



# UBA Price Review Consultation: Discussion Paper

Submission | Commerce Commission

24 August 2012

## Introduction

1. This is Telecom's submission on the Commission's 26 July UBA Access Price Review Consultation paper.
2. The Commission's discussion paper is open in nature, inviting views on a range of issues related to the approach to and process for applying a new UBA IPP. We think this is the correct approach to take at this stage in the process, and appreciate the opportunity to engage on issues at an early stage in the Commission's process.
3. In particular, we recognise that there are a number of particularly complex issues the Commission and industry will need to address in this process, not the least of which is the unique design of the UBA service, which has few if any precise international peers. Benchmarking, and the appropriate approach to it, is the clear focus of the Commission's Discussions Paper, and we have provided our views on the Commission's specific questions in the submission. Two further complexities, which are not addressed in the Discussion Paper, are:
  - the inter-relationships between this review and the Commission's current UCLL price review; and
  - the question of how to properly account for the application of the UBA competition test when setting the UBA price.

**It is not at all clear how UBA should be priced if the UCLF price is de-linked from the UCLL price.**

4. The pricing principles for the UBA service require that UBA price be the sum of the averaged UCLL price plus the additional costs of providing the UBA service which are not recovered through the UCLL price. With the current uncertainty as to what cost components of the local loop network the UCLL price will recover (i.e. whether the UCLF price will be de-linked from the UCLL service) it is entirely unclear what the potential ambit of the "additional costs" will be. If the UCLL price is de-linked from the UCLF price, where and how will the costs of the sub-loop fibre backhaul service be recovered on cabinetised lines? Would de-linking mean that there might need to be multiple UBA prices – one for UBA provided over cabinetised lines, and another for when it is provided over non-cabinetised lines? Could we find any benchmark prices for such services?
5. These questions do not arise if the Commission sets a single UCLL price, linked to the UCLF price, which covers all local access network costs in the same way as every other jurisdiction we are aware of does.
6. These complexities have not been explored in any detail in either the UCLL price review process, or in the UBA Discussion Paper. Given their importance, we believe it would be useful for the Commission to hold some workshops to enable stakeholders to work through the various scenarios, and to engage with and better understand some of these important issues.

The UBA service is subject to a competition test, and the UBA price must be set with this in mind.

7. The initial pricing principle (**IPP**) for the UBA service is subject to a competition test. This means that the price will only apply in future to non-competitive areas. This means the price must be designed in a way that reflects average costs for the areas in which the price will apply – not simply average costs across the whole country. As the boundary between non-competitive and competitive areas will move over time setting a UBA price now, that provides certainty to the industry of the price that will apply come 1 December 2014, is not a simple task.

It is better to take the time needed to address these issues properly than rush to complete this process by 1 December 2012.

8. We recognise that the Commission has a legislative duty to use reasonable efforts to complete this process by 1 December 2012. However, there is a balance to be achieved between completing the process in a timely manner and taking the necessary time to get the right answers. Given the unusually complex nature of this pricing exercise, we believe the Commission should take additional time to get this right. The prices the Commission is setting will not apply in the market until December 2014 – so there is no rush.

## The UBA service

9. The UBA service is Chorus' wholesale broadband bitstream access service.
10. Retail service providers (**RSPs**) / access seekers can usually either purchase Chorus' UBA service or purchase the UCLL service instead and deploy their own equipment to provide a retail broadband service (either with or without a voice service). The choice for RSPs between UBA and UCLL is essentially a build or buy decision; incur greater one-off capital infrastructure costs upfront and secure lower input costs going forward or avoid capital and purchase network inputs at a price that reflects the relevant costs to supply that are born by Chorus.
11. The UCLL input on its own is enough for access seekers to provide a voice and broadband service, whereas access seekers who do not purchase UCLL need to purchase both UBA and UCLF (or a resold voice product) to offer both. From an input price perspective input prices can be summarised as follows:

Designated Access Service	Functional output	Component Price	Total Price for voice and broadband
UCLL	Voice	\$19.84 <sup>1</sup> +	<b>\$19.84<sup>2</sup> +</b>
	Broadband	DSLAM/voice switching costs	<b>DSLAM/voice switching costs</b>
UCLF	Voice	\$24.46	
UBA	Broadband	\$21.46	
<b>UBA / UCLF Voice and BB</b>			<b>\$46.21</b>

12. Telecom is unique amongst RSPs in that, for a three year transition period, we are not permitted to purchase the regulated UCLL service by virtue of an explicit restriction contained in the Act. Instead, we purchase a commercial baseband copper service for voice only access priced at the UCLF price (currently \$24.46), adding UBA (at \$21.46) to this when a customer wants voice and broadband.
13. So our input costs for three years after separation are significantly above those we would pay if we unbundled urban exchanges in the same way as other RSPs have. This makes us the biggest

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<sup>1</sup> This represents the current urban UCLL price. From 1 December 2014, this price will be replaced with an averaged UCLL price, which is currently under review. The current non-urban UCLL price is \$36.63.

purchaser of UBA nationwide and means that we currently use the most expensive inputs to serve the majority of New Zealanders.

14. All of which means we have a strong and direct interest as a wholesale customer in the outcome of this process. How the Commission prices UBA, and the relativities between UCLL, UCLF and UBA, will affect our investment decisions and the investment decisions of all other RSPs from this financial year forward.
15. In particular, Telecom's decisions about what input costs it purchases from 1 December 2014 will be influenced by two principle components of the current pricing reviews the Commission is undertaking:
  - Whether the UCLF price is de-linked from the UCLL price; and
  - Whether, and to what extent, the cost-based UBA price is implemented in a way that properly reflects actual UBA costs in exchange service areas (**ESAs**) where it is regulated, and therefore facilitates commercial pricing in competitive ESAs that reflects the actual UBA costs that would be faced if we unbundled those ESAs.

