristics' of the current network that must also be available from the MEA first set out in the Commission's UCLL Process and Issues Paper.⁵⁵ The Commission must make a clear and transparent decision on core functionality before finalising its views on the appropriate MEA.

⁴⁹ Chorus Submission at [217].

⁵⁰ Chorus Submission at [232].

⁵¹ Chorus Submission at [217].

⁵² See NWS Submission Report at section 4.3.

⁵³ NWS Cross-Submission Report at section 2.3.

⁵⁴ Chorus *Letter to Commerce Commission re Notice of New UBA service variants* (14 May 2014).

⁵⁵ Commerce Commission *Process and issues paper for determining a TSLRIC price for Chorus' unbundled copper local loop service in accordance with the final pricing principle* (6 December 2013) at [96] – [97].

D2.6 Chorus makes a specific argument is that abstraction away from the *in situ* service is not permitted by the TSO:⁵⁶

The TSO is one of the key obligations that an HNE will inherit. The HNE essentially steps into Chorus' shoes and becomes the network operator. Any scenario in which there is no network TSO operating in New Zealand would be unrealistic and the Commission cannot assume away the important ability of RSPs to comply with the [TSO commitment to deliver the local residential voice and dial up data services (which includes facsimile calls and dial-up internet)].

D2.7 As we have previously submitted, the Commission has wide discretion to determine the MEA that should be used in modelling each service.⁵⁷ The Act offers no guidance on the point. As WIK observes, the MEA concept requires the Commission to identify modern technology substitutes rather than relying on the ongoing use of current technology.⁵⁸ Restricting choice of MEA to services that are capable of delivering all current end user services would, contrary to s18(1), limit the Commission's ability to reach FPP decisions to promote investment in new services that will deliver long term benefit to end users of telecommunications services.

D2.8 In our view, the TSO is of limited relevance when determining the MEA for UCLL and UBA services, which we consider could be a single, integrated MEA. Developing a TSLRIC model requires the Commission to decide the efficient cost today for an equivalent service unconstrained by Chorus' historic technology choices. TSO obligations that are historic and contingent in nature do not constrain the service description or MEA applied to UCLL or UBA services.⁵⁹ As WIK notes, the adaptations that may need to be made by users of current services where these cannot be delivered via the MEA is a question of migration that should not influence MEA selection. To the extent that there are costs associated with such migration, they are borne by RSPs and end users and not by Chorus.⁶⁰ We therefore disagree with Chorus' argument that it should be compensated for any such costs where alternative network technologies are included in an MEA.⁶¹

D2.9 Vodafone observes that its end user customers are in any case already abandoning the legacy copper services that Chorus considers must constrain the Commission's MEA selection process. This reflects the reality of technological evolution in the telecommunication sector, with consumers becoming increasingly attuned and adaptive to new services provided using modern access networks.

Case study: End-user transition from copper-based services

Historically, services such as EFTPOS and alarm monitoring in New Zealand have been provided using copper-based terminals.

In recent times, a number of vendors have shifted to GSM-based M2M solutions. These services are generally more efficient, lower cost, and provide improvements on legacy copper-based solutions (such as wireless EFTPOS terminals that are not "tethered to the till" and can be taken, for example, from table

⁵⁶ Chorus Submission at [239] and [240].

⁵⁷ Vodafone Submission at [G1.6].

⁵⁸ WIK Cross-Submission Report at [10].

⁵⁹ See also James Every Palmer's draft advice to the Commerce Commission (12 March 2014) at [39].

⁶⁰ The inclusion of these extraneous costs would also distort build/buy incentives: see WIK Cross-Submission Report at [14].

⁶¹ Chorus Submission at [227.1].

to table in a restaurant, or alarm monitoring solutions which are less expensive to install because changes to premises wiring as not required).

