



Review of Designated and
Specified Services under
Schedule 1 of the
Telecommunications Act 2001:
draft decision

Submission | Commerce Commission

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Executive Summary

1. The Commission is conducting a review into whether, at this stage, there are reasonable grounds to commence an investigation in to omitting a number of regulated services from Schedule 1 of the Telecommunications Act 2001 (**Act**) (**Review**).

Spark resale services

2. The Commission has proposed to investigate removing Spark PSTN resale services from Schedule 1. While the Commission has not set regulated terms for our resale serve for over ten years, it remains listed in the Act and is increasingly at odds with competition in the market and the regulatory framework.
3. There are strong indicators that the Commission should have a proper look at removing these services, which are left over from a regulatory approach that the rest of the Act has long since moved on from:
 - a. Voice services are being offered over a number of competing technologies today that were not available or in widespread use when the resale services were added to the Act in 2001. These services provide an effective substitute for, and competition to, Spark's PSTN voice services and as a result, PSTN based services are in decline as customers migrate to competing services and platforms.
 - b. RSPs have deployed their own voice switches and can readily purchase a wholesale access – including Chorus baseband or UCLL/UCLFS services – or use their own networks to deliver voice services without use of Spark's resale services. In particular:
 - i. A large number of RSPs have deployed their own voice switching infrastructure, which enables them to bypass Spark's resold PSTN services. These RSPs can use their own voice switches to serve customers on fibre, fixed wireless and/or copper connections;
 - ii. Chorus plans to extend its baseband IP service to over 68% of lines, which enables RSPs to deliver their own voice services over Chorus' copper network outside of their unbundled footprint;
 - iii. VoIP technology has evolved considerably in the past ten years, to a point now where high-quality voice services can be, and are being, delivered at scale over broadband connections without any voice-specific access connection. Orcon's "Genius" service is an example, which runs over Chorus' copper UBA service. Similarly, over the top global providers such as Microsoft (Skype and Office365) also offer voice services to customers that are completely disconnected from the networks they are provided over;
 - iv. Spark, Vodafone and a number of other RSPs (for example Farmside and Wireless Nation) now offer fixed wireless services over a range of mobile and wireless networks, which support voice and broadband services; and
 - v. Increasingly mobile networks and services are competing directly with fixed networks and services, including for voice services. Chorus reports that naked broadband services continue to show the greatest growth rate in the copper broadband portfolio, growing by more than 10,000 while overall copper connections shrunk by 14,000¹. IDC reports that about half of new broadband

¹ www.chorus.co.nz

consumer connections are internet only². These customers are not shifting off voice services completely – they are simply substituting their fixed landline with VoIP and mobile voice services.

- c. The deployment of the Government's Ultrafast broadband (UFB) network has resulted in a material overbuild of the copper network which Spark's resold PSTN voice services use. Today, over 921,000 New Zealand households, schools and hospitals are able to connect to UFB, and choose from multiple voice and broadband providers none of which use Spark's resold PSTN voice service. The introduction of UFB has also shifted all RSPs' investment and marketing focus off copper and onto fibre services, further reinforcing the non-strategic nature of PSTN resale services.
4. We consider there is clear evidence that our PSTN resale voice services face effective competition. That competition has led to reducing volumes and prices. It has made it unnecessary for any RSP to request regulated terms for these services in the past ten years.
5. We acknowledge that, despite these market trends, our PSTN resale voice services are still used by RSPs to serve a good number of customers, and are the preferred option for those customers. Indeed, in some instances PSTN resale voice is one of a small number of options for an end-customer (where, for example, the customer is outside of mobile and fibre coverage meaning only PSTN, satellite and VoIP are feasible options). Other submitters may make an argument for the continuation of the regulated resale services as a "safety net" for these customers. We do not agree that the fact of continued demand for a service that was once a source of market power, but is no longer, is reason to retain regulation. But the Commission does not need to answer that question for now – all it needs to consider is whether the market has changed sufficiently to warrant another look at the costs and benefits of continued regulation of the services. It cannot be the case that demand for a service must drop to zero, or close to it, before a regulator can take that second look.
6. If the Commission were to decide that this set of facts still does not constitute reasonable grounds to investigate de-regulation of the services (not de-regulation itself, just a detailed consideration of it), it's difficult to imagine how any regulated service will ever be omitted from Act.

