

Unbundled Bitstream Access Price Review Consultation

Proposed amendment to the Unbundled Bitstream Access Standard Terms Determination made under s30R of the Telecommunications Act 2001, as required by s77 of the Telecommunications (TSO, Broadband, and Other Matters) Amendment Act 2011

Discussion paper

Date: 26 July 2012

Confidential material in this report has been removed. Its location in the document is denoted by [].

Purpose

1. This paper sets out the Commission's proposed approach to the price review of the unbundled bitstream access standard terms determination (**UBA STD**)¹ required by the Telecommunications (TSO, Broadband, and Other Matters) Amendment Act 2011 (**Amendment Act**).
2. Submissions on the Commission's proposed approach as set out in this discussion document are due by **5 pm on Friday, 24 August 2012**. Cross-submissions will then be due by **5 pm on Friday, 7 September 2012**. Following receipt of submissions, the Commission will prepare a draft determination for further consultation.

Summary

3. This price review is required by s77 of the Amendment Act, and is limited to making only those changes necessary to implement the new forward-looking cost-based benchmarking approach to unbundled bitstream access (**UBA**) pricing. The new forward-looking cost-based prices set by this review will come into effect on 1 December 2014.²
4. The Amendment Act changed the initial pricing principle from a retail-minus based price to a forward-looking cost-based price. The new initial pricing principle for UBA is:³

The price for the designated access service entitled Chorus's unbundled copper local loop network, plus benchmarking additional costs incurred in providing the unbundled bitstream access service against prices in comparable countries that use a forward-looking cost-based pricing method

5. The price for the service *Chorus's unbundled copper local loop network*⁴ is set under the unbundled copper local loop (UCLL) standard terms determination (the **UCLL STD**).⁵
6. The Commission must therefore benchmark the additional costs incurred in providing the UBA service.
7. In determining the price of the UBA service, the Commission must consider the relativity between the UBA service and Chorus's unbundled copper local loop network services.⁶

¹ *Chorus' unbundled bitstream access standard terms determination* (Commerce Commission Decision 611, 12 December 2007).

² See s77 of the Amendment Act.

³ Schedule 1 of the Telecommunications Act 2001, Chorus's unbundled bitstream access, Initial pricing principle applicable after the expiry of 3 years from separation day.

⁴ Schedule 1 of the Telecommunications Act.

⁵ *Standard Terms Determination for the designated service Chorus's unbundled copper local loop* (Commerce Commission Decision 609, 7 November 2007) (the **UCLL STD**).

⁶ Schedule 1 of the Act, service description *Chorus's unbundled bitstream access*, Additional matters that must be considered regarding application of section 18.

Statutory framework

8. The following paragraphs describe the statutory context of this price review, including:
 - 8.1 The reasons for and scope of this price review
 - 8.2 The requirements of the new initial pricing principle
 - 8.3 The additional considerations the Commission must take into account when determining a price for the UBA service, including relativity with the unbundled copper local loop service and Sections 18 and 19 of the Act
 - 8.4 A description of the regulated UBA service.

Scope of this UBA price review

9. The scope of this review is limited. The Amendment Act introduced a new forward-looking cost-based pricing principle for the UBA service, to have effect from 1 December 2014.⁷ The Amendment Act requires the Commission to make reasonable efforts to calculate the price that will apply from 1 December 2014 by no later than 30 November 2012.⁸
10. Section 76 of the Amendment Act limits the Commission's review to implement the new forward-looking cost-based initial pricing principle. In all other respects, the Commission's power to conduct a s30R review are suspended in relation to the UBA service until 3 years from Separation Day.⁹
11. Consequently, the Commission will not as part of this review be considering any amendments to the price or the terms of the UBA STD that are not necessary for implementing the new initial pricing principle.
12. Parties may still seek a price review in accordance with the final pricing principle.