The Act provides a three year transition away from existing structural pricing imbalances – after that, RSPs should be able to replicate UCLL cost bases using UCLF+UBA.

16. As set out above, the Act presently provides for Telecom to purchase a more costly set of input services from Chorus in urban exchanges of New Zealand than we otherwise would choose to purchase.
17. From 1 December 2014, though, the restriction in the Act falls away. At the same time, the Act provides for a series of changes in pricing principles and pricing levels to take place:
  - The current de-averaged UCLL prices are replaced with an averaged UCLL price;
  - The retail minus UBA price is replaced with a forward-looking cost-based UBA price that will only apply in non-competitive areas, with commercial UBA pricing applying in competitive areas.
18. Our interpretation of the policy intent behind these changes, and of the UCLL, UCLF, and UBA service descriptions, is that they were designed to, among other things, address the structural pricing imbalances between UCLL and UCLF+UBA. Bringing UCLL pricing into line with UCLF pricing, and UBA pricing into line with actual costs faced by unbundlers will ensure that, on 1 December 2014:
  - **Fibre-focus:** Regulatory pricing incentives are in place that do not, in themselves, skew industry investment away from fibre services. RSPs, including Telecom, will not face regulatory-driven incentives to invest in further copper unbundling. RSPs, including Telecom, can use UBA+UCLF to replicate a UCLL cost base. RSPs can also continue to use UCLL to compete if they choose to;

- **Averaged pricing:** RSPs, including Telecom, can use UCLF+UBA to replicate a UCLL cost-base on rural and cabinetised lines, and therefore achieve averaged input cost pricing structures.
- **UCLL investments not stranded:** The three year transition period, during which RSPs which have unbundled urban exchanges can continue to access de-averaged urban UCLL prices, ensure those RSPs have sufficient time to payback their investments. Even at the end of this period, those RSPs can continue to operate using their UCLL assets.

19. The following table, which shows urban exchange input costs, illustrates the policy result we believe underpins the Act. UCLF and UCLL should be priced equally, and the UBA pricing framework should (a) enable UCLF customers to negotiate a commercial (non-discriminatory) UBA price with Chorus in competitive urban ESAs that properly reflects the true cost of urban UBA and (b) enables the regulated UBA price to accurately reflect the averaged cost of providing the UBA service in the regulated. Note the table does not consider specific voice switching or other costs such as BSS/OSS or ancillary costs.

#### Telecom's view on intended urban exchange economics

	UCLL RSP (exchange-fed lines)	Telecom + UCLL RSP (cabinetised lines)	Differential per line per month
Today	Urban UCLL \$19.84	Averaged UCLF \$24.46	<b>\$16.37</b>
	Urban BB and costs \$10.00	Retail Minus UBA \$21.75	
	<b>TOTAL</b> <b>\$29.84</b>	<b>TOTAL</b> <b>\$46.21</b>	
1 Dec 2014	Averaged UCLL \$22.00	Averaged UCLF \$22.00	<b>\$0</b>
	Urban BB and costs \$10.00	Commercial UBA \$10.00	
	<b>TOTAL</b> <b>\$32.00</b>	<b>TOTAL</b> <b>\$32.00</b>	

*Note: Italicised figures are illustrative only, and do not in any way represent Telecom's view of what the respective values should be*

20. If the Commission's application of the UCLL, UCLF or UBA service descriptions and pricing principles breaks any of these linkages, it cannot help but to skew investment incentives. The Commission's draft report in its UCLL price review investigation, for example, posits a scenario whereby the UCLL price could be set below the UCLF price. Taking this to its extreme, if the UCLL price was set at the draft report's \$19.75 but the UCLF was left at its current \$24.46, this

would create at least a \$4.71 per line per month incentive on Telecom to shift input services from UCLF to UCLL in urban exchanges (unless commercial prices for these services eventuated that resolved any regulated price imbalances – in which case one would need to question whether the de-linked regulated prices were sending efficient signals to the market).

21. Similarly, a UBA pricing framework that removed incentives for cost-reflective commercial pricing in competitive ESAs, would have the same result. The nationally averaged cost-based UBA price will very likely exceed the actual costs of an unbundler deploying broadband equipment in an urban exchange, and so the regulated cost-based UBA price must be able to “move” with the geographic boundaries of the UBA regulation in order to allow Chorus to price competitively in competitive ESAs without fear that doing so will result in under-recovery of costs in non-competitive ESAs. We discuss further below how we consider the UBA price setting methodology and the UBA competition test can be implemented to enable this in the most efficient way.

Copper input prices are not the only determinant of RSPs investment decisions, but even with aggressive fibre uptake, they will remain a key determinant for some time.

22. The extent to which we and other RSPs decide to invest in copper infrastructure will also of course be influenced by our strategy in regard to fibre services as these are rolled out. The relativities between fibre and copper retail and wholesale prices, and the rate of fibre uptake RSPs can drive, will also play a significant part in determining strategy and investment profiles. Systems architecture, and a preference to have as few systems platforms operating in parallel, will also be a key factor. However, even assuming very aggressive fibre uptake by end-users, a significant proportion of customers will remain on copper connections for some time, making it unlikely that any RSP will be able to ignore copper input cost imbalances. Put simply, as long as RSPs retain significant copper customer bases, copper economics will continue to be vitally important.

## UBA pricing principles

23. The Commission is setting a price that will apply from December 2014. The UBA price will be the sum of the *designated access service entitled Chorus's unbundled copper local loop network* and the additional costs incurred in providing unbundled bitstream access service.
24. The UBA service can be delivered from the exchange, from a FTTN cabinet with a parallel copper and fibre path back to the exchange and from a fibre cabinet. In most cases one line can support either UCLL, UBA, UCLFS or a bundle of UBA and UCLFS.

