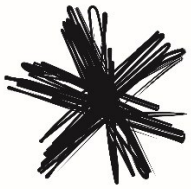

Spark New Zealand

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

Cross-submission | Commerce Commission

1 July 2016

Contents

Executive Summary

1. Thank you for the opportunity to comment on submissions and workshop discussion relating to the s30R review of UBA non-price terms (**review**).

2. The Commission's role, and its processes, are directed at advancing the interests of end-users - of customers of telecommunications services.

3. In the past 5 years the Commission's focus, and the industry's policy focus, has been centred on technical debates about pricing models for hypothetical efficient networks. The prices our customers pay for their telecommunications services are, of course, very important. But all of the time we've spent debating the design and inputs to pricing models for hypothetical efficient operators has meant less attention was paid to the other side of the Commission's role: regulating service quality.

4. Broadband is a fundamental enabler of communities and economic activities, and plays a critical role in connecting people in those communities and to those activities. The loss of broadband connectivity, or inconsistent and slow broadband, is a daily frustration for thousands of New Zealanders, and creates significant personal and economy-wide costs. In this context, the minimum service quality standards set by the Commission in the UBA STD will directly affect the broadband service experience for customers on Chorus' copper access network.

5. The service quality measures in the UBA STD are not up to scratch. They were designed at a time when the vertical-integration of the access provider (Telecom) had a natural incentive to maintain and improve service quality. Today, Chorus is structurally separated from all retail service providers, and is therefore isolated from retail demand signals. Its incentives are different, and therefore the role of the STD in regulating minimum service quality standards is also different. It follow, then, that the non-price terms of the STD must be updated.

6. The Commission should approach this task with a customer lens on: what outcomes or experiences should a customer served using UBA be able to expect?

    a. When a customer rings an RSP up to organise broadband at their new house, should they expect to get a clear answer on whether broadband is available at that house or not? Today, RSPs cannot reliably tell these customers:

        i. *Whether their house is connected to the network*: Whether there is a working intact copper pair to that house, or whether a technician will need to be sent out to connect a new copper pair to it;

        ii. *Whether broadband is available at their new house*: Whether there is a spare broadband port on the DSLAM serving that house;

        iii. *What type of broadband their house is wired for*: Whether Chorus has previously installed a VDSL splitter in the house or not;

    b. When a customer rings an RSP to complain about a sudden reduction in their broadband speed, should they expect their RSP to be able to troubleshoot their problem while they are the phone, and book an agreed time for a Chorus technician to visit their house if the problem cannot be identified? Today RSPs cannot tell these customers:

        i. *What the "baseline" broadband speed for their house is*: What the average synch speed Chorus' 5530 analyser tool has recorded for their house, which can be used as a "baseline" to indicate whether, in fact, the broadband speed to the house has changed suddenly;

ii. *Whether there is a Chorus outage affecting their area*: RSPs do not have real-time visibility of Chorus' network performance;

iii. *What time a Chorus technician will be at their house*: RSPs can only book a two-hour time slot, in which a Chorus technician will either come to the customer's premises OR contact the customer to arrange a time to come.

c. When a customer rings an RSP to complain about a fault, and Chorus sends a technician to the customer's premises, what information should the customer expect to get from that technician?

i. *Certificate of work undertaken*? A certificate setting out exactly what work was undertaken by the technician, and confirming that this work has rectified the fault found?

ii. *Certificate of baseline performance*? A certificate setting out the line speed and performance measured by the technician before and after their work?

d. When a customer rings an RSP to complain about a fault, and Chorus sends a technician to the customer's premises, but cannot find a fault, should the customer expect to have to pay for that technician's visit?

i. If no fault is found in the customer premises equipment, or in the network, should the assumption be that the customer was at fault?

ii. If Chorus has logged similar reports of faults at or near that premises before or after the customer logged their fault, should the assumption be that the customer was at fault?

iii. If Chorus cannot provide any information to the customer or to the RSP about the baseline performance of that line, or if other faults have been logged around the same area, should the assumption *still* be that the customer was at fault?

7. All of these scenarios reflect the status quo today: there is a lack of reliable information and network monitoring and reporting tools available to RSPs and to customers which create high levels of frustration, unnecessary truck-rolls and delays that could be addressed through improved non-price terms in the UBA STD.

8. Looking at the same issues from another angle, it is easy to see how the current version of the STD non-price terms have in many ways contributed to these problems by failing to create correct incentives on Chorus to address them:

a. The costs of poor pre-qualification information on working intacts fall on RSPs, not Chorus – because if Chorus records are incomplete, the solution is to send a technician out to check on the premises in question, at the RSPs cost;

b. The costs of insufficient network capacity fall on RSPs, not Chorus – because if Chorus does not have enough working intacts in an area (which would normally lead to it investing in augmented network capacity), it can simply reassign a working intact from a disconnected house – knowing an RSP or customer will pay to have that house re-connected again in the future;

c. The costs of maintaining duplicate ATM and Ethernet handovers at UBA handover locations fall on RSPs not Chorus – because Chorus gets to charge for each handover even though its inefficient network architecture is the only reason this traffic is being handed over in two different formats. In fact, in some cases RSPs have to pay Chorus

additional transport charges to take ATM UBA traffic to a handover point that is further away than the handover point for Ethernet UBA traffic, because Chorus' ATM network handover points are at a different set of locations to the Ethernet handover points.