New forward-looking cost-based Initial Pricing Principle

13. The Amendment Act changed the initial pricing principle from a retail-minus based price to a forward-looking cost-based price, and required the Commission to determine the new forward-looking cost-based price for the UBA service to have effect from 3 years from separation day:¹⁰

The price for the designated access service entitled Chorus's unbundled copper local loop network, plus benchmarking additional costs incurred in providing the

⁷ Section 77 of the Amendment Act requires that the new pricing having effect from three years from the separation of Telecom Corporation of New Zealand Limited (**Telecom**). Telecom separated into new Telecom and Chorus New Zealand Limited (**Chorus**) on 30 November 2011.

⁸ Ibid.

⁹ Section 76 of the Amendment Act. This includes a pricing review to assess applications for residual determinations under s30V, a reconsideration of the determination and a Schedule 3 investigation into changing or removing the service

¹⁰ Schedule 1 of the Act, Chorus's unbundled bitstream access.

unbundled bitstream access service against prices in comparable countries that use a forward-looking cost-based pricing method

14. The price for the service *Chorus's unbundled copper local loop network*¹¹ is set under the unbundled copper local loop (UCLL) standard terms determination (the **UCLL STD**).¹²
15. To determine the additional (forward-looking) costs of providing the UBA service in accordance with the initial pricing principle, the Commission must identify a benchmark set of:
 - 15.1 comparable countries
 - 15.2 using a forward-looking cost-based methodology
16. The UBA initial pricing principle does not expressly require the Commission to compare the UBA service against similar services, unlike the benchmarking provisions for other cost-based services, such as UCLL and MTAS. We have found nothing in the public record explaining the omission. In the Commission's view, it is implicit that the Commission must benchmark against services that are consistent with the UBA service description in Schedule 1 of the Act.

Question:

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

17. The initial pricing principle is a proxy for the final pricing principle. It is intended to provide a cost-effective and timely approach for determining the cost-based price of a service that would be determined using the final pricing principle. The final pricing principle is:¹³

The price for Chorus's unbundled copper local loop network plus TSLRIC of additional costs incurred in providing the unbundled bitstream access service.

18. The Commission must therefore seek to determine a price for the UBA service that will reflect a TSLRIC cost.
19. The new forward-looking cost-based price must also be geographically-averaged:¹⁴

¹¹ Schedule 1 of the Telecommunications Act.

¹² *Standard Terms Determination for the designated service Chorus's unbundled copper local loop* (Commerce Commission Decision 609, 7 November 2007) (the **UCLL STD**).

¹³ Ibid.

¹⁴ Ibid, clause 4A

4A Application of pricing principles for Chorus’s unbundled copper local loop network and Chorus’s unbundled bitstream access

In applying the initial pricing principle or the final pricing principle for the following designated services, the Commission must determine a geographically averaged price:

- (a) Chorus’s unbundled bitstream access service
- (b) Chorus’s unbundled copper local loop network service

20. Relativity is an additional condition which must be considered as part of the application of section 18.

Additional conditions – relativity

21. In determining the price of the UBA service, the Commission must have regard to the relativity between the UBA and the UCLL services:¹⁵

<i>Additional matters that must be considered regarding application of section 18</i>	The Commission must consider relativity between this service and Chorus’s unbundled copper local loop network service (to the extent that terms and conditions have been determined for that service)
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22. UCLL and UBA are alternative regulated services which enable access seekers to deliver telecommunications services to end-users. Consideration of relativity is necessary to ensure that the prices for UCLL and UBA are set at a level that encourages economically efficient investment in unbundling, the so-called “ladder of investment”.
23. In that context, the geographically-averaged price for UCLL does not come into effect until three years from separation day; the geographically averaged price for UBA came into effect immediately for new lines for all access seekers (and for all new and pre-existing Telecom lines),¹⁶ with a geographically de-averaged price for existing lines grandfathered until 3 years from separation day.¹⁷ Both the UCLL price and the UBA price will be geographically averaged – and cost-based – when the determination resulting from this s30R price review comes into force.

Question:

- 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?

¹⁵ Schedule 1 of the Act, service description *Chorus’s unbundled bitstream access*, Additional matters that must be considered regarding application of section 18. It is clear from the record and the Amendment Act that the relativity criterion remains a component of Commission decision-making in regard to the UBA service. See, for example, the regulatory impact statement, *Regulatory issues resulting if Telecom becomes a partner in the ultra-fast broadband initiative* [2011] MED114047, at para. 16.