## Key challenges in setting a benchmark price

### Competition test

25. In determining an averaged UBA price the Commission must meet the pricing principles set out in the Act – which require that a regulated price should ensure cost recovery.<sup>2</sup> Costs however vary significantly between urban (often competitive) areas and rural areas – which is why unbundlers primarily choose to unbundle exchanges in urban areas.
26. In Decision 731 the Commission indicated that when applying the competition test it would exclude competitive areas from the calculation of the regulated price. Accordingly, when determining a cost-based price (as it is required to do when implementing the IPP and FPP under section 77) the Commission must first identify which (non-competitive) ESAs are to be included in the determination of costs of the UBA uplift and then determine the relevant costs associated with those ESAs. ESAs which are subject to competition would therefore not factor into the cost calculation.
27. This is necessary because, if all low cost and all high cost areas are used in the calculation (i.e. a nationally averaged price is set) the averaged UBA uplift will not accurately reflect the forward-looking costs Chorus will face in the (predominantly higher cost) ESAs in which the regulated UBA service will apply. Many low cost ESAs are subject to competition from UCLL operators and we would expect that UBA will be de-regulated in many of these areas when the Commission re-applies the competition test in 2014. In those areas, Chorus should be expected to sell a lower priced commercial UBA service at competitive rates. However, if the regulated UBA price is set with reference to a national cost average (including these low cost de-regulated areas) doing so could leave Chorus under-recovering its costs for the regulated UBA service. A regime which creates a reliance on a service in competitive areas to cross-subsidise uncompetitive areas is not sustainable.

### Applying the UBA Competition Test

28. We appreciate that there may be two interpretations to how and when the competition test should be applied during this process and thought it might be helpful to set out our view of the correct approach early. In summary we think that only the costs incurred in uncompetitive ESAs apply to determining the UBA cost uplift. Three legislative and policy components support our point:
- Price stability;
  - Price certainty and early price signalling to inform investment decision; and
  - Cost recovery.

### Price stability and certainty

29. Sections 75 and 76 of the Amendment Act provide for a period of UBA price stability for a period of three years.

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<sup>2</sup> Section 4 B of Schedule 1



30. Section 77 of the Amendment Act provides for medium term price certainty and early signalling of the price that applies from December 2014:

- the Commission must make reasonable efforts to conclude a review the UBA STD within 1 year from separation day (section 77(1)); and
- the purpose of the review is to make any changes necessary to implement the IPP and FPP that will apply to the regulated service after three years from separation day (section 77(1)(a)).
- Under section 77(2) changes made to the STD during this process will only apply after 3 years.

31. In implementing section 77 the Commission is not required to invoke its powers under section 30R to review the competition test. However, the requirement to “make any changes necessary to implement the IPP” implicitly requires that when making changes to the UBA STD to implement the IPP, the Commission consider the conditions which would apply three years after separation. If there is a competition test element that would apply from December 2014, the Commission must determine the UBA price that would apply if the competition conditions set out in the IPP are met on the date on which the new price becomes effective (i.e. December 2014).

32. The Commission is certainly not precluded from applying the competition test because its powers under 30R powers are suspended. On the contrary, section 77(1)(a) makes it clear that the purpose of this review is to make any changes that are necessary to implement the IPP. When implementing the IPP the Commission has to consider the conditions that apply to the Designated Service. In this case IPP and FPP operate alongside a competition test element and therefore that test operates as one of the conditions the Commission applies when implementing the IPP. Furthermore, section 77(2) is clear that the changes made during this process only take effect on the expiry of the three year period, coinciding with the time when the Commission’s section 30R review powers are restored.

33. Parliament’s intention when suspending the Commission’s powers under section 30R was to provide Chorus and access seekers with price (and broader regulatory) stability during the three years following major structural and regulatory change. It should not be misread as limiting the application of the competition test in respect of the price that applies three years after separation, where the competition test is a condition of the designated service UBA. When implementing section 77 of the Amendment Act the Commission must therefore determine a price based on all elements of the IPP, including the relevant competition conditions.

34. We think that an appropriate way to apply the competition test at this stage is to either:

- Commence with the price that would be set using the non-competitive exchange service areas identified in the Decision 731 in September 2011. The Commission should first re-

categorise ESAs that met the first parts of the competition test<sup>3</sup> and recognise that the “other” conditions which it identified as negatively impacting competition at that stage, such as the lack of an alternative voice service, have changed. In particular, UBA plus SLES is commercially available, and access seeker voice (**ASV**) and the regulated UCLF are both available as voice inputs. To enhance the accuracy of the model applied, extrapolating forward the likely changes to competition conditions based on the rate of unbundling may be necessary to achieve a better picture of what competitive conditions are likely to look like in December 2014; or

- Assess which ESAs are subject to competition now, and apply that test to the UBA price that will apply from December 2014. This may be closer to what Parliament intended by the wording of section 77. After December 2014, the Commission would apply further competition assessments using its powers under section 30R.

35. We also recognise that some parties may question whether the competition test should be determined and implemented now or only determined after December 2014 (and implemented some time after that). We think that it should be done now, with section 30R reviews of the state of competition conducted after December 2014 to assess future changes in the relevant markets.
36. If the Commission were to refrain from actually determining and clarifying exactly how the competition test will apply, it will not be possible to provide the price certainty required at this point.
37. As a matter of further guidance, the Commission could also indicate how future competition assessments conducted under section 30R after December 2014 would affect the regulated UBA price. It would be helpful if Commission could be explicit about how new competitive areas removed from the regulated UBA service would impact the price calculation so parties can predict how price will move in the regulated zone.
38. Below we set out some reasons why it is also good policy to apply the competition test at this stage. We think that the policy reasons set out below confirm the interpretation to be applied to section 77 of the Amendment Act.

