Submission in response to the Commerce Commission's Consultation Paper on issues relating to Chorus' proposed changes to the UBA service





#### Submission

- This submission responds to the Commission's Consultation Paper on issues relating to Chorus' proposed changes to the UBA service dated 4 September 2014 (**Consultation Paper**). The Consultation Paper appended the Commission's external legal advice (**Commission Advice**) and sought feedback on that advice.
- The requirements for delivering the regulated UBA service are set out in extensive and detailed terms totalling 200 pages (**Standard Terms Determination or STD**) accompanied by a 100 page determination. These comprehensive terms, specified by the Commission, are intended to be a full set of terms under which an RSP can request UBA from Chorus without further negotiation. They are also enforceable by the Commission.
- Neither the complaint from Spark, nor the Commission Advice, drives off a specific obligation within these detailed terms that would be breached by the proposed changes to the UBA service. Instead, the Commission Advice engineers obligations that override specific STD requirements using a novel mechanism of:
  - 3.1 Extracting unstated "core principles" from the text of a range of decisions (mostly relating to a service that predates the regulated UBA service);
  - 3.2 Making a finding of fact that Chorus' proposed conduct would be inconsistent with those core principles; and
  - 3.3 Deeming the failure to act in a manner consistent with those unstated core principles to constitute a breach of the STD general good faith obligation.
- This approach is unheard of for good reason. It is a basic principle in law that general obligations cannot override the specific. Yet this is what the Commission Advice seeks to do. If this principle was accepted, it would put a regulated entity in an impossible situation trying to anticipate general obligations that may or may not override specific and prescriptive requirements with the risk of enforcement if those general obligations are not correctly anticipated. Even the Commission Advice acknowledges that key questions on the delivery of the UBA service cannot be answered against such a standard.
- 5 Even if it is right that the general can override the specific, the Commission's Advice:
  - 5.1 Appears to misunderstand critical facts and context that are readily available;
  - 5.2 Is based on flawed legal analysis; and
  - 5.3 Raises fundamental issues with the regime as implemented and administrated under the Telecommunications Act 2001 (as amended in 2006).
- We have made extensive submissions on the proposed new commercial Boost services and changes to the UBA service as part of the Commission's broader process. Those submissions include key factual information and context relevant to this consultation.



We have not repeated that detail here, and simply refer the Commission and its legal advisors to those previous submissions and customer consultation material.

- In this submission we briefly respond to key issues in the Commission Advice. We also attach advice from Jack Hodder, QC of Chapman Tripp and Dr Ross Patterson of Minter Ellison Rudd Watts. Both pieces of advice disagree with the Commission Advice and conclude that the proposed changes to the UBA service are consistent with the STD.
- 8 We look forward to understanding the Commission's next steps on the current investigation as well as the review of the new UBA variants so that the industry can move on with delivering innovative new commercial services that meet emerging end user demand.

# **Enforceable regulatory determination**

- In 2006, the Telecommunications Act 2001 (**Act**) was amended to introduce STDs (amongst other changes). The Act requires that an STD will specify sufficient terms and conditions to enable an RSP to be provided with the relevant service without the need for negotiation or further Commission determination. In other words, an STD is akin to a full set of commercial terms or a self-contained set of rights and obligations in relation to the supply of the regulated service. To move to such a prescriptive approach was unique at the time (and that remains the case when compared internationally).
- An STD is an enforceable matter under the Act. As such it is enforceable by pecuniary penalties under the Act. From an interpretation perspective, the STD is a regulation, not a consensual or contractual document.
- When setting an STD the Commission is required to make a determination comprising price and non-price terms that best meets the purpose of the Act as set out in section 18. Section 18 and the standard access principles (SAP) must inform the Commission's decision making. Good faith is not one of the SAPs. To suggest that the Commission has delegated section 18 and the SAP considerations by implying them into entitlements or obligations in an STD is unsound and/or discloses an entirely new interpretation of the regulatory schema.
- In order to discuss the legality of proposed changes to the regulated UBA STD provision, the first step is to identify the relevant legal obligations and analyse the regulatory framework. However, the Commission's advice does not analyse the specific obligations in the detailed UBA STD terms. Instead, it references section 18 of the Act and clause 2.2.1 of the General (rather than specific) Terms. Further, the advice relies on an outdated Commission determination, put in place under an old legislative regime, to import requirements not specified in the STD.
- While the industry has raised a number of key issues and questions, the Commission Advice acknowledges that those key questions cannot be answered:

"Our initial observation is that the UBA STD does not expressly address these questions and accordingly it is difficult to determine the correct legal position with any degree of certainty."