9. These are all examples of where improvements in the UBA STD non-price terms the Commission can and should make will improve customer outcomes and experiences. As Chorus and our industry shifts attention and investment away from copper and onto fibre, the minimum UBA service standards set by the Commission will become increasingly important for the customers that remain served by the copper access network. These customers will often have no alternative to copper broadband, and will likely live in areas that are remote and costly to serve. They will be vulnerable customers that might feel left behind by fibre and ultra-fast broadband networks, and they will be reliant on the Commission setting minimum service quality standards that still allow them a good broadband service experience.

10. We have set out in the attachment to this submission the changes to the UBA STD non-price terms we believe are necessary to set a meaningful and reasonable minimum service standard for these customers. We are happy to answer any questions the Commission may have on it.

Introduction

1. Thank you for the opportunity to comment on submissions and workshop discussion relating to the Commerce Commission's (**Commission**) 7 April 2016 Section 30R Review of the UBA Standard Terms Determination process and issues paper (**issues paper**).

2. This is an important review because the Commission has to consider how it will promote service performance and quality in a structurally separated market. As it stands, the STD anticipates a vertically integrated access provider facing incentives to improve end user experience - there are significant gaps in the current service setting. For example, rather than supporting improved service experience, the STD includes provisions that impede efficient operation and management of the network by shifting the costs of operational decisions to consumers as ancillary charges.

3. In this context, the Commission is tasked with producing an STD that:

    a. Results in a fit for purpose UBA service – in that it meets the objectives of a regulated service and ultimately supports end user outcomes;

    b. Is complete in the sense that Chorus and RSPs are not required to enter into a separate agreement to take the service;

    c. Best promotes efficient provision of the service. In our workshop paper, we described this as: providing an underlying input service that grows so it remains capable of meeting consumer needs; where the full functionality inherent in deployed technologies is made available as new versions and upgrades released; where the service promotes efficient investment and operational choices; and performance is aligned with price.

4. Accordingly, the Commission should update the service description – clarifying that the service is uncongested, and adding VDSL and 10xGigE handovers – and consider how best to promote a better end user service experience. As discussed in our earlier submission and workshop paper, a number of amendments are necessary to do this.

5. In this cross submission we respond to submissions and comments made at the workshop.

Updating the UBA service description

6. The submissions and workshop demonstrated the parties are generally aligned in that the UBA service has evolved over time with technology and customer demand, and should continue to do so. The parties appear to agree that capacity should be added to the network in order to cater for data demand growth – that has been the practice of Chorus for a number of years now. RSPs were also aligned on the view that the service includes VDSL and should include regulated 10xGigE handover options. However, there were differing views over whether the STD should be amended to reflect the agreed parameters.

The Commission should codify expected UBA performance outcomes

7. Chorus argued in the workshop that it was unnecessary to codify these expectations in the STD as it was already providing a UBA service to this desired standard, it was already providing useful information, and it could make transparent network performance metrics such as the percent of congested routes.

8. We disagree. The STD is used as a point of reference for the reasonable expectations and norms parties may expect. It should be updated to provide clarity on service performance

expectations to reduce uncertainty, and align incentives of access seekers and Chorus to invest and innovate in the provision of broadband to end-users. If the Boost experience tells us anything, it is that out of date or unclear expectations in the service description result in significant distortions and uncertainty for access seekers.

9. Further, the Commission is required by section 30(O) to ensure the STD is sufficiently complete to enable access seekers to purchase UBA from the access provider without the need for the access seeker to enter into a separate agreement with the access provider. But if the STD fails to provide for material rights and obligations on the parties that would ordinarily be expected in an agreement for a fundamental technology service of this nature, then the STD cannot be complete The Commission has an obligation to close those gaps as part of this process.

10. To meet its statutory requirements, the Commission needs to set out the design principles (that is, the service is an underlying input that provides access to the full functionality of Chorus' networks and that grows to meet demand) and key Chorus obligations. Setting out the general service expectations provides important guidance to market participants and to end-users, and the obligation to provide an uncongested service is consistent with expectations of all parties, including Chorus.

11. Vodafone notes that competition from, for example LFCs and wireless providers, will encourage Chorus to improve performance and codifying expected performance is unnecessary. We agree competition drives better outcomes for consumers, and regulation should be removed where possible. In which case we would expect that competition have played out in the form of reduced prices and improved services. However, the Act already provides a mechanism for reflecting this competition – the UBA competition test. We do not agree that the Commission should use the service description of non-price terms to reinforce or second-guess that mechanism.

