1 March 2013

Public

Cross submission in response to the Commerce Commission's Draft Determination to amend the price payable for the regulated service Chorus' unbundled bitstream access made under s 30R of the Telecommunications Act 2001

Chorus

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Executive Summary

EXECUTIVE SUMMARY

Introduction

1 This is Chorus' response to other parties' submissions on the Commerce Commission's (**Commission**) draft determination on the benchmarked review of UBA (**Draft Determination**).

2 The submissions on the Commission's Draft Determination highlight the challenges and complexity of the current framework that we're working within under the Telecommunications Act (**Act**):

2.1 the viability of setting regulated prices by benchmarking, if the available dataset is not of a credible size;

2.2 the implications that very low prices for copper services have for the migration to the UFB network; and

2.3 the divergence of views between the Commission and the Government as to the intent behind section 18(2A).

3 There is also real confusion as to whether the pricing structure for copper services should establish the ladder of investment in all areas on the copper network, why we might or might not do that, how to ensure that the copper pricing overall recovers Chorus' costs, and what incentives and outcomes parties are aiming for.

4 Having considered other parties' submissions we believe that:

4.1 the Commission should include the UK in the benchmark set and should consider whether France and Spain should be added but otherwise the benchmark adjustments we proposed in our 1 February submission (**February Submission**) are still required;

4.2 the existing UBA price, $21.46, falls within the range of the adjusted benchmark set. Selecting a price around current levels is consistent with section 18 and the fact that, contrary to a number of submissions, there was no expectation of a significant UBA price drop when the Act was amended to accommodate the structural separation of Telecom in 2011; and

4.3 section 18 gives the Commission a clear mandate to consider migration from copper to fibre. The Commission can do this by putting greater weight on the long term benefits of fibre, which will deliver higher quality services and innovation, rather than the short term gains of lower copper prices.

The policy framework review

5 Since submissions were made on 1 February, the Minister for Communications and Information Technology has announced that the two planned regulatory reviews under the Act have been brought forward.[1]

6 The Minister has signalled that, when the current legislative framework was set, the outcome proposed in the Draft Determination was not envisaged. Chorus welcomes the Minister's announcement to bring forward the review of the regulatory framework for telecommunications services (**Review**). It is a principled move to ensure that New Zealand has the right policy environment to drive growth and innovation enabled by world-class broadband services through fibre. We are looking forward to engaging with the industry to help shape a new environment where everyone – government, infrastructure companies and retail service providers (**RSPs**) – are incentivised to work to a shared vision where ultimately New Zealanders are the winners.

7 We are conscious that cross-submissions are now being made against the backdrop of this Review. Given the intention to start the Review immediately, and the fact that the deadline for the Commission to complete the UBA review is likely to be extended to a date no later than 30 November 2015, we think that it is reasonable for the Commission to pause the current UBA pricing process while the Review is completed. We appreciate the Commission may have questions as to whether it can pause the current process, but we consider that this would be a pragmatic and sensible outcome in the circumstances and the immediate focus should be on the future regime.

8 At the completion of the Review the Commission will have sufficient time to finalise this UBA pricing process (if benchmarking remained the regulatory pricing principle).

9 On the other hand, if the current pricing process continues, we still believe that the Commission has the tools to ensure that the Government's UFB policy is not undermined. We continue to support the proposed corrections and adjustments to the benchmarking exercise, set out in our February Submission. Once these adjustments are carried out, the benchmarking suggests a UBA price in line with the current price is reasonable.

Current framework

10 The submissions that the Commission has received highlight the confusion about what the current framework seeks to achieve, now that the sector has been radically changed by structural separation and the UFB Initiative.

11 Historically, the Commission has applied the relativity requirement by reference to the ladder of investment theory. The Commission has said that its objective is to facilitate Layer 1 investment by RSPs, so that they can compete at Layer 2.

1 Amy Adams "Review to provide certainty to consumers, industry" 8 February 2013.

12 As we said in our February Submission, it is not clear how the Commission is interpreting the relativity requirement and the ladder of investment in light of the fact that:

12.1 as a result of the prices the Commission has set so far, unbundling has primarily occurred in high density urban exchanges;

12.2 a UBA price of $8.93 would only further deter investment, especially in rural and cabinetised areas; and

12.3 the Government's policy is to have an averaged UBA price, but relativity today needs to be considered against de-averaged urban and rural Layer 1 prices, and as against UCLL and SLU lines. From 2014, the Commission will still need to consider relativity as between averaged UBA prices and "de-averaged" UCLL and SLU lines.

13 There are three potential outcomes being proposed in submissions:

13.1 the promotion of Layer 1 copper services;

13.2 Telecom will unbundle and will have an advantage over other RSPs in the market; and

13.3 enabling the transition from copper to fibre services.

14 RSPs are unclear on the outcomes they are seeking, which is not surprising given that regulation sets all the incentives as to whether to unbundle widely or just in some areas. At the same time RSPs also want lower UBA pricing. Standing back, it is clear the objective of the framework needs to be clarified.

15 A further area of confusion is the Commission's approach to section 18, and in particular section 18(2A). The Review is a clear signal that UFB investment needs to be (and was intended to be) considered under section 18(2A). If this pricing process continues, there is an opportunity to correct the position.

16 We agree with the submission from other Local Fibre Companies (**LFCs**) that section 18 gives the Commission a clear mandate to consider migration from copper to fibre. Section 18 is a tool to be leveraged in the context of benchmarking and to implement the Government's UFB vision. The Commission can do this by putting greater weight on the long term benefits of fibre rather than the short term gains of lower copper prices.

17 There is also confusion over how section 18 operates. The Commission has asked whether section 18 permits or requires pricing above the legislative cost base[2], and submitters have responded to say it does not. However, this is not the right question.

2 This is a term used by the Commission in the Draft Determination to mean a benchmarked price that is consistent with the IPP.

As explained by CEG in its report *Pricing at the legislated cost* (attached), all of the proposed adjustments in our February Submission are directed at *identifying* a price that can be expected to recover the cost consistent with the initial pricing principle (**IPP**). Section 18 guides that exercise.

18 Chorus is not asking the Commission to set prices outside the benchmark range but the benchmark range must be properly specified. For example, the specific benchmarks identified by the Commission are countries that have not taken into account the effect of a fibre deployment such as is occurring in New Zealand. This means that adjustments are required to the benchmarks to establish an adjusted range that is consistent with the IPP.

