



Section 30R review of the UBA standard terms determination

Submission to Commerce Commission

5th May 2016

ABOUT VOCUS

1. Vocus (New Zealand) (**Vocus**) welcomes the opportunity to make this submission to the Commerce Commission on the "Section 30R review of the UBA standard terms determination" process and issues paper.
2. Vocus New Zealand is the third largest fixed line operator employing over 550 staff In New Zealand. Our retail operation includes a number of challenger brands - Slingshot, Orcon, Flip and 2Talk. We are also an active wholesaler of services including access, voice and broadband over both fibre and copper.
3. Vocus has made significant investments in New Zealand. We are the largest copper unbundler with a presence in over 200 exchanges throughout New Zealand. In addition we operate 4,200km fibre optic network transits between virtually all major towns and cities, and connects directly into all major peering exchanges. .
4. Our customers in New Zealand range from government agencies, integrators, large corporate, SME and residential households. We are committed to New Zealand's fibre future.
5. Vocus Group is one of the fastest growing telecommunications companies in Australasia and a major provider of voice, broadband, domestic & international connectivity and data centres throughout New Zealand and Australia.
6. If you would like any further information about the topics in this submission or have any queries about the submission, please contact:

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SUMMARY

1. Perhaps the best indicator of what is the regulated service is what it has been and is today?
2. **The regulated service is clearly not an average service.** The service is full speed service, operating to the physical capability of the line with additional capacity added to local backhaul as required. Both RSPs (nationally and locally for our own DSLAM network) and Chorus (to the local handover) have to date invested in additional capacity to meet demand as required, despite falling retail prices. How has that been achieved; technology capability advances, lower prices for equipment and bandwidth and efficiency improvements. There is no reason this should not continue in the future.
3. Chorus' likely investment in copper is minimal in Vocus' view, any investments they make will be in the fibre local aggregation paths that UFB, UBA and other services share. Spark & Vocus have submitted that we have historically as a matter of network capacity planning augmented our links, **including our own DSLAM network**, to meet demand as matter of policy. We anticipate other RSPs are the same. We would expect the same from Chorus unless there was a dramatic change in circumstances which should be dealt with at the time.
4. The Commission attempt to 'grade' the regulated service, terming it an average service as opposed to an advanced service *'that provides for the latest consumer uses'* is concerning. The regulated service is a 'world class' service – Chorus have said so on many occasions. The Commission are in danger of 'dumbing down' the regulated service and allowing a window for Chorus to extract an artificial premium – Boost demonstrates they would clearly take this course of action.
5. The current regulated UBA product is not an average product, it is 'world class' and serves the vast majority New Zealanders well. (De?)Grading the regulated service to allow for Chorus to introduce commercial variants would be contrary to s18.
6. Vocus have no issue with an 'anchor product' approach in some situations but we do in this case for the reasons outlined in the paper. It's also worth noting that Chorus have no incentive to create lower priced commercial services so if an anchor product approach was used in this situation surely a new lower cost, lower specified, baseline service should be regulated?
7. Vocus encourage commercial variant provided they don't impact the regulated service. There may be a need in future for niche commercial products but in practice the opportunity for Chorus to innovate on the UBA local access network is limited – most innovation and variants are likely to come from RSP's.
8. In Vocus' opinion to clarify where commercial variants are allowed the Commission should not be trying to grade the regulated 'general use' internet access service into categories but rather clarify on what 'dimensions' commercial services could be differentiated. **Perhaps the best way to think of the opportunity for commercial variants is to consider what the regulated service is not!** It isn't, for example, a symmetrical service, it doesn't have a committed rate. It should also be noted that Chorus can & does make margin from upstream commercial services such as the current commercial tail extension service which is where they can create grades and RSP's have options.

9. Vocus supports Spark in needing better transparency of information and systems. The issues tend to be operational and diverse – covering prequalification, connection and fault resolution. Unfortunately the number of issues tends to make it difficult to get to the key issues and therefore risks getting placed in the 'too hard' bucket.
10. Vocus suggest that it may be useful to convene a working party (possibly under the TCF) with the operational experts to agree, coordinate & prioritise issues and then feedback to Commission rather than the Commission using the submission process.

WHAT IS THE REGULATED SERVICE?

Q1. Do you agree that an anchor regulation approach should be used for the regulated UBA service? Why/why not?

Q2. 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.