However, this conclusion is at odds with the fact that there is existing Commission precedent on the issues and questions raised.

# Specific requirements of the STD – speed and throughput

- 15 Schedule 1 of the UBA STD describes the services that Chorus must make available to Access Seekers under the standard terms determination. Clause 3 of that Schedule contains the Service Description for the basic regulated UBA service (BUBA which includes EUBA0). Schedule 1 specifies:
  - 15.1 The metrics that the BUBA service must achieve;
  - 15.2 The obligations in relation to throughput in clear and unambiguous terms (see clause 3.12 of Schedule 1); and
  - 15.3 The obligations in relation to line speed in clear and unambiguous terms (see clauses 3.6 and 3.7 of Schedule 1).
- Paragraph 9 of the Commission Advice incorrectly conflates the concepts of line speed, throughput and PIR. In doing so, the advice misunderstands the service characteristics of the regulated UBA service and misunderstands Chorus' proposed changes to the regulated UBA service. The advice also appears to miss (or misunderstand) previous Commission precedent.
- 17 Line speed and throughput<sup>1</sup> are related but distinct concepts. The distinctions are set out in authoritative literature and reflected by distinct treatment in the UBA STD.
- 18 Chorus is proposing to introduce traffic management to the regulated UBA services with the effect that the regulated UBA services will achieve an average throughput metric of 300 kbps. Chorus is not proposing to impose any line speed restrictions. The regulated UBA service will continue to achieve a peak rate of the Full Speed/Full Speed line speed.

# Line speed

Line speed is the maximum number of bits you can transmit over a line in a certain defined time, say one second.<sup>2</sup> Under the STD, the regulated UBA services are required to have a maximum line speed (or Full Speed/Full Speed), upstream and downstream:

The Basic UBA Service available under this service description is a DSL enabled service which has a maximum downstream line speed for data traffic sent to the End User and a maximum upstream line speed for data traffic sent from the End User.<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> PIR (or Peak Information Rate) is another term that is used. It is used in the context of an Ethernet Interface to specify its performance in terms of peak number of frames transmitted per section. PIR is a provisioned characteristic of the service, i.e., PIR has a value that is specified and set by the operator. In circumstances where the line is designed to operate at full speed, no PIR is applied.

<sup>&</sup>lt;sup>2</sup> Newtons Telecommunications Dictionary (27<sup>th</sup> ed, 2013) at p710

<sup>&</sup>lt;sup>3</sup> Clause 3.6 of the UBA STD Service Description



- The Full Speed/Full Speed obligation relates to the end user line which runs from the end user premise to the DSLAM, also known as an access line.
- In other words, line speed is an instantaneous view of the maximum speed of the data connection between the end user modem and the DSLAM. The end user can never receive information at a rate faster than the line speed. It is not, however, a guarantee that the end user will achieve maximum line speed at all times. Line speed will be affected by the physical properties of the line, the type of DSL equipment and how it is configured.
- Using a roading analogy, the access line is akin to a private road that connects to a motorway. Line speed is the fastest speed that your car is capable of driving down the private road.

# Throughput

- Throughput is the actual amount of useful and non-redundant information which is transmitted or processed.<sup>4</sup> The throughput metric, in contrast to the Full Speed/Full Speed obligation, relates to the end to end service from the end user to the handover point at the first data switch.
- Throughput is specified in the STD as an average throughput over a specified period of time and will be affected by, amongst other things, end user application usage, contention and the presence of other services on the network. Average throughput can be no greater than the maximum line speed and because it will vary over time, on average it will generally be much less than the maximum line speed.
- Continuing the roading analogy, throughput is akin to the average speed you achieve on a journey from your home, along the private road and motorway to the city. It is affected by a number of factors, including driver behaviour, the amount of traffic and the number of lanes on the motorway.
- While the STD specifies a minimum throughput of 32kbps, the STD acknowledges that Chorus may over deliver on this minimum requirement which Chorus does.