Benchmarking

19 Based on the joint submission from the other LFCs and CEG's report *Forward-looking cost-based pricing methods*, we think that the Commission should include the UK in the benchmark set (otherwise the Commission should make the adjustments proposed in our February Submission). The addition of the UK would likely lead to an increase in the range of the adjusted benchmark set.[3] Notably, the current UBA price is still within the range. We think that selecting a price around current levels would be consistent with section 18.

20 The Commission needs to select a price point from a benchmark set that is comparable to New Zealand. Adjustments to the raw benchmark set are required to ensure comparability. For this reason, in this cross-submission, we refer to the "adjusted benchmark range" (in our February Submission, we included both the raw and the adjusted benchmark numbers). The adjustments we proposed to the raw benchmark prices to ensure comparability with New Zealand in our February Submission included the selection of the appropriate starting price and adjustments for speed, line density and accelerated fibre migration.

21 We think that it would also be worth investigating further whether prices for France and Spain meet the definition of "forward-looking cost-based pricing method", and should also be included.

22 Otherwise, we do not believe that the submissions from other parties change the proposed approach in our February Submission. In fact, a number of submissions from other parties implicitly lend support for the importance of line density to the UBA price.

Response to specific points

23 In this cross-submission we address the following points:

[3] In this submission we use the word "range" to refer to the range of the benchmark set (from lowest price country to highest price country). Depending on the context, the benchmark set may be the raw benchmark set, or the adjusted benchmark set. The adjusted benchmark set is the set of benchmark prices after all of our proposed adjustments for comparability (or some combination of them) have been made.

Submission	Chorus Response
TSLRIC modelling of UBA costs will be a simple exercise.	TSLRIC modelling of UBA will require a number of complex issues to be worked through.
The benchmark dataset should be expanded to include countries that apply an FDC approach. Various other changes should be made to the benchmark set – relating to whether models are verified, handover points, and comparability.	The UK should be included in the benchmark set, and further consideration should be given to including France and/or Spain. Otherwise we reiterate our view on the appropriate benchmark set and adjustments for comparability set out in our February Submission, and do not believe any further changes are required.
The Commission's approach to choosing the speed of the service benchmarked needs to be corrected to ensure proper recovery of the common cost component of current costs.	We agree - this is consistent with our February Submission. However, more is required to ensure that the benchmarking reflects the speed distribution in New Zealand so we support the WIK approach.
Denmark and Sweden deploy a voice/broadband linecard solution, different to Chorus' broadband cards, and the port cost is the relevant network cost for benchmarking UBA.	The absence of significant voice traffic on Chorus' UBA network means that theoretically the benchmarked UBA price should be adjusted upwards, not downwards, because sharing assets gives Denmark and Sweden economies of scope.
Swedish price differential is not cost-based and basing calculations on a business variant is not appropriate.	Since there is no cost-based information, the WIK approach is appropriate and Analysys Mason seems to support this approach.
Section 18(2A) does not allow prices to be set above "cost".	Chorus is not seeking a price outside the benchmark range permitted under the IPP. The appropriate benchmark set is reached after all necessary adjustments to that set are made. The recommended accelerated fibre migration adjustment would not involve setting prices outside the range of benchmarks so is consistent with the IPP.
A central price point (e.g. the mean) should be selected.	The correct price point to select is one higher than the central point (median or mean).

Submission	Chorus Response
For connection and transfer charges the Commission: • should not use benchmarking in certain circumstances and should use Chorus' costs as a check; • should clarify whether it is consolidating the existing connection charges; and • should make a number of changes to the definition of connection charges.	We believe the best approach is to price these services based on the rate of third party fees + administration costs + margin (**cost-plus approach**). If the Commission continues to benchmark, then its intention around the setting of connection charges needs to be clarified but we do not agree with the proposed changes to the definition of connection charges.

24 We note that we have not responded to every point raised in other parties' submissions but rather have focused on the key issues. We refer back to our February Submission for more detail on the approach we propose should be taken to ensure the Commission sets a cost-reflective price for the UBA service in New Zealand.

Submission

LEGAL FRAMEWORK

Section 18

25 Submissions illustrate continuing confusion over the operation of section 18. Helpfully, the Review is a clear steer that Parliament intended section 18(2A) to apply to the UFB investment.

26 We agree with the submission from other LFCs that section 18 gives the Commission a clear mandate to consider migration from copper to fibre. The Commission can do this by putting greater weight on the long-term benefits of fibre rather than the short-term gains of lower copper prices.

27 As explained in our February Submission, the key points to be considered when applying section 18 are:

27.1 section 18(2A) was a clear statement of Parliament's intention that the Commission prioritise investment incentives;

27.2 it is clear that section 18(2A) applies to the UFB investment, and indeed was passed with the UFB investment in mind;

27.3 section 18(2A) requires the Commission to prioritise successful migration to the UFB network over short term price gains on the legacy copper network;

27.4 the Commission's proposed UBA price creates conflict with the long-term dynamic efficiency gains expected from the UFB network;

27.5 there is no competition problem to solve on the copper network, but by discouraging migration to the fibre network, the Commission will defer the significant consumer benefits of competition on the fibre network; and

27.6 section 18 is relevant to all the decisions made in the benchmarking exercise, not just price point selection. It is notable that no submitters have argued that UFB is not a consideration under section 18(2A).

28 There is also confusion over how section 18 operates. The Commission has asked whether section 18 permits or requires pricing above the legislative cost base, and submitters have responded to say it does not. However this is not the right question. As explained by CEG in its report attached to this submission *Pricing at the legislated cost*, all of the proposed adjustments discussed in submissions are directed at *identifying* a price that is consistent with the IPP. Section 18 guides that exercise.

29 Chorus is not asking the Commission to set prices outside the benchmark range, but the benchmark range must be properly specified. This means that adjustments are required to the benchmarks to establish an adjusted range that is consistent with the IPP.