¹⁶ The Commission was required to set a geographically-averaged price for the UBA service for new lines as part of its review completed prior to the separation of Telecom. A revised UBA STD reflecting this requirement was issued on 24 November 2011, and came into effect on 1 December 2011.

¹⁷ See ss76-79 of the Amendment Act.

Additional considerations

Purpose of Part 2 of the Act as set out in sections 18 and 19

24. In making the determination for this price review, section 19 of the Act directs the Commission to reach a decision in accordance with section 18:

18 Purpose

- (1) The purpose of this Part and Schedules 1 to 3 is to promote competition in telecommunications markets for the long-term benefit of end-users of telecommunications services within New Zealand by regulating, and providing for the regulation of, the supply of certain telecommunications services between service providers.
- (2) In determining whether or not, or the extent to which, any act or omission will result, or will be likely to result, in competition in telecommunications markets for the long-term benefit of end-users of telecommunications services within New Zealand, the efficiencies that will result, or will be likely to result, from that act or omission must be considered.
- (2A) To avoid doubt, in determining whether or not, or the extent to which, competition in telecommunications markets for the long-term benefit of end-users of telecommunications services within New Zealand is promoted, consideration must be given to the incentives to innovate that exist for, and the risks faced by, investors in new telecommunications services that involve significant capital investment and that offer capabilities not available from established services.
- (3) Except as otherwise expressly provided, nothing in this Act limits the application of this section.
- (4) Subsection (3) is for the avoidance of doubt.

Question:

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

Description of the regulated UBA service

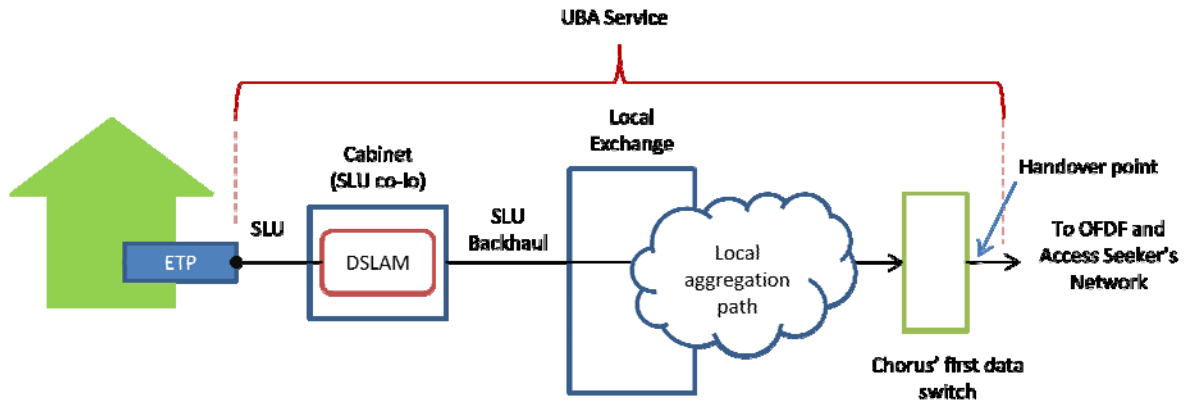
25. An overview of Chorus's unbundled bitstream access service (the **UBA service**) and its major components are set out below.
26. The UBA service is described in the Act as:¹⁸

A digital subscriber line enabled service (and its associated functions, including the associated functions of operational support systems) that enable access to, and interconnection with, that part of a fixed PDN that connects the end-user's building (or, where relevant, the building's distribution frame) to a first data switch (or equivalent facility), other than a digital subscriber line access multiplexer (DSLAM).

¹⁸ Schedule 1 of the Act, Chorus's unbundled bitstream access service description.