# The distinction between line speed and throughput in the UBA STD

- 27 The UBA STD Service Description sets out specific and distinct metrics for line speed and throughput for the regulated UBA services.
- The Commission's Advice assumes that past Commission decisions relating to line speed are directly relevant to considerations concerning average throughput. This is not correct the two metrics are distinct and have been independently addressed by the Commission in its decisions. The average speed over a journey does not impact the maximum speed at which you can drive down your private road.

<sup>&</sup>lt;sup>4</sup> Ibid, p1189.



# Specific requirements guide engineering choices

- Having clear and specific speed and throughput requirements is what guides engineering and design choices for the regulated entity. If these requirements are unclear or unspecified, investment decisions are unclear.
- From a roading perspective, metrics such as maximum speed, journey times and traffic will in turn determine the number of lanes you build, the quality of the road and the number of traffic lights. If these are not defined, you might fail to meet expectations or invest inefficiently.

### **Prioritisation of traffic**

- At paragraph 12b, the Commission's advice suggests difficulty reconciling clauses 3.25 and 4.26 of the UBA STD Service Description. This indicates that the advice has misunderstood the service construct of the regulated UBA services, in particular as it relates to prioritisation of traffic.
- The UBA STD regulates two different UBA services: Basic UBA and Enhanced UBA. Basic UBA is a best efforts internet grade service. Enhanced UBA is made up of two different classes of service (CoS), the first is best efforts internet grade traffic, the second is real time grade IP traffic (with 3 different profiles 40, 90 and 180kbps). These classes of service are inherently concerned with assigning priorities to different types of traffic, in this case giving higher priority to latency-sensitive real-time traffic over best efforts Internet traffic.
- The UBA STD prevents discrimination between traffic for different services of the same class at the same handover point. Clauses 3.25 and 4.26 prevent prioritisation between Basic UBA, UBS (the regulated predecessor to Basic UBA) and the internet grade CoS Enhanced UBA.

### **Pricing**

- The Commission Advice asserts that there is a mismatch between what Chorus is being paid for and the proposal for traffic management. The assumption is that the benchmarked IPP price reflects ongoing investment in the network and the FPP price may consider future expected performance.
- However, the Commission Advice does not discuss the fact that the benchmarked countries (Denmark and Sweden) differentiate services by speed and not throughput (as we do in New Zealand). At the time of benchmarking, there was no comparison that could be made regarding levels of throughput in the benchmarked countries. In other words, the benchmarking compared "apples and oranges". There was also no discussion around the fact that the service would evolve. In fact, RSPs encouraged the Commission to assume a static throughput of 32kbps.
- We also understand that the benchmarked prices were based on a single year's estimate of the traffic carried by the service in other words they reflect past rather than future demand. The Commission Advice makes no attempt to test its understanding that Sweden or Denmark makes allowance for future growth in traffic beyond the modelled year. It is nothing more than an assertion and yet drives a counter-intuitive conclusion with profound implications. Further, expected traffic levels,



to the extent reflected in those countries, are clearly not expected traffic levels in New Zealand.

- 37 This context is critical in making assertions about a mismatch between prices and what is proposed.
- During the benchmarking process, Chorus encouraged the Commission to recognise the over delivery of the UBA service. We reiterate this in the FPP context. If the Commission also has an expectation that there will be increased investment and ever increasing over delivery, then this should similarly be factored into an FPP pricing.

# Chorus' proposal

- To date, Chorus has been over delivering on its commitments under the UBA STD. This has included:
  - 39.1 Investing in capacity such that end-users receive an average throughput of 230kbps, rather than the minimum requirement of 32kbps; and
  - 39.2 Investing to meet increased demand for UBA as customer numbers grow.
- This level of investment has been possible at current prices. We have also seen a trend of customers moving to higher specification services.
- 41 A number of RSPs have asserted that Chorus is proposing to "degrade" the regulated service, including the "nuclear option" of implementing traffic management so that customers only receive 32kbps. These assertions are simply incorrect. In fact, Chorus is proposing to:
  - 41.1 Increase capacity such that end-users receive an average throughput of 300kbps i.e. more than today and around 10 times the minimum required by the STD; and
  - 41.2 Chorus will continue to increase capacity to maintain this level of average throughput as customer connections grow.
- This is not degrading the service, and is an appropriate response to future investment in the face of a 50% reduction in price. Using a roading analogy, this is similar to increasing the number of lanes on the motorway to account for increased numbers of cars but not improving the road to account for the fact that cars can (and drivers want to) go faster where there are budget constraints.
- As an open access wholesaler, and in a world of increasing and changing end user usage, Chorus is incentivised to make new offerings where appropriate commercial pricing allows for it.
- Chorus is incentivised to solution its existing funding gap through a range of initiatives including offering enhanced services for enhanced revenues. Absent the funding gap, Chorus would, as an open access wholesaler, still be committed to better broadband and be incentivised to make new offerings to the market for revenue gain this makes



commercial sense. Rather than a "one size fits all" service, those who want more can get more.