Relativity

30 In relation to the relativity / ladder of investment framework, we highlighted in our February Submission that it is not clear to Chorus how the Commission is interpreting the relativity requirement and the ladder of investment in light of the fact that:

30.1 as a result of the prices the Commission has set so far, unbundling has primarily occurred in high density urban exchanges;

30.2 a UBA price of $8.93 would only further deter investment in rural and cabinetised areas – and such a price would result in Chorus effectively creating a "price squeeze" in those higher cost areas; and

30.3 the Government's policy is to have an averaged UBA price, but relativity today needs to be considered against de-averaged urban and urban Layer 1 prices, and as against UCLL and SLU lines. From 2014, the Commission will still need to consider relativity as between averaged UBA prices and "de-averaged" UCLL and SLU lines.

31 Submissions from other industry participants have only served to highlight the confusion in the industry on how the Commission is applying the ladder of investment. For example:

31.1 during the UCLL process, RSPs argued that they intended to unbundle widely. But in submissions on UBA, they seem to suggest that unbundling is only relevant in high density exchange areas;

31.2 CallPlus & Kordia and Flip focus on setting a price for the high density, lower cost urban areas to reflect the build/buy choice that they face in those areas. However, there is no consideration given to the fact that Chorus offers services in higher cost areas, and the impact of a low UBA price on unbundling (or on Chrous' ability to recover costs) in those areas; and

31.3 CallPlus & Kordia state the risk of Telecom unbundling outside of urban areas (in other words, climbing the ladder of investment) presents a serious competition concern.

32 It will help all market participants, and inform the Review, if the Commission explores these issues in greater detail than it has to date.

TSLRIC pricing

33 A further theme in submissions from RSPs is the suggestion that TSLRIC modelling of the costs of the UBA service will be a simple exercise.

34 In its report *Costing issues in pricing the UBA*, CEG has considered what may be required in order to properly model the TSLRIC of the UBA service in New Zealand. CEG finds that there are number of complex issues that need to be worked through, including the spatial density factors, the sharing of network assets between services

giving rise to economies of scope (for example, the provision of voice services), and the technology that is used to model the provision of services.

35 These issues will inform any UBA pricing decision, and any wider consideration of the regulatory structure.

BENCHMARKING

36 In light of submissions received by the Commission we make the following points on benchmarking:

36.1 several submitters implicitly support our February Submission that line-density is a key cost driver of the UBA service;

36.2 forward-looking cost-based prices may include FDC based prices – the Commission should add the UK to the benchmark set immediately and carry out further work as to whether Spain and France should be added;

36.3 Belgium, Switzerland and Greece should be included in the benchmark set – there is no evidence that Denmark and Sweden are “more comparable to New Zealand” than other jurisdictions to a degree that justifies the risk of relying on a benchmark set of only two countries;

36.4 adjustments are required to the benchmark set - Belgium requires adjustment to account for density differences; and benchmarking needs to be against a weighted average price of the speed variants to account for cost-allocation, and adjusted for different line speed distribution in the relevant jurisdictions;

36.5 the price differential for Enhanced UBA services is not cost-based but there is support for the WIK proposal;

36.6 an adjustment to account for accelerated fibre migration is required;

36.7 none of these adjustments result in a UBA price above cost but rather they identify a cost reflective range;

36.8 we disagree with RSPs that the median or mean price point is appropriate. A higher price point is justified (for the reasons set out in Sapere’s 30 January report); and

36.9 Contrary to a number of submissions, there was no expectation that the UBA price would drop significantly as a result of the move to cost-based UBA pricing. As set out in our February Submission, there were a range of views put forward – including views that the UBA price could go up – but no expectation that the UBA price should or would drop.

Line density

37 In our February Submission we identified that the Commission had omitted from its benchmarking analysis one of the main cost drivers of the UBA service: line density. The focus has been on particular cost components, such as linecard port costs, and the central issue of per unit costs has been overlooked. This omission resulted in a material understatement of the UBA costs. CEG reported that adjusting for this omission alone resulted in a UBA cost of $14.19, an adjustment of $5.26.

38 The submissions the Commission has received from other industry stakeholders implicitly support our view that line density is a key cost driver. For example:

38.1 Telecom implicitly acknowledges the influence of line density on cost in the context of its discussion of the competition test in the UBA service description (which will tend to remove high line density / lower cost urban areas from the regulated service).[4] Telecom states:[5]

> *We expect that different geographic areas are likely to demonstrate different cost characteristics. In part, this is why unbundlers choose to primarily unbundle exchanges in urban areas.*

38.2 CallPlus & Kordia emphasise their concern at the possibility of Telecom moving to unbundle exchanges and cabinets nation-wide. In their view this would be a "significant threat to competition". This is because Telecom's scale will result in lower unit costs that CallPlus & Kordia believe they cannot match. In short, the per unit costs of providing the UBA service are not constant across geographic areas. Line density is significant – in the view of CallPlus & Kordia, determinative:[6]

> *If the UBA price is set artificially high we are therefore facing the prospect of Telecom as the dominant market provider being the only player with significant scale to have a viable alternative to Chorus UBA in cabinetised areas. If the dominant market player has a significantly lower cost base than its competitors, and is able to provide a significantly better service than the Chorus UBA service, there are serious implications for competition which are not in the long term interests of consumers.*

38.3 CallPlus & Kordia also emphasise that scale and utilisation matter when comparing their position with Chorus (albeit overlooking the conditions that Chorus faces outside the urban areas):[7]

> *Chorus with their much larger scale and higher utilisation would experience even lower costs than ourselves.*

38.4 Network Strategies identifies population density as relevant to the assessment of comparability.[8]

39 Of course, these submissions also supported a UBA price at the price level suggested in the Draft Determination. Parties suggested that a price of approximately $9 reflected

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4 CEG quantifies the significant potential impact on cost due to the removal of high density areas in its report *Costing issues in pricing the UBA*, page 15.

5 Telecom "Submission on UBA price review draft determination, 1 February 2013", paragraph 39.

6 Kordia & CallPlus "Unbundled bitstream access service price review, January 2013", paragraph 11.

7 Kordia & CallPlus "Unbundled bitstream access service price review, January 2013", paragraph 34.

8 Network Strategies "Benchmarking issues ibn the Unbundled Bitstream Access Draft Determination, 1 February 2013", page 8, exhibit 4.

the costs they experienced in providing the UBA service from unbundled exchanges. We do not endorse the RSPs' costs – we have had no visibility of how they have calculated their costs and what they have included. As we noted in our February Submission, Chorus faces multiple costs in providing a nationwide UBA service that are unlikely to be considered by RSPs who have unbundled a small number of high density urban exchanges.