12. We also think that it is important to amend the non-price terms to clarify circumstances when Chorus can levy a regulated charge. For example, as discussed below, the non-price terms should place an obligation on Chorus to provide RSPs with a copy of meaningful data that; proves that no fault existed in the Chorus network, that a technician was dispatched and incurred cost to assess the fault, and that, in the circumstances, the no fault found fee is warranted. Such a positive obligation and onus to prove cost causation is reasonable and necessary to reflect Chorus' exclusive access and control of diagnostic tools and information systems relating to its network.

Proposed service definition amendments

13. If the Commission proposes to codify service obligations, there appear to be limited material issues to be resolved.

14. All parties agree that VDSL and higher capacity handovers are standard to modern deployed technologies. We consider the addition of these to the service description would be consistent with the FPP price settings. Similarly, all parties agree that the UBA service is expected to provide for the growing throughput needs of all customers. Chorus noted in the conference that it would continue to add capacity to the ethernet UBA network to meet demand, and to avoid congestion.

15. The Commission can simply amend the STD for these matters to:

    a. Restate that the UBA service is an underlying input service that makes the full capabilities of the network available to access seekers, and evolves over time to meet end user needs;

b. Clarify that the UBA service objective is to provide an uncongested service. In the case of the ethernet based UBA service, Chorus should augment capacity in the ethernet based network so that it operates as an uncongested network. In practice, this should be via a requirement that Chorus ensures that links in its Ethernet network are never more than 80% full, measured on a 15 minute busy hour basis; and

c. Clarify that VDSL is within the UBA service description and add 10xGigE handover option. These changes are necessary to continue to meet the Act's requirement for international best practice.

Setting a 10xGigE handover price

16. At this stage, no price has been determined for 10xGigE handover options. The workshop explored different methodologies for setting prices for 10xGigE handovers. While the UBA FPP was completed last year, the Commission did not set prices for 10xGigE handovers in the FPP process, and accordingly the proposed costs were not tested by the parties through the process. In any case, it is unclear to us whether the Act would permit the Commission to jump straight to an untested FPP price. Rather, the Act may require the Commission to determine an IPP price, followed by FPP if requested.

17. Our preference is that the Commission take a pragmatic way forward to avoid this, and consider relevant New Zealand benchmarks for handovers. For example, UFB handovers available from Chorus and LFCs provide a real world benchmark of handover prices. In fact, they provide prima facie evidence of an efficient price for these handovers. The Commission should request advice from LFCs in particular as to whether they believe the UFB 10GigE handover price reflects the costs of those handovers and/or whether LFCs have any plans to increase these prices at the conclusion of the UFB contracted period. Similarly, the Commission should enquire of Chorus what 10GigE handover prices it is included in its tender for UFB2 subsidies. Alternatively, if the Commission were concerned that there may be some underlying technology differences, it could consider benchmarked relativity between UFB 1xGigE and 10xGigE prices. This benchmarking would indicate that the 10xGigE should be 300% of the cost of a 1xGigE handover, and the Commission should set a price of $450.

18. Finally, as was noted at the workshop, connection charges should be the same for 10G and 1GigE handovers – there is no difference in work required to install a 1xGigE from a 10xGigE connection.

Resolving for legacy ATM BUBA services

19. Within the general construct, there is a specific ATM BUBA lifecycle issue. Whereas the FPP assumes a UBA service provided nationwide using modern Ethernet technology and fibre backhaul links, Chorus currently has a mixture of Ethernet based and legacy ATM based DSL networks that are used to provide the regulated UBA service.

20. The legacy ATM DSLAM network is dated and offers a poor standard of service to a significant number of customers due to technology and transport capacity constraints. Customers served using this technology experience a materially reduced service relative to those served using Chorus' modern Ethernet network. The question for the Commission and Chorus is how to improve service to these customers?

21. The FPP model provides some guidance – providing a link between service performance and price. RSPs and InternetNZ submitted at the workshop that FPP model parameters provide service performance principles or clues, while Chorus argued that the FPP price is divorced from the provided service provided in practice and should be discounted.

22. While the FPP is premised on a hypothetical efficient network, the model assumes a level of quality and Chorus is compensated accordingly. We have to recognise quality in some way as it has – to an extent – driven the resulting FPP prices. Where price is disconnected from actual quality there must be other - more efficient - prices available to the Commission that better provide the s18 outcomes. With little appetite to revisit the FPP price, the Commission has to look at its approach to service performance to align price.

23. Vodafone says not to force investment in inefficient investment in legacy copper networks when high speed alternatives are available. We're not suggesting that Chorus be forced to invest in legacy technologies where inefficient. We believe that Chorus should have flexibility to mitigate performance and this could include, for example, accelerated migration to UFB services. In any case, our specific proposals are unlikely to drive UFB competing investment.