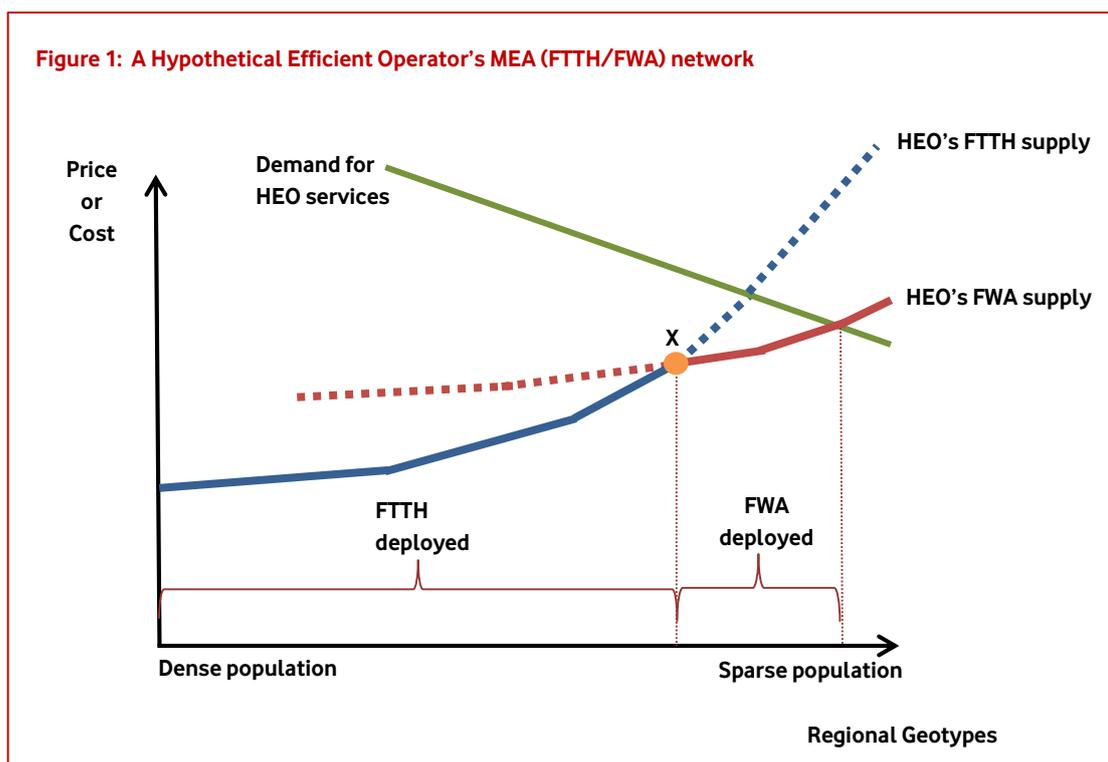
- D2.10 The UFB programme and the process of adaption that has been heavily promoted by Chorus in the context of its UFB deployment has, in our view, altered consumers' expectations regarding the continuing use of historic copper services, and end users understand that transition from historic services to new services must occur at some point.
- D2.11 Finally, even if the TSO did operate to constrain MEA selection, it is not realistic to assume as Chorus does that it provides a set of enduring obligations that would inevitably constrain the options available to a hypothetical operator regardless of whether it is operating in a brownfields or greenfields environment. The New Zealand Government consulted in August 2013 on the nature and extent of TSO obligations and this consultation specifically addressed whether there is still a need to guarantee specific services for end users through the TSO and the issue of transition to other means of delivering historic services.⁶² It is recognised that a number of obligations contained in the current TSO are historic artefacts that are inconsistent with current settings of New Zealand's telecommunications policy. If the hypothetical operator were a greenfields new entrant setting about replacing Chorus' network then, in light of New Zealand's telecommunications policy context, it is not clear that the Government would continue to impose on that operator the full range of existing TSO requirements, including the requirement to deliver fax and dial-up internet services. An assumption that it would continue to do so seems to us unlikely to reflect real world conditions of that hypothetical scenario.

No economic constraints on MEA selection

- D2.12 By definition, in a competitive market, an efficient operator would dimension its network capacity by optimising across technology supply costs to meet exactly that level of (current and future) demand for which the (current and future) price to consumers is expected to equate the deployment and operating cost.⁶³
- D2.13 The real life application of this theory to the HEO would imply a scorched node approach optimising across both FTTH and FWA technologies to dimension a combined FTTH/FWA network that will accommodate current and reasonably foreseeable future demand (as discussed in Section C above). This is illustrated in Figure 1, below, which provides simplified supply schedules for FTTH & FWA, and a demand schedule for the HEO's services. To the right of point X, a HEO would deploy FWA.

⁶² Ministry of Business, Innovation and Employment *Review of the Telecommunications Service Obligations (TSO) for Local Residential Telephone Service: Discussion Document* (July 2014) at [22] and [144].

⁶³ See NWS Cross-Submission Report at section 3.1.