Chorus backhaul service

7. The Commission also considers a number of determined Chorus wholesale access and associated backhaul services, concluding that there is not reasonable grounds to omit these services from Schedule 1. We agree. While there is nascent competition from LFCs and wireless technologies in broadband markets, the strength of these alternatives are not yet sufficient to constrain Chorus' power in broadband infrastructure markets and it would be premature to undertake an investigation at this stage. RSPs rely heavily on Chorus inputs and to remove them from the Act would have a significant adverse impact on the market and end users.
8. However, we agree that the Commission should review the current approach to backhaul services. The current suite of backhaul services - defined in 2006 – is tied to specific services and does not reflect the diverse market we operate in today. Importantly, the current service specifications do not permit regulated backhaul links to be used for traffic from more than one service, making it impossible to use these links efficiently. This has resulted in little or no take-up of the regulated services even on links where the Commission has repeatedly found there is limited or no competition. The Commission should launch an investigation to amend the designated service descriptions.

² <http://www.stuff.co.nz/technology/digital-living/80162941/the-state-of-broadband-in-nz>

Introduction

1. Thank you for the opportunity to comment on the Commission's draft decision (**draft decision**) on whether to commence an investigation under clause 1(3) of Schedule 3 of the Telecommunications Act 2001.
2. In this submission we comment on the preliminary views relating to whether there are reasonable grounds to investigate omitting a service from Schedule 1 of the Act.

Determining whether there are reasonable grounds to investigate

3. As noted in the draft decision, at this stage the Commission is only required to consider whether there are *reasonable grounds* to investigate omitting a service from Schedule 1 of the Act every five years.
4. That provides the Commission with an opportunity to evaluate the performance of telecommunications markets over a reasonable time horizon and assess whether a regulatory backstop is still required or should be withdrawn. The obligation recognises that the benefits to end users and retail service providers arising from certainty of regulated access to wholesale services can be offset by negative consequences or distortions that arise from regulation that overreaches.
5. In order for a regulatory framework to deliver predictability, certainty and efficiency, investors must have confidence that regulation of a service will be applied *and lifted* in a principled and predictable way.

Evidence of competitive activity supports lifting regulatory obligations

6. The draft decision focuses on evidence of competitive activity that indicates continued regulation is no longer needed to promote competition for the long terms benefits of end users. We agree that evidence of viable alternatives and competitive activity indicate that regulatory obligations are unnecessary and should be lifted. Competitive activity is one indicator of whether regulation is necessary; competitive markets promote efficient output, quality and prices.
7. When conducting any competition-based assessment, the Commerce Commission has generally equated a lessening of competition with an increase in market power. Market power is the ability to raise price above the price that would exist in a competitive market (the 'competitive price'), or reduce non-price factors such as quality or service below competitive levels³. Where market power exists, mandating access to a wholesale service is material intervention that may be appropriate where it matches the scale or scope of the economic problem it seeks to address. However, where the provider of the regulated services no longer holds market power or where there has been a significant reduction in the level of power it holds in the market, such as where access seekers (and end users) have and readily utilise other viable options, mandatory access regulation should be wound back in order to avoid other distortions which inappropriate regulation can cause.
8. Further, regulation should ordinarily be lifted where access seekers and end users have access to competitive alternatives from competing service providers and alternative technologies to promote provider incentives to invest in their own infrastructure at the right level, over the long term, to build more enduring competitive markets. Regulatory principles such as this encourages competition, innovation, investment and market entry as appropriate.

³ *Woolworths & Ors v Commerce Commission* (2008) 8 NZBLC 102,128 (HC)

Spark resale services

9. Schedule 1 currently designates three local access and calling resale services:
 - a. Local access and calling service;
 - b. Other access and calling services (not price capped and including, for example, ISDN and Centrex), and
 - c. Value added services supplied in conjunction with a local and calling service. The draft decision proposes that the Commission has reasonable grounds to investigate omitting local access and calling resale.
10. The Commission proposes to investigate omitting these services from Schedule 1, and we agree there are reasonable grounds to consider doing this.