Asset and investment management transparency

24. The Commission must recognise disconnected quality in some way, the question remains how it should do this? InternetNZ noted at the workshop that consumers are already paying for higher quality through the FPP prices, and suggested the Commission should require Chorus to improve service performance. As we set out in our earlier submission, we believe the Commission has the powers to mandate service improvement through section 30O to align with the FPP price.

25. However, as noted in the workshop, the FPP provides little advice on the rate in any year at which assets are replaced and the network upgraded. Chorus provides little if any visibility of its asset and investment management plans, and the Commission has no information to form a judgement on whether asset replacement is consistent with the FPP pricing principles or will ever deliver the efficient network assumed by the FPP. RSPs have no information relating to the evolution of the platform, against which they can make their own investment plans. Accordingly, the Commission should:

    a. Require Chorus to make transparent its plans and commitments to asset replacement through amendment to the general terms; and

    b. Clarify that, if these plans are not acceptable, then it will impose specific performance improvement requirements.

ATM BUBA handovers

26. At this stage, there is an issue in that it is not possible to purchase ATM based BUBA for some regions without taking a tail extension service and charge.

27. This is due to differences in the ATM and ethernet service architectures. The ethernet based service is be handed over at a (first) data switch (each of which has a Chorus determined coverage area), while ATM based services are handed over at the BRAS. There are fewer BRAS' than first data switches and this means that, for some areas, ATM traffic must be picked-up by access seekers in a different coverage area and transport and capacity charges apply accordingly. For example, Northland sourced ATM traffic can only be picked up at the MDR exchange in central Auckland. This means access seekers incur a B step transport charge and are subject to additional throughput charges, i.e. a 150kbps per customer dimensioned handover costs an additional $4.83 per customer per month.

28. Since the workshop discussion, we have looked at this matter further, and it appears that the STD principles have been incorrectly applied to ATM based traffic which should be handed over at the BRAS as if it were the first data switch. This is because the:

a. The UBA service description in the Act and STD provides that Chorus is to hand over traffic at the FDS *or equivalent facility.* We are of the view that the price for the regulated service incorporates all costs which Chorus incurs up to the point at which it hands over the traffic to the access seeker. The handover takes place at a facility that is equivalent to the FDS, i.e. where a RSP can pick up the traffic;

b. As an operational matter, customers within a region must be assigned to a particular handover point. The service description provides that Coverage Areas and related Handover Points are established for ATM based DSLAMs, and for the EUBA based DSLAMs. However, there is no obligation that the Handover Point should lie within the coverage area. Chorus noted that there are different catchment areas, recommending in 2011 that the service description recognise the differing handover characteristics[1].

c. The service description requires Chorus to publish the current list of Handover Points and Coverage areas on its secure web site. Chorus has identified ATM Coverage Areas for which the only available Handover Point is in a different Coverage Area, and additional transport charges apply accordingly.

29. We believe Handover Points and Coverage Areas are being applied by Chorus in a manner that is inconsistent with the STD principle, which requires service to be available at the FDS or equivalent facility at the STD determined price. Accordingly, we believe this can be resolved by clarifying the expectation that the STD pricing should apply to the Handover Point (even where this is defined outside the Coverage Area). This would then align UBA pricing for the ATM based variant with the FPP price.

30. Further, the Commission should ensure the STD does not impede the efficient upgrading of network by ensuring Chorus faces more of the cost of legacy equipment. As noted in the workshop, Chorus has incentives to replace equipment to reduce its input costs and this incentive does not change. However, where the STD is structured in a way that Chorus receives either more revenue from delaying the replacement of legacy technologies, or is otherwise insulated from the implications of its decisions, then it must result in deferred replacement and less efficient outcomes.

31. Accordingly, we've proposed additional changes that seek to ensure Chorus faces more of the costs of its operational decisions, it should only receive revenue for activity that is efficient.

32. A clear example is Chorus' current practice of requiring access seekers to purchase two separate handovers at the same place in order to pick up ATM-based UBA traffic and Ethernet-based traffic. All of this traffic is UBA traffic, and access seekers would prefer to purchase a single handover from Chorus for this traffic. Similarly, we would expect, and the FPP expects, that an efficient network operator would aggregate all UBA traffic from one area into a single handover. The fact that Chorus does not do this is a function of its inefficient network architecture. In that context, the correct party to bear the costs of that inefficiency is Chorus – not access seekers (who have no say over Chorus' technology or architecture choices) or ATM-based end-users (who are already experiencing the service performance limitations arising from Chorus' inefficient network architecture). The charge for an ATM BUBA handover should not apply where this simply duplicates existing Ethernet handover capacity.

[1] http://www.comcom.govt.nz/regulated-industries/telecommunications/archive/standard-terms-determinations-archive/uba-archive/clarifications-to-the-uba-service-and-technology/uba-std-clarification-ethernet-delivery-of-buba/. Chorus proposed to note that "technologies may have different Coverage Areas, Handover Points, Handover Connections and geographic coverage."