#### Cost recovery sets the right incentives for stronger competition

39. As a matter of policy that approach is good practice as it ensures Chorus is able to recover its costs and it sets the right incentives for competition in ESAs subject to competition. In summary, if Chorus knows that it is recovering its costs across the more expensive uncompetitive ESAs it will have the right incentives to develop targeted offers to meet the market and competition in competitive areas. However, if an average price set for UBA is materially lower than the higher costs born in say rural ESAs Chorus is likely to limit the extent

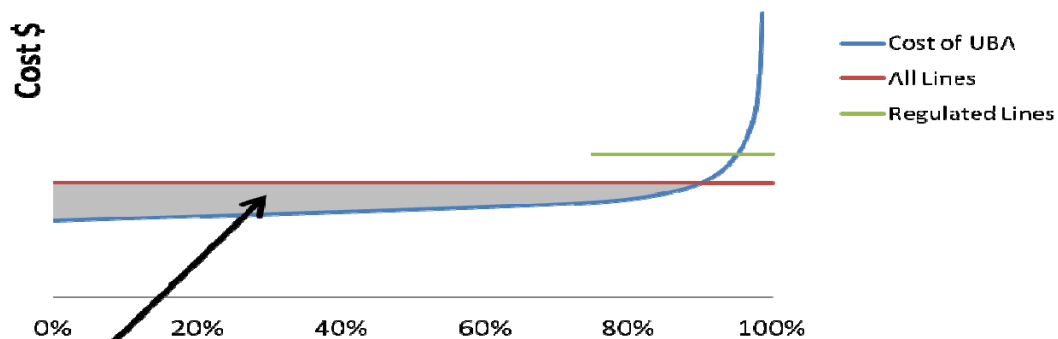
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<sup>3</sup> I.e. there are two or more infrastructure-based competitors in the ESA and UBA-based lines constitute less than 80% of the lines in that ESA.

to which it prices UBA to meet the market in competitive areas as it will always try to recover the costs of the rural UBA through higher urban pricing.

40. The United Kingdom applies the same approach and in that country bitstream is an effective competitive input to LLU. Another thing to be aware of is that when benchmarking the relevant bitstream costs against those in comparable countries, we will be comparing costs of the service in uncompetitive areas in those countries. In many of other countries the regulated price of the wholesale bitstream input is based solely on the costs to provide the service in the non-competitive areas. So when benchmarking UBA costs against others, it makes sense to recognise that we are benchmarking the costs of our more costly ESAs against the costs of the more costly ESAs in those comparable countries. If we were to benchmark our average costs (including the costs Chorus incurs in competitive ESAs and non-competitive areas) we would probably end up misapplying the benchmark with [the wrong price].
41. The graph in figure 1 below illustrates the competition incentives. If the UBA price includes costs incurred in both competitive and uncompetitive areas it drives access seekers to unbundle and UBA remains a weak competitive threat as Chorus is incentivised to recover its costs in non-competitive areas by keeping the price in competitive areas high.

Figure 1: competitive v non-competitive area economics



Area where UCLL is incentivised under all lines model: all low cost areas unbundled by all parties but little footprint growth

42. We also recognise that while the regulated (non-competitive) areas are likely to exclude a number of urban ESAs they are still likely to be found across the country and so will still be sufficient to enable the Commission to derive a nationally averaged price for the regulated UBA service.

### The UBA Competition Test condition

Exists in the UBA service description because layer two copper bitstream is economic to replicate in large parts of the country and where this is the case it is not necessary or appropriate to require provision of the regulated service.

While the competition test had little direct impact under a retail-minus pricing framework it has a more direct impact under the new cost based pricing principles. Indeed when applied the competition test will help ensure efficient investment by sending appropriate price signals to investors. Equally it will help facilitate a competitive wholesale market by allowing Chorus to compete in competitive areas which it may otherwise find difficult to.

Although regulation was not rolled back following Decision 731 due to some other factors (principally related to the lack of a UCLFS or equivalent service) it did clearly define the relevant markets and the competition test:

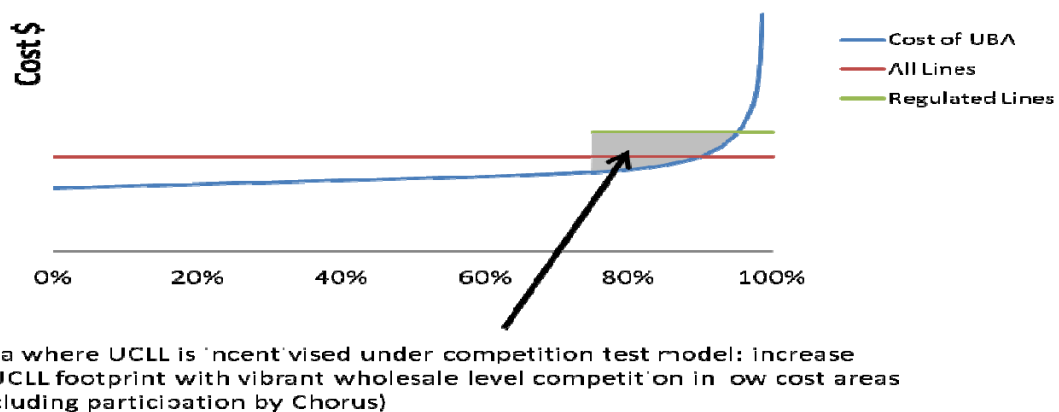
**Market definition:** the regulated UBA service in each exchange service areas (ESAs)

**Competition test:** two or more major operators + <80% (Telecom) market share

**Implementation:** competitive ESAs are removed from the service description and the price list is adjusted to reflect this. NB

Structural separation and the potential merger of Vodafone-TCL results in increased demand side constraint on Chorus suggesting the approach set out above is on the conservative side. Equally those same structural changes together with the introduction of the UCLFS STD address the concerns that resulted in the Commission not implementing the competition test in decision 731.

Figure 2: incremental unbundling



43. Our view is that around 150 ESAs, equating to around 75% of lines, will be deemed competitive by December 2014. We consider it unlikely that either the IPP or FPP would yield a UBA price

above the current \$21.46 UBA price and expect it could be considerably lower<sup>4</sup>. This view is based on our own analysis in which we have sought to robustly<sup>5</sup> replicate what a FPP would yield coupled with a view of regulated bitstream services in countries which apply a competition test.

