



Section 30R review of the UBA standard terms determination: process and issues paper

Submission | Commerce Commission

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Executive Summary

1. Spark New Zealand welcomes the Commerce Commission's (**Commission**) s30R review of non-price terms of the UBA standard terms determination (**review**).
2. The current UBA service definition - and the approach to ensuring it remains fit for purpose - has remained largely static since 2007 when the service was first regulated despite fundamental change to available technology and market structure. Further, the FPP pricing review determination by contrast has imposed fresh modelling and efficiency assumptions in setting a price for the UBA service. As a result, the price and non-price terms are currently disconnected.
3. We agree that it is important that the Commission ensures price and non-price terms are aligned, and continue to provide a foundation service that is fit for purpose and that will continue to meet evolving customer demand and retail service provider (**RSP**) investment.

The purpose of Chorus' UBA service

4. The purpose of UBA is to be the foundational broadband building block input upon which access seekers and RSPs can invest and innovate to provide competitive broadband services to end users.
5. The Commission's process and issues paper (**issues paper**) recognises that UBA is the most common wholesale input used by RSPs to deliver copper fixed line broadband services to their customers. It is foundational to 1.1 million end user connections across New Zealand and delivered exclusively over Chorus' fibre to the node network.¹ Even small changes to Chorus' UBA service have a significant effect on the market and the quality of non-fibre fixed line broadband services available to end users. We therefore support the principal objective of this review, namely to ensure that UBA STD is fit for purpose.
6. What would be required to ensure that the UBA service is fit for this purpose? We recognise that interested parties will have different views on what and how this should be determined and consider that the opportunity for interested parties to participate in workshops in June will be a useful mechanism for identifying and debating these issues.
7. In our view, in order for the UBA service to remain fit for purpose and durable, the UBA non-price terms should be updated to confirm that:
 - a. The regulated UBA service is intended to be a wholesale input service that can be used by RSPs to construct competitive and differentiated retail services that meet end user needs, and that this means the service is expected to evolve over time;
 - b. VDSL and 10xGbps handovers form part of the regulated services – these are capabilities inherent to modern deployed copper based technologies; and
 - c. A general obligation that Chorus is to augment the UBA platform to meet data growth should be added for clarification. Chorus should be obliged to provide transparency of legacy copper routes where, on an exception basis there is congestion and commit to investment or lifecycle plans to resolve the congestion issue.
8. These changes do not undermine the potential for commercial variants to the UBA service – these are important for promoting innovation. An updated service description would better align the UBA service with FPP prices and ensures commercial variants are based on innovation of new functionality, rather than the service description artificially constraining the regulated UBA

¹ Commerce Commission, *Section 30R review of the UBA standard terms determination: Process and Issues Paper*, 7 April 2016 Paragraph 3.

service. Clarity of the regulated UBA principles and expected outcomes provides the benchmark against which potentially new commercial variants could be tested.

Anchor product and pricing

9. The issues paper seeks views on the idea of an anchor product approach to the regulated UBA service. We can see that anchor product regulations can form part of a cohesive regulatory framework. However, the more we look at the approach in this context, the more apparent it becomes that the concept of anchor product regulation is inconsistent with the current UBA framework. We believe a shift to an anchor pricing framework would be complex to implement, and to operate, and such a shift may well require revisiting recently finalised FPP pricing. We are therefore cautious of this proposal.
10. Implementing an anchor approach is not only a significant exercise, it is also, in our view, unlikely to deliver material innovation and investment benefits over the current approach. The regulated UBA price is based on a range of modelling and efficiency assumptions which make it clear that the UBA service is intended to provide for ongoing performance improvement. We are not aware of significant planned innovation to the existing copper UBA platform, and think it unlikely in the context of UFB.

A focus on access to platform functionality that improves the end user experience

11. The Commission should also be conscious of end user service experience. One of the key drivers of customer dissatisfaction for our customers is the challenges they face when their broadband service has a fault. RSPs are facing increasing competitive pressure to improve the end user service experiences. While we are undertaking a number of initiatives within Spark to improve the customer experience, there are latent UBA platform features and information available from Chorus that could provide further improvements.
12. In this submission, we set out a number of proposals that would facilitate access seekers ability to improve service to end users. For example, amending the STD to:
 - a. Provide access seekers with remote visibility of customer line performance;
 - b. Oblige Chorus to, at the time of pre-qualification, advise on port availability and installation;
 - c. Clarify when cancellation charges should apply;
 - d. Provide visibility of congested links and elements; and
 - e. Give access to alarms and notifications relating to UBA platform components;

would enable access seekers to materially improve the end user experience relating to faults and customer connections.

