Cross-submission in response to the Commerce Commission's issues paper relating to assessing Chorus' new UBA variants – Boost HD and Boost VDSL (7 July 2014)





Executive summary

- 1 Chorus is proposing to provide enhanced services ahead of anticipated demand for innovative high quality broadband services that support HD video (Boost). Our wholesale services are open to all of Chorus' approximately 100 customers. RSPs use our wholesale products to innovate and compete against each other in service offerings to end users.
- The Boost proposals represent a pragmatic and economically sustainable commercial solution to facilitate RSPs meeting increasing bandwidth demand that arises from increasing end user demand for "hungrier" applications such as HD video streaming. Enhanced copper services enable better broadband in the transition to fibre period. As a proactive wholesaler, Chorus is seeking to be a step ahead of what the market demands, rather than trying to catch up with it.
- The task at hand is to assess whether the Boost proposals are materially differentiated as compared to the Basic UBA (BUBA) STD service. Higher throughput commitments on their own have previously been considered to be materially differentiated.
- 4 In relation to the Basic UBA service Chorus has proposed in parallel:
 - 4.1 To add traffic management at a level slightly better than today's observed average throughput. Traffic management has been in place on BUBA (ATM) since its inception, implemented by Telecom. Chorus' proposed traffic management does not alter line speed as some submitters have suggested; and
 - 4.2 To move VDSL technology from supporting a BUBA service (with some different commercial components) into an enhanced Boost offering. An enhanced Boost VDSL service would better performance than today's BUBA VDSL at a lower price.
- We have consulted. There are different views on the proposals. There are different views on what the UBA STD today requires.
- 6 Chorus and RSPs cannot move forward without guidance from the Commission. The key questions are:
 - 6.1 Are the Boost service proposals materially differentiated from the BUBA service? If so, what are the key differentiators? If not, what characteristics would predictably result in commercial proposals in the future being considered to be materially differentiated?
 - 6.2 Can the Basic UBA STD service be met using ADSL/ADSL2+ technology alone (and not VDSL2¹) and can traffic management be applied?

¹ Chorus issued a commercial notice on 30 May 2014 that VDSL be withdrawn from 1 December 2014 subject to consultation because six months' notice is required. This proposal was subject to consultation with customers. Additionally, we expected to have the benefit of the Commission's guidance in advance of 1 December.



- Chorus' proposals are available as a range of open access wholesale products. RSPs and end users will be able to choose from a best efforts internet browsing service through to HD video streaming services. The top of the range product offers more for less than today's wholesale price. Throughput on the basic service will be traffic managed at a level slightly above today's observed average so it remains fit for purpose for internet browsing needs and provides a clear definition for everyone.
- Telecom/Spark's view is that Boost services have no value relative to the regulated UBA services provided today. That view should be put to the test in the market. Boost represents an opportunity for the Commission to support an initiative that Chorus hopes will stimulate a new phase of competition in broadband markets and be another step in the delivery of better broadband.
- 9 During the course of this process some RSPs appear to be advocating for a "one size fits all" approach even in a market of changing demand. Some submitters suggest strained interpretations of the UBA STD be adopted to achieve this. They go so far as to say previous views of the Commission were wrong. If the Commission considers they are right, this further emphasises the need for early Commission guidance.
- The Commission is not required to come up with detailed product designs of new product specifications in this process nor is it required to price commercial products. A section 30R process is the appropriate forum for changes to regulated services and is available to the Commission anytime from 1 December 2014.
- 11 There has been a suggestion from some that Chorus is "gaming" the regulatory regime by not waiting for the section 30R process to be available. That is simply not the case. The availability of that process from 1 December gives the Commission ample opportunity to monitor progress under Boost for a few months and, if appropriate, initiate a section 30R process something it can do on its own initiative at any time.
- 12 Chorus hopes that such a section 30R review will not be necessary. Boost services are designed to sit alongside the basic regulated service presenting a range of choices. In the event of such a process, Chorus would hope the merits of its proposals would be endorsed. While there are regulated enhanced voice variants available today (although with extremely limited uptake²), the Boost proposals are enhanced broadband variants not present today. A range of products provides choice for everyone and meets changing market demands.
- Delaying enhanced Boost proposals until a lengthy section 30R process is progressed will not benefit end-users. It would mean choice and competition will be held up and could encourage delaying tactics. In addition, commercial offers may be disincentivised if it is not clear when they will be considered materially differentiated under the regime.