40 Nonetheless, RSPs' experiences need to be seen in the context of line density being a significant cost driver. These submissions are from parties delivering the UCLL service only, or largely, in exchanges in urban areas where line density is highest. We would expect them to experience costs that are below the average cost of providing the service nation-wide in both exchanges and cabinets (which have lesser scale than exchanges).

41 The task in this process is to set a national average price. This will average across areas with high line density (and lower costs) and low line density (and higher costs).

Effect of fibre prices

42 We believe that international data points need to be adjusted to recognise the effect that the migration to the UFB network will have. As explained in our February Submission, in order to benchmark the forward-looking costs of the UBA service for New Zealand, an adjustment is needed to recognise the effect of migration to the UFB network, and the ceiling set by fibre prices, on the expected cost recovery on the copper network.

43 The per unit prices set internationally will have been set after considering forecast volumes. The combination of per unit prices and forecast volumes will result in the expectation that total forward-looking costs in each jurisdiction will be recovered.

44 In New Zealand, however, volumes on the copper network are expected to drop as migration to the UFB network occurs. This has not been factored into the international prices. If no adjustment is made, using these prices in New Zealand would result in an expectation of under-recovery of total costs.

45 The Commission cannot use the unadjusted international prices now, and commit to revising the unit price of the UBA service as volumes drop on the copper network. As explained in the CEG report *Effect of fibre on copper bitstream prices*, this would result in steeply rising copper prices. Consumers inside the UFB coverage area would avoid paying these prices by switching to fibre services, resulting in an expectation of under-recovery of copper costs. Consumers outside the UFB coverage area would face inequitably high copper prices.

46 As explained in the CEG report *Effect of fibre on copper bitstream prices*, the better solution is to make an adjustment now to the price path for copper services, so that the legislative standard of an expectation of recovering forward-looking copper costs is met.

47 This adjustment is relevant to the Commission's question as to whether section 18 could be used to set a price above the legislative cost base.[9] As explained in the CEG report *Pricing at the legislated cost*, benchmarking adjustments are directed at identifying a cost base consistent with the IPP rather than pricing above it. The adjustment for the effect of fibre prices is a good example: without this adjustment, there will not be an expectation that the prices set by the Commission will result in a price consistent with the IPP.

Forward-looking cost-based prices

Does "forward-looking cost-based pricing method" mean TSLRIC?

48 The three LFCs, relying on papers by CRA and Plum Consulting, submitted that there is no material difference between LRIC and FDC methodologies, and that the Commission was wrong to exclude benchmarks on that basis. CEG and Chorus agree with the LFCs' reasoning.

49 In their joint submission on the Draft Determination,[10] the LFCs said that:[11]

49.1 the literature cited by the Commission does *not* support its proposition that FDC approaches are not a reasonable proxy for TSLRIC; rather, CRA and Plum Consulting explain that the methods can yield similar outcomes;[12] and

49.2 even if FDC was not a good proxy for TSLRIC, it is still a "forward-looking cost-based pricing method" and the observations from France, Spain, Bahrain and the UK should therefore be included in the benchmark set.

50 CEG has considered this issue in the attached report *Forward-looking cost-based pricing methods*. The main findings from CEG's report are:

50.1 the LFCs' submission has merit. FDC methods that use a *current replacement cost methodology* (as opposed to historical costs) to derive the pool of costs to be distributed might reasonably represent "forward-looking cost-based pricing methods" within the meaning of the Act;

50.2 "forward-looking cost-based pricing method" could reasonably be read as encompassing FDC methods based on current costs as well as TSLRIC approaches. There is no reason in economics to construe the term "forward-looking cost-based method" as referring only to the latter. This is reinforced by the fact that, in practice, there may be few differences of economic significance between the two methods;

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9 Commerce Commission "UBA Price Review Draft determination, 3 December 2012", page 29.

10 Enable Networks Limited, Whangarei Local Fibre Company Limited and Ultrafast Fibre Limited "Joint Submission on Unbundled Bitstream Access Service Price Review Draft Determination Dated 3 December 2012, 1 February 2013", paragraphs 20 to 26 (hereafter: 'LFC Submission').

11 LCF Submission, paragraph 25.

12 CRA "Costing methodologies and incentives to invest in fibre, July 2012" (hereafter: 'CRA Paper') and Plum Consulting "Costing Methodology and Transition to Next Generation Access, a report for ETNO, March 2011" (hereafter: 'Plum Paper').

50.3 the extent to which a particular implementation of the FDC or TSLRIC methods represents current as opposed to historical costs – and is therefore "forward-looking" – can consequently vary from model-to-model. The Commission is drawing a bright-line distinction between two cost allocation methodologies that, in practice, may not be so readily distinguishable; and

50.4 the Commission should not make a blanket assessment that an FDC approach is not a "forward-looking cost-based pricing method". A careful case-by-case assessment of any given model is required.

51 CEG has undertaken an initial analysis of the approaches employed in the four jurisdictions referred to by the LFCs. CEG's preliminary views are that:

51.1 there is strong reason to think that it would be appropriate to include the UK price in the benchmark set as it is based on an FDC approach using current costs;

51.2 it is unlikely to be appropriate to include the Bahrain price in the benchmark set, since, according to the Commission, the FDC approach uses historical costs, and so would not represent a forward-looking methodology; and

51.3 there is insufficient information for CEG to offer even a preliminary view as to whether France and Spain should be included in the benchmark set – but, by the same token, there is not yet a sound basis to confidently exclude them.

52 We therefore believe that the Commission should:

52.1 include the UK in the benchmark set; and

52.2 carry out further investigation as to whether it would be appropriate to include France and Spain and investigate whether any other jurisdictions meet the definition of "forward-looking cost-based pricing method".

53 For any further data points to be added to the benchmark set (UK, France, Spain, Belgium, Switzerland, Greece, etc) the Commission would need to select an appropriate starting price that recovered all common costs, and make any required adjustments to the benchmarks for speed, line density and accelerated fibre migration.

Verified model

54 Greece and Switzerland were excluded in the Draft Determination because they were not verified by the regulator.

55 Vodafone's submission earlier in this process listed both Greece and Switzerland as observations that may satisfy the Commission's benchmark.[13] However, Vodafone has now aligned itself with the Draft Determination and supports the exclusion of Switzerland, Greece and Slovakia:[14]

[13] Vodafone "Submission on UBA Price Review, 24 August 2012", paragraph 31.