D2.14 Chorus submit FWA should not be included in the MEA for the UCLL service because:

- (a) it “cannot deliver the functionality of UCLL”; and
- (b) “achieving 100% coverage” of the Commission’s proposed coverage area would be “very high cost”.⁶⁴

D2.15 Chorus also challenges the use of FWA in the model on the basis of its interpretation of the Commission’s approach to considering it in the first place:⁶⁵

The Commission proposes to model an HNE UCLL provider with a FTTH network, supplemented by FWA. It arrives at that proposal by first asking what technology an HNE, with a blank sheet of paper, would want to use today. The Commission then double-checks that such a network could at least provide the “core functionality” of the UCLL service.

D2.16 We do not agree that the Commission is required to select an MEA that enables Chorus to continue delivering the full functionality of UCLL service. Our reasons for this view are set out in our prior submissions. In addition, we do not accept that the Commission’s approach to including FWA is either fairly characterised by Chorus.

D2.17 Self-evidently, a hypothetical efficient operator would utilise FWA in the deployment of a fixed access network today, especially in rural areas where it is clear that FWA (particularly with access to new technologies, such as 4G LTE) can provide a superior experience to wireline (FTTC) broadband, and ongoing improvements to the network are significantly easier.⁶⁶

⁶⁴ Chorus Submission at [5] and Appendix 2.

⁶⁵ Chorus Submissions at [30].

⁶⁶ NWS Cross-Submission Report at section 4.1. See also discussion of UK Broadband Limited Report in NWS Cross-Submission Report at [3.2].

D2.18 As WIK observe:⁶⁷

[...] it is possible to replace copper lines with FWA solutions less expensively than with newly constructed FTTH lines in the cost intensive sparsely populated rural areas. The technological evolution of mobile solutions, especially 4G and 5G LTE and the use of low frequencies, will have the effect that the FWA footprint is more and more able to substitute copper lines. These considerations show that the assumption of one single evaluation criterion, unbundling, is not adequate to the MEA concept in cost intensive areas, where customers would receive poor or no services otherwise. In other words: Sticking to unbundling would harm customers' interest in preventing them from getting access to broadband solutions with a reasonable cost/benefit ratio. The Commission as well as TERA have judiciously weighed a whole range of criteria in order to identify suitable MEA products. WIK recommends that the Commission continues this way of a mixed FTTH/FWA MEA approach and additionally takes LTE developments into consideration which have the potential of enlarging the FWA area beyond the current RBI area.

D2.19 As such, FWA should appropriately form part of the MEA (as we have previously submitted, for both UCLL and UBA). For the reasons set out above, and as both WIK and Network Strategies have observed, the inclusion of a FWA component is a common feature in orthodox LRIC modelling.

D2.20 Further, we do not accept Chorus' concerns in respect of any potential costs to deliver FWA to the relevant coverage areas. As a matter of principle, we submit that this cannot be accepted as a fatal factor at the outset. Instead, as we have previously submitted, it is the model that should determine the extent to which FWA is a more efficient method of provisioning services than a wireline solution. However, as a preliminary 'sense check' before commencing modelling, FWA must be considered as a capable and cost-effective solution. Network Strategies addresses the three primary concerns raised by Chorus in relation to cost in section 4.3 of their Cross-Submission Report, and Vodafone agrees with that analysis.

D2.21 Accordingly, we endorse Network Strategies recommendation:

We recommend that the Commission includes FWA in its MEA, so that it is deployed by the hypothetical operator where it is efficient to do so. This is likely to be in the rural areas of the network and as we have previously recommended is likely to represent the least cost modern technology in at least both zones 3 and 4. The design parameters must be based on the latest available technology.

D2.22 We understand that the Commission has not yet stated whether it intends to model the entire network, or rather classify the network geographic sub-regions into geotypes (based on at least geology and population density).