² As at 1 August 2014 <2,000 connections, or 0.21% of the UBA base.



- 14 Through traffic management, the proposal is to provision throughput at 250kbps. This is slightly above today's observed average and by far exceeds the 32kbps minimum requirement in the UBA STD. Chorus cannot seek to solve individual RSP averages or customer mixes at a point in time, or from time to time, through an open access product. Traffic management ensures allocation of bandwidth is fair for everyone.
- Some are referencing degradation of the regulated UBA service in contemplation of significant forecasted growth in end-user demand for bandwidth. It is equivalent to arguing that the performance of a car has "degraded" because it is being driven up a steeper hill where in fact, the performance is the same, it is just being expressed in a different (more demanding) context. And the argument ignores the launch of Boost services that provide more choices for those who want to get up a steeper hill faster.
- Recognising the potential pressure of time, if the Commission wishes to monitor Boost in the market before considering whether a section 30R review is necessary, we propose to increase the 250kbps to 300kbps. This adjustment, combined with introduction in a managed and staged way, is proposed to ensure the Commission can have confidence there is a buffer for growth during a monitoring period. The allocation of bandwidth of course, is significantly higher for the Boost proposals that will be available also.
- The UBA STD is nearly seven years old. It has provided, and continues to provide, the regulatory foundation for a basic broadband service. Chorus' proposals are intended to ensure that BUBA continues to meet basic needs such as internet browsing and is complemented by commercial Boost services for more sophisticated use. The basic UBA service will always depend on how much and what activity is occurring on the network from other end users at any point in time and what the RSP has additionally invested.
- In our view, basic UBA should not be expected to deliver a complete solution for all end user needs in today and tomorrow's market. If a "one size fits all" approach is proposed in the future to meet real world demand, the current UBA STD will need a substantial rework and with those changes, pricing that is appropriate.
- 19 RSPs have sought to have the BUBA service priced at the regulatory minimum. But, on the other hand, they have demanded more under the STD and now some seem to be suggesting that the UBA STD should be a moving target of compliance.
- The Commission does not need to determine prices for commercial services in this process or in clarifying the UBA STD as it stands. Should the Commission redefine the UBA STD in the future under a section 30R review, then it will of course need to align pricing at that time with whatever those changes are.
- The design of the Boost proposals has sought to respect consistency with regulatory commentary and decision making under the regime as highlighted in the table below. There is clearly some confusion and the Commission's guidance should be welcome by all.



Issue	Reference
How have RSPs described the UBA service previously?	Pages 97, 101 and 129 of the UBA Price Review Conference transcript, 12-13 June 2013 (see Appendix).
	Excerpt from a letter from CallPlus, Orcon, Vodafone and Telecom (now Spark) ³ to the Commerce Commission, 10 July 2013 (see Appendix).
	Paragraphs 151, 152 and 153 of the Final Determination of the Commerce Commission to amend the price payable for the regulated service Chorus' unbundled bitstream access made under s 30R of the Telecommunications Act 2001, 5 November 2013 (see Appendix).
What views have been held on the use of VDSL technology and the basic UBA STD previously?	Paragraphs [40] and [41] of the Final Decision of the Commerce Commission on the request for a Review/Clarification of the application of the UBA STD to VDSL technology, 16 April 2010 (see Appendix).
	Relevant quotes at pages 99-100, 100, 100-101, 101 and 141 of the UBA Price Review Conference transcript, 12-13 June 2013 (see Appendix).
What views have been expressed in the regulatory framework and what market practice is in place regarding traffic management and the basic UBA STD?	Traffic management affects throughput, not line speed. The minimum throughput specification in the UBA STD will be complied with, as will the requirement to have maximum upstream and downstream line speed. For quotes distinguishing throughput and line speed, see pages 98 and 129 of the UBA Price Review Conference transcript, 12-13 June 2013 (see Appendix).
	Chorus' proposed traffic management is consistent with the concepts of "best efforts", "international best practice" and "good faith" in the UBA STD.