[14] Vodafone "Submission on UBA price review draft determination, 1 February 2013", paragraph 14.

For the purposes of benchmarking, we do not support reliance on cost models that have not been examined by the relevant regulator. Nevertheless, in its UCLL STD review the Commission did include Switzerland within its benchmark set (despite the fact that in Switzerland a cost model is prepared by the operator and may not be reviewed by the regulator).

56 However there are a number of reasons why these models are safe to use. In the case of Greece, the regulator has had involvement in the price setting process and we are not aware of any reason to suggest that the model is not reliable. The Swiss regulator has confirmed that ex-post price control has not been considered. We understand that regulatory verification of the Swisscom cost model could only occur in the case of a lawsuit, which has not occurred to date, suggesting the prices are perceived to be reasonable by affected parties.

Other comments

57 We have a number of technical comments to make regarding the data used or proposed by Analysys Mason and Network Strategies. In particular:

57.1 Analysys Mason used 2013 Belgium cost information in its summary (Figure 2.1: Prices of BROBA, ADSL/ADSL2+/Re ADSL without Voice). Some caution is appropriate here - because the 2013 model has not yet been publicly released we are unsure of its status;

57.2 Analysys Mason and Network Strategies both use Danish cost model version 4.1, when the approved pricing implemented for 2013 is version 4.2; and

57.3 we agree with Analysys Mason and Network Strategies that cost model version 9.1 for 2013 is the appropriate cost model to use for Sweden.

Comparable countries

58 Network Strategies has submitted that it is appropriate to use a small sample "if the small benchmark sample provides a closer match to New Zealand than that obtained with a larger randomly selected sample."[15] Denmark and Sweden are "certainly more comparable to New Zealand than many other jurisdictions, across a variety of relevant statistical measures" including teledensity, urbanisation and population density.[16]

59 Exhibit 4 of Network Strategies' report does not analyse any countries other than Denmark and Sweden. Nor does it assess comparability through a robust or empirical method.

60 We note that Network Strategies' use of factors such as population density impliedly supports our submission that line density is a cost driver. Nonetheless, comparability should be determined through proper evidence-based analysis, as was done in 2007 when setting the UCLL price, and as is suggested by CEG in the course of this review.

[15] Network Strategies "Benchmarking issues in the Unbundled Bitstream Access Draft Determination, 1 February 2013", page 7.

[16] Network Strategies "Benchmarking issues in the Unbundled Bitstream Access Draft Determination, 1 February 2013", page 8.

As we have noted in our February Submission and elsewhere in this submission, it is also important to make adjustments to benchmarks before comparing them to New Zealand. CEG has established that line density is an important cost driver for UBA through robust econometric analysis of Danish and Swedish cost models.

Similar services

Handover point

Belgium

61 In the Draft Determination the Commission excluded Belgium from the UBA benchmark set. In our February Submission we considered that Belgium should be included, and the submission from Analysys Mason has raised some new points which we consider below. We continue to support the inclusion of Belgium in the benchmark set.

62 The Commission originally excluded Belgium on the basis that the handover point is not sufficiently similar to UBA. We acknowledged the differences in handover (i.e. very little transport between the DSLAM and switch), but in our February Submission we considered that, in the circumstances and with appropriate adjustments,[17] Belgium should be included.

63 Analysys Mason has suggested that Belgium should be included without adjustment on the basis that a service in another country with a local aggregation switch which also has regional points of interconnect is comparable to UBA.

64 In light of Analysys Mason's submission, we have given further consideration to the similarity of Belgium's BROBA product with UBA. In our view the BROBA service handover point is similar to UBA in that it terminates at a FDS. The higher proportion of co-located DSLAMs and FDS is likely to be a product of the density characteristics in Belgium. Whilst this creates a significant difference in the relative levels of transport required between BROBA and UBA, the appropriate adjustment is not transport related, but density related. CEG has provided compelling evidence on line density as a cost driver and a robust method for adjustment.

65 We continue to support the inclusion of Belgium. We agree with Analysys Mason that including Belgium at the distant node level overstates UBA transport and the parent node level is more similar to UBA. We do not agree with Analysys Mason that no adjustment is required, as the co-location of DSLAMs and FDSs in Belgium is driven by density, which must be adjusted for.

66 Accordingly, it follows that the Belgium transport component, which is beyond the FDS, is not relevant for benchmarking UBA.

Hungary

67 In relation to Hungary, Analysys Mason proposes a method to adjust for retail-minus transport pricing between the DSLAM and FDS. We support the intent to increase the size of a small dataset. However, as noted above, the use of the Belgium transport charge is not appropriate for benchmarking UBA transport, as it is beyond the FDS.

[17] Chorus "Submission on UBA price review draft determination, 1 February 2013", paragraphs 80 to 82.

Removing Belgium places undue weight on Denmark as the only relevant benchmark to derive a transport charge for Hungary.

68 If the Commission determines that supplementing access-only benchmarks with derived transport charges is acceptable for benchmarking under the IPP, we believe a more robust approach is to use the UCLL Backhaul price (as discussed in our February Submission), which relies upon seven data points.

Speed

69 In our February Submission we suggested a different way for the Commission to model cost allocation in Denmark / Sweden. We reiterate our February Submission, and the RSPs' submissions have prompted us to further clarify this issue.

70 Higher speed prices contain a greater allocation of shared costs so only a weighted average of all speeds in Denmark / Sweden will recover shared cost. Analysys Mason has also correctly identified this error in the Draft Determination, and understood the need for a weighted average to capture all shared costs. However, Analysys Mason does not appear to have considered the line speed difference between the benchmark countries (Denmark and Sweden) and UBA, and has therefore stopped short of fully adjusting for speed as suggested by WIK. We consider that the approach proposed by WIK is still required, to ensure comparability of line speeds. If the need to ensure comparability of line speeds is not accepted, then the Commission should select the starting prices recommended by CEG, to capture the common cost component of current costs.