44. As outlined earlier in this submission we believe Chorus should be able to recover its efficient costs in regulated areas without reliance on an unsustainable cross subsidy from competitive areas. We are confident that the approach outlined above ensures that. We are also concerned to ensure customers in non-metropolitan areas benefit from low prices and are not unduly disadvantaged by moves to promote competition and efficiency in urban areas. Our analysis suggests that this will not be the case however, if such an outcome appeared likely, the best course of action would be to bring the issue to the attention of the Government which has the policy remit and tools to address the issue in a transparent and efficient way.

## Process

### Clarity needed over the network uplift and other dependencies

45. It is important that review is coordinated with parallel activities which may influence or be dependent on the outcome of this review – even if this necessitates a slight extension to the 30 November target date.
46. The obvious example is in relation to the network uplift for UBA. According to the pricing principles the UBA price will be the sum of the averaged UCLL price plus the additional costs of providing the UBA service which are not recovered through the UCLL price.
47. Therefore, to determine what categories of costs need to be benchmarked or modelled under the IPP or FPP it is first necessary to establish which costs are recovered through the network uplift. For example, if the Commission embarks on an exercise of breaking apart the cost components of the access network (i.e. de-linking the UCLF and UCLL prices) it is difficult to see how it can meaningfully implement the IPP or FPP until that is completed. A settled network uplift is obviously also required. That is because the “additional costs” of providing the UBA service will differ depending on which network components are included and how costs are allocated. For example, if the Commission determines to set separate “NCUCLL” and “UCLF” prices rather than a single averaged UCLL price that covers the entire local access network, it is not at all clear what the scope of the UBA “additional costs” would be in each instance. Where a UBA service uses a sub-loop fibre backhaul between a cabinet and exchange, and UCLF uses a parallel copper feeder in the same trench, how are costs allocated as between the services? We do not believe that this is the model Parliament intended to apply, but if the Commission disagrees, these issues will need to be resolved.

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<sup>4</sup> In a range from \$17-20 depending on a variety of volume, cost and other assumptions, comparability criteria and associated factors (exchange rates, CPI etc).

<sup>5</sup> Our modelling is designed partly to inform this process and to inform Telecom investment decisions and is both sophisticated and populated with the most accurate data available to us.

48. If the Commission opts not to break apart the access network averaging model then these issues do not arise and the Commission can proceed with a relatively less complex application of the UBA pricing principles. That is because under this scenario Chorus would recover the cost of the copper and fibre elements of its local access network including the FTTN element of the network in a single UCLL price in the same way all other jurisdictions we are aware of do. The UBA pricing principle is then “simply” about the electronics, backhaul (excluding the cabinet to FDS leg) and associated co-location costs. This is the model that we believe Parliament intended to apply.

## Attachment: responses to specific questions

49. In this section we respond to the specific questions raised in the discussion paper and include further detailed views where appropriate on benchmarking methodology.

### Specific questions

1) *Do you agree with the Commission's view regarding the absence of "similar services" from the benchmarking criteria for UBA?*

#### *Absence of "similar services"*

50. We think that it is implicit in the requirement to benchmark that the benchmark against which the UBA uplift is set is sufficiently comparable or similar to the regulated UBA service to be a useful proxy for the actual costs of the service.

51. The fact that there is no express requirement for similar services may possibly have been intentional, and may indeed be reflective of the fact that benchmarking requires the comparison of services which are similar enough to make their pricing relevant to the price setting process envisaged by the Act.

52. "Similar" does not necessarily mean identical in every respect, and adjustments can be made to address differences based on an understanding of technical and comparability criteria. An over-emphasis on "similar services" together with an over-emphasis on the exclusion of benchmarks on comparability grounds may make it difficult to assemble a set of benchmark points which can be relied upon.

53. We agree the Commission must benchmark against services that are consistent with the UBA service description set out in Schedule 1 of the Act. We comment further on comparability issues below.

#### *Commission's proposed approach to benchmarking rightly assess comparable services*

54. The Commission proposes to conduct the benchmarking exercise using the following sequence of steps.

- o *Identifying services, or service components, similar to the UBA service.* Subject to the comments noted above we agree with this approach.
- o *Assessing whether the countries set forward-looking cost-based prices.* We agree with this approach and are of the view that a range of models used to set forward-looking prices should be considered including TSLRIC(+), LRIC (+) and (x)-LRAIC models.
- o *Identifying whether the countries are comparable.* Subject to the comments noted below in relation to considering comparability, we agree with this approach.

- *Adjusting the benchmark set (as necessary) and selecting an appropriate price point within the benchmark.* Subject to the comments noted below in relation to considering comparability issues when selecting an appropriate price point, we agree with this approach. In particular, we consider that the importance of maintaining relativity between UCLL and UBA outweighs the absolute price point selected.
- *Adjusting the benchmarked price to address any differences in the service description or quality or the underlying costs in and between the UBA service variants.* Subject to the comments noted above in relation to service similarity, we agree with this approach.

55. The Commission's preliminary view on the omission of the words relating to "similar services" seems sensible as long as the approach to similarity is not overly formal. This goes hand in hand with the approach to comparability in selecting the benchmark set consistent with the IPP. We would endorse an approach based on broad similarity such that the prices are reasonably reliable from the perspective of a benchmarked price point with adjustments made to the benchmark set, or taken into account in selection of an appropriate price point, whichever is demonstrably the most reliable.

*Comparability: Keeping it simple for the IPP*

56. The IPP should be used to benchmark against regulated prices in other jurisdictions as a relatively simple proxy for the outcome of an FPP determination process.