 $^{^{3}}$ Telecom is now renamed Spark. However as reference is made to Telecom past submissions we use both names interchangeably.



Issue	Reference
	Chorus actively manages traffic in the context of ATM-based regulated UBA services today as put in place by Telecom since its inception. This has been accepted as standard practice. For comments on Chorus' ability to traffic manage, see page 131 of the UBA Price Review Conference transcript, 12-13 June 2013 (see Appendix).
	All network resources are finite. Traffic management brings about greater clarity and fairness for all RSPs in an open access environment.
When will the Commission consider commercial services to be materially differentiated?	The Commission's original UBA determination (Decision 611, paragraph 340 recognised that Telecom/Spark (then Access Provider) should be able to offer new UBA services to its customers.
	Paragraphs [5] and [12] of the Final Decision of the Commerce Commission on the applicability of the UBA STD to Telecom's Wholesale VDSL2 Service, 20 December 2010 (see Appendix).

- We provide more detailed responses to RSP submissions below.
- 23 The structure of the remainder of this cross-submission is as follows:
 - Part A: we restate the benefits for end-users arising from Boost;
 - Part B: we respond to RSPs' submissions regarding the level of differentiation between regulated UBA services and Boost;
 - Part C: we discuss why the requirements of the UBA STD will continue to be met, and also address the argument made by some RSPs that Chorus is unable to withdraw VDSL technology;
 - Part D: if we are to debate broader questions relating to regulatory design, the appropriate forum in which that should happen is a robust section 30R process; and
 - Part E: finally, we cover a few specific issues of secondary importance.



Part A: The Boost services deliver material benefits to end users

- Submitters have largely put to one side the real benefits that the Boost services can and will deliver to end users over and above the regulated UBA service. Chorus articulated these clearly in its dialogue on 10 July 2014 and reconfirmed the Boost proposals in a letter dated 28 July 2014 for this process, following ongoing consultation and dialogue with RSPs and the Commission. The benefits that these proposals deliver include:
 - 24.1 Increased service reliability and a richer range of service options as a result of Chorus' speed commitments and higher minimum throughput specifications;
 - 24.2 Higher line speed, a more consistent experience and fewer stability/speed issues as conditions change as a result of Chorus delivering line profile optimisation;
 - 24.3 A more reliable service with the best performance possible for the location as a result of premises wiring being provided with the Boost VDSL service;
 - 24.4 Improved performance during times of heavy internet use as a result of Chorus providing a "premium best efforts" quality of service, which is a prioritised service and superior to internet-grade best efforts;
 - 24.5 Better upfront information about the service availability and performance as a result of enhancements to Chorus' provisioning tools;
 - 24.6 Lower upfront costs, with installation included in the monthly wholesale price; and
 - 24.7 More competition in the retail market as RSPs deliver differentiated service offerings.
- The proposed Boost portfolio will continue to sit alongside the regulated basic UBA service.
- The Boost services enable an end user to receive a better service that supports HD video streaming, even at peak times, and will permit RSPs to confidently market such services. Chorus' proposal is to offer these services at prices that are lower than today, so end users can receive more for less. If end users only want to do internet browsing and "basic" activity, then the proposals for a traffic managed basic UBA service are more than adequate.
- There are other commercial features of the Boost package of services, for example a simplified Tail Extension Service (TES) Model, which are relevant to the attractiveness of the Boost proposition in total for customers, but not relevant to the Commission's determination of whether the Boost services are materially differentiated. For clarity, it is noted that the TES service is not a pre-requisite for taking Boost RSPs can choose to take TES or backhaul from Chorus, or provide their own backhaul. Chorus will



continue to provide TES for the regulated UBA service on a commercial basis, as we do today. However, the simplified TES model will only be available with Boost.

Likewise, Chorus proposed and consulted on a range of handover options, designed to facilitate RSPs to take Boost. These will be important from the perspective of the attractiveness of Boost, but do not go to the fundamental question of whether the Boost services are materially differentiated from the BUBA STD.