71 Kordia & CallPlus have made several points that relate to handover dimensioning, and suggested that Chorus is somehow gaming the regulated UBA service. We do not consider these comments to be relevant to the current benchmarking process. Chorus provisions more than sufficient bandwidth for best efforts and real-time traffic across the Local Aggregation Paths (**LAP**). Our Service Provider Guide sets out the following:[18]

> *Each End User is located in a Coverage Area. The End User traffic from numerous DSLAMs in a Coverage Area is carried to the Handover Point over LAP dimensioned to support the throughput rate for Enhanced UBA of both Best Efforts and Real Time traffic.*
>
> *Where a Service Provider does not wish to (or is unable to) collect UBA traffic from the Local Handover Point and wishes to transport the traffic to a Remote Handover Point where they have already established a Handover Link, they may do so using:*
>
> (a) *Tail Extension feature, or*
>
> (b) *Point to Point Backhaul, or*
>
> (c) *UBA Backhaul, or*

[18] Enhanced UBA Service Provider Guide, 21 September 2012, page 11.

(d) *Third party transport.*

72 Chorus' approach to handover capacity is in line with the countries being considered during this benchmark process.

Scope of service

73 The submission by Kordia & CallPlus misunderstands the scope of service. Specifically, they have argued that:

73.1 Denmark and Sweden deploy a voice/broadband linecard solution, whereas Chorus just deploys broadband cards – doubling capacity and halving their costs; and

73.2 port cost is the relevant network cost for benchmarking UBA.

74 In response CEG has looked into this in its report *Costing issues in pricing the UBA*. CEG notes that the sharing of network assets between services gives rise to economies of scope, meaning that unit costs can be reduced. In the benchmarked models many of the assets used to provide the UBA increment are also utilised in the provision of voice services. In New Zealand, Chorus does not carry significant voice traffic over the section of its network between the DSLAM and the first data switch – instead Chorus provides inputs that RSPs can use to provide voice services and resells Telecom's local access and calling service as an agent.[19] This means that Chorus has a reduced ability to spread cost across voice services compared to carriers in the benchmark jurisdictions, which will have a tendency to raise the costs of providing the UBA increment in New Zealand relative to other jurisdictions. That is, the absence of significant voice traffic on Chorus' network means the benchmarked UBA price should be adjusted upwards - the opposite of the Kordia & CallPlus argument.

EUBA

75 In our February Submission we noted that the Swedish price differential was not cost-based. Analysys Mason makes a similar point, as well as suggesting that basing calculations on a business variant (Bitstream Pro) is not appropriate. As we said in our earlier submission, identifying cost-based CoS differentials at the wholesale level is a challenge.

76 As no cost-based information has been found, the WIK approach (section 4.5.4) is appropriate.[20] Analysys Mason also supports this approach.[21] Applying the existing percentage uplifts for EUBA 40/90/180 to a new cost-based BUBA price is pragmatic and consistent in the circumstances. We see no reason to replace the existing (retail-based) EUBA price differentials with another set of retail-based price differentials.

[19] Chorus will shortly launch a new product (Baseband IP) which will be capable of carrying a voice service from an RSP soft switch to an end user's existing connection point. The product will be available at launch on 10% of cabinetised lines in the network utilising a new linecard installed in those cabinets. Once Baseband IP has been launched, Chorus will carry some voice traffic on some of these lines, depending on take-up of the service.

[20] WIK-Consult "Comments to the bitstream price benchmarking cost methodology, 10 October 2012", page 30.

[21] Analysys Mason "Comments on UBA service benchmarking review, 30 January 2013", page 8.

Price point selection

77 Some submitters (for example Telecom[22] and Vodafone[23]) argue that section 18(2A) does not allow prices to be set above "cost". We believe a more subtle point is crucial – the range consistent with the IPP is reached *after* all necessary adjustments are made.

78 When selecting a price point it is necessary that the correct range of forward-looking costs is identified as a result of making any necessary adjustments to ensure comparability. Only after all necessary adjustments have been made can the benchmark set be said to reflect the IPP and represent a meaningful range.

79 In summary, it is not the case that adjustments result in a price:

79.1 above the IPP permitted in the Act; or

79.2 outside the benchmarked range.

80 Rather, adjustments result in a range that reflects the IPP. CEG has considered this issue in the attached report *Pricing at the legislated cost*. CEG considers both adjustments in general, and as an example the adjustment to recognise the effect of the fibre rollout and fibre prices. We summarise CEG's advice on the fibre price adjustment below.

A price above the IPP permitted in the Act

81 CEG's view is that the recommended accelerated fibre migration adjustment would *not* increase the price above the IPP permitted in the Act, because:

81.1 the benchmarking exercise is meant to arrive at prices that allow recovery of the forward-looking costs. Therefore a price that would not allow recovery of the current costs of the UBA service in New Zealand would be inconsistent with the IPP in the Act;[24]

81.2 benchmark prices are a single (current) year price, set at a level that will ensure that over the life of the assets the current costs of the assets will be recovered;[25]

81.3 the particular benchmarks selected by the Commission (i.e. Denmark and Sweden) do not account for any expected reduction in demand or take into account any constraint on future copper prices that would arise from a fibre deployment such as is occurring in New Zealand;

[22] Telecom "Submission on UBA price review draft determination, 1 February 2013", paragraph 42.

[23] Vodafone "Submission on UBA price review draft determination, 1 February 2013" paragraph 12.

[24] Commerce Commission "Revised Draft Determination on the Benchmarking Review for the Unbundled Copper Local Loop Service, 4 May 2012", page 25: "*Consistent with the forward-looking requirement of the IPP, the benchmarked prices are required to be based on current costs.*"

[25] In fact, the current price is the first year in a price path or price trend that if followed will recover the current replacement value of the network given expected demand.

81.4 as a result, without CEG's proposed adjustment for fibre migration and the effect of fibre prices, the benchmarked price would not allow recovery of the current costs of the UBA service in New Zealand and therefore would be inconsistent with the IPP in the Act; and

81.5 with the proposed adjustment, the price path set for UBA would be consistent with the IPP in the Act – i.e. pricing is not above cost.

A price outside the benchmark range

82 CEG's view is that the recommended fibre price adjustment would *not* involve setting prices outside the range of the benchmarks that are consistent with the IPP, because:

82.1 the Commission must benchmark prices from comparable jurisdictions;

82.2 CEG's proposed adjustments are required to ensure that the single year prices identified in the benchmarks are comparable to the New Zealand circumstances:

(a) with respect to the recommended fibre price adjustment, the specific benchmarks identified by the Commission are prices that do not take into account the effect of a fibre deployment such as is occurring in New Zealand; therefore an adjustment is required to the benchmarks to establish a range that is consistent with the IPP (i.e. one that sets a price that will allow expected recovery of the legislated cost base); and

(b) once all appropriate adjustments are made the Commission can pick a point within the range of benchmarks that is relevant and comparable to New Zealand. The Commission's approach to determining the UCLL price in its recent price review (including the use of econometric adjustments for population density to ensure comparability with New Zealand) is a precedent for this.