Improving the end user service experience

33. The key issue for the review is how to promote efficient network practices and operational performance so that customers get a better experience and better service levels than they do today.

34. The reality is that today's network does not always meet the standards implied by the network modelled in the FPP process, or the standards expected by customers. We accept that the FPP is, by dint of the TSLRIC pricing methodology forced on the Commission, a thought experiment that does not model Chorus' actual network or costs. But we do not accept that the hypothetical efficient network standard used to set the price has no link to the actual performance standards set for Chorus in the non-price terms of the STD.

35. The price and non-price terms must converge over time, and the Commission has several tools before it to ensure Chorus faces the correct incentives to ensure this convergence occurs in an efficient way. As we have discussed above, in relation to ATM technology, the Commission can require greater transparency by Chorus of its network performance and investment plans in order to shine a light on them. Similarly, it can require that Chorus bears the direct and indirect costs of by, for example, placing the costs of inefficient network operation or investment on Chorus rather than on Chorus' customers.

36. Chorus' continued use of ATM technology, and it's reluctance to upgrade legacy copper backhaul links with fibre backhaul, constrain the peak speeds and throughputs available to customers. This creates significant frustration for those customers, and raises questions in their minds as to why they should pay the same as customers served using ethernet technology.

37. Just as important though, because it affects many more customers than the ATM issue does, is the lack of modern tools and information available to customers and access seekers about Chorus' network performance and capacity:

    a. RSPs cannot determine at the time or pre-qualification whether a port is available to connect the customer, and the connection service that will be required. This means the RSPs and consumers face unexpected costs, and frustrating delays for customers. The customer takes pot luck with the connection occurring – we have around 900 failed connection per month;

    b. Customers served from ATM based DSLAMs are experiencing significant congestion and poor performance at peak times. Chorus reported at the workshop that the ATM network minimum throughput is just over 32kbps per customer (average busy hour throughout for copper services overall is 575kbps). However, RSPs have little visibility of where these customers are and when there might be some customer relief;

    c. RSPs have little visibility of real time service performance, faults or network outages. This means that RSPs can only reactively respond on the basis of customer complaints and, where there is a fault or outage, results in a frustrating process for end users and high costs for RSPs;

    d. Customers have no information to assess whether their connection or working to expectations, or that service company activity (for which they are charged) has provided a reliable service. This causes significant frustration for customers - around 25% of chargeable events are challenged by customers.

38. All of these are examples of inefficient network operation and management that Chorus should be incentivised to address. The Commission can create the right incentives, and make a demonstrable difference in customers' experiences, by requiring better performance from Chorus on each of these issues. The STD currently doesn't encourage more efficient operational practices, and RSPs lack basic information that would allow them to improve the customer's lot. In many cases it does the opposite. This places the current STD in breach of the standard access principles.

39. We have set out proposals in our workshop paper that would improve the situation. The attachment sets out these proposals, updated for feedback at the workshop and subsequent discussions with RSPs.

40. We acknowledge that raising the operational standards required of Chorus will drive cost into Chorus and into access seekers. We acknowledge that these costs will, indirectly, find their way to customers. But we are confident that the net effect will be a significant long-term benefit to those customers. We are confident it will make a meaningful difference to customers on a daily basis – in the form of reduced frustration, quicker resolution of faults, quicker connection to the internet and – perhaps most importantly, greater confidence in their broadband services.

41. We also acknowledge that Chorus and the rest of our industry has shifted focus away from copper to fibre as the network of our future. That does not make continued high performance of the copper network any less important though – arguably it makes it more important. The customers left with copper as the only feasible form of broadband connection should be the customers of most concern to policy-makers. They will be the hardest to reach customers, the costliest to serve customers, and the customers who feel most vulnerable, most at risk of being left behind by our industry. They are the customers for whom the minimum standard set by the Commission will be the most real.

Change through s30R and within the STD

Clause 10

42. The Boost process demonstrated that Chorus has both the incentive and the ability to degrade the regulated service, by unilaterally amending service performance, to reflect a minimum performance standard. To prevent a recurrence of this an evolving performance should be clearly provided for in the STD.

43. It is probably not enough to just say that the service must be "world class" or consistent with international best practice without providing some definition of that that means today, and an obligation as to what that means over the regulatory period. It is necessary to set obligations that define continued expectation in future, i.e. to "keep up with international best practice" as Vocus says at paragraph 22 of its submission,

44. The Boost process also demonstrated the short-comings of clause 10 and we consider that this is a good time to update the clause to close the gaps and provide for a complete process for assessing whether a new variant forms part of the regulated service or not. One thought we had is that clause 10 could provide for a 2-tier process as follows:

    a. To provide the Commission with a chance to give Chorus a "quick steer" on whether it considers the variant would likely fall outside the regulated service. This might be possible for example where the proposal is totally different – e.g. symmetric as opposed to asymmetric – and the process may provide for the

Commission to make a draft decision within 2 weeks, consultation within 2 weeks and a final decision within a further 2 weeks.

b. To enable the Commission to take a more considered path to consider and determine whether a new variant may fall within, outside of, or degrade the regulated service. If it is questionable whether the service is different, the process may provide for the Commission to publish a discussion paper within 2 weeks, submissions within 2 weeks, draft decision within 2 weeks thereafter, further submissions and a final decision thereafter.