Part B: Level of differentiation

- 29 Chorus has identified a number of differences between Boost services and the regulated UBA service. These are described in some detail in Chorus' submission and Appendix 2 of Chorus' Notice of 14 May 2014.
- A number of (but not all) submitters focus on preventing the application of traffic management. Those submitters seem to ignore most of the enhanced features of the Boost services. Instead, they take the position that the Boost services are only distinctive because the regulated UBA services are going to be (unlawfully, they say) allowed to "degrade" of course the alleged "fears" outlined in the Appendix have not transpired and are not proposed by Chorus. Flipping that around, those submitters are arguing that, if the regulated UBA services were not subjected to traffic management in the manner proposed, there would be no material difference between the services and Boost would be within the UBA STD.⁴
- 31 The logic here is circular particularly when some of those submitters say they support commercial proposals. If Boost cannot be differentiated, then it will be not be launched as it will be redundant relative to regulated UBA services. On this logic, guidance from the Commission as to when and how commercial offers might be considered materially differentiated is ever more important if they are supported at all.
- The very fact that the focus has fallen on this topic (i.e. alleged STD breach) suggests a general acceptance that the Boost services (as currently designed relative to regulated UBA services) are otherwise sufficiently different to fall outside the existing STD. Those differences have been described in detail in Chorus' submissions and Chorus is optimistic that they will be sufficient to attract market support.
- 33 Telecom/Spark's view is that Boost services have no value relative to the regulated UBA services provided today.⁵ That view should be put to the test in the market. If another RSP takes a different view and finds end-user support for innovative services offered over Boost, then that will in all likelihood require a competitive response from Telecom/Spark (and any other RSP that had not initially seen the same market potential). Boost represents an opportunity for the Commission to support an initiative that Chorus hopes will stimulate a new phase of competition in broadband markets and be another step in the delivery of better broadband.

See Telecom/Spark submission, paragraph 6

See Telecom/Spark submission, paragraph 11



Part C: The UBA STD

- We respond to submissions on three main components of the UBA STD as potentially delivering to some preferences that the regulated UBA service be "future proofed" to accommodate ongoing provision of capacity to meet demand growth indefinitely. Those components are:
 - 34.1 the requirement in clause 3.6 of the service description that the regulated UBA service have maximum downstream line speed and maximum upstream line speed;
 - 34.2 the requirement in standard access principle 2 in Schedule 1 of the Telecommunications Act 2001 that the service must be supplied in accordance with "international best practice"; and
 - 34.3 the "good faith" requirement in clause 2.2.1 of the General Terms.
- 35 We discuss each of these in turn below.

Line speed and throughput

A number of submissions commonly conflate the concepts of line speed and throughput. That is evident in Telecom/Spark's submission where it states that:

Today, the prevailing regulated UBA variants (EUBA 0 and VDSL) have no throughput limits applied to them – they are full speed services in accordance with the UBA STD... 6

- However, line speed and throughput are not the same thing. Accordingly, in the UBA STD, they are each governed by different provisions within the service description:
 - 37.1 Line speed is governed by clauses 3.6 to 3.8.
 - 37.2 Throughput is governed by clauses 3.12 and 3.13.
- Line speed is a measure of the maximum speed an end-user will be able to experience on an individual line. By contrast, throughput is the actual speed experienced at a given time and "average throughput" is the actual speed expressed as an average over a period. This is not contentious, and is fundamental in the context of telecommunications network engineering.
- 39 The traffic management that Chorus intends to adopt in respect of regulated UBA services affects throughput. Line speed will be completely unaffected. In particular, in terms of line speed, both regulated UBA services and Boost services will have maximum downstream line speed and maximum upstream line speed, as required by the UBA STD.

See Telecom/Spark submission, paragraph 39

See, for example, Ofcom's 2010 voluntary code of practice regarding broadband speeds.