13. These proposals also need to be considered in light of other access seeker and access provider proposals, and the capabilities of the relevant platforms. For example, when Chorus proposed to introduce Boost they offered preferred access to network reporting capability which was already available to Chorus but only if RSPs paid the Boost premium. The Commission should seek to eliminate the scope for this sort of premium and create incentives for Chorus to progressively deliver utility-enhancing outcomes through determined services as and where they become available.

Introduction

1. Thank you for the opportunity to comment on the Commerce Commission's (**Commission**) 7 April 2016 Section 30R Review of the UBA Standard Terms Determination process and issues paper (**issues paper**).
2. Spark New Zealand supports the Commission's overall objective for the review - to ensure the regulated UBA service remains fit for purpose. The Commission first set UBA terms in December 2007 and the service description has remained largely unchanged since then. Over the same period however there has been significant changes in available and in use technologies, Chorus was structurally separated and the assumptions underpinning UBA pricing have changed fundamentally.
3. We support the Commission's proposed objective of providing for a regulated UBA service that meets end-users' evolving needs. Within that approach, greater clarity over the principles that underpin the regulated UBA service will provide a benchmark against which possible commercial variants can be assessed. Commercial variants should provide a real point of difference – over regulated services - in incremental investment, value and functionality.
4. We further support the Commission's proposal that the UBA service description should be aligned with the decisions made in the FPP process, including UBA service performance and criteria for applying ancillary charges. Were the regulated service description provide for lower performance metrics than assumed and modelled in the FPP prices, then prices will likely be inefficient, incorporate an unwarranted premium, and unlikely to promote efficient outcomes². In this submission we recommend the STD be amended to ensure non-price terms are consistent with FPP assumptions used to derive the UBA service prices and provide appropriate incentives for continued efficiency by Chorus.
5. Finally, the UBA service description should be augmented to facilitate improved services for end users by clarifying where costs should be passed to RSPs and end users as ancillary charges, and providing access to latent UBA platform features and information. In this submission we set out proposed high level changes to current arrangements, but appreciate that the detail of these changes and other access seeker proposals may best be progressed in the review through a technical workshop.

Key principles when undertaking the review

The regulated service

6. The UBA service is intended to be an underlying and undifferentiated building block service that RSPs can use to construct retail offerings³, maximising the potential for differentiation and innovation at retail.
7. In other words, the intention that innovation in copper broadband delivery is best achieved through an undifferentiated wholesale building block service rather than seeking to differentiate between inputs at wholesale where market value could not be determined without competition. The FPP price was determined on the basis of a single underlying

² Section 4B of Schedule 1 of the Act prohibits double recovery of costs in designated services (whether determined or provided on commercial terms).

³ See D611, Figure 2 and around page 25 for discussion of the principles that underpin the design of the regulated UBA service. As set out in earlier submissions, D611 built on principles developed in previous Commission decisions.

wholesale service capable of supporting retail broadband services that meet evolving end user requirements.

8. These principles were carried through in to the FPP model, i.e. that the UBA service was undifferentiated, captured modern technologies capable of supporting VDSL and ADSL variants, and had sufficient capacity to meet increasing data demand.
9. The current UBA approach permits commercial variants, however, we do not believe it anticipated significant scope for such commercial services to occur in practice. Rather, the intention was to enable Chorus to make adjustments to the regulated services in response to RSP requirements, so that they could respond better to retail demand and construct more attractive services for end consumers. We think that this approach continues to be useful, and that anchor product regulation discussed below in addition to the FPP price capped service approach narrows the space within which this competitive activity can occur.
10. Accordingly, the review should focus on updating the UBA service description to ensure the service reflects these principles.

1 Do you agree that an anchor regulation approach should be used for the regulated UBA service? Why/why not?

11. The issues paper floats the possibility of an anchor regulation approach. An anchor pricing approach would represent a significant departure from the current UBA framework which, while it permits commercial variants, does not require that commercial variants exist to promote competition and innovation. We do not support an anchor approach for UBA services.
12. Ofcom applied an anchor product approach to UK broadband pricing as a means to promote investment in fibre infrastructure⁴. The prices of copper based broadband would be set by reference to a copper regulatory pricing model, and BT would have some pricing flexibility over services delivered over new fibre infrastructure. The approach is generally considered with network transition in mind; anchor product regulation results in part in regulated, and in part in non-regulated services whose prices are linked. The key benefits being that the resulting price flexibility for new services promotes efficient investment in major new infrastructure (i.e. more likely to occur where end user value exceeds cost) and optimal choice of investment from a portfolio of choices (i.e. of timing and technologies)⁵. Therefore, the approach does not readily apply retrospectively existing platforms as the key benefits of anchor pricing are not available once the investment has been made.
13. An anchor product approach is also complex to apply as it requires selecting an efficient anchor product (i.e. selected in light of anticipated investment benefits) and a balancing of efficient investment incentives and higher prices (i.e. the outcome of pricing flexibility and market power). Ofcom has indicated that, in balancing these tensions, it would move away from pricing flexibility for a service at some point⁶. We can see how an anchor product

⁴ Ofcom implemented as part of its 2007 as a means to promote investment in fibre infrastructure – copper based broadband services were priced on the basis of a copper costs, and BT free to invest and price fibre services relative to those prices. Ofcom implemented as part of the overall regulatory framework and as a transitional measure. It has signalled in its 2016 strategic review that it will move away from the approach for super-fast broadband, setting service prices directly.