45. This process is likely to be no more onerous or lengthy than the kind of process already included in clause 9, and provides significantly more certainty and process efficiency than we saw in the Boost process. The ability to make changes to the service that takes it outside of the regulation will invariably be contentious and the STD, like any other agreement seeking to regulate for this sort of change should provide a clear process for a reasonable and independent adjudicator to make an informed decision to resolve any impasse.

46. The Commission is the only body that has the lawful power to determine whether or not the service provided by the access seeker complies with or is required to comply with the determination it set. The Commission's role in making that decision should accordingly be more clearly set out in clause 10. The Commission will inevitably have to mediate operational disputes between regulated stakeholders as they evolve over time – it may delegate aspects of that to another body of forum as it has under clause 9, but in other cases it is more clearly the only body empowered to and the most efficient place for determining the issue - such as in respect of changes proposed under clause 10.

Completing the review

47. We note several parties have called for these more operational issues to be addressed by the TCF, in a working party environment. We do not support this for the reasons explained above: while the changes we are suggesting are technical in nature, they go to the very heart of the price-quality trade-off the Commission is required to make in this STD. They will drive changes in costs, and for that reason, the industry is unlikely to reach agreement on them. The industry has had years to agree sensible changes to systems to achieve these changes, and has not done so.

48. Often the best way to achieve this type of change is to force it: to focus parties' minds on the issues by putting a strawman (such as a draft determination) in front of them, which they must react to. The threat of an external deadline and decision (a final determination) has proven time and again the most effective way of forcing parties to identify workable solutions to intractable issues such as these, and is likely to be most effective in this case. If parties wish to utilise the TCF to facilitate discussion leading into submissions this course of action is open to them.

49. The Commission should set out Chorus obligations in the draft decision, and then convene a technical workshop to develop an implementation plan. This would capture how the outcomes should be achieved.

END

Attachment: proposed changes

This attachment has been updated from the workshop paper to add more information relating to customer impacts, and revised for feedback from the workshop discussion and subsequent conversations with RSPs. The key changes being that:

a. The proposed service speed commitment is better considered as part of the concern that there is no agreed service performance benchmark against which end users concerns can be compared. This better reflects the intend not to ask Chorus to invest significantly in the copper access network, but that Chorus should stand behind the performance a well maintained network could provide. Customers should have a comeback when the network does not perform as expected, and not incur frustrating ancillary charge when is doesn't.

b. Asset management is based on transparency, and removing impediments to efficient network operation and investment. While the Commission has the power to impose performance obligations relating to the ATM BUBA network, we believe that initially the focus should be on providing greater transparency of Chorus plans;

c. Group proposed work assurance proposals as establishing a baseline/benchmark - against which customer charging events can be tested;

d. Provide a limited customer warrantee on service company work – customers shouldn't incur NFF or in home charges to fix poor workmanship; and

e. Minor changes to clarification of where NFF charges should apply and clause 10 approach.

Service definition and performance

What is currently happening	What needs to happen	Proposal
The STD does not set out an expected UBA outcomes accepted by all parties, and this results in disputes such a Boost and uncertainty for RSPs and Chorus.	While D611 sets out clear principles, these need to be codified in the s30R decision or STD to avoid future argument.	1. Amend Service Description (**SD**) to clarify that UBA is an underlying input service that makes the full capabilities of platform available to access seekers, and evolves over time to meet end user needs.
There is ongoing congestion in the network – at the workshop Chorus indicated that 48 routes were currently suffering congestion and the ATM based BUBA service minimum throughput is currently just above 32 kbps (whereas overall average demand is 565kbps). This mean that at peak times, the ATM based service will be frustrating and	Clarity that Chorus is to generally provide an uncongested service, and seek to mitigate the impacts of congestion. The practical codification of this being a capacity commitment for the ethernet network. For the ATM based network, transparency of impacted customers and time bound plans to resolve	2. Amend SD to set Service Objective that UBA is an uncongested service that supports the maximum service speed of the line. In particular, a. Ethernet UBA - Chorus to add capacity so that no route is more than 80% full at peak time;