- Defining anything other than maximum downstream or upstream line speed could be achieved by Chorus by programming line cards within the DSLAM to allow no more than a certain specified speed. That is what Telecom (now Spark) proposed to do with respect to certain upstream speeds in its Standard Terms Proposal for UBA. That proposal was not accepted by the Commission, as reflected by clause 3.6 of the Service Description.
- However, Chorus does not propose to constrain line speed for regulated UBA services. The maximum downstream line speed and the maximum upstream line speed with continue to apply as will be the case for Boost services. Chorus' traffic management will instead be applied to achieve a specified average throughput. In that regard, the UBA STD only requires that average throughput does not deteriorate below 32kbps. Under Chorus' proposal, with average throughput calibrated to 300kbps, the applicable standard mandated by the UBA STD with respect to this particular metric will continue to be comfortably satisfied.

Good faith and international best practice

- Some RSPs have suggested that the notions of "good faith" and "international best practice" outlined in the UBA STD operate to impose increasingly onerous service obligations on Chorus to match growth with demand. This suggestion is not credible. Chorus cannot be expected to carry potentially significant liability for breach of an STD where the requisite performance standards are unstated, subjective and constantly changing. Regulation of this nature does not work. And the proposals are inconsistent with views submitted in the past (see Appendix).
- Chorus understands the substantive underlying concerns of RSPs that have given rise to these claims. Some RSPs want a single regulated UBA service that caters universally for demand as it grows. Chorus does not prefer that model, but respects the fact that there are differences of view. But these concerns go to fundamental questions of regulatory design. The right place to have that conversation is a section 30R process. We should not be stretching to interpret a 7 year old UBA STD in a way that effectively ushers in by stealth fundamental change to the regulatory scheme.

Move of VDSL technology to Boost

- 44 Although the RSP submissions primarily focus on the application of traffic management to the regulated UBA service, a number of submissions also claim that the withdrawal of VDSL technology to deliver the regulated service will also breach the UBA STD.
- 45 Chorus awaits the Commission's guidance on the issue, expected before the proposed date in the notice of 1 December.
- Chorus' proposals have been made in reliance on previous views. The UBA STD is deliberately drafted in technology neutral terms. As the Commission correctly concluded in relation to its WVS decision of 16 April 2010, the DSL technology which Telecom (then Access Provider) elected to use to deliver BUBA and EUBA was a decision for Telecom alone. The same applies now for Chorus. Telecom originally (and now Chorus) have invested in deployment of VDSL technology on this basis.



Part D: Fundamental issues of regulatory design are for section 30R

RSPs' submissions go to features of the existing UBA STD

- 47 CallPlus and Spark's submissions seem to be a critique of the regulatory outcomes that will flow from Chorus implementing this proposal in accordance with the UBA STD. The Commission should not be tempted to interpret the UBA STD to mean something it does not in order to deliver a particular regulatory outcome preferred by some (but not all) RSPs, and that suppresses competition and end user choice.
- The right approach is to monitor and assess outcomes under the existing STD and deploy appropriate regulatory tools if and when the Commission considers it appropriate to do so. We think the Commission should be wary of delay of competition opportunities to make innovative new offerings by any RSP in the retail market. Ultimately, the market should (and will) make its own assessment of the merits of the new Boost services. If there is no demand for Boost, Chorus will simply remain focussed on delivering regulated UBA but the interpretation issues now raised need to be addressed.
- There will be no degradation of the regulated UBA service in absolute terms. The RSPs are instead describing degradation in a relative sense, in contemplation of significant forecasted growth in end-user demand for bandwidth. This "degradation" ignores the launch of Boost services and the likely corresponding availability of **enhanced** (not degraded) services. It is equivalent to arguing that the performance of a car has "degraded" because it is being driven up a steeper hill where in fact, the performance is the same, it is just being expressed in a different (more demanding) context.
- Chorus' proposal ensures that growing end-user demand for bandwidth will be met. The overall performance of the network will materially improve due to the network enhancements being proposed by Chorus. The regulated UBA services provide the foundation from which that will be achieved and Boost services will be used to augment that foundation. There will be no "degradation" because end-users will be able to choose services that meet either "basic" needs or greater needs such as provision of reliable HD video and this will be reflected in the pricing. This is how the regulation has been designed and the outcomes will benefit end-users.
- At the Commission's workshop on 11 August, there was discussion about the different class of service proposed for Boost services. Similar arguments about potential degradation of the regulated service were raised. On this point, there have always been different classes of service in the STD as well as commercial services like HSNS. The same arguments apply to class of service. There will be no "degradation" to the regulated service and end-users will be able to choose a service that best meets their needs.
- 52 Some perspectives of degradation of the regulated UBA service appears to be measured against an "expectation" that Chorus will invest to meet demand across the board from