⁵ See Brian Williamson. 2014. “Anchor product regulation – a new regulatory tool.” Info, Volume 16(5). Working paper: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2336963

⁶ See Ofcom initial conclusions from the strategic review February 2016. See para’s 4.44 onwards for factors it would consider when deciding whether to apply - and remove away from – pricing flexibility. <http://stakeholders.ofcom.org.uk/binaries/telecoms/policy/digital-comms-review/DCR-statement.pdf>

approach can form part of incentive regulation pricing models, falling, as it does, between the two extremes of price cap regulation on one hand, and regulatory forbearance with the possibility of later regulatory intervention on the other. However, in that case, an anchor approach needs to be considered as part of the wider regulatory framework, i.e. in light of significant new investment proposal and supported by appropriate regulatory pricing models. We note too that the concept is being considered as part of the ongoing Telecommunications Act review.

14. Accordingly, the anchor approach cannot readily and retrospectively be applied to the existing UBA framework. In terms of the overarching framework, the New Zealand copper/fibre policy debate has obviously evolved differently with fibre co-investment risk substantially reduced by Government subsidies, no regulation of fibre services until 2020, and an express recognition in section 18(2A) of the Act that any future (fibre) regulation would give due consideration to the risks faced by investors in new services such as fibre.
15. It would be a complex task to identify an efficient anchor product, anchor price and potentially multiple UBA variants. The Commission would need to have in mind significant new network investment innovation (other than in fibre) and provide settings that are targeted or focused towards a genuinely innovative new goal (as Ofcom did in applying an anchor approach in its context). Yet we are not aware of significant new innovation and investment not captured, to date, in the UBA regulatory framework.
16. Conversely, the anchor approach would be a significant departure from current UBA principles. As noted above, UBA is a fundamental building block service that continues to deliver the full range of evolving features and benefits inherent in current best in class assets used to deliver it. The framework is based on maximising the potential for competition and innovation at the retail level, in both connection (i.e. larger data caps) and novel services such as music, television and other media content, and innovative new applications. Therefore, a wholesale approach that seeks to differentiate wholesale services on the basis of retail demand will inevitably distort efficient activity at the retail level, and this has a material cost for end users. Significant wholesale differentiation on this basis would likely leave RSPs with limited ability and incentives to outperform rivals.⁷

The Commission should simply update the existing service description

17. Accordingly, we support the current approach which seeks to identify a UBA service capable of meeting end user needs – and clarifying the nature of this service provides a useful benchmark against which commercial variants can be tested. The current framework permits commercial variants where truly innovative and efficient.
18. In which case, the UBA service should be an underlying wholesale building block service that evolves over time so that it continues to be capable of supporting retail services that meet end-user need, and makes all the inherent capabilities and features of modern deployed technologies and systems available to users. It would require limited changes to the UBA non-price terms within the current framework to reflect these outcomes.

Focusing on transparency and removing regulatory impediments to asset upgrades

19. The issues paper notes that there are limited incentives to invest in new commercial variants. But more importantly, we think that where the FPP price modelled ongoing investment to sustain and upgrade the network, the non-price terms should reflect that by

⁷ Pablo Ibanez Colombo, *Discriminatory Conduct in the ICT Sector: A Legal Framework*, in G.Surblyte (ed), *Competition on the Internet*, 2015, pp 65

providing positive obligations on Chorus. Otherwise there will be little incentive for Chorus to actually deliver the modern fully functional service for which they are already being compensated.