The access and calling market

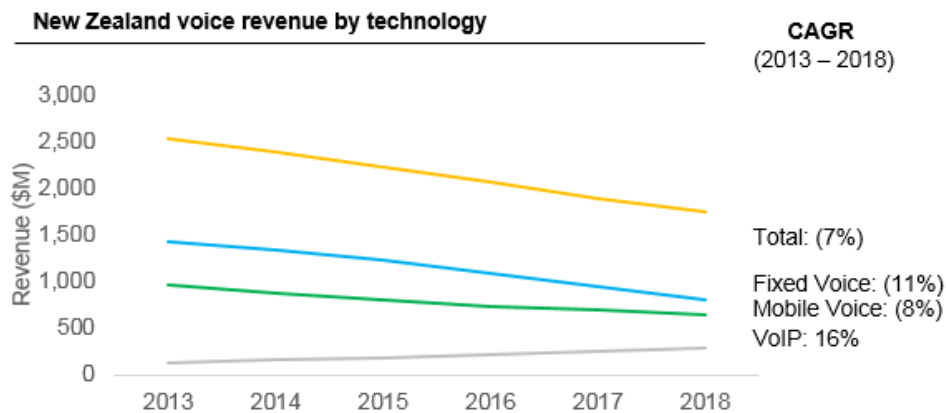
11. The draft decision acknowledges the reality that there is now a dynamic market, within which there are realistic access and calling substitutes for Spark's resale service which RSPs increasingly consume. Spark has every incentive to provide compelling and competitive offers to its customers – not because of the regulatory overhang but because of the competitive threat that Chorus' baseband services and voice over IP provide.
12. The technology and market has changed significantly from when resale services were first added to Schedule 1 of the Act. Voice services can now be provided as an application over a number of wireless and fixed accesses, and Chorus offers a range of wholesale broadband, baseband, UCLF and UCLL services that RSPs can use to provide retail voice services.

Resale customers have a number of options for voice services

13. There are substantial RSPs – with the backing and resources of major international operators - that already offer voice services directly to end-users using their own networks or wholesale access services other than Spark's. These RSPs can readily expand existing capacity to avoid using Spark resale services should they want to. As noted in the draft decision, service providers are reducing their reliance on resale services and increasingly purchasing alternatives or providing their own voice services.
14. Alternatives to Spark's PSTN services are available over all access mediums, including copper, but the trend towards these alternatives has accelerated as RSPs have shifted their strategic focus to migrating end users off copper and onto wireless and fibre based accesses where RSPs do not use Spark's resale services. The latest UFB update indicates that over 921,000 New Zealand businesses, homes and hospitals now have access to UFB, and reports almost 200,000 end users are connected to UFB fibre, with over 30k new connections in the past quarter. We expect the number of connections per quarter to increase as the UFB is completed (currently only 63% complete)⁴.
15. This shift has resulted in declining Spark PSTN resale volumes and prices. Resold local service accesses have []**SPKCI**. We believe a substantive part of the PSTN resale decline is due to customers migrating to naked broadband services.

⁴ See the latest UFB and RBI update here <http://www.mbie.govt.nz/info-services/sectors-industries/technology-communications/fast-broadband/documents-image-library/mar-16-quarterly-broadband-deployment-update.pdf>

16. Looking forward, we expect the migration to alternative platforms to accelerate as UFB is rolled out and RSPs increasingly offer fixed wireless services. IDC forecasts industry year on year fixed voice decline of 11% through to 2018.



17. The alternatives available to RSPs and end users provide an effective substitute for our resale service, and constrain our ability to increase resale prices. While there is no resale standard terms determination in place for resale services, we offer a commercial resale service to wholesale customers competitively priced against alternative solutions. [**JSKCI** This further indicates that Spark actively competes with other wholesale providers.
18. Our resale customers have in recent years [**JSKCI**
19. More recently, we have noticed a further shift in strategies towards moving customers to UFB and fixed wireless. All of these trends support the contention that RSPs already have multiple competitive alternatives to Spark's resale services that they can purchase, and are purchasing in large volumes.
20. In terms of Centrex and ISDN, [**JSKCI** to new access services such as IP trunking and cloud based solutions. We have already grandfathered primary rate ISDN, reflecting the changes in this market and PSTN lifecycle management drivers.