⁸ See Spark submission, paragraph 61b



a single undifferentiated regulated input without any regard to the efficiency of that approach. While such an approach is permitted under the UBA STD, it is not mandated nor reasonable.

Telecom/Spark's submission emphasises that Chorus would be able to recover the costs of a service of the kind that it would prefer. That may be true if it is factored into any future FPP pricing, but this is not really the point for the current processes. The service Spark indicates it wants can only come as the result of a s30R process. It is not mandated by the UBA STD. Chorus' view is that a s30R process would conclude that the approach suggested by Spark would not encourage innovation, does not promote competition resulting from the development of new services and does not best support the interests of end-users in the long term.

A broader conversation may happen later

- Chorus believes that the current version of the UBA STD strikes a sensible balance. In particular, it is sufficiently flexible to allow Chorus to provide regulated UBA services in the manner proposed (including with a commitment to continue to over deliver on the regulated minimum) together with the Boost services intended to cater for significantly higher bandwidth consumption. However some RSPs disagree. Many would prefer that the Boost service levels be provisioned as of right under the UBA STD in which case, of course, Boost services would be redundant but that is neither efficient nor reasonable, and suppresses innovation resulting from differentiated offers at a wholesale level.
- The RSPs' submissions in substance ask the Commission to **amend** the UBA STD without observing the mandatory processes in the Act. They do this, for example, by claiming that the regulated UBA service must "evolve"¹⁰ continually to meet an unspecified level of demand. This approach would be unworkable because it would be unspecified. The compliance threshold would be set by an inherently subjective view of demand. It is also inconsistent with what RSPs argued in the benchmarking process. As illustrated in the **Appendix**, RSPs argued firmly that the Commission must set a price for the minimum specified service in the STD when it did benchmarking. Some are now arguing that Chorus must deliver more.
- In contrast, Vodafone's view is that there is no "open-ended" investment requirement embedded in the UBA STD.
- Open-ended investment is not a reasonable "vision" of how regulation should operate. Spark suggests that this approach is necessary post-separation because Chorus lacks the incentive to meet market demand. This ignores the fact that Chorus is a structurally separated open access wholesale service provider incentivised to provide innovative services to our customers, as illustrated by the Boost proposals. Chorus has

See Spark submission, paragraph 25 and again at paragraph 64

See CallPlus submission, paragraph 12.



voluntarily introduced a range of additional fibre services post separation, not required under contract, again demonstrating strong innovation.

All of these arguments also conveniently forget that when Telecom/Spark provided the regulated UBA service, retail minus pricing applied. With retail prices unregulated, that meant that the wholesale price could effectively be adjusted then by changes at retail. That is not the case in the industry structure today where Chorus faces cost based pricing only whether or not retail pricing is differentiated.

No attempt at gaming

- 59 Chorus does not accept that there is any component of "gaming" due to the fact that the Commission cannot use its section 30R review rights until 1 December 2014. On the contrary, Chorus is well aware that the Commission can open reviews anytime from that date if there are concerns.
- And in support of that we have proposed a reasonable throughput buffer increase to enable the Commission to consider supporting the proposals and taking a "wait and see" approach. This will give commercial proposals a chance in the market to those who see opportunities.

Part E: Additional comments

- Finally, Chorus responds to the specific matter of the costs of providing additional bandwidth, raised by RSPs in submissions.
- 62 Callplus' submission includes a claim that no significant additional investment is required by Chorus to offer the throughput commitment between the DSLAM and the First Data Switch.¹²
- Callplus' claim would be correct if Chorus' network was physically designed consistent with Callplus' assumption. But the reality is that networks are built and augmented over time to cope with additional users and services and as such many POIs today have multiple physical switches. As set out in Chorus' primary submission, significant investment is required to modify the network as this would require extensive redesign, grooming and a service design change.
- The Commission does not need to determine prices for commercial services in this process or in clarifying the UBA STD as it stands. Should the Commission redefine the UBA STD in the future under a section 30R review, then it will of course need to align pricing at that time with whatever those changes are.