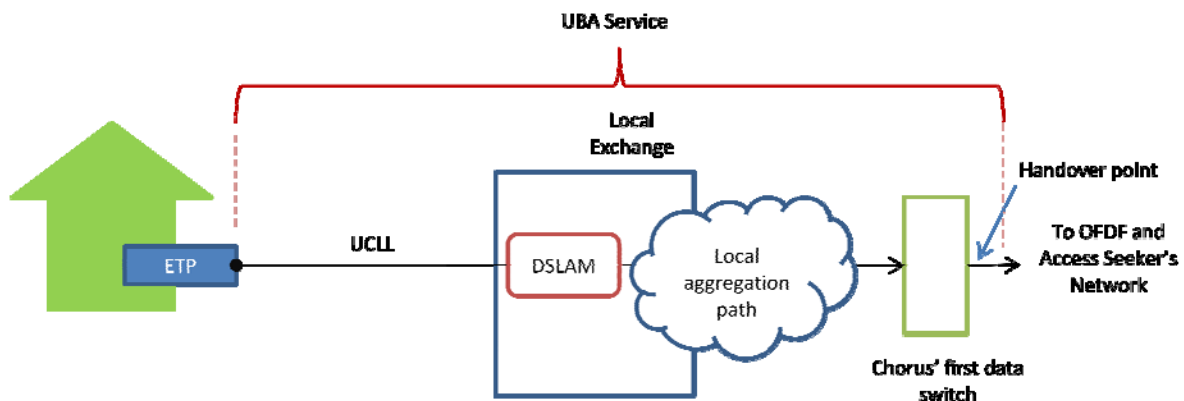
27. The UBA service is regulated in accordance with the UBA STD issued by the Commission. It is provided in two ways. Over cabinetised lines, UBA is provided from the cabinet (cabinet-based UBA) as follows:

Figure 1: UBA over cabinetised lines



28. Over non-cabinetised lines, UBA is provided from the exchange (exchange-based UBA) as follows:

Figure 2: UBA over non-cabinetised lines



29. The UBA service is a digital subscriber line enabled service that enables access to, and interconnection with, that part of Telecom's fixed PDN that connects the end-user's building to Telecom's first data switch (or equivalent facility) other than a DSLAM. In the UBA STD, 4 variants were specified:

- 29.1 Basic UBA¹⁹
- 29.2 Enhanced UBA 40kbps
- 29.3 Enhanced UBA 90kbps
- 29.4 Enhanced UBA 180kbps

¹⁹ This includes EUBA0; see the *Final Clarification of the Standard Terms Determination on Chorus's Unbundled Bitstream Access service* (Commerce Commission Decision 746, 19 December 2011).

30. Each variant of the UBA service was also available with and without POTS.
31. The basic UBA (BUBA) service was specified with a single class of service, internet grade FS/FS service. The table below outlines the metrics the BUBA service must achieve:

Metric	Specification (1500 byte packet)
Throughput	99.9% probability of providing to any provisioned End User a minimum uplink and downlink average throughput of 32kbps during any 15 minute period on demand
Mean one-way packet delay	< 1 sec
One-way packet delay variation	Unspecified
One-way packet loss ratio	Unspecified

32. The enhanced UBA (EUBA) services were differentiated by having two classes of service, one an internet-grade service and the other a real-time class of service where packets could be tagged. The table below outlines the metrics that the Enhanced UBA Services must achieve:

Metric	Notes:	Real time CoS (200 byte packet)	Internet CoS (1500 byte packet)
Throughput	kbit/s	= 40kbit/s or 90 kbit/s or 180kbit/s	99.9% probability of providing to any provisioned End User a minimum uplink and downlink average throughput of 32kbps during any 15 minute period on demand
Mean one-way packet delay	Interleaving HIGH Interleaving LOW	<50ms <25ms	<1s <1s
One-way packet delay variation	Milliseconds	<10ms	Unspecified
One-way packet loss ratio	Interleaving HIGH	<0.1%	Unspecified

33. The service descriptions for the basic UBA service and the enhanced UBA services are set out in Schedule 1 of the UBA STD, and in Attachment 1 to this discussion paper.