11. What is the regulated service? Perhaps the best indicator is what it actually has been. The UBA service provided by Chorus is: -
 - (a) A full speed service operating to the physical capability of the line. Demand for additional capacity has been met as required, with Chorus investing in capacity for their local aggregation and RSP's investing in national connectivity or consuming Chorus' commercial tail extension service.
 - (b) A service providing connectivity to the majority of New Zealanders, with little demand and scope for commercial variants to the Chorus' component to date.
 - (c) A service that is 'world class' in terms of performance, international best practice using current technology capabilities such as VDSL
 - (d) A service that has been not subject to de-prioritising of traffic or throttling.
12. The result has been, as Chorus have said many times, New Zealand benefits from a 'world class' broadband service.
13. **Vocus' view is that there is no reason that this should not continue in the foreseeable future**
14. As UFB migrations continue it is logical to assume that there will be less 'pressure' on the copper service and less reason for additional investment. However the reality is the investment required in copper is largely maintenance - such as card replacements – the actual investment is in the shared local fibre network.
15. The copper last mile is full speed, uncontended as it's a point to point solution – unlike UFB which is shared. The main investment required to meet consumer demand is on the local area backhaul to the RSP's handover. As the Commission notes that investment is not in the copper network but investment in Chorus' fibre local aggregation network to the first data switch and therefore shared with UFB and other traffic. Therefore there is even less reason why copper services should be constrained as the investments are necessary to support UFB.
16. RSP's are significant network operators in their own right and arguably have to make the bigger investments in bandwidth to ensure good quality broadband. Vocus is the largest unbundler of exchanges in NZ, with over 200 exchanges covering half the lines in New Zealand. Vocus operates on the basis that once we hit 80% usage we invest in additional capacity as required to meet demand and avoid congestion. Spark have similarly submitted¹ that they apply '*a network capacity management policy of adding capacity to links when usage hit 85% of link capacity. This provides*

¹ Cross submission to Commerce Commission 15 Aug 2014 "Boost & Commercial Handover Connection issues paper" para 8

Spark with sufficient time to add capacity so that the link is not expected to be congested (with a 95% probability)”.

17. We have operated on this basis for a number of years and anticipate that will continue.
18. Vocus is concerned that in trying to solve a theoretical future problem, that may or may not occur, the Commission is likely to create a current problem that will produce an outcome contrary to s18.
19. In saying this the intention is not to tie Chorus to having to meet unlimited unforeseen demand. There could be an unforeseen ‘step change’ in usage and demand or technology which was unforeseen but that should be dealt with, if it eventuates, at the time rather than double guessing demand and global technology changes and embedding this into a service description – a fruitless task in our opinion. The reality is that technology innovation has generally meant that operators have been able to keep pace with demand despite reducing retail prices.
20. Details of Chorus’ network capacity policy, usage on links and investment plans are not visible to RSP’s. If they were RSP’s may be able to comment on these or identify potential problems. With better transparency of any network issues that occur (as discussed later in response to question 20) the industry could look to address unforeseen significant changes. Similarly we are not being unreasonable and accept that there may be small pockets of network, for example ATM based services, where there may be a technical constraint. However we would like more disclosure and transparency on the issue.

GRADING OF FULL SPEED INTERNET ACCESS WILL BE COUNTER PRODUCTIVE

21. Vocus have significant concerns with the Commissions categorisation in terms of baseline / average / advanced.
22. In our opinion the intention of the Act was that UBA would be a full speed ‘best efforts’ service meeting the needs of the majority (80%+ we would suggest) of New Zealanders and delivering a service which keeps up with international best practice , in line with the access principle comments in response to question 3 below, and demand. That includes New Zealanders being able to take advantage of the ‘latest’ consumer uses’ that overseas consumers enjoy (which the Commission have termed advanced?).
23. Describing UBA as an average or an advanced service is problematic. **The current UBA service is not an average service.** Yes, some users have slower performance because of physical limitations in the copper network but that is different. If it were an average service then 50% of New Zealand would be receiving a service that was lower than international best practice, even though their copper line is capable of better – that would be a poor outcome and not in line with the requirements of s18 nor claims of a world class service.
24. The Commissions driver is to incentivise investment in copper and allow Chorus the opportunity to innovate where available (noting our later comments in para 31) that we believe the scope for the network operator to innovate is limited). That appears to be the driver of the categorisation.