What is currently happening	What needs to happen	Proposal
unworkable for some internet applications such as video. Customers are frustrated when reporting faults as RSPs have no visibility of the potential cause (congestion) or when they might see some relief.	(which could mean "no planned solution" or migration to other platforms (UFB)).	b. <u>ATM based UBA</u> - Chorus to mitigate end user impact of technology choices and provide time bound plans to resolve congestion (currently in backhaul).
VDSL and 10xGigE handovers are standard modern technology options. If the STD does not provide for these options, it is not complete. Around 70% of our handovers are 10xGigE, and all new handovers would be if they were available at all sites today. Chorus prices UBA handovers at almost 5 times the price of the technically identical UFB handover, and has been unable or unwilling to provide 10xGigE handovers in some locations. Driving inefficiencies.	The service description and STD need to be made complete by clarifying that VDSL is part of the regulated service, and high capacity handover options added. Handover prices set consistently across platforms. Mechanism to encourage Chorus efficiently make capacity available.	3. Amend SD to clarify VDSL and add 10xGigE handover options. 4. Amend Price List (**PL**) to provide 10xGigE handover at UFB price (connection and monthly). 5. Where Chorus is unable to provision a 10xGigE handover and the RSP must take multiple GigE handovers, the price for multiple handovers should be capped at the 10xGE price.
In some regions, it is not possible to obtain an ATM UBA handover link, and transport and capacity charges imposed to obtain traffic in a different region. For example, Northland traffic can only be take accepted in Auckland, for which a $2.10 per line per month charge applies ($4.83 per line at 150kbps throughput). RSPs are obliged to inefficiently deploy multiple handovers due to Chorus' technology choices.	The current approach is not consistent with the designated service or STD, the BRAS should be treated as the FDS equivalent facility. In which case, traffic handed over on the same terms as if it were a FDS. Chorus should see the full cost signal of technology choices, no inefficient handover charges should apply.	6. Amend SD to clarify that ATM BUBA handovers from the BRAS handover are treated as a FDS, i.e. can only incur distance steps from that point and throughput charges are not permitted. 7. Amend PL so that BUBA handovers incur no charge where an access seeker's existing co-located Ethernet handovers have sufficient capacity for traffic.
There is no visibility of Chorus lifecycle plans, and this makes our own technology planning difficult. The first RSPs know of changes in many cases is when a service is withdrawn or changed. Current structure creates an incentive to withhold information relating to new capability, creating an	Reduce information asymmetries around technology plans for regulated services. Give RSPs and Commission transparency of replacement and upgrade plans.	8. Amend General Terms (**GT**) obliging Chorus to make asset and investment management plans for key components transparent, with committed replacement and new capability plans (could be based on the formulation set

What is currently happening	What needs to happen	Proposal
option for future "upsell" (when such capability is inherent to technologies deployed). The Commission cannot assess whether ATM BUBA replacement is occurring at the rate it would expect.		out in clause 2.6 of Electricity Distribution disclosure requirements[2]). 9. In terms of the ATM based BUBA service, Chorus should make transparent a time bound transition plan. The Commission should clarify that if, over time, this departs from expectations it would consider imposing specific performance obligations.

Clause 10

What is currently happening	What needs to happen	Proposal
Clause 10 process is asymmetric, does not provide for access seekers to identify variants for provision as the regulated service. Accordingly, weighted towards variants outside rather than inside regulated service Clause 10 does not provide its own remedies and conclusions – e.g. NZCC to revert to powers under the Act	Balance approach so that access providers and access seekers can drive new variants. The Commission has a clear role – being to confirm new variant inside or outside regulated service, and most likely power – e.g. approve, decline, conditions.	1. General Terms (GT) to provide that: a. Access seekers may request new variants within regulated terms. The clause should then set out requirements for Chorus to give full considerations and respond to request; b. Two-tier process to provide for fast-track and more considered pathway; c. Ability for Commission to "pause" proposals that are not straight forward; 2. Clarify Commission powers, actions and ability to approved or require amendments to be more expressly set-out.

[2] http://www.comcom.govt.nz/regulated-industries/electricity/electricity-information-disclosure/part-4-review-of-electricity-information-disclosure-requirements/

Improving outcomes for end users

What is currently happening	What needs to happen	Proposal
Provisioning events		
RSPs and end users are incurring costs and frustration due to the high number of service company truck rolls for re-connection. RSP analysis for the purposes of the FPP showed that 25% of UBA connections requiring a truck roll were live with another RSP within the preceding 5 months (indicating poor record keeping or significant breaking of intacts). Current processes suggest Chorus and service companies are breaking down a high number of intact connections (for capacity or fault restore purpose), and truck rolls being used to resolve for incomplete network records.	Chorus has an incentive to reduce the number of intacts being broken down (and therefore available for re-connections) and truck roll connections. Network operators are able to minimise truck rolls through efficient network and record management practices, and service company restore that avoid breaking down intacts to replace a faulty pair. STD connection definitions clarity that re-connections incur only a remote connection charge, aligning with FPP assumptions.	1. Amend Price List (**PL**) to provide that only a remote connection can apply to reconnect a premises, except where the prior service was a UCLL.
As RSPs do not have real time visibility of whether a port is available, they must place orders on the basis that a port is expected to be available. Customer connection service orders are subsequently rejected – fail – and this process results in around 900 highly dissatisfied customers per month. Further, RSPs can't advise customers of likelihood they will receive service, if at all, nor the work/likely time for connection. RSPs are inhibited from creating a tiered pricing model reflective of the Chorus costs. Chorus is able to simply pass on the costs through ancillary charges, and connections are revenue opportunity for service companies.	RSPs have pre-qualification stage visibility of service availability, likely connection required and expected service speed. RSPs can then set appropriate customer expectations. Visibility of connection type so that RSPs can signal efficient costs to consumers. Chorus has an incentive to improve network records and facilitate a "right first time" process for consumers.	2. Amend Operations Manual (**OM**) so that, at pre-qualification, RSPs have visibility of: a. Whether a port is available (currently delayed registering); b. Connection required to make service live; c. Status of home wiring (whether Chorus has installed a splitter); d. Expected service speed. 3. Amend the OM ancillary service definitions so that: a. There is no charges for a manual investigation where the pre-qualification