57. The first step in the IPP process, consistent with the Commission's past practice should be to identify as many possible benchmarks as possible, excluding only prices for clearly dissimilar services, and using relevant country comparability issues only as a very broad filter. Even prices for broadly similar services from broadly comparable jurisdictions embed useful price information which the Commission should consider relevant when analysing the subset of IPP compliant benchmark prices.

58. The second step in the IPP process, again consistent with the Commission's past practice, should be to exclude price points which are not consistent with the IPP – i.e. prices which are not forward looking cost based prices. Depending on the number of price points that remain in the benchmark sample, it may be appropriate to use other criteria to exclude observations.

59. The Commission should ensure that as many price points as possible are being considered in order to make the selection of a benchmark point within the range as statistically reliable as possible. The objective of the IPP is to identify a price point which is the best proxy for the outcome of an FPP determination process in the New Zealand setting. The smaller the benchmark set, the wider the range of estimation error around the selection of a price point from that set, and the greater the asymmetric risk of regulatory error.

60. Finally, price setting for the New Zealand case should take proper account of the local supply and demand characteristics and in particular the state of competition in the New Zealand market. Accordingly, a clear market definition and consideration of competitive areas for UBA services



may be required to ensure that the selected price based on benchmarks is appropriate for New Zealand.

61. In selection of a price point from a benchmark set which complies with the legal requirements of the IPP, the Commission can and should exercise its expert judgment. This may be done in a number of ways.

- First of course, consistent with the Commission's past practice, the IPP compliant benchmark set should be considered. Good practice in a quantitative analysis relies on the tools of inferential statistics. From this perspective, we think it useful to review the median (as a robust measure of central tendency), the upper and lower quartile boundaries, (25<sup>th</sup> and 75<sup>th</sup> percentiles) to gain an understanding of the dispersion, the number of price points, to gain a sense of the potential magnitude of the standard error of the median.
- Where the IPP compliant benchmark set is too small for statistical methodology to provide a robust estimate of a price point, the selection of a price point may require a more qualitative consideration of a wider range of factors. This may include a number of country specific matters and including a consideration of the relevant model parameters used by regulators in benchmark countries (and depending of course on the information available)<sup>6</sup>.
- The informed selection of a price point from the IPP compliant benchmark set may be tested against an analysis of the wider set of prices drawn from the set of potential benchmarks identified in the first step described above. These prices when considered in the context of background details of the level of competition, and of regulators' processes embed information relevant to a wide range of country-specific supply-side and demand-side considerations for similar services. In carrying out this exercise, the Commission should seek to take account of all relevant information that it can practically gather.
- In short, where the Commission is faced with a small IPP compliant benchmark set, the exercise of expert informed judgment using all available information on international pricing of similar services to assist its exercise of expert judgment may result in selection of a price point that is more likely to reflect New Zealand costs than the selection of the median or 75<sup>th</sup> percentile with a large estimation error.
- The key criterion to be fulfilled in selection of a price point is that on the information reasonably available to the Commission and based on a consideration of the available

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<sup>6</sup> Subject always to the information available, the cost model used to support a forward looking cost based price should reflect an efficient deployment, the cost base used for the assets, the MEA choices, depreciation methodologies and the approach to dealing with technological advances (e.g. through the use of tilted annuities). Cost model inputs including variations in the inputs to and modelling of cost of capital for differing jurisdictions, the choice of asset unit costs and asset life assumptions, the choice of allocation keys for joint and common costs and currency conversion factors also are relevant considerations.

information, the chosen point in the range is the best proxy for the outcome of an FPP determination process in the New Zealand setting.

62. We are not suggesting that the IPP process should be excessively complex or detailed. As noted in our UCLL cross-submission, we believe the Commission should exercise its expert judgment in carrying out the benchmarking process, but that at minimum that judgment should be based on three key principles:

- The IPP method should not be over-complicated given there is the backstop of an FPP if parties have concerns at the outcome of the IPP process;
- The selection of comparability criteria should ensure that there is a sufficiently large sample to improve the reliability of the benchmark estimate; and
- a robust analysis supporting the data point selected from the benchmark set which reflects as much relevant information as practicable.

*2) Given that both the UCLL price and the UBA price will be cost-based in future, are there any other considerations relevant to the relativity requirement?*

63. We think that it is important to remain cognisant of the relationship between the UBA and UCLL costs and other regulated products such as UCLF. If for example the Commission determines a UCLL service that does not establish all UCLL costs then it will have implications for the UBA uplift component. We think that there is only one UCLL service (not a separate full and "other service") and as a matter of Government policy the UCLF price is linked to the full UCLL service price despite the fact that UCLF only provides access to the lower frequency spectrum (and not the full spectrum) of the line.

64. The linkages become more acute when you consider where the UBA uplift starts from. As discussed above it is not at all clear what would happen to the UBA uplift if the Commission decided to de-link UCLL and UCLF prices. What would flow through to the UBA price? Is it the "Full UCLL" price, the UCLF price, the UCLL STD price or some other price and would there be multiple UBA prices that are then derived from that, such as cabinetised UBA and non-cabinetised UBA. How all that could work to achieve a single nationally averaged UBA price is also unclear.

65. In a cost-based world the main relativity consideration becomes the UBA uplift. The ladder of investment-type incentives become far less relevant than they were in a pre-fibre world and the relative difference between UBA and UCLL becomes a pure factor of cost differences. We are not sure if regulators should be stimulating deeper investment in one technology over another. For example, is it objectively speaking a good thing if Telecom were to duplicate Chorus DSLAM assets?

66. The relativity of the UCLL and the UBA prices in a cost based setting creates incentives in the market for investment by access seekers and access provider. While they are both cost-based,

they are also both benchmarked. This means that differences in the benchmark sample for each service could distort the relativity.