25. In Vocus' opinion the differentiation should not be trying to grade the 'general use' internet access service into categories but rather clarify on what 'dimensions' commercial services could be differentiated.
26. We discuss service differentiation in response to question 8. There may be niche bitstream services that could be differentiated from the regulated service if there was demand for them. However they are not simply different grades of the current regulated service.
27. 'Grading' the service that provides access to the internet for most kiwis into baseline / average / advanced will lead to a diminishing of the regulated service that Kiwis have been used to and provide scope for Chorus to artificially extract a premium over and above the FPP regulated price. Furthermore Chorus has little or no incentive to create lower specified, more affordable low end services. Surely in that case if an anchor based approach was taken there would be a need for an additional low cost, lower specified regulated baseline service?
28. Whilst Vocus is not opposed to an 'anchor' service concept for many services we do not consider it appropriate in this instance, given that in our view the regulated service is a full speed service with sufficient capacity to meet expected demand.

THE REGULATED SERVICE IS FUTURE PROOFED

Q3. 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?

29. Vocus considers that it is very clear that the regulated service should evolve over time keeping pace with technology developments and international best practice.
30. Access principle 2 under clause 5 of schedule 1 to the Act, as incorporated into schedule 1 description by clause 2.3 of the UBA STD states that "the service must be supplied to a standard that is consistent with international best practice" .It's difficult to see how this could be interpreted in any other way than the service is expected to keep pace with international changes in demand and technology improvements and deliver a world class service.

Q5. To what extent should the FPP price and underlying modelling assumptions be considered as part of this process?

Q6. Are there any other key factors we should consider when assessing possible changes to the UBA STD as part of this section 30R review?

31. The FPP should be used to inform this process however the overriding principle remains that UBA should continue to meet the needs of the majority of New Zealanders and keep pace with international best practice. The FPP model is a complex, holistic model based on a snapshot of what we know now and is far from an exacting exercise. Therefore taking 'bits out of the model' and pinning the regulated service down to assumptions and metrics in the model is in Vocus' opinion 'inconveniently' problematic.

32. It might be considered that Chorus should at a minimum meet the modelled requirements however it is not a 'service specification' for the future nor should it be treated as a cap as typically technology and efficiency advances make it possible to deliver more for less.

Q7. 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?

33. Vocus do not support this. See previous comments.

DIFFERENTIATE OF REGULATED AND COMMERCIAL SERVICE

Q4. 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?

34. Vocus' welcomes commercial variants provided they are not used in the manner that Boost was to constrain the regulated service and allow Chorus to artificially extract a premium from the market. The most important principle as the Commission has identified is that commercial variants should not be prioritised over or impact on, the delivery of the regulated service.
35. However in practice the scope for Chorus to innovate and provide variants on the 'last mile' (to the first data switch) is limited. The reality is that the innovation is likely to come from RSP's and 'over the top players'.
36. Chorus is already incentivised to provide commercial variants where they can attract a premium over and above the regulated price. It's unlikely that Chorus has any incentive to introduce a lower priced variant.
37. The actual investment required by Chorus is arguably considerably less than RSP's, largely in the local aggregation network used by multiple services.
38. As Chorus invests in its capacity in the local aggregation point it should be remembered that **it also makes a margin from related upstream services that require that investment.** In the case of UBA over and above the regulated service Chorus make margin through its commercial tail extension services – a logical ancillary service that hinges off the regulated UBA.
39. To reiterate our concern is that the Commission in attempting to 'grade' the regulated service that provides access to the internet for most kiwis into baseline / average / advanced will lead to a diminishing of the regulated service that kiwis enjoy and provide scope for Chorus to 'artificially'

extract a premium over and above the FPP regulated price. Boost clearly demonstrated that Chorus is incentivised to do this.

40. **In a fast moving technology global market a more fruitful approach might be to consider not what the regulated service is, as that is by its very nature dynamic as recognised by the Act, but what it isn't.**

PRODUCT DIFFERENTIATION “WHAT THE REGULATED SERVICE IS NOT”

Q8. *Should the line between the regulated UBA service and commercial UBA variants be clarified? If so, why and how?*