Impediments identified in 2010 are unlikely to apply

21. The Commission noted in 2010 that there were a number of alternative wholesale inputs that can be used to deliver telecommunications services, and concluded that metropolitan markets were competitive but that there was limited competition outside metropolitan areas.
22. That observation no longer holds. Chorus' inputs are available nationally at a single averaged price, meaning that key competitive dynamics across the regions and metropolitan areas are more consistent. There are very few wholesale lines that cannot feasibly be accessed by RSPs, demonstrated by the fact that RSPs have continued to make inroads in to the market. RBI has also significantly extended Baseband IP and fixed wireless access coverage (and potentially goes further with RBI2).
23. Even where a broadband connection is not available, though, customers today are likely to have multiple options for providing voice service. Mobile services are increasingly

competing with fixed line voice services, as evidenced by the rapid growth in naked broadband. []SPKCI

24. There are few, if any, wholesale lines that cannot feasibly be accessed by RSPs using alternatives to Spark's resale services.

There are reasonable grounds to launch an investigation

25. On the basis of the evident competitive activity in the market alone, we do not believe Spark has any market power that warrants continued regulation. While no discernible benefit to retaining resale services in Schedule 1, it risks undermining the transition to a more efficient industry structure and technology innovation.
26. Retaining resale regulation is also inconsistent with 2011 regulatory objectives to promote more efficient deeper competition on the basis of Chorus wholesale inputs, and can only risk holding back desirable market and technology transitions.
27. This is a much richer and diverse picture than when the Commission looked at this issue in 2010, and deserves a closer look. Many of the impediments for service outside urban areas are no longer relevant and the Commission should investigate omitting local access and calling from Schedule 1.

Value added services

28. The Commission notes it has previously taken the view that value services such as messaging and smartphone services should be included in the local access services market, as it was not clear that these services could be supplied in isolation from the access line. As it proposed to investigate omitting access lines, it proposes to also consider value added services.
29. We agree this makes sense. The service description in the Act describes value added services as being supplied in conjunction with the local access and calling service. If the underlying access service was omitted from the Act, it would leave value added services hanging.
30. Further, value added services do not necessarily form part of the underlying PSTN functionality. For example, while voicemail can potentially be provided separated from the underlying PSTN, features such as three way calling are inherent to PSTN switching and require the deployment of a switch. If an RSP deploys the infrastructure or a switch to do this, which can readily be done, it is difficult to see the purpose of a resale service. The RSP could simply acquire a wholesale service from Chorus.
31. Accordingly, in investigating omitting value added services from Schedule 1, the Commission could primarily focus on access and calling (consequentially omitting value added services if it decides to omit the service), and consider value added services further if it decides not to omit the underlying access and calling service.

Parts of a bundle

32. The Commission's preliminary view is that there are reasonable grounds to start an investigation into removing this service from Schedule 1. We support and agree with that conclusion. As the Commission observes in the Draft Decision, bundling of retail services forms part of the market offerings from all operators active in the sale of retail services. These bundles are increasingly the preference of end-users.