67. One solution is to carry out a cross-check and survey the relativity of UCLL and UBA prices in other jurisdictions, whether regulated (and if so, how) or not, to determine relativities. The survey could include countries that are not even that similar to NZ, but in respect of which the relativities between UCLL and UBA pricing may be informative. It is possible that the sample size under this approach could be much larger than the sample of cost-based UBA prices. However the Commission would need to understand the policy and legislative context in those jurisdictions to understand their relevance to relativity in New Zealand.
68. If the UCLL and UBA prices are set from benchmark samples, each price will be a point estimate selected from a range. As noted above, the smaller the sample from which that price is selected, the greater the estimation error in that point estimate. The IPP is intended to be a simpler shorter process to select a materially correct price point as the best available proxy for the outcome of an FPP determination process in the New Zealand setting.
69. Because of this, the potential for regulatory error in selection of the price point, and the estimation error associated with the size of the sample set means that differences in the benchmark sample for each price could result in material distortion of the relativity. Benchmarking relativities could offer a useful way to ensure that relativities can be shown to be maintained.

### 3) *What should the Commission consider in its section 18 analysis of the price review of the UBA service?*

70. Section 18 is often treated as nothing more and nothing less than an instruction to price regulated services at cost.
71. While pricing at cost is often the best way to give effect to section 18, it is possible that other factors become more relevant to serving the long term interests of end users than simply pricing at cost. These are:
  - Ensuring that the regime and the services being regulated works as a coherent whole. Neither the interests of end users nor industry are served if the Commission takes a piecemeal approach to formulating pricing for each service and the pieces do not fit together in the end. In this sense section 18 is a segue into ensuring that the linkages and relativities between UBA, UCLL and UCLFS are maintained.
  - Ensuring that the regulatory environment creates the right incentives. We have noted above how the way in which the Commission chooses to approach its discretion within its application of IPPs could potentially tip the balance in terms of the investment choices and the conduct that parties engage in.

- Ensuring the fundamental soundness of the sector. For example if robotically setting prices at cost meant that Chorus' business case fell over, query whether such an outcome would serve either the interests of end users or industry.

72. Section 18 is also about maximising the competitive outcomes in a sector. To this end, in promoting competition for the long term benefit of end users it is important that the Commission considers what the key bottlenecks are. Regulation should be focussed on the most appropriate economic bottleneck. Regulatory wind back and creating the right incentives for stronger competition should be key objectives. It may well be that the local loop is the effective "natural monopoly", not the UBA overlay. Given there is UCLL available, the policy argument for mandated UBA is less compelling, as the entry barriers are lower, but the importance of relativity becomes far more significant.

73. In our view section 18 is the section that allows the Commission to depart from a purely robotic interpretation of an IPP and , modify its application in order to achieve a broad range of possible pro competitive outcomes (some are alluded to above) that serve the interests of end users.

#### *4) Do you agree with the use of teledensity criteria for determining comparability?*

74. As discussed above, the selection of comparability criteria requires some consideration of both the supply and demand parameters and relevant model factors. Teledensity is one indirect indicator of potential demand, and it is not immediately clear that it is an ideal proxy for UBA demand, whereas the linkage to demand for UCLL intuitively appears stronger.

75. We recommend a flexible approach to determining comparability criteria, particularly for the exclusion of possible benchmarks. We think that an approach based on consideration of a wider range of indicators of country specific supply and demand factors would be more appropriate than exclusion of potential benchmarks based on indirect and partial indicators of demand as country comparability measures.

76. We think it would be helpful if the Commission were to set out its view on the cost and uptake drivers for UBA then a selection of appropriate comparability metrics could be clear. Cost drivers for UBA clearly include equipment in the exchange or cabinet, and the costs of an aggregation path between the DSLAM and the first data switch or equivalent facility. As pointed out in paragraph 36 comparable countries may well reflect differences in network architecture affecting the hand-over point, and the equipment involved – factors which will be relevant to cost and to comparability. The importance or otherwise of metrics such as teledensity depends on what the actual cost drivers are. As a starting point, the Commission should set out what is different between UBA and UCLL and therefore why the criteria may differ. For example, if the main costs are in equipment, which is cheaper depending on the scale of purchases, then pure population of countries (or pure size of the comparable access providers) might be important.

77. In addition, we note that forward looking cost based benchmark prices are based on models which implicitly embed a range of assumptions about the intersection of the long run supply and demand curve for a jurisdiction. We think that care should be taken to identify comparability

criteria which clearly influence the long run cost of supplying similar services to UBA. It is not clear to us that teledensity is a relevant criterion for determining comparability.

**5) Are there any other comparability criteria that could and/or should be used?**

78. As discussed above, the selection of comparability criteria requires significant further consideration of both the supply and demand parameters.

**6) If comparable countries that meet the comparability criteria are limited, what other information should the Commission gather in order to establish a price for the UBA services?**

79. We suggest that the Commission should gather as much information as possible based on the matters discussed in our response to Question 1 above and take a simplified benchmarking approach. In carrying out this process, the Commission should ensure that the benchmarking process does not become as detailed and complex as an FPP determination. Erring on the side of simplicity and pragmatism the Commission should still approach the benchmarking process with a view to achieving a price which best approximates the outcome of an FPP determination.

80. In respect of relativity between UCLL and UBA, and as noted above, a possible approach would be to survey price relativity between UCLL and UBA around the world, regardless of how those prices are determined. The results could then be used to scale up the NZ UCLL price. At the very least this technique might be used as a cross-check on what might be a very small sample of cost-based UBA prices.

**7) What key cost drivers do you think need to be taken into consideration when benchmarking the UBA service variants?**

81. As noted above, a regulator, informed by modelling, sets a price which it believes to be a close proxy for the price which a workably competitive market would reach in the absence of limited competition. The Commission identifies a number of areas of cost difference:

- o In service and performance characteristics, such as performance expectations, line speed, QoS etc.
- o In the components of the regulated bitstream service (e.g., additional transport)
- o In the location of the hand-over point.