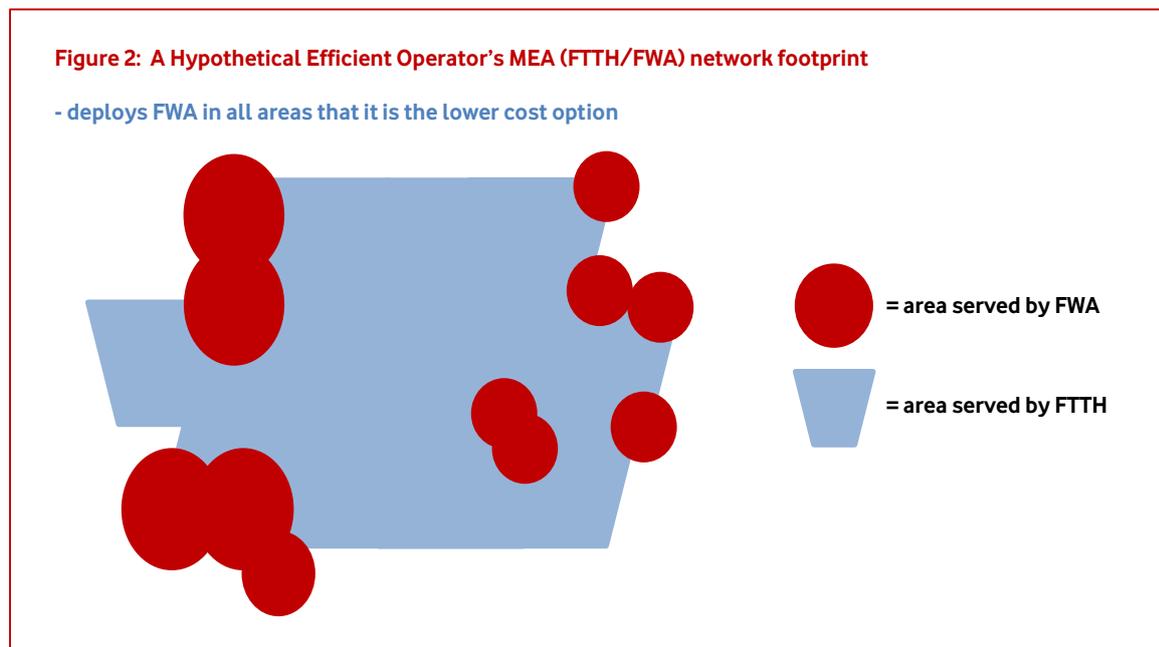
D2.23 Rather than assuming a blanket FTTH build with only FWA at the 'edges', we propose the following (simplified) scorched node approach for a HEO deploying an MEA network using the optimal mix of FTTH (i.e. UFB) and FWA, as follows:

- (a) classifying New Zealand areas into network geotypes (based on at least geology and population density);
- (b) for geotypes in which the costs of UFB deployment are lower than FWA, the model should assume (i.e., FTTH MEA) is built; and

⁶⁷ WIK Cross-Submission Report at [24].

- (c) for geotypes in which UFB is uneconomic or FWA can be deployed more cheaply, but where FWA deployment is forecast to bring a positive return, the model should assume FWA is deployed.

D2.24 In this way, FWA may feature in 'gaps' between UFB-served areas, rather than providing an access solution only at the edges of the network. Figure 2 below illustrates such a network footprint.



D3 Aerial deployment

D3.1 Vodafone reserves its position on aerial deployment until the due date for supplementary cross-submissions on 25 August 2014.

D4 Reuse of assets

- D4.1 Chorus submits that Commission can only value assets using ORC.⁶⁸ As set out in our earlier submissions, we do not consider that the Commission is constrained in this manner.⁶⁹
- D4.2 We do not accept that investors held any "reasonable expectation" that assets would be valued at ORC under a TSLRIC model, absent any evidence that this issues was actively considered or that this factor operates to confine the Commission's discretion in any case.⁷⁰ As set out in our earlier submission, utilisation alternative valuation methodologies for re-usable assets during LRIC modelling exercises is common regulatory practice, and so it is open to the Commission in this case.⁷¹
- D4.3 Finally, we do not accept Chorus' proposition that ORC is:⁷²

⁶⁸ Chorus Submission at [269].

⁶⁹ See Vodafone Submission at section E3.

⁷⁰ See Chorus Submission at [270], and Vodafone Submission at [E3.3].

⁷¹ Vodafone Submission at [E3.4].

⁷² Chorus Submission at [270.3].

[...] consistent with sending the right build or buy signals, in the sense that a new entrant will only profitably enter if it can match the optimised replacement cost of the network. In other words, it discourages inefficient duplication of infrastructure by setting a price based on the perceived cost of a feasible HNE

D4.4 In our view, pricing (likely fully depreciated) re-usable assets such as ducts and trenches at ORC is in fact more likely to encourage inefficient duplication of infrastructure (because Chorus will be permitted to recover significantly above its actual efficient costs). This is the rationale that underpins the dual valuation approach common amongst other regulators in the first place.⁷³

D5 Asset sharing

D5.1 Chorus supports the principle that the hypothetical efficient operator should be modelled as sharing third party assets.⁷⁴ However, Chorus unduly constrains the potential for sharing efficiency gains in a TSLRIC model with its criteria that the model may only incorporate sharing “if there is spare capacity ... regulations permit the sharing ... it is reasonably achievable and would be likely to take place in the real world”.⁷⁵

D5.2 That is, sharing should reflect what would be expected from a hypothetical efficient operator (i.e., in accordance with modern practice) and should not be constrained by past practice (including any lack of) sharing in New Zealand historically.⁷⁶ This sharing should cover:

- (a) third party network infrastructure (including non-telecommunications networks, such as electricity lines businesses) such as ducts, poles, sewers, as well as gas pipelines and water lines; and
- (b) different levels of the access network.