33. It is clear from the evidence that all parties have been able to construct competitive bundles of retail services without the need to seek access to the regulated service. Changes in market structure, and technology enhancements have meant that all parties have access to a wider range of inputs enabling them to offer bundled retail services. Alternatively, even if the designated service is removed from the Act, RSPs will continue to have access to bundles through Chorus wholesale arrangements. Chorus is obliged to offer UBA in a bundle with PSTN services and Spark has every commercial incentive to offer a resale voice input service for that bundle.
34. In most cases mixed bundling⁵ benefits consumers. Bundling generates lower prices to consumers, increased consumer choice and expands demand in the market. In general retail bundling practices are usually welfare enhancing since they give rise to both demand and supply side efficiencies. These might for instance come in the form of economies of scope/scale for production and marketing, reductions in consumers search, purchase and ongoing transaction costs, and the faster diffusion of new technologies in the marketplace.
35. In the New Zealand telecommunications markets today typical retail bundles are readily replicable by all major RSPs. The evidence that operators can and do create competitive bundles, and have not sought access to the regulated service is clear. Prior to the structural separation of Telecom in 2011, the Commission recommended preserving parts of bundles resale in 2010 as a safeguard against the potentially anti-competitive effects of bundling. That risk has now almost completely dissipated.
36. In paragraph 52 of the draft decision, the Commission notes that “from a regulatory point of view, their goal is to *ensure that RSPs can buy the main components of a bundle in order to be able to build their own competitive bundled offerings and compete in the retail market*. In the current market structure, we think it is clear that RSPs can and do purchase or create all the building blocks they require to construct their own competitive bundles. Where there are wholesale inputs available means there can be no competitive issues, i.e. RSPs are able to construct competing fixed telecommunications bundles based on wholesale inputs.

Other regulated services

Interconnection with a fixed PSTN

37. The Commission proposes not to investigate omitting this service from Schedule 1. Although we consider that the incentives on parties to withhold interconnection services or materially increase the price of interconnection is low we do not oppose the retention of interconnection in the Act, as we recognise that interconnection of networks remains fundamental to our regulatory and competition frameworks.
38. It is necessary to connect to other voice service providers in order to complete calls. However, interconnect is currently provided on commercial terms in a fragmented market – there are a number of voice service providers in the market. As it stands, we exchange traffic with around a dozen non-international interconnect parties, while there are 80 or more retail service providers in the market today⁶. In practice, no operator is able to refuse to interconnect or inefficiently differentiate as otherwise calls simply come through another interconnected provider. Under these circumstances, we do not believe any provider is

⁵ A mixed bundle is one in which the goods or services can be either purchased together or separately.

⁶ ["Internet Service Provider Survey: 2015". Statistics New Zealand](#)

likely to have market power under these circumstances, and a regulated service is not necessary.

39. The Commission has requested parties on whether to amend the service in light of IP based telephony developments, or whether there are barriers to more efficient interconnection arrangements. We believe it would be too early draw any conclusions relating to new forms of interconnect, and whether there is an impediment to commercial negotiation of these forms of interconnect.
40. IP interconnect is occurring in the market and, where necessary, traffic is being exchanged between IP based and traditional PSTN based calling services. From a technical perspective we are not aware of evidence to suggest that the industry, overall, if failing to reach efficient IP interconnection outcomes.
41. Where there have been recent disputes, these have generally related to the relationship between caller charges and interconnect payments. For example, where a network operator does not, or is not permitted, to charge the caller for the call (i.e. it may be a TSO local call, 0800 or toll by-pass national call). A regulatory change relating to these calls would significantly impact retail models, and will not necessarily result in more efficient outcomes.

Chorus access services (UBA, UCLL and UCLF)

42. The Commission's preliminary view is that there are no reasonable grounds to commence an investigation in to the deregulation of Chorus wholesale access services in Schedule 1.
43. We support the Commission's initial view. These services are subject to current determinations and RSPs rely heavily on them in order to provide retail services to end users. At this stage, there are over 1.7M such connections and RSPs have no viable alternative for the bulk of end user customers.
44. UCLF, itself, remains the foundational voice input service upon which retail service providers supply voice services in the market. Spark is heavily reliant on UCLF and the commercial parallel service, baseband for the supply of voice services to more than one million retail customer lines and 300,000 wholesale lines. Accordingly, regulated wholesale access to Chorus' copper network will remain critical to the continued development of competition in telecommunications markets.
45. Nascent competition from other access providers' services, including wireless and LFCs do not yet impose sufficiently strong competitive constraints on Chorus market power. The regulatory framework is also based on the continued availability of regulated Chorus wholesale products and to remove these services would be a significant change to the framework, and expectations relating to how end user benefits are maximised. At this stage, UBA remains the foundational broadband input service upon which retail service providers supply innovative enhancements and services in the market.
46. In any case, the Government recently considered this issue in the recent Telecommunications Act review discussion, concluding that Chorus market power persists and that wholesale access products should continue to be regulated. For all these reasons, it would be premature to commence an investigation in to omitting access services from Schedule 1.
47. The Commission has also proposed not to investigate removing from Schedule 1. We agree, co-location is a necessary part of using a regulated access services and is associated with the UCLL service.