83 It follows that Telecom and Vodafone are wrong to submit that it is not consistent with the IPP for prices to be set outside the initial (unadjusted) benchmark range. In fact, it may not be consistent with the IPP for prices to be set *inside* the initial (unadjusted) benchmark range, because to do so would be to set prices with reference to non-comparable countries.

Asymmetric risk

84 RSPs have argued that the median (or mean) price point in the set should be selected. While RSPs have considered the impact on RSP investment in DSLAMs, they have not considered the impact on investment by access providers in network infrastructure. They have therefore omitted a significant material factor in the analysis. Once this factor is taken into account, it follows that the correct price point to select is one higher than the median, for the reasons noted by Sapere in its 30 January report on section 18.[26]

[26] Sapere "Comment on how to best give effect to the purpose of Section 18 in relation to UBA pricing, 30 January 2013".

The tight grouping of benchmark prices

85 In its submission, Analysys Mason presents four raw benchmark prices that are closely aligned and suggests that the Commission can take comfort from this observation. Telecom further suggests that the spread of these benchmarks is indicative of the contained nature of the UBA service, using elements that are all sourced from international providers. It asserts that the similarity in raw benchmark prices is therefore not surprising.

86 CEG has considered this issue in its report *Costing issues in pricing the UBA*. CEG concludes that:

86.1 aside from being internally inconsistent, Telecom's submission assumes away the possibility that the underlying unit costs of providing the UBA increment may differ between benchmark jurisdictions and abstracts from the complexities of modelling the UBA. We show that there are likely to be significant cost differences between the benchmark jurisdictions, and significant cost differences between these jurisdictions and New Zealand; and

86.2 in light of these differences, no comfort can be taken from a narrow range of raw benchmark prices. The range of benchmark prices when adjusted for expected differences in underlying cost between the benchmark jurisdictions and New Zealand is what is relevant. This represents an application of the IPP that is consistent with the objective of approximating the outcome of the FPP.

Currency conversion

87 In its report, Network Strategies advocates the use of PPP rates alone for currency conversion, as opposed to a blend of PPP rates and market exchange rates.[27]

88 We agree that the use of a blend of PPP rates and market exchange rates is not the best method for currency conversion. However, we consider that a better currency conversion method would involve a blend of sectoral PPPs which accurately reflects the mix of cost components in the UBA service. As noted by CEG in a June 2012 report, this method is less distorting than the use of PPPs for GDP as a whole.[28]

CONNECTION AND TRANSFER CHARGES

89 Parties have acknowledged that the size of the benchmark set for determining connection and transfer charges is problematic. We favour using a "cost-plus" approach by looking at the substantial market-tested data on Chorus' costs. In their submissions Telecom and Analysys Mason have made suggestions which we believe favour this approach, and we believe that it is a path which is open to, and has been used by, the Commission. We want to engage with the Commission on this proposal.

[27] Network Strategies "Benchmarking issues in the Unbundled Bitstream Access Draft Determination – Final report for Vodafone, 30 January 2013", page 12.

[28] CEG "Benchmarking UCLL prices for New Zealand – A report for Chorus, June 2012".

90 If, following consultation on the "cost-plus" approach, the Commission decides to proceed with benchmarking connection charges, then a number of adjustments need to be made, as outlined in our February Submission.

Cost-plus approach to connection and transfer charges is preferable

91 Telecom's and Analysys Mason's submissions raised issues with benchmarking the connection and transfer charges given the paucity of benchmarks and comparability concerns. Telecom considers that for some charges it is not sound to use benchmarking. Analysys Mason suggests that given the risks of over or under recovery that the Commission cross-check the accuracy of the benchmark price by using a price based on the actual market price for the service in New Zealand, with a reasonable mark-up for management/supervisory/procurement overhead expenditure by Chorus. In our view this supports our proposal that it would in fact be preferable to adopt a "cost-plus" approach.

92 In its submission Telecom also suggests certain changes to UBA connection charges. Specifically for service components 1.3a through to 1.3d (wiring and modem installation), Telecom implies that these services could in theory be provided by any provider and could therefore be considered "sundry" services and have "current prices checked against cost."[29] We agree with this view, and consider that it is worthwhile more broadly considering some charges as sundry in order to determine them based on cost and not the limited benchmark set.

93 In the past the Commission has made a distinction between "sundry" and "core" charges in a pragmatic way. There is no legal requirement for the distinction, and the concepts of sundry and core charges are not in the Act. In the original UBA STD the Commission simply stated: "[t]he Commission considers that Core charges comprise the following general categories".[30]

94 We understand that the Commission considers that core charges should be benchmarked in accordance with the IPP.[31] Sundry charges are set by reference to costs. However, it seems that benchmarking is not necessarily always used even in the case of core charges. The Commission has historically taken a pragmatic approach. For example, when determining the UCLL co-location monthly rental charge (Decision 672), the Commission recognised that the benchmark set was too small and used Telecom's costs instead:[32]

> *The Commission noted that similar cabinet co-location services were only available in a small number of countries, and that there was not a consistent*

29 Telecom "Submission on Unbundled Bitstream Access Review, 1 February 2013", page 16.

30 Commerce Commission "Standard Terms Determination for the designated service Telecom's unbundled bitstream access, Decision 611, 12 December 2007", paragraph 128.

31 Commerce Commission "Standard Terms Determination for the designated service Telecom's unbundled bitstream access, Decision 611, 12 December 2007", paragraph 129 and Commerce Commission "Draft determination: Unbundled Bitstream Access Service Price Review, 3 December 2012", paragraph 141.

32 Commerce Commission "Standard Terms Determination for the designated services of Telecom's unbundled copper local loop network service (Sub-loop UCLL), Telecom's unbundled copper local loop network collocation service (Sub-loop Co-location) and Telecom's unbundled copper local loop network backhaul service (Sub-loop Backhaul), Decision 672, 18 June 2009", paragraph 183.

approach for determining co-location charges. Rather than directly benchmarking co-location rates, the Commission noted that such rates were typically related to the space used by Access Seekers, and that the equivalent unit of space in Distribution Cabinets in New Zealand is the Rack Unit. Therefore, the Commission considered information supplied by Telecom on the cost of building and installing Distribution Cabinets, and determined a recurring monthly co-location charge per Rack Unit, based on these costs.

