Section 30R review of Chorus' Unbundled Bitstream Access Service – draft determination

Cross Submission | Commerce Commission

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Introduction

1. Thank you for the opportunity to comment on submissions on the Commission's UBA s30R review of Chorus' Unbundled Bitstream Access service draft determination (**the draft**).

2. Submissions support the Commission's proposed approach, and material differences appear to relate only to the practical implementation of the "uncongested" UBA service objective.

3. InternetNZ note that the proposed ATM network carve out leaves around 20,000 end-users in limbo and that it has the potential to skew RBI contract decisions. We agree. RBI2 funding of investment should be incremental to, and not a replacement for, investment implied by regulated prices.

4. In this submission, we comment on:

    a. The proposed utilisation cap approach; and

    b. Chorus' request that it be given sole discretion to determine 10GE handover and ATM based UBA service availability.

5. The Commission currently anticipates releasing a final decision by March 2017. Only a limited number of key issues remain to be resolved and we encourage the Commission to finalise its decision early in the New Year.

Service performance

6. Submitters agree that the UBA service should, in principle, be an uncongested service, and that a practical means of codifying this requirement is through maximum utilisation of local aggregation paths (**LAP**). The differences in views relate to how this objective should be reflected in utilisation measures.

7. The UBA service architecture anticipates that the LAP is shared among all end users and, therefore, the bandwidth is potentially contended. It would be possible to dimension the LAP so that capacity is equal or higher than the sum of bandwidths per subscriber access line of all end users connected to the DSLAM. This would ensure that the LAP would never congest (and contention is avoided). The drawback of this approach would be that - with little probably that all end users will use the service at the same time to the full extent – capacity would remain unused. As Chorus notes, this would be inefficient and no submitter has asked for this standard.

8. In which case, the possibility remains that the UBA service will be congested, even if this is for only an instant. Accordingly, we believe an uncongested UBA service is one where the effect of contention on the end user service is expected to be negligible, even though LAP capacity may not be equal or higher than the sum of the individual end user requirements. This is essentially BEREC's recommended approach - the Common Position recommends that bandwidth be "ostensibly uncontended"[1]. Therefore, in order to provide an ostensibly congested free network, the framework should ensure that Chorus manages network capacity so that the effect of contention on the end user service is expected to be negligible.

[1] See Common Position on Layer 2 Wholesale Access Products, BoR (16) 162, page 9. The common position references the definition of "Ostensibly uncontended" in Common Characteristics of Layer 2 Wholesale Access Products in the European Union, BoR (15) 133, page 10-11.

Transparency versus utilisation cap

9. The approach set out in the draft relies on setting maximum LAP utilisation as a means to achieve the service performance target, i.e. to ensure that UBA is an uncongested service. However, the actual service impact is a function of link utilisation, lead times to deploy additional capacity and end user behaviour. In other words, as the factors that drive service performance are uncertain, there will always be uncertainty relating to the relationship between utilisation and performance, and the relationship will change over time as end user demand changes. Accordingly, the regulatory framework requires some flexibility to ensure it maintains an uncongested service over time.

10. In our submission, we had proposed that the Commission rely on transparency to ensure Chorus provides an uncongested service, i.e. that the Commission set out its performance expectation (that there be minimal congestion), what this might mean under today's conditions (less than 80%), and Chorus provides transparency where it falls outside this objective. That proposal aimed to avoid:

    a. The static utilisation cap being seen as an end in itself, i.e. replacing the primary objective of delivering an uncongested service. This is because it will only achieve this given certain assumptions relating to the nature of demand (which is uncertain and can change); and

    b. Creating a target whereby Chorus has an incentive to manage to that target, and we end up back in the Boost situation whereby Chorus argued that 32kbps minimum throughput was the required actual throughput, even though it results in an unusable regulated service.

11. Nonetheless, we appreciate that other submitters and Commission may prefer a specific target utilisation approach rather than the transparency based framework we proposed. There are advantages to both approaches, and we would support an appropriate utilisation cap if that were preferred by the Commission. However, if the Commission prefers a cap, it should be clear that: the intended outcome is an ostensibly congestion free service; that any cap is intended to support this outcome; and that it would return to this matter if the proposed settings do not in fact deliver the intended outcome.

12. We suggest that, for the avoidance of doubt, the Commission could insert the overriding objective that the service must not be congested in the service description, and set more specific guidelines around how to ensure the objective is consistently met in the Operations Manual (permitting subsequent amendment).

Setting the utilisation cap

13. Chorus proposes that utilisation be capped at 95% of technical link capacity over a 15 minute period, with various exceptions for different events. Other submitters have proposed 85% maximum utilisation, or reducing the reporting period to 5 minutes to make it less susceptible to peaks (we agree). Access seekers also supported more detailed reporting requirements for links exceeding 70% utilisation.

14. We proposed a maximum expected range of 80% under normal operating conditions. This was merely an expectation – i.e. it relied on the underlying obligation to provide an uncongested service and threat of further regulation to drive behaviour - and Chorus current planning objective to maintain LAP utilisation at less than 70% in any case[2]. The 80% threshold reflected the fact the LAP would not have the statistical benefits of handover links, and therefore a lower maximum

[2] Chorus Congestion Free Networks Technical white paper September 2016.

LAP utilisation than RSPs reported for the core network was appropriate. Further, the maximum LAP utilisation that can be achieved before customer impacting congestion is a function of the number of customers serviced and the individual line rates relative to the bandwidth of the path. For example, higher utilisation is possible where there are a thousand customers with access speeds averaging 5mbps over a 1Gbps link, compared to 100 customers with 50Mbps access speeds over the same size link.