41. Vocus considers that it would be near impossible to draw a definitive “line in the sand” between regulated and commercial. As we have stated we would be very concerned if the Commission, in trying to give guidance on what might be a commercial variant, ended up being prescriptive in terms of performance metrics of the regulated service based on what we know at this point in time.
42. Trying to be prescriptive with what the performance metrics of the regulated service are in a rapidly changing landscape would actually recreate the problem that gave rise to Boost. The very nature of the regulated product is that it is evolving, ADSL to VDSL, increased demand. However the reality is that in the last 5 years both RSP's and Chorus have maintained a good quality, affordable service that is widely used.
43. Maybe it is more useful to consider what the regulated service is not! If the regulated product was regarded a best practice internationally ‘best efforts’ full speed unconstrained broadband service capable of accommodating the latest uses then there are still dimensions which could be considered for commercial variants. For example
- (a) Symmetrical as opposed to asymmetrical services may be a differentiator
 - (b) A service that provides prioritisation of packets (such as EUBA) with the important proviso that this is not at the expense of the regulated service could be a commercial variant (see comments at question 19)
 - (c) Committed bandwidth (CIR) again with the important proviso that this is not at the expense of the regulated service could be a commercial variant
44. As discussed it is difficult to be prescriptive, hence our suggestion that more clarity on the process for introducing new variants may be useful. (see comments question 20)
45. If the Commission after considering feedback is minded to specify actual metrics on elements such as throughput Vocus suggest these should be expressed as a minimum, not a cap, with the overriding principle that service continues to perform as it has to date and keeps pace with international developments – i.e. its world class..

Q14. Should Chorus be able to prioritise commercial traffic where performance of the regulated UBA service is not affected?

46. We are fundamentally opposed to prioritisation of commercial services where the underlying regulated service is impacted. Assuming that does not occur Vocus considers this an odd question.
47. Generally the reason Chorus would want to prioritise traffic is to avoid it being congesting with the 'normal' traffic (i.e. regulated in this case). As such if the regulated traffic is to be unaffected why do Chorus need to prioritise commercial traffic?

Q19. Should the EUBA variants be removed from the UBA STD? Why / why not?

48. Vocus would not be opposed to the existing EUBA variants becoming commercially offered services in line with our comments in the previous section.

VDSL

Q9. Is Chorus required to provide the regulated UBA service over VDSL where available and requested by an access seeker?

Q10. Should Chorus be able to withdraw the regulated UBA service over VDSL where it has already made it available to access seekers?

49. During the Boost submissions in 2014 Vocus and the majority of submitters all considered that it was clear that VDSL was part of the regulated service and as such Chorus had no right to unilaterally withdraw the service. The regulated service is technology agnostic.
50. VDSL is simply an evolution of the regulated UBA service, not a different service. Internationally VDSL is widely used and it is impossible to buy DSLAM cards that are not VDSL capable. In our opinion the regulated service includes VDSL and future xDSL variants.

GEOGRAPHIC DIFFERENCES & ATM BASED SERVICES

Q11. Should there be geographic differences in the regulated UBA service specifications due to the UFB deployment?

51. The pricing of UBA has been set based on the current situation where the same service specification applies irrespective of UFB deployment. Any proposal to lower the specification of UBA in areas where UFB has been deployed should have a parallel review of the pricing of the UBA service and either a de-averaging or a lowering of averaged price.
52. If the Commission decide to lower the specification it could have a significant impact on RSP's. It would drive consumers to shop for services, trigger calls into call centres etc. To expect them to pay the same price for the degraded service as well as driving costs into the business seems unreasonable.

53. UFB is currently supply side constrained, with an ever growing connection pipeline, not demand side constrained. Many industry participants consider that this problem will get worse. From a practical stand point Vocus has always maintained that copper and fibre coexist. VDSL has the capability to provide a high speed service that will ease the pressure on the pipeline of fibre connections whilst ensuring consumers get a high speed broadband service over copper at least as an interim measure.
54. Lowering the specification of copper broadband as a '*forced migration by stealth*' is a poor policy.

Q12. *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?*

Q13. *If not, under what terms should the ATM-based UBA service be provided?*

55. Vocus does not currently have a view that Chorus should have to replace its ATM based network to meet any changes to the regulated service from this review. However in saying that this is based on little or no information on the actual network or constraints. Accordingly we share some of Sparks concerns with respect to the ATM based service and transparency of information.
56. Historically RSP's have had concerns over the extent to which Chorus has constrained the ATM based service. Originally RSP's were told that ATM based services had capacity constraints and customers, where possible, should be migrated to Ethernet based EUBA. RSP's actively migrated customers.
57. What should have happened is that the migration of customers off the ATM based network should have created spare capacity which benefitted the remaining users of the ATM based network. What actually happened is that for some time the handover got re-dimensioned downwards as customers reduced as a result of applying a formula of a fixed amount of bandwidth per customer, despite there clearly being capacity freed up by migrations. In fairness to Chorus they have subsequently increased the amount of bandwidth per user but RSP's have no way to tell whether overall capacity was retained.
58. The point is that there is significant asymmetry of information between the operator and the RSP's.
59. RSP's run significant networks themselves and we are not looking to drive unnecessary investment by Chorus, however we would like more information on their network both to understand issues and minimise our own costs in areas such as fault resolution.
60. Vocus suggests that, similar to our comments on transparency later on, that a TCF working party could be convened to look at the wider issue of transparency around network capacity & congestion as well as specific issues such as ATM network plans.