20. As it stands the UBA platform can't fully support the FPP modelled service performance as, for example, legacy DSLAMs remain in use with limited functionality and constrained backhaul (Conklin's). In other words, actual UBA price/quality for a significant number of end users is disconnected from the FPP price/quality.
21. The Commission has asked whether it could require Chorus to replace legacy technologies such as the ATM network to close this gap. Regulatory practice, including that under Part 4 of the Commerce Act, ordinarily anticipates that the access provider can be obliged to maintain a level of investment to augment capacity and ensure that the regulated service is fit for purpose and maintained intact. Therefore, we would expect to see ongoing investment augmenting capacity to provide for demand growth or to replace expiring legacy assets and, when this occurs, modern replacement would have inherently more functionality. Otherwise regulated services would soon become irrelevant and the regulatory pricing principles in the Act would make no sense.
22. Section 300 provides that the STD must specify sufficient terms to enable the service to be made available, and the timeframes within which the access provider must make the service available, without the need for a separate agreement between the access seeker and the access provider⁸. As with any agreement between a technology service provider and its customers, it is imperative that the service provider is required to commit to periodic service upgrades. If the contract is not itself periodically renewed then the contract must be framed sufficiently clearly so that the implication of service evolution is specified as overtly as possible.
23. The TSLRIC model anticipates replacement over the long term, but provides no guidance over the rate that this occurs in any particular period. In theory, the Commission could establish a clear price/quality recommendation that provides Chorus the appropriate incentive to invest to replace the ATM network.
24. On one hand, the Commission should not need to resolve this question. Operators constantly replace equipment to maintain service (for lifecycle reasons - assets expiring, no longer supported by vendors, reduce costs) and to improve the customer performance. Likewise, Chorus should be responsible to maintain and upgrade investment given that the regulated UBA TSLRIC price is based on a modelled level of performance. TSLRIC regulation, if correctly calculated, provides sufficient incentives for access provider, access seekers and intermodal competitors to compete, innovate, and invest. But on the other hand, we can see reasons why the Commission should intervene. We consider that, for example, it would be more efficient for Chorus to upgrade ATM technology, but because it faces only limited competitive pressure to improve its service, it may not do so in a timely way. We think Chorus should face an additional incentive to carry out that innovation and investment in the form of a set of regulatory obligations.
25. We consider that the Commission should, at a minimum:
 - a. Require transparency of Chorus asset management and replacement plans, so that over time RSPs and Commission have visibility of the network transition. If these plans are

⁸ Section 300 (1)(a) read with section 300 (1)(b) of the Telecommunications Act 2001

materially disconnected from what would be expected in competitive markets the Commission could then enforce a default maintenance / upgrade / quality schedule;

- b. Address incentives in current non-price terms that discourage optimal investment to replace and upgrade the network. As it stands, a number of UBA ancillary services are defined in a way that the costs of deferred investment is pushed on to RSPs and consumers. This undermines the incentives Chorus has to invest in the network at the optimal rate, i.e. Chorus is moving away rather than closer to the optimal rate.
- c. Redefine the tasks involved in ancillary charges so that inefficient and counter-productive activities are prohibited – such as activity relating to network re-arrangements – that delay future capacity augmentation and cause unexpectedly low service performance. This would also align non-price terms with the FPP which assumes a modern network with sufficient capacity to all demand (i.e. network re-arrangements are not necessary where sufficient capacity exists in a network).

2 Should the regulated UBA service be a baseline service, average service, or advanced service? Please explain how your view is consistent with section 18 purpose statement.

- 26. Ensuring that the UBA service remains an evolving building block service provides a certain and fit for purpose platform on which RSPs can innovate and add customer value add propositions which themselves continue to evolve for years to come. This is the best way to ensure meaningful competition that benefits end users. We don't support seeking to constrain the regulated service by constraining the capability of the current platform.
- 27. As noted above, the UBA service should be a mainstream wholesale input service capable of supporting the mainstream retail services that meet consumer needs, and this means it grows over time. The approach should provide access to all the features and capabilities of deployed technologies. For example, capturing incremental features inherent to deployed technologies such as vectoring and pair bonding. This would be a fit for purpose UBA service with scope for commercial variants that genuinely deliver innovations above and beyond the regulated building block.
- 28. This is a fundamentally different approach to one that seeks to identify a basic, middle or advanced service, as that approach implies the regulated service is defined in order to create space for a commercial variant. Further, efficient anchor product selection is context and critical to driving innovation. The proposed categories are not derived in light of current demand or anticipated new innovation and, therefore, are not particularly helpful for defining an anchor product.
- 29. Finally, it's not clear to us how the FPP price could be deconstructed in order to price the particular variant. For example, the service must reflect all of the modelled FPP assumptions that anticipate the use of modern best in-use assets for the duration of the regulatory period to ensure that the FPP price does not over-compensate Chorus for the service performance provided. This would mean that, unless the Commission intends to implement a framework that permitted higher than FPP prices overall, then the baseline service with limited functionality would need to be provided at a discount to the FPP price so that, when combined with higher specified services, would deliver the expected FPP price. We're not aware of any performance quality or features not provided for in FPP model assumptions that could go towards an advanced service, but if there was this would possibly justify a premium - and expected discount for other variants - to the FPP price.

Considerations when amending the UBA STD

3 Do you agree that the regulated UBA service should be specified to evolve over the regulatory period to meet the changing needs of end-users?