15. Chorus now has several initiatives intended to migrate customers to VDSL, and the higher line speeds mean LAP will be more prone to short term congestion[3]. A lower utilisation is even more appropriate in these circumstances - 80% maximum utilisation may still result in performance degradation on cabinets where a high proportion of VDSL customers.

16. Provided the Commission clearly articulates the underlying performance standard, there may be little practical effect between different caps in a high growth market. In a high growth market, the difference between 85% and 95% might be a deferral of projects by a few weeks and increased customer service degradation for that period. In which case, end users would likely face congestion and degraded service for a short period of perhaps 3-4 weeks, although this will seem like a long and frustrating time for impacted end users. Conversely, the implications for Chorus of a conservative cap are low as the measure only applies to fibre fed DSLAMs where the cost to add incremental capacity is very low, and at most investment is brought forward by a short period.

17. However, the implications for end users will be greater (between different caps) where data growth on the copper network slows and in areas fibre is shortly to be deployed. Under these circumstances, Chorus would be able to maintain utilisation close to the cap without adding capacity. As set out in our submission, end user performance will be severely impacted if utilisation approaches 95% utilisation over a 15 minute period.

18. Accordingly, the Commission should set a utilisation cap of no more than 85% (it should preferably be 80%). This will ensure that customer service performance is not unreasonably impaired, promotes competition by avoiding creating a performance ceiling, and is more likely to be sustainable over time. Otherwise, we will be revisiting this issue in the near future.

Exceptional utilisation event

19. Chorus notes that there may be circumstances beyond its reasonable control where it exceeds the utilisation cap for a short period, i.e. in response to a civil emergency, an unexpected spike in demand due to RSP testing, or a denial of service attack.

20. We agree that there may be circumstances beyond Chorus control, and it shouldn't be liable under those scenarios. However, the STD already addresses these risks via the Force Majeure provisions in clause 20 of the General Terms. Clause 20 captures an event beyond the reasonable control of a party.

21. Chorus suggests that the existing provisions are not fit for purpose as any breach of the utilisation standard will likely be short term and only result in a degraded service, and the fact that access seekers are not required to pay service for the duration of the event is likely to be disproportionate.

22. We disagree. In Spark's view the current Force Majeure provisions should remain in place for short term issues that genuinely arise from a force majeure or uncontrollable event. That principle is probably not contentious. However Chorus appears to suggest that force majeure provisions

[3] Chorus is working with RSPs to migrate customers to VDSL, offering migration support, free transfers and modems subsidies to migrate ADSL services customers to VDSL in areas outside its UFB network coverage.

are not fit for a different purpose – i.e. to enable them to exceed the cap for a short (but entirely unspecified) duration for a range of potential circumstances that may be beyond their control. We think that such a clause may only be appropriate if Chorus has already committed to proactively monitoring and managing congestion well in advance of any risk to congestion arising – such as if the "safety net" kicked in at 80%. If they only committed to making a change at 95% then a short term breach of the congestion requirement would be directly related to leaving capacity augmentation so late.

23. Further, we are not limited on our ability to apply the Force Majeure provision: the draft proposes a bright line obligation that any force majeure circumstances can be tested against; and a force majeure event is limited to the extent and to the part of the UBA Service not provided and would be proportionate.

Service availability

10GE handovers

24. Chorus proposes that it should have discretion to determine whether there is sufficient demand to make 10GE handovers available.

25. We disagree. Chorus shouldn't have the discretion to limit the availability of the regulated service. Higher capacity links are essential to meet the growth in data demand, and these should be available at all FDS handover points. We had proposed the price cap rule in our workshop paper for situations where Chorus was unable to provide 10GE handovers, not as part of a proposal to give Chorus discretion to withhold service. Access seekers face a number of other costs when 10GE handovers are not available and – if Chorus were to withhold service – access seekers should be compensated for these costs.

26. In any case, access seekers will only order 10GE handovers where they are necessary. Access seekers are seeing demand drivers and have all the incentives to order 10GE handovers only where this is the most efficient means to obtain traffic, i.e. RSPs face higher regulated handover charges for a 10GE handover and have their own costs. If anything, the significant price premium proposed for UBA 10GE handovers means that access seekers will order less handovers than would otherwise be efficient. Under these circumstances, there's no need for Chorus to have the discretion to withhold service.

Chorus ATM network service discretion

27. Chorus has also asked that it have the discretion to grandfather or withdraw ATM based UBA services.

28. In principle, we agree Chorus should be able to withdraw legacy technologies and UBA variants over time. This is efficient and part of the network evolving to that deployed by an efficient operator.

29. However, the withdrawal of technologies and services need to be undertaken in close consultation with access seekers and end users. We have a number of business customers using the ATM based services, and these customers will need to be engaged and carefully managed in any lifecycle initiatives. However, under current proposals, we have no visibility of Chorus' lifecycle plans that form the basis of consultation with customers and giving sole discretion to determine service availability is likely to result in insufficient weight being given to end user concerns.

30. In terms of the regulated service, we believe that any change to deployment rules are best addressed through amendment to the Operations Manual, i.e. which would see provisioning rules

that preferred a particular technology choice. We recommend that the Commission not amend the STD as proposed, but recommend that Chorus address this matter through the anticipated clause 9 review of the Operations Manual.

END