Benchmarking the additional costs of providing the UBA service

34. In order to determine the “additional costs incurred in providing the unbundled bitstream access service,”²⁰ the Commission must undertake a benchmarking exercise. Where the benchmarked service includes the equivalent of the unbundled copper local loop in its cost, the Commission will need to deduct that component in order to determine the comparable additional costs of providing the UBA service.
35. We propose to conduct the benchmarking exercise as follows:
- 35.1 Identifying services, or service components, similar to the UBA service²¹
 - 35.2 Assessing whether the countries set forward-looking cost-based prices
 - 35.3 Identifying whether the countries are comparable
 - 35.4 Adjusting the benchmark set (as necessary) and selecting an appropriate price point within the benchmark
 - 35.5 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.

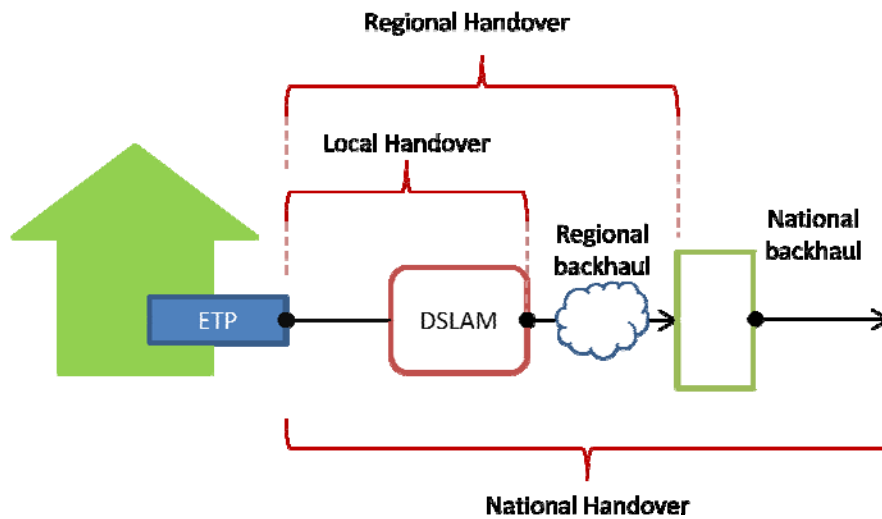
Similar services and service components

36. The Commission considers that a major differentiator between the New Zealand UBA service and wholesale bitstream access services in other countries is likely to be the location of the hand-over point, which may be local, regional, or national (see diagrammatic representation in Figure 3, below). The Commission considers that these services would still be sufficiently similar for benchmarking purposes, but may need to take into consideration the differences in cost arising from the backhaul to the hand-over point.
37. We consider that the UBA service may be benchmarked against each of these comparable services where they meet the other benchmarking criteria (that is, are from a comparable country and are based on a forward-looking cost-based price). Adjustments may be necessary to address any major cost differences between them (ie, the additional backhaul costs to deliver the service from the DSLAM to the point of hand-over).

²⁰ Schedule 1 of the Act

²¹ The service description does not have the usual requirement that the Commission benchmark against “similar services”.

Figure 3: wholesale bitstream access hand-over points



38. Similarly, while UBA is a copper-based service, our preliminary view is that the additional costs in providing UBA is largely comparable with fibre-based services with similar speeds and contention.²² For example, regulated UBA is, in the case of cabinetised lines, provided in part over fibre (from the cabinet to the exchange). The additional costs of providing the UBA services are likely to be comparable across fibre and copper networks.

Forward-looking cost-based prices

39. The initial pricing principle requires that the UBA service be determined with reference to countries that set a forward-looking cost-based price. This includes TSLRIC prices (reflecting the final pricing principle of the UBA service). The Commission has previously accepted models based on a LRIC+ or LRAIC methodology as being equivalent to TSLRIC, on the basis that these methodologies estimate forward-looking costs over the total service increment, and include a reasonable allocation of common costs.²³

Comparable countries

40. The Commission must benchmark the UBA service against the forward-looking cost in comparable countries.
41. At this stage the Commission has identified teledensity as the most likely criterion for comparability. The Commission's view is that teledensity is indicative of overall adoption of telecommunications services, including broadband.

Questions:

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

²² Other countries, such as Sweden, have taken a similar approach regarding comparability of fibre and copper based services in some cases.

²³ See, eg, MTAS STD, para. 245.