30. Yes. What is important for innovation is clarity around the principles, i.e. what the UBA service is all about and expected outcomes. This would provide a useful benchmark against which commercial variants can be tested. Further, we should guard against specific service quality measures being drafted that create new static minimums which would over time fail to achieve the intended purpose – these are quickly outdated and need to be updated over time with changing RSP requirements.
31. In line with the current UBA principles, the service should continue to evolve over time so that it continues to be fit for purpose, and provide access to features and capabilities inherent in modern technologies. For example, capacity is added to network to meet end user data growth and software updates made available to users. The FPP approach provides funding for network upgrades and these should be made available as part of the regulated service.

4 Should we provide any additional incentives for Chorus to develop commercial UBA variants, in addition to the ability to set prices outside the regulated price cap? If so, why and how?

32. No additional incentives to create commercial services should be provided for in this process. Chorus' incentives to investment have already been factored into the UCLL and UBA prices and provided through the UFB and RBI subsidies. We consider that the greatest incentive for Chorus is to have clarity and certainty on what kinds of innovations to the regulated service would likely fall outside the regulated service and qualify for a potential market-driven premium.
33. We expect that Chorus, RSPs and the Commission may be able to use the proposed June workshop to identify enhancements that might properly be a commercial service.

5 To what extent should the FPP price and underlying modelling assumptions be considered as part of this process?

34. The FPP price and model reflect a number of UBA service outcomes, and these outcomes have driven the UBA determined price. For example, the Commission's FPP model is based on a modern network (fibre fed ISAMs at existing nodes) capable of meeting data growth over time and with fit for purpose systems, and ongoing investment to maintain and enhance platform. The regulated service must over time provide at least the level of service implied by the FPP modelling assumptions, including with regard to minimum throughput.
35. The Commission should expect that, over time, the actual service can support these outcomes. If the STD specified a lower spec'd service, for example, it would imply an inefficiently high price relative to the service. There is no end user benefit in overstating regulated prices for the particular service performance provided, and doing this is unlikely to be consistent with the pricing principle and the Act. Therefore, the regulated service should be aligned with the FPP price and underlying modelling assumptions.
36. The key areas that should be aligned are relate to:
 - a. UBA service performance. The FPP price is driven largely by the performance specifications of the service – i.e. that there is sufficient capacity to meet demand

at a node and the platform is capable of meeting data demand – and these should be reflected in the service definition; and

- b. The definition of connection and ancillary charges. For example, the FPP replacement cost modelled network is dimensioned to meet all demand and implies funding of ongoing upgrades and maintenance to minimise fault conditions. The service definitions should ensure that these costs – already forming part of the ongoing monthly charges – are not pushed on to end users and RSPs as ancillary charges as this results in a double recovery (once through higher capital costs, and again through ongoing ancillary charges).
37. The Commission is required to reconcile modelled performance with actual achieved performance. The more difficult reconciliation relates to DSLAMs technically unable to support this level of throughput on the affected lines. The Commission should expect to see Chorus progressively upgrade infrastructure in each exchange or cabinet over time so that every DSLAM supports the modelled throughput assumption. Otherwise, the TSLRIC price is ultimately overstated.

6 Are there any other key factors we should consider when assessing possible changes to the UBA STD as part of this section 30R review?

38. The Commission should also be conscious of possible operational improvements that enable access seekers to improve end user outcomes when defining the service. As noted in the issues paper, with separation a key dynamic for improving end-user service experience was lost.
39. In part, the Commission can promote end user outcomes by requiring Chorus to provide service information and system transparency so that RSPs can better engage with customers. As set out below, we propose that Chorus be obliged to provide of information relating to likely connection charges and details of platform outages.

Specific review issues/questions

Are the technical and functional requirements of the regulated service fit for purpose?

7 Should the UBA STD be updated to explicitly recognise that the regulated UBA service is an 'average' mid-specification service (or otherwise)? Why/why not?

40. We don't support an approach that seeks to identify a UBA mid or other specification service intended to create space for commercial variants – commercial variants should stand on their own merits. To amend the STD to introduce the concept of a mid-specification anchor product would be a fundamental change to the nature of the STD.
41. The focus needs to remain on providing a fit for purpose wholesale input on which retail services can be provided. The UBA STD decision provides that the UBA service is a basic building block service. The service definitions simply need to be updated to clarify that the service is one that is updated over time to ensure it remains fit for purpose.

Should the line between the regulated UBA service and commercial UBA variants be clarified?

8 Should the line between the regulated UBA service and commercial UBA variants be clarified? If so, why and how?

42. As noted above, UBA service principles could be clarified so that it provides an effective benchmark against which commercial variants could be considered. Variants that fall

outside these principles may be commercial services – promoting genuine innovations that address a novel set of requirements.