Chorus backhaul services

48. The Commission also reaches the preliminary view that there are no reasonable grounds to commence an investigation in to omitting backhaul services from Schedule 1. The Commission has determined a number of backhaul services, and provides for regulation to be lifted on routes where competition is not limited. These backhaul services are provided in conjunction with UBA, UCLL and UCLF services.
49. We support the Commission's initial view. Backhaul services should remain as Schedule 1 services and available on regulated terms. Backhaul is a significant cost for Spark and RSPs generally, and ultimately end users. We currently purchase over []SPKCI per year of backhaul services from Chorus for PSTN and bitstream services, a material proportion for rural exchange linking.
50. There is evidence of significant price reductions on competitive routes. For example, the price of transport from []SPKCI. However, there has not been no material change in prices on routes without competitive entry - suggesting prices are disconnected from underlying cost.
51. There may be a number of reasons that the regulated backhaul service has not acted as a constraint on commercial prices. For example, current prices could be high. The ACCC determined in April 2016 that Australian regional transmission services prices should be reduced by between 13 and 76 percent⁷. Alternatively, the Commission has also asked whether the existing designated backhaul services be amended to reflect developments such as increasing demand for bandwidth from UFB, RBI and LTE deployments, for views on current service restrictions. It's likely that current service descriptions have contributed to the underlying problem.
52. As noted in the draft, New Zealand designated backhaul services can only be used for the purpose of connecting specific regulated access services over specific routes. Further, the designated services provide only a limited number of capacity options.

Designated Service	Connection	Per month
UBA backhaul	\$4030 per end	50Mbps step 1 (<5km) \$738 ... 1Gbps step 5 (<25km) \$7142
UCLL, UCLF backhaul (exchange to handover)	\$4030 per end	100Mbps step \$964 ... 1Gbps step 5 (<25km) \$7142
UCLL, UCLF backhaul (cabinet to exchange)	Cabinet end \$541 Exchange end \$4030	Urban: pro-rata share of \$1911 based on fibres used plus \$430, per month Non-urban: share of \$3197 plus \$430

53. The current determined services unnecessarily distinguishes between traffic types – i.e. UCLL/UCLF or UBA related. Modern transport systems comfortably support multiple traffic streams within the same link, i.e. UCLL, UCLF, UBA, UFB and wireless access. Accordingly, an operator using regulated backhaul would inherently be inefficient. An

⁷ See <https://www.accc.gov.au/media-release/accc-releases-final-decision-on-prices-for-regulated-transmission-services>

efficient service would, for example, provide more flexible capacity options plus the ability to map multiple VLANs within the capacity.

54. Given the fragmented structure and pricing of backhaul services, it is unsurprising that there has been little if any take up on regulated backhaul services, and the regulated backhaul services is unlikely to provide a meaningful constraint on the exercise of market power nor promote efficient commercial pricing.
55. Accordingly, we consider that there are reasonable grounds for the Commission to review and amend the designation of backhaul services. In that investigation, the Commission should consider removing service limitations, and provide a modern Ethernet based service that permits customers to efficiently use available capacity. If competition is limited on a route, regulation should apply to all backhaul services and not just current designated services.

Number Portability

56. We're not aware of specific issues relating to number portability.

Mobile cell site co-location

57. The Commission proposes not to consider omitting the mobile collocation service. Looking forward, new sites are likely to be smaller as operators deploy smaller capacity driven towers and 5G sites. Under these circumstances, co-location on mobile operators' towers is unlikely to have any real impact on competition outcomes.
58. The existing specified colocation service is generally fit for purpose, although industry has developed some improvements to the process elements which have proven to be beneficial to all parties. We recommend the Commerce Commission tasks the TCF with developing an industry view on the colocation process. The TCF deliverable would be a recommendation back to the Commerce Commission of changes which should be made to the mobile co-location service.

END