D5.3 We do not accept Chorus’ submission that the experience of the LFCs is “less relevant” to a nationwide hypothetical efficient operator.⁷⁷ It is in the economic interests of both parties for the HEO’s network to utilise existing infrastructure, and it is not required that that infrastructure be owned by that HEO.⁷⁸

D5.4 Finally, we note that a critical input for asset sharing is third party poles for aerial deployment. We will provide further commentary on this in our supplementary cross-submission due on Monday 25 August.

E Transaction charges

E1.1 Chorus observes that the Commission has not yet addressed the issue of one off, or transaction charges, that relate to new connection charges, transfers and other core charges, and which form part of the cost calculation for the TSLRIC model.⁷⁹ Chorus proposes that consultation on

⁷³ Vodafone Submission at [E3.4]. See also WIK Submission Report at section 2.1.

⁷⁴ Chorus Submission at [107].

⁷⁵ Chorus Submission at [107].

⁷⁶ For further information, see our discussion of the hypothetical efficient operator above at section B3.

⁷⁷ Chorus Submission at [64].

⁷⁸ See WIK Cross-Submission Report at section 6 (Asset sharing). In addition, see the discussion on electricity lines businesses in the NWS Submission Report at pp 15 – 20.

⁷⁹ Chorus Submission at [157].

transaction charges should commence before publication of the draft determination on 1 December.⁸⁰

- E1.2 Chorus submits that the Commission should base transaction charges on the actual prices paid by Chorus to its service companies, plus a mark-up for Chorus' internal costs.⁸¹ Chorus also introduces the concept of a 'cost escalation' methodology for future year charges.⁸²
- E1.3 This is based on Chorus' assertion that an HEO would incur the same charges as it actually incurred, because service contracts were let via a competitive tender, and Chorus charges the same prices to its own internal business inputs. Chorus describes an alternative approach of bottom up cost modelling to estimate activity cost using information on time, materials and overheads as being 'complex and time consuming', mainly due to the cost driver analysis necessary to calculate activity specific unit labour costs from data on multiple tasks, staff, locations and travelling time.⁸³
- E1.4 In our view, the calculation of transaction charges must be transparent, similar to all other modelling inputs and assumptions. It would not be reasonable for the Commission to simply accept that Chorus' assertion that charges are efficient as a basis for setting accurate activity based costs.
- E1.5 Chorus's contractors perform tasks for both Chorus and other entities. Contracts are likely to cover the supply of services across both regulated and non-regulated activities, in which case the Commission will require information about the activities covered in the contract fee. If contracts are written on a time and materials basis, then this would imply that Chorus does have the granularity of information required for activity based costing, or at least the contractors would have this information. Service provision costs would necessarily have been a key factor determining the commercial negotiation and agreement between Chorus and its contractors.
- E1.6 Chorus recommends that the Commission adds a margin to cover Chorus overheads, but this implies that access seekers will be paying both the contractor's overhead costs, and Chorus' overhead costs – a double counting of overhead costs if compared to a single HEO. We do not agree that this is a reasonable assumption, especially without more granular information on activity costing.
- E1.7 Finally, with regards to the 'cost escalation' methodology proposed by Chorus, we agree with Network Strategies' warning that it would be:⁸⁴

[...] inappropriate to apply any cost escalation methodology without information on the duration and any provisions for increased costs in Chorus' service contracts, followed by an assessment of whether such provisions are reasonable.

⁸⁰ Chorus Submission at [158] – [159].

⁸¹ Chorus Submission at [168].

⁸² Chorus Submission at [173].

⁸³ Chorus Submission at [172].

⁸⁴ NWS Cross-Submission Report at p 35.

F Financial issues

F1 Operating expenditure

F1.1 In our view, Chorus' proposed approach for identifying efficient operating expenditure is not appropriate, because Chorus does not represent the hypothetical efficient operator that must be modelled.⁸⁵ Simply adopting operating expenditure of the incumbent risks foreclosing reduction of those costs to an efficient level.