43. The UBA service description already captures some key aspects of the service, including handover specifications, single class of service without prioritisation and that it is a full speed full speed service. We continue to support the notion that the UBA service should be provided to achieve the fastest line speed possible on any given line without any artificial constraints being placed on that.
44. Nonetheless, the current UBA technical specification should be augmented to reflect the service principles by:
 - a. Confirming that VDSL variants form part of the regulated service and provide for a 10xGbps handover option. These features form part of modern deployed technologies;
 - b. Moving away from “internet-grade best efforts” terminology which is difficult to specify and replacing with a minimum acceptable line speed and throughput performance commitments;
 - c. Defining the minimum compliant service speed as a set percentage of the technical achievable line speed currently identified – for example - in the UBA address checker. This should then form the benchmark against which speed related customer reported faults could be tested, and subject to a NFF fee only when the network is performing to specification, i.e. the service speed exceeds the acceptable defined level; and
 - d. Specifying that the EUBA network, in principle, be operated as an uncongested network. For example, Chorus should augment capacity where peak demand through a 15 minute period is equal to 80% of route capacity. The FPP price already anticipates both throughput data growth (for dimensioning equipment/links) and throughput of 2.8Mbps per connected customer (constraining the deployment of otherwise lower cost wireless technology);

For residual ATM based variants, requiring transparency of congested equipment and routes, and plans to resolve congestion.

Should Chorus be required to provide the regulated UBA service over VDSL, and should it be able to withdraw VDSL?

9 Is Chorus required to provide the regulated UBA service over VDSL where available and requested by an access seeker?

10 Should Chorus be able to withdraw the regulated UBA service over VDSL where it has already made it available to access seekers?

45. We believe that Chorus is already required to provide VDSL as part of the regulated service wherever ADSL and VDSL are both available. The UBA STD requires Chorus to provide the regulated UBA service over VDSL, where the technology is available and requested by an access seeker. Further, as the Commission notes in the issues paper, that the FPP price compensates Chorus for providing the regulated UBA service using VDSL technology.

46. As above, the Commission should amend the STD confirming that VDSL is part of the regulated service - this avoids future arguments. Access providers shouldn't be permitted to unilaterally withdraw regulated services.

Should geographic differences apply to the regulated UBA service specifications?

11 Should there be geographic differences in the regulated UBA service specifications due to the UFB deployment?

47. We don't support geographic differences in the performance requirements – it would be difficult to manage our network performance and customers.
48. However, the proposed service commitments set out above are unlikely to require geographic differentiation in practice. For example, while Chorus should be obliged to provide an uncongested EUBA network, its plan to achieve this could include capacity augmentation or, in UFB areas, to promote customer migrations to UFB. In other words, there should be a single standard, and Chorus can resolve by either adding capacity or promoting migration to fibre (further de-loading a constrained platform).

12 Should Chorus be obliged to replace its ATM-based network if it is unable to meet potential changes to the technical specifications of the regulated UBA service as a result of this review?

13 If not, under what terms should the ATM-based UBA service be provided?

49. The ATM based service, where a number of DSLAMs have limited capacity backhaul, cannot support VDSL services and have constrained throughput. The FPP was based on the costs of using modern equivalent assets to deliver services at today's forward-looking costs. There are in principle good arguments that performance standards should be set with reference to those modern assets actually being deployed given Chorus is already being compensated on the basis of a platform capable of supporting these service levels.
50. Therefore, the challenge is to bridge the gap between what is currently provided in practice and capability funded through the FPP model. As noted above, section 30O provides the Commission with broad powers to specify all terms in the STD, including the relevant timeframes within which the access provider is required to meet those terms. Chorus should make transparent and agree an ATM transition plan that would see the ATM platform phased out. We understand that this is what is occurring anyway, and clarity around the plan would be for everyone's benefit.
51. Accordingly, the STD could be amended so that Chorus:
- a. Is obliged to report on routes and accesses where throughput is constrained, and planned network augmentation or mitigation activity (if any). This should be at a level which allows RSPs to better manage customer expectations;
 - b. Provides time bound plans for progressive upgrades to legacy DSLAMs and associated backhaul, and to make available features inherent to deployed technologies such as network monitoring tools.
52. Further, in earlier submissions we have questioned the need for Chorus' network management of the ATM network, and the associated bandwidth commercial charges. While there has been significant migration of customers off the network and there is likely no further need to allocate network capacity through additional charges, the charges remain and likely undermine Chorus incentives to upgrade the ATM network.