¹¹ See CallPlus submission, paragraph 66

¹² See Callplus submission, paragraphs 43 – 44.



Appendix

Final Decision of the Commerce Commission on the request for a Review/Clarification of the application of the UBA STD to VDSL technology, 16 April 2010

[40] "Decision 611 sets out the price and non-price terms for the services defined in the decision. It requires Telecom to deliver those services (BUBA and three variants of EUBA) where Telecom has ADSL or ADSL2+, or any future version of DSL coverage. *This requirement is, and was intended to be, neutral in terms of the form of DSL service provided."*

[41] "The intent of the STD is clear. Telecom must provide access to BUBA and EUBA in accordance with the terms of the STD. The DSL technology which Telecom elects to use to deliver BUBA and EUBA is a decision for Telecom alone. There is no compulsion on Telecom to use VDSL to deliver the regulated BUBA and EUBA services, except where they have chosen to make it the only DSL technology available in an exchange or cabinet to deliver the regulated service."

Final Decision of the Commerce Commission on the applicability of the UBA STD to Telecom's Wholesale VDSL2 Service, 20 December 2010

[5] "The Commission has considered the submissions and cross submissions and concluded that WVS [VDSL2] incorporates a number of features not included in the regulated UBA Service Description. These features include an *increase in the minimum average* throughput from 32kbps to 96 kbps, and a warranty from Telecom that the minimum line speed thresholds will be 15Mbps download and 5Mbps upload, with compensation payable in the event this standard is not met. In the Commission's view these more onerous obligations on Telecom are sufficient to differentiate VWS from the regulated UBA service."

[12] "Submitters suggested that higher throughput metrics alone were not a sufficient differentiator from UBA. The Commission does not agree. The UBA Service Description specifies 32kbps as a minimum, compared with 96kbps for WVS. Currently Telecom is providing an average throughput of 45kbps for the regulated UBA service, which is well above the minimum required, but significantly below the level required under WVS. *The more onerous throughput obligation applying to WVS is sufficient to differentiate it from the regulated service."*

VDSL introduction, 15 May 2013

- Telecom's former wholesale VDSL service (WVS) was unsuccessful, with low uptake.
- On 15 May 2013 Chorus announced the introduction of VDSL technology into the Basic UBA (BUBA) product family. Our market release can be found at: http://www.chorus.co.nz/file/12677/175188.pdf



- This followed extensive consultation with RSPs and other stakeholders during the period from March to May 2013.
- Pricing was aligned with the regulated basic UBA price with additional features/fibre ready install. (Other features like higher throughput were not present at that time).
- A commercial fact sheet provided information about Chorus VDSL, including details of the service, how to order it and the business rules governing availability.
- On amendments, the fact sheet said:

"Amendments

Chorus reserves the right to make operational decisions.

Chorus will consult with the industry about any changes to the Chorus VDSL service, including the Availability Rules. Unless stated otherwise above, where a change is material, Chorus will endeavour to give six months' notice, but reserves the right to make changes on shorter notice if required to do so as a result of regulatory change."

UBA Price Review Conference transcript, 12-13 June 2013

Page 97: "I'll just add to that. The services in New Zealand, the BUBA service, the one we're talking about at the moment, is obviously the lowest tier, there's about six or seven variations, mainly commercial, and that service has a 32 kilobyte per second throughput restraint ..."

Page 98: "...Now, I do understand the point, that if you've got cabinetisation, sure, you're going to get bigger speeds. Materially it's not going to be 40 megs per second, it's going to be, say, 8 or 9 megs a second, I do understand that, but that's on one dimension. There's another dimension, for example, where it's restrained you. It's only regulated 32 kilobytes per second throughput. So, on another dimension it's actually quite a poor service and so there's no reason to mark the thing up. And I guess this is just an illustration again, that as soon as you start monkeying with the numbers and trying to find a way through, you get into trouble."