95 The Commission has exercised judgment in assessing whether core charges must be benchmarked and in classifying certain charges as sundry. That should be done on a pragmatic basis, as it has historically. The problems with there being a limited benchmark set are avoidable. Analysys Mason has said that "benchmarking these charges against other jurisdictions, especially when the benchmark is based on only a few countries, has a risk of either under-recovery or over-recovery".[33] Moving to a cost-plus basis for these charges will allow for accurate prices to be set.

96 Concerns raised in submissions support the issues Chorus also noted with benchmarking connection and transfer costs. Overall we consider these submissions support a "cost-plus" approach rather than the benchmarking of these charges. In particular:

96.1 Analysys Mason suggests the inclusion of Belgium to the benchmarking set used for connection and transfer charges. However, even with the inclusion of Belgium, Analysys Mason generally only proposes the use of two benchmarks for the relevant item given comparability issues;

96.2 none of the countries offer options with modem included;

96.3 few prices directly reflect the "with port change"/"without port change" distinction used in New Zealand; and

96.4 some of the benchmarks the Commission has chosen are not the best available.

97 Analysys Mason suggests that the Commission cross-check the accuracy of the benchmark price by using a price based on the actual market price for the service in New Zealand with a reasonable mark-up for management/supervisory/procurement overhead expenditure by Chorus. This seems unnecessary when the actual market price (with adjustments for administration costs and an appropriate margin) could be used to set the accurate price.

98 Telecom suggests that Analysys Mason's benchmarking suggestion should not be used for change of plan services. Telecom agrees with our position that the benchmark data is substantially different to the known costs which apply in New Zealand.

Lack of clarity in the Draft Determination on connection charges

99 Vodafone notes that there are three different connection charges relating to connections today ("connection only", "connection and wiring" and "connection, wiring and modem installation") and that the Draft Determination's impact on these connection charges is

[33] Analysys Mason "Comments on UBA service benchmarking review, 30 January 2013", page 9.

not clear. Vodafone requests the Commission clarify any changes to charges and considers that a consolidation into one single price would be a significant departure from the status quo that would require further consultation.

100 CallPlus & Kordia submit that the Commission has only changed one of the connection charges and as this is not the only charge they also seek clarification on whether the intention was consolidation or there was no change to the other charges.

101 We agree with both of these submissions, as set out in our February Submission we are unclear as to the Commission's intentions. In particular, if there was an intention to consolidate connection charges then further consultation would be required. Chorus needs to recover the costs of the actual connection and transfer services that it provides. If the Commission intends to benchmark prices for connection and transfer services then it should benchmark services that are comparable to what we provide today. If the Commission was to consolidate connection charges then it would need to ensure that the relevant charge recovered all of the costs of the services Chorus provides.

Telecom's proposed changes to the service definitions

102 Telecom submits that connection charges should seek to signal the efficient costs of connection services or premises and ensure the costs are born by the party most able to manage those costs or act on the cost signals. We agree with this statement in principle. However, we do not agree that this is the effect of the changes Telecom proposes to the structure of the connection and transfer charges or that these are minor amendments. Instead Telecom's proposed changes would significantly change today's charging structure, would leave Chorus exposed to costs driven by RSP/end-user changes, and are otherwise unnecessary.

Initial premises connection charges

103 Telecom proposes that connection charges only be permitted for the initial connection to the network. Premises connection related charges which are shared by UCLL, UBA and UCLFS need to apply to an initial service.

104 We note that:

104.1 where UBA is ordered standalone or later added to UCLFS that the UBA STD sets out the relevant charges; and

104.2 where UCLFS is ordered standalone, UCLFS and UBA are ordered together or UCLFS is added to an existing UBA connection that the UCLFS STD sets out the relevant charges.

105 While UCLL or UCLFS may have been (or may still be) in place on the relevant copper pair, if UBA is later ordered, a "without site visit" (Exchange or Cabinet Visit) as defined in our February Submission will still be required to connect the port at the exchange or cabinet (remote or exchange/cabinet only) if the copper pair is connected to the lead-in and the lead-in is connected to the premise wiring. In addition, if UCLL or UCLFS were in place there may still need to be a site visit to install a splitter (if wiring was ordered) or connection and wiring which would require an additional truck roll.

106 However, we do agree with Telecom that there are situations where an existing UBA connection remains intact and only a remote connection is required. In this situation we agree that Chorus will incur administration charges that should be allowed to be recovered. This is consistent with our proposal for a “new connection only without site visit” – “Remote Connection” - charge to be added to the Price List.

107 We also note that a copper pair may be relinquished by an end-user or RSP. If a copper pair is not in use and it is not reserved to enable completion of an active request for a particular RSP or end-user and it may instead be used for another end-user premise. It would not be efficient for Chorus to leave premises connected in case the copper was required for a particular end-user if it could be used elsewhere, particularly in the context of UFB investment in fibre and in future end-users may migrate to fibre and no longer require a copper connection. If RSPs wished to “reserve” a copper pair in this way they have the option of maintaining the circuit by continuing to pay a monthly rental fee. A site visit may therefore be required to either:

107.1 reconnect premises wiring disconnected from the ETP; or

107.2 reconnect a disconnected lead-in if there was no longer any service on the line and Chorus should be able to recover these costs.

108 Accordingly, we disagree with the proposal that a connection charge should only be applied the first time a premise is connected to the network (or reconnection from an alternative network).

109 Telecom’s proposed definition for “UBA Service New Connection” also only refers to connection to the ETP. There are other places where the copper pair may require connection or reconnection – for example the pillar, building frame or the cabinet – that the new connection charge needs to cover.

Other changes not necessary

110 Changes are also not necessary if the correct connection service is ordered as Chorus has defined in our February Submission. RSPs have a relationship with the end-user (e.g. through the end-user’s current active phone line) and can contact the end-user which better enables the RSP to understand their likely requirements. We understand that this is not fool proof and situations will arise where the connection activity will differ from what is ordered but this remains the best source of information available to RSPs.