53. The additional throughput charges in question are implemented through the commercial UBR backhaul service which has both distance and throughput steps. If access were possible at the FDS, access seekers could avoid this charge through purchasing capacity to the relevant First Data Switch. However, the ATM network architecture means that traffic is handed over at the relevant BRAS. There are less BRAS handover locations than FDS locations, and this means it is not currently possible to avoid the UBR service and throughput charges.
54. In which case the ATM service is disconnected from the UBA service description and FPP model (which imply service availability at the FDS). In other words, access seekers should not incur transport charges for traffic between the customer and the first point in the network at which traffic can be handed over (i.e. the BRAS) and that BUBA is an uncontended service for which additional bandwidth charges do not apply. To align the approaches and provide an incentive for Chorus to transition the network, the STD should clarify that handovers from the relevant BRAS should be treated as through from the FDS, i.e. treated as though directly from the relevant FDS and not subject to throughput charges.
55. Further, RSPs should not be required to pay for duplicated handovers, i.e. both ATM and an Ethernet handover at the same location. To provide Chorus further incentive to migrate off legacy platforms, the service description should be amended so that no charge is applied to the second which only exists by virtue of the legacy platform.

Should Chorus be able to prioritise commercial services over regulated UBA traffic?

14 Should Chorus be able to prioritise commercial traffic where performance of the regulated UBA service is not affected?

56. In itself, prioritisation of traffic is an accepted network management tool. As noted by Chorus, assigning priorities to different types of traffic is a legitimate network management tool for efficiency and overall service performance purposes.
57. However, these benefits relate to prioritisation of traffic with different characteristics and performance requirements, and where there is congestion. For example, a business application may be more susceptible to packet loss than general browsing, in which case prioritisation of business services may be efficient.
58. The same network and service differentiation benefits do not apply where there are no differences in traffic or service requirements, which is the case with Boost proposal which based prioritisation solely on the basis of whether the customer was serviced by a commercial or regulated access.
59. Accordingly, the framework could provide for prioritisation where this reflects demonstrable differences in types of traffic. Where UBA is provided over an uncongested network there's likely to be little from traffic prioritisation.

Should a 10xGigE handover option be added to the UBA STD?

15 Do you agree with the addition of a 10GigE handover option to the UBA STD?

16 Do you agree that it is appropriate to use the 10GigE price determined in the FPP determination?

60. The 10xGigE handover is a standard handover increment inherent to technologies and widely used. Accordingly, a 10xGigE handover option is necessary to ensure the service remains fit for purpose.

61. A 10xGigE handover price was not determined as part of the FPP and the Commission should, therefore, use a competitive proxy for determining the price of efficient handovers given that they are used, purchased and deployed by Chorus and other LFCs in UFB. In which case, the Commission should use the charges set out in the Chorus UFB Price Caps schedule published on the CFH website for 10xGigE monthly charge and ancillary connect charges⁹.

17 Are there any other sundry services that we should consider adding to the UBA STD price list as part of this review?

62. No.

Should the process for introduction of commercial UBA variants be amended?

18 Should clause 10 of the UBA General Terms be amended to explicitly set out the key attributes? If so, why and how?

63. Spark considers that clause 10 of the UBA STD should be amended to improve the clarity of the process for determining whether a proposed service constitutes a regulated or commercial service. There is a gap in the current wording which could enable Chorus to simply introduce a new commercial service at a premium after a set time if it has not had any firm decision on it from the Commission.

Should the enhanced UBA (EUBA) variants be withdrawn from the regulated service?

19 Should the EUBA variants be removed from the UBA STD? Why/why not?

64. While something Chorus can better advise on, we are not aware of significant demand for the variants and these could potentially be withdrawn.

Should access seekers have greater visibility of Chorus' systems?

20 Should the UBA STD be amended to provide greater transparency of Chorus' systems?

65. As noted above, the Commission should be concerned that the regulated service supports improved end user experience. We have proposed greater transparency of Chorus' systems that would enable us to improve the service for end consumers, and provide visibility of Chorus and service company charges.

66. One of the key drivers of customer dissatisfaction for our customers is the challenges they face when their broadband service has a fault. The lack of visibility of the Chorus systems makes the RSPs role in resolving faults all the more difficult and there are often cases where Chorus and the RSP identify the other as the root cause of a particular fault without the visibility of the actual issue. This drives significant delays and frustrations into the resolve process.

67. Improving the information and data available to access seekers would better:

- a. Enable RSPs to better manage end user issues, set customer expectations and verify activities provided by Chorus or service customers to connect customers. Visibility of Chorus systems can only assist in improving the fulfil and assure processes; and

⁹ See here <http://www.crownfibre.govt.nz/crown-partners/retail-service-providers/>

- b. Recognise that Chorus has little incentive to drive efficiencies in to ancillary charges that are simply passed through to RSPs, and invest to upgrade the service; and
- c. Enable RSPs to reduce the costs to service end users.