F1.2 The Commission should follow standard regulatory practice, and must undertake a detailed efficiency study to determine the appropriate costings.⁸⁶

F1.3 Finally, we agree with Network Strategies that Chorus' 'cost escalation' methodology would not deliver an improved outcome.⁸⁷

Such as methodology is likely to lead to greater uncertainty and risk of bias, and indeed is unlikely to result in costs that reflect those of an efficient operator.

F1.4 We agree with Network Strategies that cost trends should be addressed by including opex for the base year, then applying a trend expressed as an annual percentage change in opex for the specified network element on a go forward basis.

F2 Depreciation

F2.1 Chorus proposes the use of an adjusted tilted annuity for calculating depreciation, where the tilt reflects not only changes in asset costs but also changes in demand.⁸⁸ We agree with Network Strategies that the use of a tilted annuity where there are trends associated with costs of the modelled assets is appropriate, but that the Commission should not consider any adjustment to the tilt for the demand until the demand projects are understood.⁸⁹

F3 Taxation

F3.1 We agree with Network Strategies that the Commission should expressly clarify the assumed taxation situation for the hypothetical efficient operator.⁹⁰

G The Commission's process

G1 The timeline

G1.1 In common with other submitters, Vodafone continues to be concerned about the timetable that the Commission is working to in this process.

⁸⁵ WIK Cross-Submission Report at Section 8.

⁸⁶ NWS Cross-Submission Report at Section 5.

⁸⁷ NWS Cross-Submission Report p ii.

⁸⁸ Chorus Submission at [125].

⁸⁹ NWS Cross-Submission Report at 7.3.

⁹⁰ NWS Cross-Submission Report at 7.3.

- G1.2 In combination, the short deadlines set by the Commission and the volume of material in submissions produced by two FPP processes running in parallel pose real challenges to the ability of parties to engage effectively at all phases of the Commission's consultation process.

G2 Consultation on modelling

- G2.1 Vodafone has previously submitted that the Commission's primary objective in completing the FPP processes for the UBA and UCLL services should be to ensure that its FPP price determinations provide an enduring industry settlement, and that uncertainty arising from these determinations themselves is reduced as far as possible.⁹¹
- G2.2 This objective is likely to be undermined if the Commission fails to allow parties to fully address key modelling parameters and methodology before parties are presented with disclosure of actual modelling work by TERA and others (i.e. before an irrevocable choice is made that cannot be influenced or altered by subsequent engagement with the parties). The Commission's Proposed Views Paper does not provide parties with any certainty as to these modelling parameters and methodology, but rather offers a further high level description of some principles of approach. While this further consultation step is welcome, it does not provide parties with any detailed description as to how modelling will actually be done in practice. These details remain for these details to be provided at some point in the future. Unless they are disclosed before a particular modelling approach becomes operative and embedded in the Commission's decision making, then parties will have lost the opportunity to engage effectively on key modelling choices.
- G2.3 To enable effective consultation on the Commission's specific proposed modelling approach further detail is required. We note WIK's advice that it is standard international practice regulator to provide a model reference document to inform comment on the high level specifications of the model. Vodafone's strong view is that further consultation on the detailed model specification must occur before the release of a draft decision. If such consultation occurs after the Commission issues its draft decision then it risks being redundant in the sense that modelling decisions will have been made and incorporated into the draft decision.
- G2.4 The Commission's explanation of these general principles is not an acceptable substitute for disclosure of the Model Reference Paper(s) and Model Specification(s). The latter documents provide an insight into the Commission's use of model inputs and interrelationship between inputs, for example, that is absent from the documents that have been released.
- G2.5 As previously submitted, unless the Commission is willing to disclose the Model Reference Paper(s) and Model Specification(s) as described in TERA's initial list of agreed outputs (or alternative documents with substantially similar content) then the process concerns that Vodafone has previously expressed will remain in place.

G3 Further consultation on transaction charges

- G3.1 In addition to setting monthly charges for the UCLL and UBA services, the Commission is required to determine appropriate transaction charges described in Appendix 4 of Chorus' submission. As yet, the Commission has provided no indication as to how it intends to approach this exercise. The

⁹¹ Vodafone New Zealand *Comments on further consultation paper on issues relating to determining a price for Chorus' UCLL and UBA services under the final pricing principles* (11 April 2014) at [H11].

quantum of these charges is not immaterial for access seekers. Accordingly, we request that the Commission provide detail as a matter of urgency of how it intends to determine appropriate transaction charge levels in the context of an FPP pricing exercise.