Pages 99-100: "I guess the comment I would make around VDSL is there was a conscious decision made several years ago that VDSL was not part of a regulated UBA service, so it would seem extraordinary to consider it and contemplate it within the service. Had it been in, that may be a different question but it was specifically excluded by the Commission a couple of years ago. So, we think it would be inappropriate to be considering VDSL, but decisions that Chorus have made have been commercial ones around VDSL but they do not link inherently into the regulated service."



Page 100: "Can I just make a comment. *VDSL* is not the regulated product. I agree 100% with Chris, it doesn't have the same price as the regulated product, it has a connection charge which is a different connection charge, it has a way of amortising that connection charge at \$5 a month. *It is not the regulated product."*

Page 100-101: "I'll say it kind of goes both ways. VDSL has a forced connection migration charge off the top of my head of \$225 every single time. UBA does not. *How can it be the same product? Commercially it looks different to us.* If you don't spend \$225 on that, Chorus charge you a \$5 premium. Now, I'm neither criticising Chorus' commercial offer or anything, *I'm simply pointing out it's not UBA.*"

Page 101: "So perhaps Chorus - sorry, can I just comment that Chorus also have additional clauses associated with this product around its life time, around its withdrawal, about migrations. It is a different product. I'm staggered we're having this conversation."

Page 101: "... we have in New Zealand a range or a stack of services ranging from commercial VDSL at one end to regulated BUBA at the other end. There's regulated services, there's EUBA and there's commercial services with higher throughput. Now, the goal is to work out the price, the wholesale price of the bottom end service. So, if one takes the weighted average of Sweden, and maybe I've misunderstood here, that would be entirely wrong."

Page 129: "..."... the answer to that is apparent from the range of services that are offered because the BUBA service is dimensioned at 32 kilobytes in theory, that's the regulation, in fact it's dimensioned slightly higher, but there are commercial variants on top of that and the key difference between them, between the BUBA and the commercial ones is that the throughput is higher and the RSPs pay more for those services increasingly as it goes up the tree."

Page 131: "In my opening statement thought I said, nothing is preventing them doing exactly to EUBA what they did with BUBA on a commercial basis. Which is why I say, if you do not benchmark the regulated product to the lowest specked service we could end up with a double-whammy of a higher price because it's based on averages, plus Chorus leering over the top exactly the same handover constraints and extracting more margin from RSPs in an identical way to what they do on BUBA, because the service description allows them to do that and the service description is not up for debate in this session, which we recognise ... The main contention pointed though here is around EUBA which currently, unlike BUBA, Chorus don't constrain but that is purely at the whim of Chorus and our concern is that there's nothing to stop them doing exactly what they've done on the other service."

Page 141: "I would have thought it was out of scope of this. VDSL, as we've said before, isn't the regulated product we're talking about right now, it's a different product."

Letter from CallPlus, Orcon, Vodafone and Telecom to the Commerce Commission, 10 July 2013



"CallPlus noted that Chorus currently, in contrast to BUBA, does not impose a constraint on the handover point for the EUBA 0 service but it could so [sic] and so the Commission must benchmark against the lowest service specifications in comparable benchmarked jurisdictions."

Final Determination of the Commerce Commission to amend the price payable for the regulated service Chorus' unbundled bitstream access made under s 30R of the Telecommunications Act 2001, 5 November 2013

[151] "Chorus also submitted that an adjustment is required for VDSL capable lines. Chorus suggest that the benchmark prices be adjusted to reflect the proportion of lines in New Zealand that are VDSL capable."

[152] "We consider this adjustment inappropriate. We are benchmarking against the costs of an efficient operator providing the service as specified in the UBA STD. We have expressly determined that VDSL is not a part of the regulated service where it is used to provide a higher class of service. Our view is that the VDSL services provided in the benchmark countries are unlikely to reflect the forward-looking cost of providing the regulated UBA service."

[153] "As we are required to benchmark the UBA service, we have benchmarked against services consistent with the service description. As such, *no additional adjustment is required for VDSL."*