If end-users are on plans designed to meet their particular needs, their expectations are more likely to be met. If, for example, customers who demand HD video streaming take Boost, then customers taking regulated UBA are unlikely to see any impact on their service experience even if bandwidth demand continues to grow exponentially.

# Timely introduction of better products

During the STD consultation process, the Commission was expressly encouraged to allow Telecom (now Chorus) to introduce commercial products without the need for regulatory intervention:

Orcon/CallPlus submitted that a more robust process needs to be incorporated to ensure that additional variants become available as technology changes over time. In particular, they submitted that the process should allow for new variants to be proposed and delivered to market without the need to invoke complete regulatory processes.

- To address these requests, the Commission ultimately implemented a process by which new commercial variants (such as Boost) could be notified.
- The commercial reality is that any new commercial services will include enhancements over and above the regulated service to make them attractive to the market. In 2010, the Commission supported the introduction of Telecom's wholesale commercial WVS service on the basis that it had enhanced throughput over and above the STD specified minimum of 32kbps. In that case, the commercial price set by Telecom meant that there was low uptake.
- There was a lot of criticism of the vertically integrated Telecom (now Spark) because of the perception that they were slow to proactively offer new wholesale services that RSPs could use to compete with Telecom's downstream retail arm. If a wholesale provider cannot make new offerings whether in a vertically integrated or structurally separated environment innovation and competition at retail will not be promoted. Yet the promotion of competition is a key plank in the section 18 purpose statement which open access at wholesale is designed to support.
- It is legitimate to offer services with increased performance with commercial prices which RSPs may choose to take, innovate and compete with for the long term benefit of end users. If some RSPs choose to take the services to compete, that will influence and stimulate competition by other RSPs.
- The Commission in its final VDSL decision agreed with Telecom's submission that the provision of a commercial variant (subject to compliance with clause 10 of the General Terms of the UBA STD) was consistent with the statement in the Commission's draft guidelines on regulatory decision making for the telecommunications sector.
- 52 Strong language in the Commission Advice, such as "ulterior motive" and "weaken or undercuts" the regulated service, indicates a potential underlying view that commercial services are not supported. It appears to imply that if RSPs take up commercial



- services that will mean that uptake of the regulated service will decline/be "less competitive" and this is not acceptable. This is inconsistent with the new UBA variant process in the STD and the Commission's final VDSL and WVS decisions.
- What matters is clear guidance on when commercial service offerings will be supported and when they will not. For example, will commercial services only be supported when the expectation is that there will be low uptake so that they do not "weaken or undercut" interest in regulated service variants?
- A flexible and speedy process for the introduction of new service offerings to the market was a matter raised by RSPs right at the outset of the UBA STD process. Orcon in particular was focused on potential introduction of higher throughput standards. At the time, parties were concerned that market demand would be dynamic, new services could be offered without needing to amend the UBA Terms and that section 30R processes would be too slow. The Commission decided to mandate a Notice requirement for new variants so there was transparency and consultation and so that it could consider its view.
- The Commission Advice does not appear to have considered the documented context behind the UBA STD or the WVS decision which was decided consistently with it. The Commission Advice means there is now increased uncertainty on how, whether and when, new offerings are incentivised into the market commercially. Flexibility, speed and certainty are further undermined.

# Provision of legal advice

- As the Commission's publication approach seeks, we also attach advice from Jack Hodder, SC of Chapman Tripp and Dr Ross Patterson of Minter Ellison Rudd Watts. Both pieces of advice disagree with the Commission Advice and conclude that the proposed changes to the UBA service are consistent with the STD.
- By providing this advice to the Commission, Chorus does not intend, and does not, waive privilege in any other communications with its internal and external legal advisors, either in relation to this matter or generally.