10GigE Handover

Q15. *Do you agree with the addition of a 10GigE handover option to the UBA STD?*

Q16. *Do you agree that it is appropriate to use the 10GigE price determined in the FPP determination?*

Q17. Are there any other sundry services that we should consider adding to the UBA STD price list as part of this review?

61. Vocus support Sparks' view that a 10GigE handover option should be added to the regulated service.
62. We are not across the FPP price for the 10GigE handover so can't comment however as we have already said we have concerns with picking bits out of the FPP model – the model is holistic, complex, a large number of assumptions and has its vagaries.
63. Common sense dictates that would expect that the pricing of the 10GigE handover would be significantly lower than the 1GigE handover price on a per Mb basis.
64. A useful benchmark is the UFB 10GigE and 1GigE handover which cost \$300 & \$100 per month respectively. In stark contrast EUBA handovers are currently priced at \$1,444 & \$152 per month despite the fact the equipment that is utilised is the same.

AMENDMENTS TO CLAUSE 10

Q18. Should clause 10 of the UBA General Terms be amended to explicitly set out the key attributes? If so, why and how?

65. At the time of the Boost introduction there was uncertainty around the process for introducing new commercial variants and the ability for the Commission to have adequate time to assess the proposal.
66. Vocus supports Chorus being able to quickly introduce new commercial variants however Boost demonstrates that the Commission need to ultimately approve any variation.
67. In the case where the majority of RSP's support the proposed variant this should be a simple approval however as with Boost there needs to be a process whereby the Commission can intervene.
68. We would support the Commission making changes by way of clarification or amendments to avoid a repetition of the Boost events.

TRANSPARENCY OF CHORUS SYSTEMS

Q20. Should the UBA STD be amended to provide greater transparency of Chorus' systems for access seekers?

69. Vocus shares concerns expressed by Spark around asymmetry of information and the need for better access to information.
70. As we have said the larger RSP's are significant operators in their own right. Chorus are a regulated monopoly provider. RSP's should have better access to information on Chorus' network.
 - (a) Where are links near capacity, what utilisation is occurring in the network
 - (b) Where there are constraints on elements such as ATM, what is the network issue & plan.

- (c) More detail on faults to reconcile billed amounts.
 - (d) Better visibility of status of DSLAM cards & ports to assist with fault resolution
 - (e) Better prequalification tools – As basic as a tool that tells us when a house last had connection and wiring undertaken or is there an intact line and should we expect a truck roll to the exchange or site?
 - (f) Why are the number of truck rolls high? Where are the ‘intacts’ being broken & why? Th
71. Vocus has previously submitted² on some of the issues that have been a cause of concern. The submission outlines issues we had with respect to connections and the frequency of truck rolls.:
- (a) the ‘bill shock’ we had when we saw the number of truck rolls occurring, information which had not previously been available.
 - (b) The joint exercise Spark, Vodafone & Vocus undertook to attempt to identify unnecessary truck rolls that were occurring and found significant unnecessary truck rolls. The cause is hard to pin down due to lack of access to systems.
 - (c) The significant reduction in the number of visits to sites and exchanges we achieved working with Chorus where we were able to get some information.
72. The issues tend to be operational and diverse – covering prequalification, connection and fault resolution. Vocus is sure that other RSP’s will echo concerns. Unfortunately the number of issues tends to make it difficult to get to the key issues and therefore risks getting placed in the ‘too hard’ bucket.
73. Vocus suggest that it may be useful to convene a working party (possibly under the TCF) with the operational experts to agree, coordinate & prioritise issues and then feedback to Commission rather than the Commission using the submission process.

² CallPlus Limited Submission on the Commerce Commission's Further Draft Pricing Review determinations for UBA and UCLL services 13th August 2015 para 11-37