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

Price point selection and adjustments to the benchmark set

42. Benchmarked bitstream services or service components may have performance characteristics that differ from the regulated UBA service and its variants. The Commission proposes to identify any major cost differences of the benchmarked UBA services prior to selecting a price point.
43. The Commission considers that there are likely to be three primary sources of cost differences:
- 43.1 differences in service and performance characteristics, such as performance expectations, line speed, etc.
 - 43.2 differences in the components of the regulated bitstream service (eg, additional transport)
 - 43.3 location of the hand-over.
44. Once the Commission has identified the major cost differences between the UBA service provided in New Zealand and the bitstream services supplied in comparable countries (or the components regulated in other countries that make up the bitstream service), the Commission can use this information to determine the appropriate benchmarked price.
45. The Commission may accommodate these cost differences by making adjustments to:
- 45.1 the prices in the benchmark set to account for the differences in key cost drivers
 - 45.2 the selection of the benchmarked price point within the benchmark set
 - 45.3 the benchmarked UBA price.
46. What adjustments are appropriate can only be determined having identified the differences (if any) between the regulated UBA service in New Zealand and the selection of similar bitstream services and components in comparable countries.²⁴

Determining the price of UBA variants

47. The Commission must determine separate forward-looking cost-based prices for each variant of the UBA service.

²⁴ The Commission may also need to take into consideration uptake of UCLL services, as to some extent the per line UBA costs may increase where unbundling increases.

48. The Commission proposes to first find benchmarks for the UBA service variants in accordance with the benchmarking criteria. Where comparable benchmarks are unavailable, the Commission proposes to impute the additional costs with reference to other wholesale broadband services that include prioritisation.²⁵

Questions:

- 7) What key cost drivers do you think need to be taken into consideration when benchmarking the UBA service variants?
- 8) Do you consider there is any other appropriate approach for determining the price of the UBA variants?

Other core costs

49. In the Commission's original UBA STD, the Commission included core charges for:²⁶
- 49.1 New connections
- 49.2 Transfers.
50. Our preliminary view is that the relevant core charges for UBA will be the same or substantially similar to those in the UCLL STD.
51. If there are any core charges in the UBA STD that do not correspond to a core charge in the UCLL STD (or the SLU STD), the Commission proposes to benchmark the charge against the cost of similar services in comparable countries (if available).
52. If benchmarking proves infeasible, the Commission would consider grandfathering the existing core charges.

Question:

- 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?

The submission process

53. Submissions are invited on the Commission's proposed approach as set out in this Consultation Paper by no later than **5pm on Friday, 24 August 2012**. Cross-submissions will then be due no later than **5 pm on Friday, 7 September 2012**.
54. You should send your submissions to:

Dr Robert Deuchars, Chief Advisor, Regulation
c/o regulation.branch@comcom.govt.nz

²⁵ The Commission took a similar approach, with reference to international retail prices for prioritised services, in the original UBA STD. See paras. 186 *et seq*.

²⁶ UBA STD, para. 128.

55. Following receipt of submissions, the Commission will prepare a draft determination for further consultation, and the Commission may subsequently hold a conference with interested parties. An expected timeframe for the Commission's decision and any further opportunities for consultation are set out below.

Consultation on price review options released	26 July 2012
Submissions due	24 August 2012
Cross-submissions due	7 September 2012
Draft determination released	October 2012
Submissions due	
Cross-submissions due (if required)	
Conference	Late October or early November 2012
Final decision released	End of November 2012

56. If requested by parties, the Commission will issue a confidentiality order under s100 of the Commerce Act 1986 in relation to these proceedings. In accordance with that order, parties will be required to mark all confidential information in bold square brackets, and note whether the information is Restricted Information or Commission-only Information with the designations RI and COI, respectively. Where confidential information is restricted information of more than one party, this should be noted accordingly.

Example: a Vodafone submission that included Vodafone and Chorus restricted information would label that information [] **VNZ/Chorus RI**.

57. The Commission intends to publish all submissions on the Commission's website. Submitters should also provide a clearly labelled 'public version' of their submissions if submissions contain confidential information.

Attachment 1

Schedule 1 of the UBA STD – Service Description for the UBA Services

(Attached)