82. These matters will all be reflected in the cost assumptions built into models relied on by the regulator. Regulated cost based modelled prices (and the resulting quantities) from other jurisdictions are determined by the regulator's or modeller's estimate of the likely intersection of the supply and demand curves for that jurisdiction, together with the assumptions used in the model construction. To determine a price relevant for the New Zealand jurisdiction from a benchmark set supply-and demand side characteristics need to be considered as do model parameters.

83. As noted, in a workably competitive market, both supply and demand curves differ across jurisdictions and as a result, any one of four outcomes arise - low prices and low take-up, low prices and high take-up, high prices and high take-up, and high prices and low take-up. In the absence of considering supply and demand-side factors it is impossible to determine whether it is the modeller's assumed supply curve or the modeller's assumed demand curve which is driving the outcome. A cost-based forward looking model typically considers supply-side and demand-side factors, and estimates a price based on a given increment corresponding to a cost based price for a long run level of consumption, and subject to a range of modelling input parameters and allocation assumptions.

84. We are still considering a number of other potential cost drivers but think that all these factors need be considered by the Commission in exercising its expert judgment when selecting a price point for the UBA service and variants.

**8) *Do you consider there is any other appropriate approach for determining the price of the UBA variants?***

85. The Commission suggests that it could benchmark difference in retail prices and possibly impute a price for the UBA variants. While it is not clear to us precisely what is envisaged by paragraph 45.1. we think three important methodological issues arise from the possible use of retail price differences to determine the price of UBA variants;

- the impact of differential pricing;
- the inability to reliably adjust retail pricing to reflect forward looking cost based wholesale prices which might be a proxy for the outcome of an FPP determination in NZ; and
- the inability to separate supply and demand side influences from retail price points.

86. First we note that national retail prices in a specific jurisdiction will often be the subject of bundled offers requiring assumptions on allocation to disaggregate, reflective of different consumption levels or data caps, and even if this is not the case will often be impacted by differential pricing at a retail level. This may not easily be able to be identified and adjusted for without very detailed information about retail competition.

87. Assuming workable competition, retail prices reflect information combining the current state of supply and demand in the relevant sector of the economy. It is important to note that irrespective of the level of retail competition, it is unlikely that retail prices could be reliably adjusted to indicate the correct level of forward looking cost based wholesale prices for the jurisdiction in question.

88. In addition and still assuming that all jurisdictions being considered represent workably competitive markets, both the supply and demand curves will differ across jurisdictions. Four outcomes arise - low prices and high take-up, low prices and high take-up, high prices and high take-up, and high prices and low take-up. The inability to determine whether it is the supply or the demand curve which is driving the outcome is called the identification problem in economics.

Cross-country comparisons of unregulated prices are unreliable as a result, and care needs to be taken with any analysis.

*9) Do you agree that the Commission's proposal for adopting the UCLL STD core charges for the comparable UBA core charges is appropriate for the purpose of the UBA price review?*

89. The Commission has proposed to set UBA new connection and transfer charges. The UBA charges would draw from UCLL charges where it involves the same or substantially similar activity. The Commission would set benchmark prices for UBA services for which there isn't a corresponding UCLL charge.
90. We are open to the Commission reviewing the structure of the charges and activities they apply to as part of UBA price review. The future UBA service will be different to the way it was treated when Telecom and Chorus operated a vertically integrated wholesale and retail business. For example, UBA will be considered the "primary" service on the line from December 2014 (UBA was initially established as the incremental service on the line and POTS was the primary service).
91. UBA connection and transfer charges should reflect the nature and costs of the activity. We agree the Commission can base UBA charges on UCLL charges where it involves the same or substantially similar activity. For example, similar costs are likely to arise when a premises is initially connected to the Chorus local access network irrespective of whether the line is used initially to support UBA or UCLL. However, we recognise that it will not always be possible to draw parallels with UCLL for all activities such as service transfers or splitter charges which are ordinarily not applied to a UCLL connection.
92. We know that the pass through of changes to service company charges can be significant. In July this year Chorus pass through of service company cost changes impacted Telecom by [~\$] **TCNZ COI**. Benchmarking cost therefore also becomes an important check to ensure that there are incentives on Chorus to negotiate efficient service company pricing and to ensure that New Zealand consumers are not required to bear higher labour and other costs than their peers in comparable countries.
93. A further consideration is that it is important to properly classify the type of costs incurred to ensure that service company practices are efficient. We recognise that a truck roll could be required either to do work at a customer site (**site visit**) or to do work on another part of the network such as at the exchange or cabinet or even the plinth outside a customer premises (**network activity**). We think that,
- Site visits should only be chargeable for all work from the External termination point (**ETP**) into the customer premise; and
  - Network costs should be chargeable for all work from the local exchange to the ETP.

Site visit charges should only be available where a site visit would be incurred by an efficient operator. A site visit should, for example never be required to re-connect a previously intact

connection which was disconnected to enable Chorus to temporarily reassign the cable pairs to another line.

94. At this stage, the key activities likely to involve substantially similar activities are:

- The initial connection of premises to the network. No charge is necessary for network re-arrangements or subsequent re-connections as these are not connection related. This is likely to involve substantially similar activity to a UCLL new connection;
- The exchange based or cabinet based activity necessary to transfer between services or service providers, i.e. premises reconnection or jumping between UBA and UCLL. A transfer from UBA to UCLL is likely to involve substantially similar activity to UCLL transfer between providers;

95. Further, the Commission should consider adding cost based price on request service for bulk transfers. The current STDs provide a bulk transfer rate for migrations greater than 20 lines. However, the proposed charges are unlikely to reflect the cost of significant migrations. We believe RSPs should be able to request a cost based (with Commission set Chorus margin) for bulk transfers over 100 lines.

96. Chorus has proposed in the UCLL pricing review an alternative model whereby connection charges are set by reference to service company costs plus a margin. As part of that review the Commission should consider the structure of UCLL charges so that they better align with cost, while ensuring an incentive remains to efficiently operate the network (i.e. not shift costs on to RSPs through the operation of the local access network).