What is currently happening	What needs to happen	Proposal
		information listed above is not available as specified above; b. Connection charges can be no more than listed in the pre-qualification information; c. There are no NFF, or in home service charges, where the service speed is materially less than specified at the time of pre-qualification.
<u>Establish a baseline for service performance</u>		
The fault process leaves consumers confused and frustrated, and RSPs and consumers with high costs. While customers are charged for provisioning and NFF/Fault services, there is no feedback (that the line works to an agreed standard) nor operator commitment to service outcomes. Customer cannot see value for money or whether there was any improvement from the fee. At worst, in some cases end users see no improvement and face further charges to investigate and fix faulty work (that they consider should have been fixed the first time). Up to 25% of charged events are vigorously challenged by end users.	Establish a baseline service standard for the line that can be used to determine a fault event, and the line performance tested and logged at the time a service company is at the site. Where a tech is on side, in all cases a record made of the performance at the completion of the job. Agreed splitter install guidelines including location, interaction with home alarms, record keeping.	4. Establish a Service Objective that a service will work consistent with the expected service performance set out in the Chorus coverage report. 5. OM so that at the time the fault is cleared/closed, tech certifies service performance and results of investigation/activity (outside current notes field). 6. Amend OM so that tech records the tested service speed at completion of site visit or failed provisioning event. The service is warranted for 45 days to perform without fault. 7. OM to provide clarity around wiring (splitter) standards.

What is currently happening	What needs to happen	Proposal
<u>The Fault event</u>		
Customers may suffer a halving of speed and, even where the degradation is identified as a cable issue, will incur NFF and no resolution if the cable complies with "field specifications". While faults can be raised for "low sync speed", there is no agreed threshold or practical way to test this with current RSP tools. All service impacting events that cannot be proven to the Chorus network, are allocated as NFF fees. We are finding that customers are unwilling to agree to raise a fault with Chorus and risk NFF fees. Customers are left with poor service performance, and feeling of being left hanging. Customers face a lack of clarity over service company appointments, accepting and taking time off work for an appointment that simply ends up being a phone call (the appointment being to call not be onsite).	Recognition that slow speed - relative to the speed the line should support - is treated as a network fault event. NFF charges should only apply where the network was recorded as performing to the baseline standard at the time the fault was reported. Cancellation charges only apply where it is truly the customer's fault/choice.	8. Amend GT so that degradation to the service performance relative to expected line speed is an unplanned outage, and that service failing to meet the Service Objective is a Chorus fault event. 9. Amend GT and OM so that: a. NFF charges do not apply where a tested fault is present at the time a fault it report (Chorus should initially have the reverse onus until point where RSPs are able to remotely measure and record performance remotely); b. Cancellation charges not to apply where records indicate service did not perform to the objective at time fault was recorded, or where tests show service is clear at time of cancellation; 10. Amend OM so that Chorus provides an explanation for cancellations, and specific times for appointments.
<u>Diagnostic tools and processes</u>		
RSPs are tasked with addressing customer performance concerns, and diagnosing fault reports. However, RSPs do not have access to Chorus network reports and existing diagnostic tools that would permit them to do this. Accordingly, RSPs rely on indicators of network outages (i.e. repeat customer complaints and modem resync records) to diagnose issues.	RSPs have access to existing reports and diagnostic tools, and can use this to troubleshoot customer reported faults. Reduce the number of faults reports and NFF as can compare tested performance with expected.	11. Ask Chorus to report back by the end of July on options to provide: a. Reporting on congested routes and network elements, and planned network augmentation or mitigation activity so that RSPs can set and manage customer expectations;

What is currently happening	What needs to happen	Proposal
RSPs are notified by disaffected customers of network outages rather than network alarms.		b. RSPs remote visibility of customer line performance metrics off the DSLAMs (i.e. via an API that provides performance reporting); c. RSPs access to alarms and notifications relating to UBA platform service impacting events.