68. This would require amending the STD to:

- a. Oblige Chorus to provide remote visibility to RSP of the line speed (peak and average) and throughput at the time Chorus addresses faults on the customer's connection. This would improve the management of end user faults.

The absence of a stated minimum acceptable line speed and throughput results in inconsistencies in quality of service and in determining whether a remediation truck roll is required. When a fault is addressed, the line speed and throughput standard that customer's broadband returns to, is inconsistent and not to a stated minimum standard. The primary outcome is to provide consistency in customer's quality of service.

- b. Oblige Chorus to, at the time of pre-qualification, advise on the availability of ports and connection type necessary to provision the circuit, i.e. whether the connection requires no site visit (intact), work at Exchange cabinet or and work at the customer premises.

Chorus do not supply sufficient information at prequalification to allow RSP's to fully inform customers of what activities are required to be carried out and their associated charges, resulting in a poor customer experience. Further, the lack of information at prequalification, means that RSP's cannot validate Chorus charges. Experience would suggest that activities are not always accurately recorded resulting in miss charging.

- c. Amend the Cancellation ancillary charge service description to limit to circumstances where the charge applies and require Chorus to provide details of cancelled services. From our experience, the majority of cancellations are due to service be restored after fault ticket has been created (even though the customer complaint may have been valid at the time or intermittent). Customers frequently express frustration and dispute on-billed cancellation charges.

In principle, cancellation charges should not apply where tools indicate a fault condition, and service is subsequently restored by the time the technician is dispatched. As these tool aren't yet available, to provide efficient operational incentives, cancellations should not be charged where no fault is found and, in the event of a cancellation, service companies/Chorus should provide more meaningful explanation as to the cause to permit ongoing improvements and manage customer frustration.

- d. Amend STD reporting requirements so that Chorus is required to report on constrained access links and equipment, i.e. where the network has insufficient capacity to provide an unconstrained service (the performance minimum).

RSPs are not able to manage customer complaints efficiently because we can't see problems in the Chorus network – this information should be made available to RSPs. This would enable us to identify and inform specific customers of reasons for poor throughput service

- e. Provide access to alarms and notifications relating to UBA platform components. At this stage, we base customer performance investigations on broadband authentication logs, i.e. repeated disconnections of the service. However, without visibility of Chorus elements we can only infer by elimination where the fault may lie.

Providing access to this data would enable us to provide a more responsive service to our customers.

- 69. The specific amendments that put these changes in to effect could be developed through the s30R review process.
- 70. We appreciate that other access seekers may have other requirements and there are ongoing discussions with Chorus relating to available platform information. The Boost service anticipated access, for example, to network analyser data that allow RSPs to identify specific lines with performance issues. Therefore, we propose that transparency obligations be progressed in the review through an operational workshop.

Other relevant matters

21 Are there any other relevant matters which we should consider as part of this review?

Clarifying when connection and NFF ancillary charges apply, confidentiality and SLA liability caps

- 71. As set out above, the Commission should ensure that the non-price terms do not in themselves discourage replacement of legacy equipment.
- 72. The FPP price already provides for a modern network which is not susceptible to faults and sufficient capacity so that network re-arrangement is not required to connect customers. However, the STD includes charges for NFF relating to poor line speed and network re-arrangements. This means that Chorus has diminished incentives to efficiently manage and replace the network and double recovers costs (once through higher than otherwise would be the case FPP monthly charges and again through ancillary/connection charges).
- 73. In which case, the Commission should:
 - a. Amend the definition of connection charges so that only the “remote connection” can apply to connect an end user sites previously connected to the network. The FPP implied network has sufficient capacity so that it is not necessary to break down intact lines, and Chorus is fully incentivised to optimise network management and replacement by facing both capital and operational costs; and
 - b. Amend the definition of NFF so that, for customer reported faults:
 - i. Chorus assumes the onus to demonstrate that the NFF charged to RSPs are caused by issues outside its network (this onus currently sits with RSPs with limited tools and ability to change fault outcomes); and
 - ii. NFF charges are not applied to customer reported faults where the network is not performing to specification, i.e. measured line speed is less than a specified percent of the technical calculated line speed. When charging a NFF, Chorus should supply network performance information that details line speed and throughput parameters relevant to the Service Description.

The FPP assumes a high quality network with minimal faults and, to promote efficient investment in the network, the costs should not be simply passed on to RSPs and end users. These NFF should not be charged to the RSP because they sit in Chorus' area of responsibility.

74. The transparency proposals set out above should reduce NFF volumes.

Updating confidentiality and risk provisions

75. Finally, The Commission should also look at:

- a. Reviewing the confidentiality provisions in the UBA STD which appear somewhat unworkable in a post-separation world; and
- b. Providing for revised service level terms and liability caps, to ensure that appropriate incentives are in place to meet service levels.

END
